

MINISTRY OF HEALTH OF BRAZIL

DIETARY GUIDELINES
FOR BRAZILIAN CHILDREN
UNDER 2 YEARS OF AGE

Brasília – DF
2021

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for brazilian children
under 2 years of age*

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Secretariat of Primary Health Care
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2021 Ministry of Health of Brazil.



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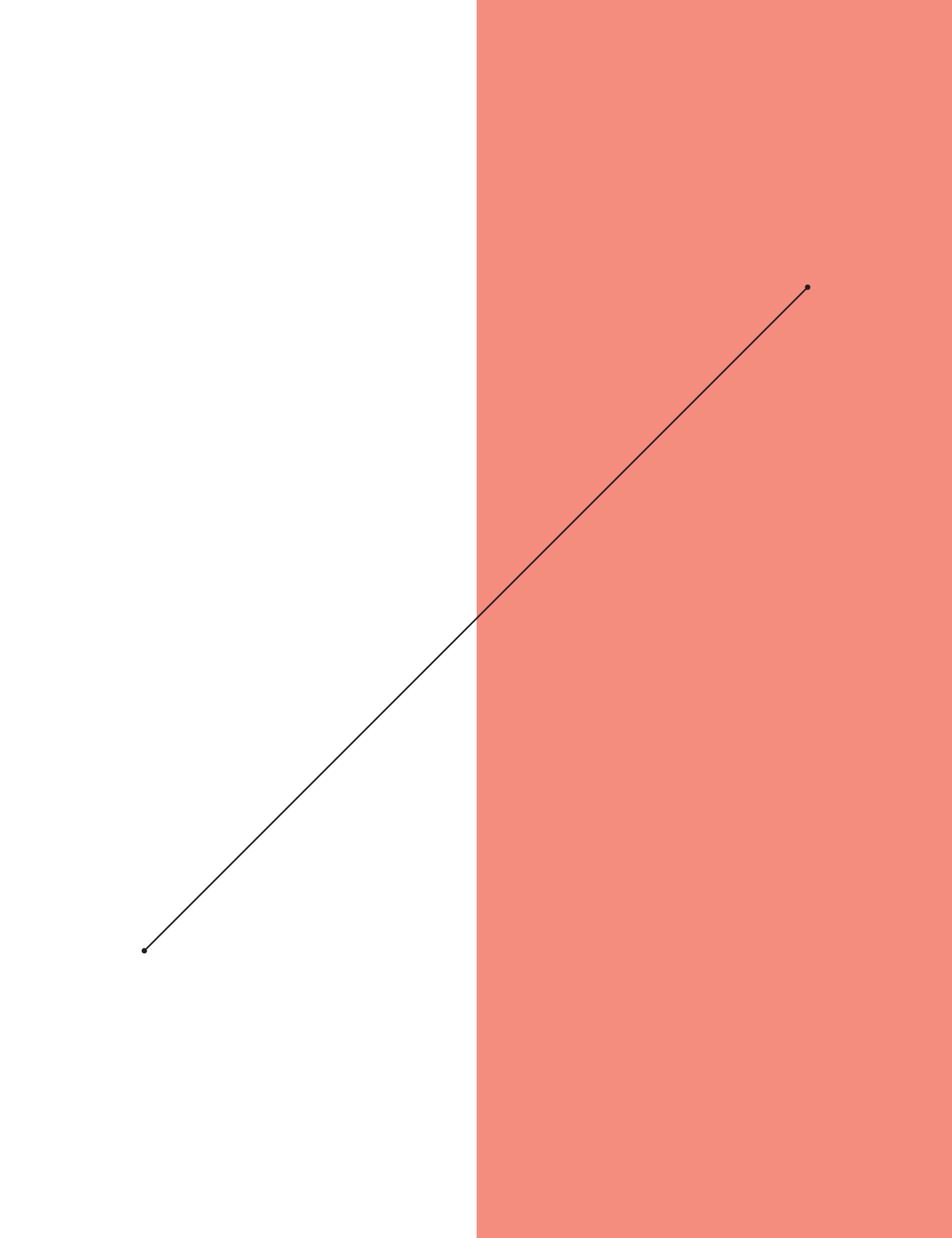
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PREFACE

The Dietary Guidelines for Brazilian Children Under 2 Years of Age is an official document from the Ministry of Health of Brazil, in line with the Dietary Guidelines for the Brazilian Population, published in 2014. It includes recommendations and information on feeding children in their first two years of life in order to promote health, growth and development, so that they reach their potential. In addition to supporting families in day-to-day care, this document provides professionals with information on how to develop individual and collective nutritional and food education actions within the Unified Health System (SUS, in Portuguese) and in other areas. It also provides guidance for policies, programs and actions that seek to support, protect and promote health and the food and nutritional security of Brazilian children.

Food plays a central role in all stages of life, especially in the first years, which are crucial for growth and development, habit formation and health maintenance. Over the past few decades, there have been many advancements regarding the implementation of policies that promote, protect and support breastfeeding and healthy complementary diets. Examples include the National Food and Nutrition Policy and National Integral Child Health Care Policy, the implementation of the Brazilian Norm for the Commercialization of Foods for Infants and Children in Early Childhood, Nipples, Pacifiers and Nipple Shields (NBCAL, in Portuguese), among others. However, many challenges remain for ensuring adequate, healthy diets in the beginning of life.

Although breastfeeding rates have increased in Brazil, its duration is still shorter than what is recommended. Two out of every three children under 6 months of age are already given some other kind of milk, especially cow's milk, and only one out of every three children is breastfed up to 2 years of age. Additionally, starting in their first years of life, children are not eating enough healthy foods, such as natural or minimally processed foods, and are being exposed early in

life to ultra-processed foods that can harm their health. Thus, early weaning and low quality, low variety diets lead to different types of poor nutrition, harming child development.

On the one hand, the share of the child population that already has excess weight (overweight or obesity) increases every year, due to intense changes in eating habits and ways of life, such as: increased consumption of unhealthy foods, such as ultra-processed foods; the existence of environments that favor their consumption; family's lack of time for preparing meals due to, for example, extended working hours and commutes, especially in large cities; lack of child care support networks for working women and their families and loss or reduction of the tradition of cooking and transmission of cooking skills between generations, among others.

On the other hand, cases of malnutrition, anemia and Vitamin A deficiency continue to exist, whether in population groups who face difficulties in producing or acquiring foods; or as a result of violations of basic rights due to socioeconomic conditions, conflicts over land ownership or other factors. In some realities, although food is present, these deficiencies can result from food INADequacy or presence of diseases.

In order to support families and guide public policies, the World Health Organization (WHO) recommends that governments formulate national guidelines on food and nutrition. These guidelines are usually presented in dietary guidelines, which seek to provide updated, objective information in a language that is accessible to everyone, taking into account the cultures of different countries and their populations. The first version of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age* was published in 2002 and revised in 2010. This new edition seeks to respond to social transformations and changes in eating habits that took place over the past few years and, also, aligns its approach and its recommendations to the *Dietary Guidelines for the Brazilian Population*.

This text reinforces the Ministry of Health's commitment and absolute priority of contributing to the development of strategies for promoting and guaranteeing the Human Right to Adequate Food (HRAF) for children, considering the specificity and relevance of the first years of life in human development.

Ministry of Health of Brazil

THE *DIETARY
GUIDELINES
FOR BRAZILIAN
CHILDREN UNDER
2 YEARS OF AGE*
AS A TOOL FOR
PROMOTING THE
HUMAN RIGHT TO
ADEQUATE FOOD





The Human Right to Adequate Food (HRAF) is a basic human right. This means that all people, regardless of where they live, must have regular and permanent access to good quality foods, in sufficient quantities, so they are well nourished and free from hunger. This right is guaranteed by the Brazilian Constitution and it is the government's obligation, at the federal, state and municipal levels, to respect, promote and provide it. Adequate and healthy food is crucial for maintaining life and ensuring well-being and quality of life.

Adequate and healthy foods must be harmonious in both quantity and quality,

meeting the principles of variety, balance, moderation and pleasure. They should meet each person's needs according to their life stage, preferences and specificities, such as having certain diseases or food restrictions. In order to achieve that, food production must be guided by appropriate, sustainable practices that protect the planet.

An adequate, healthy diet must be based on “real food” and starts with breastfeeding. It must be based on natural or minimally processed foods (such as rice, beans, fruits, vegetables, cassava, corn, meat and eggs, among others). Industrially-processed foods (such as canned foods, cheese and preserves) should be limited and only eaten in small amounts. On the other hand, ultra-processed foods (such as cookies, artificial juices, soft drinks, packaged savory snacks, instant noodles, confectionery) should not be part of children's diets.

Food is a part of the identity of groups and peoples, and is related to affection and to caring for one's self, for others and for the environment. Adequate, healthy choices also respect regional habits and cultures, both from cities and rural areas, from all Brazilian regions, as well as those of indigenous and traditional peoples and communities, such as *quilombola* and *ribeirinha* communities, among others.

Thus, an adequate, healthy diet contributes to child health, that is, it helps ensure that children grow and develop so that they reach their full potential. This is very important during childhood and is crucial in the first two years of life. The prevalence of childhood obesity grows each year in Brazil. It is essential that we all protect children and avoid unnecessary weight gain and the consequent development, in adult life, of chronic diseases related to obesity.

Unfortunately, not all Brazilian children have access to a healthy diet. Unequal access to foods is still a reality in Brazil, which leads many people not to purchase or eat healthy foods in the necessary variety and quantity. There are also people who have limited access to healthy, adequate foods in the places where they live. It's important to be critical of food information, advice and messages in commercial advertising because they lead to the consumption of

foods that are unnecessary and/or harmful to health.

In order to ensure the HRAF, it is crucial that children be protected and families, supported. For this, we need intersectoral public policies to promote the population's access to adequate, healthy foods and to help people to become autonomous in their choices.

This is the perspective of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age*: to be a publication that presents the necessary information in order to encourage, support, protect and promote the health and food and nutrition security of the population under 2 years of age.



Faça de alimentos
in natura ou
minimamente
processados a
base de sua
alimentação





DIETARY GUIDELINES FOR FAMILIES WITH CHILDREN UNDER 2 YEARS OF AGE

The arrival of a new child often brings doubts regarding how to feed them. The whole family and those who are close to them want to offer the best so the child can grow happy and healthy. What is recommended at this age? How and how often should a child be fed? How long can they be breastfed? What foods can they eat?

The *Dietary Guidelines for Brazilian Children Under 2 Years of Age* have recommendations and information on how to feed children to promote their growth and development and support their health. Common doubts, crucial explanations and practical recommendations about breastfeeding and diets in the early stages of life are gathered here.

The information presented in these Guidelines may be different from what you have seen on the internet or what friends, family and even some health professionals have told you. This happens because studies on child nutrition are being done all the time. They produce new knowledge and lead to changes in recommendations over time. The information and recommendations in these Guidelines are based on the most up-to-date knowledge on feeding children and will help them have a great start in life.

The Guidelines may and should be used by all people who participate in child care, including the mother, father, the mother's partner, the father's partner, grandparents, men and women who are related to the child (or not), who live with the child (or not). This document can also help community members and health, education and social work professionals who take care of children at their workplaces, such as primary health care units, hospitals, daycare centers, group homes and any and all spaces committed to promoting adequate, healthy diets for children.

The recommendations included in these Guidelines are valid for most Brazilian children. However, it is worth bearing in mind that children live in different economic, social, cultural and geographical contexts, with a large variety of foods and ways of preparing and eating them. For this reason, local characteristics must be taken into account when following the recommendations. For children who have specific diseases or conditions and require a different or special diet, guidance should be provided by health professionals who can adapt the recommendations found in these Guidelines to each child's conditions.





PRINCIPLES

When writing these Guidelines, the starting point were the principles presented in the Dietary Guidelines for the Brazilian Population, published in 2014. These Guidelines also follows the principles listed below. They bring together bases, values and precepts that were important for the formulation of the recommendations regarding childhood diets.

1) Children's health is an absolute priority and responsibility shared by everyone

Pregnancy and the first two years of life are important for children's full growth and development and for their current and future health. The opportunities and decisions regarding health care and diets made at this moment will have lifelong repercussions.

Raising, feeding and guiding a child are tasks not of a single person, but of everyone who is directly or indirectly connected with the child. This responsibility should be a priority for the State and should be shared between families and society, including companies, organizations and educators.

2) The family environment is a space for promoting health

The family environment should enable interactions and strengthen bonds between children and the other family members. It should be safe and welcoming and provide an adequate, healthy diet. Affectionate relationships, security and nutrition are crucial for children's integral development.

3) The first years of life are important for establishing eating habits

In the first years of life, the variety of foods and the way in which they are offered influence children's eating preferences and their relationship with food. Children who eat healthy, adequate foods early in life are more likely to become thoughtful, autonomous adults capable of making good eating choices.

4) Access to adequate, healthy foods and to good quality information strengthens families' autonomy

Access to reliable information strengthens the autonomy of families and caretakers, enabling them to critically choose foods and to propose changes regarding eating practices. Autonomy is also related to the right and ability of families to have access to, buy or produce the foods they will eat.

5) Eating is a social and cultural practice

The act of eating has many meanings. We eat not only to satiate our hunger, but also because we are happy, sad, anxious, lonely, among many other reasons. Eating is a cultural act that involves relationships, habits and ways of preserving and transmitting traditions and knowledge. Eating foods and preparations connected to our family, community and/or ethnicity's history, and to the region where we live, is part of an adequate, healthy diet. There are very different socioeconomic and cultural realities in Brazil, such as those of traditional, specific population groups, of the many rural and urban zones spread across the five Brazilian regions. For this reason, the recommendations offered in these Guidelines should be adapted to the different regional, cultural and ethnic realities.

6) Adopting a diet that is adequate and healthy for children is a way of strengthening sustainable eating systems

The choice of foods must take into account their impacts on the environment and on the forms of production, distribution and organization of rural and urban spaces. When families make adequate, healthy choices for feeding children, from choosing to breastfeed, to choosing a diet based on natural or minimally processed foods, they contribute to protecting the environment.

7) Stimulating children's autonomy contributes to the development of a healthy relationship with food

Encouraging children's autonomy is crucial to building a good relationship with food. This exercise can happen in everyday situations related to eating, such as letting children choose from different healthy options; trying new flavors, smells and textures; trying to eat on their own; eating with the family, among others. Preparing a favorable environment for that to happen, respecting each child's time, observing and responding to their signs of hunger and satiety and their other reactions favor children's protagonism in their history with eating.







BREAST MILK: THE FIRST FOOD

If we could say, in a single sentence, why breast milk and breastfeeding are so important, that sentence would be “breastfeeding is much more than feeding a child”. For small children, breast milk is the first contact with real food and the breastfeeding period is special, full of affection and care.

In this chapter, we will talk about the importance of breast milk and breastfeeding and the most common difficulties that arise in this process. We also offer some guidance so that breastfeeding takes place in the best possible manner. At the end of the chapter, the section “Questions and Answers” goes straight to the point, clarifying the most common doubts.

Breast milk and breastfeeding

Unique and unmatched, breast milk is the ideal food for children because it is totally adapted to their needs in the first years of life. There is no other milk like it, despite industry efforts to modify milks from other mammals, such as cows, to make them more suitable for consumption by young children. Because it is naturally produced by the woman's body, breast milk is the only one that contains antibodies and other substances that protect children from common infections while they are being breastfed, such as diarrhea, respiratory infections, ear infections (otitis), among others. The first two years of life are the most decisive for children's growth and development, with repercussions for their whole lives. Breastfeeding at this stage can prevent the development of many diseases in adulthood.



Child development is a continuous and very intense process at this life stage. Children's bodies change rapidly and the brain perfects crucial skills, such as sight, intelligence and capacity for interaction. These transformations are interconnected: one influences the other. All this development depends not only on the child's characteristics at birth or the milk they are given, but also on their interaction with the environment in which they live. Both physical needs, such as food and hygiene, and emotional needs, such as feeling safe, loved and protected, must and should be met.

When children are breastfed, they receive many stimuli that help them develop, such as exchanging heat, smells, sounds, eye-to-eye contact and touches, forming an intimate contact between mother and child. Therefore, breastfeeding is very important for childhood development and for establishing affection bonds.

Breastfeeding is a mother's right and being breastfed is a child's right. But ensuring this right does not depend only on the woman's wishes and decision. Often, despite wanting to breastfeed, mothers are unable to do so.

It is very important that everyone participate in breastfeeding: the child's father, the mother's partner, family members, women who have been through this experience, the community, employers, coworkers, child education institutions, daycare centers, schools, health professionals and the State. Grandmothers, in particular, play an important role in breastfeeding because they have probably experienced it themselves and because they are strongly emotionally involved and have a great influence over the family. Therefore, breastfeeding involves everyone, but a woman's wishes and choices must always be considered and respected.

Breast milk is unique and unmatched and breastfeeding promotes health and affection for both mother and child. Women: ensure your rights and exercise your power to decide over your body and your choices during the entire breastfeeding period.

Breastfeeding until age 2 or longer and exclusive breastfeeding in the first 6 months

The current recommendation is that children should be breastfed in their first hour of life and until the age of 2 years or longer. In the first 6 months, the recommendation is that children should only be given breast milk. When this happens, we say that the child is being exclusively breastfed. No other type of food needs to be given to a baby who is exclusively breastfed: not liquids, such as water, coconut water, juices or other milks; nor other types of food, like baby food or porridge. Even in hot, dry areas, there is no need to offer water to children who are exclusively breastfed, because breast milk contains all the water needed for hydration in this period. In hot days, children may want to nurse more often to quench their thirst.

The offer of other foods in the first 6 months of life, in addition to unnecessary, can also be harmful, because it increases the risk that children will become sick and can hinder the absorption of important nutrients present in breast milk, such as iron and zinc. Additionally, generally speaking, children are only mature enough to eat other foods at around 6 months of age.

Despite the recommendation that breastfeeding should continue until the age of 2 or longer, many people are shocked when they see children that age nursing because they believe they are too “old” to be breastfed. However, there is no set maximum duration for breastfeeding. It can last as long as the woman and child wish, so long as there is no harm to either of them.

Why is breastfeeding so important?

- **Because it is good for the child’s health** – Breast milk protects children from infections, such as diarrhea, pneumonia and ear infections (otitis) and, if they become ill, the illness tends to be less severe. It also prevents certain diseases later on in life, such as asthma, diabetes and obesity, and favors physical and emotional development and intelligence. The movements children make in order to get milk from the breast are an important exercise for their mouths and facial muscles and help them not to have problems breathing, chewing, speaking, swallowing, or problems in the way their teeth are aligned.

- **Because it is good for the woman's health** – Breastfeeding helps prevent some diseases in women, reducing their odds of developing breast, ovarian and uterine cancers and type 2 diabetes. Exclusive breastfeeding in the first 6 months may increase the interval between births. The longer a woman breastfeeds, the greater the health benefits she will enjoy. Additionally, breastfeeding can be good for women's mental health, increasing their self-esteem and self-confidence, which are important elements in their empowerment.
- **Because it promotes an emotional bond** – Breastfeeding is an act of profound interaction between mother and child, with many exchanges, and is usually pleasurable for both. Thus, breastfeeding brings mother and child closer, making it easier for them to bond.
- **Because it saves money** – Breastfeeding is much cheaper than feeding the child with other milks because breast milk is produced by the woman herself to be offered to her child. It doesn't require preparation, which saves time, water and gas. Industrialized infant formulas, on the other hand, can take up a large part of the family's budget. In addition, not breastfeeding can create extra expenses, since children who aren't breastfed become sick more often.
- **Because it is good for society** – Children who are breastfed become sick less often and are less likely to develop certain diseases in the future. Because of this, the health system and their families spend less money to guarantee their health. When children become sick, mothers and caretakers often miss work, which can harm the family and society as a whole. Children who are breastfed also have higher odds of reaching their maximum intelligence potential, becoming adults with greater capacity for work, which contributes to the country's development.
- **Because it is good for the environment** – Breastfeeding effectively contributes to environmental sustainability and food and nutrition security. Breast milk is a natural, non-industrialized food produced and provided without creating pollution and without harming natural resources. It doesn't require the production of animal milk, which reduces its environmental impact, avoiding residues that





contribute to methane emissions, with a direct result on the greenhouse effect. It reduces the industrial production of milk formulas and an entire product chain that generates waste, such as tons of cans, plastics and labels.

What is breast milk and how is it produced?

During pregnancy, the breasts undergo transformations in order to produce milk. After the baby is born, in the first days, milk production is small, but enough to meet the needs of newborn babies, who have small stomachs. Generally speaking, in the third to fifth day after birth, the breast milk “comes in”. At this point, the breasts become bigger and the woman starts to produce more milk.

The milk produced in the first days of breastfeeding is called colostrum. This milk is produced specifically for babies at that age. It has more proteins and is rich in antibodies and other substances that help to protect children from diseases.

It is important to know that, during each feeding, only part of the milk is stored in the breast. Most is produced at the moment the child is nursing.

The amount of milk a woman produces depends mainly on how much milk her child consumes or how much is expressed. Therefore, the more a child nurses and the more milk they consume, the more milk the mother produces. This explains why women are able to donate milk without harming their children’s breastfeeding, and why mothers of twins are able to feed both children exclusively with their milk. Although the composition of breast milk is similar among all women, small variations occur in order to adapt the milk to specific needs. For example, the milk produced by the mother of a premature child is different, precisely so as to meet that baby’s needs.

It is common for women to worry about their milk’s appearance and to think it is weak because of its color. All breast milk is of good quality, regardless of its appearance. The milk’s color and composition may vary based on the mother’s

diet and also on the moment of each feeding. During a feeding, the initial milk may seem “thin” or “weak” because it is more transparent, but this milk is very rich in water, which is important for children’s hydration, and in antibodies, which protect them from infection. After the child has nursed for some time, the milk may appear whiter or yellower, because it contains more fat. That is the milk that leaves children feeling satiated. This is why it is important to let children nurse for a long time from one breast before offering the other, so that they can benefit from all the breast milk’s qualities.

The flavor of breast milk can also vary according to the woman’s diet. Through breast milk, babies come into early contact with the flavors of the foods their mothers have eaten, which positively influences their reaction when they start to be given foods at 6 months of age.

All breast milk is adequate and contains calories, fats, proteins, vitamins, water and other essential nutrients in the right doses for children’s adequate growth and development. Breast milk is never weak.

In order to complement the nutrients found in breast milk, it is important to expose infants to the sun every day. This is the main stimulus for vitamin D production, which is important for bone growth.

How to breastfeed

Although breastfeeding is the natural way for women to feed small children, they and their families need time to adapt to the routine and care of the new baby. This adjustment period will be longer or shorter depending on the woman’s previous breastfeeding experiences and on the specific characteristics of the child, woman, family and the people who surround and support them. Each breastfeeding experience is unique, different from that of other children and, especially from that of other women.

Breastfeeding isn’t always easy, especially in the first days after birth and for first-time mothers. It takes patience, information and support. However, breastfeeding can be more pleasant and pleasurable if certain problems can be avoided.

Here are some things you can do to prevent problems when breastfeeding.

- **Make sure you have a proper position and latch** – There are many positions in which you can breastfeed: sitting down, reclining, lying down or any other position that is pleasant, familiar and appropriate at any given moment. Mother and baby should feel comfortable. The baby's body should be turned toward the mother's body. The baby's head and body should be aligned and the neck should never be twisted. It is important to fully support the baby, putting their face close and facing the breast.

Figure 1 – Different breastfeeding positions

1. Woman sitting, with the baby next to the mother. The baby's body is turned toward the mother's body and is well supported by the arm on the same side of the breast being offered (traditional position).
2. Woman sitting, with the baby positioned to her side (American football position).
3. Woman lying down, next to the baby.
4. Woman sitting, supporting the child with the opposite arm to the breast being offered (inverse traditional position).
5. Woman sitting, vertically supporting the baby against her body (koala hold).





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Regardless of the position, the most important thing is to have a proper “latch”. Latch is the name given to the way the child’s mouth is positioned on the breast in order to nurse. A proper latch makes it easier for the child to extract milk and doesn’t hurt the woman. In order for this to happen, first of all, there can be no obstacles between the child’s mouth and the part of the breast they must latch on to, such as clothes, cloths, the mother’s hand or the baby’s arm.

The breast should be supported with the hand in a “C” shape (Figure 1, item 1, and Figure 3), instead of placing the fingers in a scissors shape, so that the fingers don’t get in the way of the baby’s latch. The baby’s nose should be directly in front of the nipple. When the child opens their mouth wide, it is time to put their mouth onto the breast for nursing. You can make the baby open their mouth wide by gently touching their lips with the nipple. With the mouth wide open, the baby can latch on to the nipple and to the biggest possible area of the areola, the dark part of the breast that surrounds the nipple. There are some signs that indicate a proper latch: mouth wide open, lips turned outward, chin resting on the breast and seeing more of the areola above the baby’s mouth than below it (Figure 2).



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Figure 2 – Proper latch of a baby being breastfed right after birth



Figure 3 – Hand in a “C” shape, not in a scissors shape



- **Breastfeeding shouldn't hurt** – If you feel pain while breastfeeding, you should check whether your baby is latched on properly. Pain can be a sign that the latch can be improved. If that happens, remove your baby from your breast by carefully placing your index or pinky finger into the corner of the baby's mouth so they will let go of the breast without hurting the nipple (see Figure 7). Then, place the baby once again on your breast, with the baby's mouth wide open. If breastfeeding continues to hurt, ask a health professional for help.
- **Start breastfeeding as soon as possible, preferably in the baby's first hour of life** – It is recommended that breastfeeding be encouraged as soon as possible, immediately after birth, if the mother and the baby's conditions allow it. Regardless of the type of delivery, a newborn baby should be in skin-to-skin contact with the mother, that is, the baby should be on top of the mother, with no clothes or cloths between them, for at least 1 hour, respecting the woman's

wishes. Starting breastfeeding soon after birth favors the release of hormones that help the “coming in” of the milk and the decrease of postpartum bleeding, as well as protecting against harmful microbes.

- **Pay attention to the moment when the milk “comes in”** – Breast milk “comes in” at around the third to fifth day after birth, though this can happen sooner or later than that. During this period, milk production increases and, usually, the mother produces more milk than the child is able to consume. Because of this, it is common for the breasts to become full, heavy and uncomfortable. When the breasts are very full and hardened, children may have difficulty properly latching on and extracting the milk. Therefore, in these situations, the mother should express a little bit of the milk so the breasts will become softer and the child can nurse more easily.
- **Give the baby enough time to nurse from one breast before switching to the other** – The amount of time a baby remains on the breast varies from child to child. It can vary for the same child, depending on their hunger and “mood” at the time when they are nursing, the interval between feedings and the present and environmental conditions. In warmer and dryer places, babies may want to nurse more frequently because they are thirsty. What is important is that the mother should respect the child’s own rhythm and give them enough time to get plenty of milk from one breast, until it is very soft, before switching to the other. In this way, the child can ingest milk with different compositions, since it changes over the course of a single feeding. A child will not always nurse from both breasts at every feeding. Sometimes, they can become satiated after nursing from only one breast. The child should nurse until they are satiated, that is, until they stop nursing, let go of the breast or fall asleep. If the woman still feels discomfort after nursing because the breasts are still full, she can express the excess milk. This milk can be stored to be given to the child at a later time or can be donated to a human milk bank. It is recommended that the mother first offer the breast from which the baby last nursed – if both were offered – or by the breast that was not offered in the last feeding.

You can find techniques and procedures in the section “How to express, store and offer breast milk”.

- **Breastfeed whenever the child asks (on demand)** – In order to meet all the baby’s needs, including their emotional ones, it is recommended that breastfeeding should take place whenever the child desires it, with no pre-defined intervals or schedules, day or night, a practice known as breastfeeding on demand. The mother should pay attention to the signs that the child wants to nurse, such as making movements with the hands and mouth, babbling and sucking their hand. Mothers don’t have to wait until their children cry before breastfeeding. In the first months of life, children usually nurses many times per day, between 8 and 12 times. Over time, mother and baby establish their own rhythm. Women have a right to breastfeed in public, if they wish to, and in any way they feel most comfortable.

It is recommended that children be breastfed from the first hour of life and any time they wish to nurse. The amount of milk a woman produces depends mainly on how much the child nurses. More feedings, more milk, more health.

Practices that can make breastfeeding easier


- **Taking care of the woman’s health** – The woman’s physical and mental health is very important. Taking care of it is crucial. Everyone must pay attention to this, because sometimes women are so busy and caught up with caring for the baby that they end up forgetting to take care of their own health. There are specific aspects of women’s health, such as diet, hydration and rest, that require doubled attention. During breastfeeding, women usually feel more hunger and thirst. Ideally, women should be given guidance since pregnancy, based on the *Dietary Guidelines for the Brazilian Population*: making natural or minimally-processed foods the basis of their diet; using oils, fats, salt and sugar in small amounts; avoiding eating ultra-processed foods; eating regularly, slowly, in appropriate environments and, as much as possible, in the company of family members, friends or colleagues. Women

need support both in caring for the child and in order to maintain an adequate, healthy diet during this period.

This is why it's important that all family members share household tasks, including those related to eating: organizing a menu, planning and carrying out grocery shopping, preparing and, when needed, freezing home-cooked meals, in order to make the woman's routine with her child easier. Women should also be encouraged to drink water regularly and frequently, and to pay attention to signs of thirst, in order to quench it; if they usually consume stimulating foods and beverages, such as coffee, tea or drinks made from yerba-mate, they should limit their consumption; and avoid soft drinks, industrialized juices, nectars and other sugary or "energy" beverages. There is no evidence that any food or beverage increases breast milk production.

You can learn more in the sections "Getting to know foods" and "Cooking at home".



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- **Having a support network** – For women to be able to devote themselves to their newborn babies, they need support from other people and institutions, not just in terms of caring for the child, but also in other everyday situations and needs, such as sharing household tasks, accompanying women to doctor's appointments, getting guidance from health professionals. No one can breastfeed in the mother's place, but that doesn't mean that other people can't participate in breastfeeding. Women need time and tranquility in order to breastfeed and take care of themselves. Because of this, it is crucial that others participate, including the child's father, the mother's partner, the grandparents, other family members and their extended network of relationships, including coworkers and classmates. In the closest, everyday group, it is up to family members to share household tasks and care for the other children in the home. The support from employers, coworkers or classmates and the encouragement of breastfeeding must be concrete, organizing and offering women an appropriate space to breastfeed or express the milk. The same goes for daycare centers, which must be prepared to receive and store breast milk and give it to the child. During the breastfeeding period, especially in the beginning, women tend to be more sensitive. Listening to them without judging them, hearing their doubts and fears, paying attention to their needs and complimenting their efforts toward breastfeeding are signs of support that strengthen women in this very special moment.

Practices that can harm breastfeeding

Some practices, which some may consider harmless, can harm breastfeeding. Here, you'll find a list of these practices and why they're harmful.

- **Offering other milks or infant formulas in order to unnecessarily “complement” breast milk** – This is unnecessary and leads the child to nurse less often from the breast, which reduces the protective effect of breast milk against diseases and causes a reduction in the amount of milk the mother produces. The use of other milks should only be oriented by a health professional.
- **Introducing solid or soft foods before 6 months of life** – Children who are breastfed and are offered any other food before their 6th month start to nurse less often. In the first six months, breast milk is the best food and meets all of children's nutritional needs. Therefore, no other foods that can lead the child to nurse less should be offered.
- **Offering a bottle** – Nursing from a bottle can confuse children, because the manner in which babies nurse from bottles is different from the manner in which they nurse from breasts, regardless of the type of bottle nipple. If a child nurses from the breast in the same way they nurse from a bottle, the milk may not come as easily, and this can cause frustration for the child, who may even begin to refuse the breast. Additionally, the lack of the movements children make when nursing from the breast may favor the appearance of oral problems, such as dental malocclusions. Not only that: bottles can be a source of infection from viruses or bacteria, increasing the odds that children will become sick.
- **Offering pacifiers** – Families offer their children pacifiers for a number of reasons, the most common of which is to “calm” them, making them stop crying. Before offering a child a pacifier, it is important to reflect on the pros and cons of its use and assess the risks and benefits. Children who use pacifiers tend to nurse less often from the breast. Any type of pacifier, even the ones called “orthodontic”, can lead to mouth deformations, poor teeth alignment, and speaking, chewing and breathing problems. Additionally, using pacifiers increases the likelihood of having “oral thrush”, a popular name for candidiasis

or moniliasis. It is important that families are familiar with other ways of calming their babies, besides offering a pacifier, such as stroking them, picking them up, singing and nursing.

- **Smoking during breastfeeding** – The harmful substances present in tobacco, in addition to harming the woman, are passed on to the breast milk. Exposing children to these substances, including through passive smoking, increases the likelihood that they will develop allergic respiratory diseases. Additionally, when mothers smoke, this can affect milk production and change its taste, possibly interfering in children's weight gain. This is why it is strongly recommended that women not smoke during breastfeeding. If, despite all efforts, a woman is unable to stop smoking, care must be taken to minimize possible harms to her child: smoking the smallest possible number of cigarettes and not exposing her child to cigarette smoke. Although women are discouraged from smoking while breastfeeding, it is believed that the risk of smoking while breastfeeding is smaller than the risk of weaning a child because of cigarettes. Women who are smokers can seek out a health unit and participate in the National Tobacco Control Program offered in SUS to treat cigarette dependence. Anti-smoking patches and chewing gum can be used while breastfeeding.
- **Using medication without medical guidance** – Some medications, herbal remedies, teas and herbs should not be used by women who are breastfeeding because they can be passed on to the milk and affect their children. They can often be replaced by other substances that pose a smaller risk to children and/or to breastfeeding. But is important to know that most medication, including antibiotics, can be taken by women while breastfeeding. This is why women should talk to a health professional before using any kind of medication while breastfeeding.
- **Ingesting any alcoholic beverage** – Women should not drink alcohol while breastfeeding because it not only reduces milk production, but also quickly passes on to the milk and stays there while there is alcohol in the mother's blood. We don't know enough about the effects that consuming alcohol through breast milk can have on children, but it is believed to affect their development. If the mother does drink alcohol on occasion, it should be limited to 240 mL of wine or two cans of beer and she should wait at

least two hours before breastfeeding, or express and discard the milk in this period. Since children can't always wait that long, ideally, women should not drink or they should express milk before drinking, so they can offer it to their children, preferably using a glass, during the period they should wait to eliminate alcohol from their body.

You should avoid practices that are harmful to breastfeeding, such as offering your child a bottle or pacifier, smoking, drinking alcoholic beverages and using medication without medical guidance.

When is breastfeeding not recommended?

There are only a few conditions that make breastfeeding INADvisable. Examples include mothers who have HIV (the virus that causes AIDS), HTLV1 and HTLV2 (viruses that compromise the body's defenses) or who use medications that are incompatible with breastfeeding, for example, those used to treat many kinds of cancer. Mothers who frequently use alcohol or illicit drugs (marijuana, cocaine, crack, amphetamines, ecstasy and others) should not breastfeed their children while they are still using these substances. All efforts must be made so these women can get the support they need in order to abstain from using these substances and, therefore, so they are able to breastfeed their children, if they so desire.



In certain cases – such as certain infections, occasional use of alcohol and/or illicit drugs, vaccination against yellow fever (for women whose babies are under 6 months of age) or exams that require use of radiopharmaceuticals –, it is recommended that breastfeeding be temporarily interrupted, under the supervision of health professionals, because the period during which women should abstain from breastfeeding varies depending on the situation. In order to maintain milk production and guarantee that their children will go back to nursing from the breast after the interruption, women should continue to regularly express their milk (and, in some cases, discard it) while they are not breastfeeding. With some planning, it is also possible for women to previously express milk, which they can offer to their children during the period when they are unable to breastfeed.

Children should not be breastfed by any woman other than their mother, including family members and friends, because of the risk of transmitting certain diseases, such as HIV, through the milk. When one woman breastfeeds another woman's baby, this is called “cross nursing”. Women who have the viruses for hepatitis A, B and C can breastfeed. However, women who have the hepatitis C virus and whose nipples are injured should talk to a health professional.

Main difficulties when breastfeeding

The arrival of a new child brings many joys, but also many concerns to the couple and/or family's routine, causing changes that are both sudden and (often) radical. So many new things and uncertainties can generate negative feelings in the mother, such as loneliness, insecurity, sadness and a great deal of tiredness, especially due to the baby's feeding demands, which are frequent during the day and during the night. Many women go through mood changes after birth and it is very important that they don't blame themselves for this. The postpartum baby blues or maternal sadness is a common, temporary condition that can be partly caused by hormonal changes and by the need to adapt, emotionally, to the new status as a mother and to all the changes this brings. On the other hand, postpartum depression manifests through more intense and lasting symptoms of sadness, irritability, inability to care for the baby, tiredness, loneliness. This condition requires medical care and psychological support and may be associated with the decision not to breastfeed.

or with the early interruption of breastfeeding. On the other hand, some studies have shown that breastfeeding can lessen or even prevent this type of depression.

It is also common for women to experience certain situations directly connected with breastfeeding that can create insecurities and make the process harder. The following recommendations can be useful in preventing and coping with some of these situations. Nonetheless, if women experience any situation that gets in the way of breastfeeding or puts it at risk, they should seek help from health professionals. This help can be found in primary health units, in outpatient units and doctor's offices or in breastfeeding clinics, human milk banks and collection points belonging to the BLH Network Brazil – Global Network of Human Milk Banks. Some maternity hospitals offer services, such as breastfeeding hot-lines or outpatient care, which can provide information both during prenatal care and after birth, when women experience any doubt or difficulty. You must be careful with information available online, in social networks and blogs, because they are often not based on scientific evidence and can be mistaken and/or outdated.

Here are the most common difficulties related to breastfeeding and what can be done to address them:

- **Delay in the time when the milk comes in** – For some women, it may take longer for the milk to “come in”. Elective cesarean sections (those that are scheduled, without the woman going into labor) have been singled out as a factor associated with this delay, due to hormonal factors and because it makes breastfeeding in the first hour of life more difficult. The same is true for premature births and maternal obesity.

What can be done: in these cases, it is crucial for women to feel confident and to be supported by their families and support networks. Some measures may help, especially stimulating the breasts with the baby's frequent suction. But professional support is crucial.

- **The child has difficulty sucking** – Some babies have difficulty initiating breastfeeding in the first days of life. Sometimes, they don't suck, resist the breast, cry, turn their faces away, or throw themselves back when placed at

the breast to nurse. There are those who try to suck, but are unable to grab the nipple and areola with their mouths; some latch on, but can't sustain the latch; others refuse one of the breasts or are very sleepy. Sometimes, the cause may be associated with the use of bottle nipples, nipple shields or pacifiers, or with pain caused by the baby's positioning, such as, for example, when a baby has a broken collarbone. Because of this, babies may be unable to adequately suck on the breast or they may not open their mouth enough, which makes latching on impossible. Babies may have difficulty grabbing the nipple and areola (the dark part of the breast that surrounds the nipple) with their mouths when the breast is very large, very full or hardened, or when the nipples are inverted, protruding or very flat (Figure 4). Babies with a short lingual frenulum (tongue-tie), depending on the degree, may have difficulty latching on and sucking.

What can be done: some useful measures are no longer using bottle nipples, nipple shields and pacifiers; using support for very large breasts; improving the latch and varying the baby's position while nursing (Figure 1). While the child is having difficulty sucking, it is recommended that the mother express her milk, either manually or using a pump, six to eight times a day. The milk should then be offered to the baby in a glass or spoon. This can help the milk production until the child becomes better at sucking. It is important that a health professional observe the feeding soon after birth and that the baby be examined in order to determine if they have tongue-tie that can interfere with breastfeeding. Health professionals are crucial to identifying the cause of the initial difficulty and can provide guidance regarding the most appropriate course of action.

- **Flat or inverted nipples** – Flat or inverted nipples can make breastfeeding harder, but don't necessarily make it impossible, because children also latch on to the areola, and not just the nipple. It is crucial for women to feel confident and to receive help from everyone, especially their families and health professionals.

What can be done: before birth, women should not do exercises or use loofahs or syringes to stretch their nipples, since these methods aren't effective and can cause harm. After birth, use of nipple shields is not recommended. Instead, you

should help the baby grab the nipple and areola with their mouth and you should try different positions to facilitate the latch. If the breasts are very full, it may be useful to massage them before breastfeeding, extracting some of the milk so the areola will be softer.

- **Sore and/or injured nipples** – In the first days after birth, mothers may experience sore nipples or some discomfort during nursing, even if their breasts aren't injured, which can be considered normal due to the increased breast sensitivity at the end of pregnancy and beginning of breastfeeding. However, after the first week, persistence of pain is a warning sign. Injured nipples, caused by INADequate latch and/or position during nursing (Figure 5), are the most common causes of pain. Other causes can include flat or inverted nipples; problems with the baby's sucking because of a short lingual frenulum; baby spending too much time sucking on the breast after nursing, without extracting milk, as if the nipple were a pacifier; improper use of milk pumps; traction on the nipple due to interrupting nursing without taking the proper precautions; use of creams and oils that can cause allergic reactions on the nipples; use of nipple shields; keeping the nipples moist, in contact with bras, diapers, gauze or cotton pads with leaked milk, and thrush (candidiasis).



Figure 4 – Different types of nipple

1. Flat nipple.
2. Protruding nipple.
3. Inverted nipple.

What can be done: the best thing for avoiding nipple injuries is making sure the baby has a proper latch. You should avoid using soap, alcohol or any other product on the nipples. You can also massage the breasts and extract a little bit of milk before each feeding, if the breast is very full and therefore making the latch more difficult. In order to stop the feeding and get the baby to release the breast without stretching the nipple, you should carefully introduce your index or pinky finger into the corner of the baby's mouth. If the nipples are already injured, they should be rinsed with clean water at least once a day in order to avoid infections. Some procedures may be useful for reducing pain: changing feeding positions, as shown in Figure 1, reducing pressure on painful spots; beginning feeding by the uninjured or less-injured breast. If the pain is intolerable, the woman can temporarily stop offering that breast and manually express the milk in order to prevent other problems, such as breast engorgement or mastitis (Figure 6), which is the inflammation of the breast. Use of creams, oils, antiseptics, tea bags, banana or papaya peels or any other substance on the breasts in order to reduce pain is not recommended. There is no scientific evidence that use of any of these products, or breast milk itself, helps injured nipples. If symptoms persist, you should visit a health professional who will detect the cause of pain and guide you regarding the most appropriate treatment.

- **Breast engorgement** – Another common difficulty, especially in the first days of breastfeeding, happens when the breasts produce more milk than the baby is able to nurse. It is normal for breasts to become full before feedings and this does not require any treatment. The problem is when breasts become so full that the skin becomes stretched, with the breasts often becoming hard or with the presence of lumps, something called breast engorgement. In more serious cases, the breasts can become very painful and swollen, the skin can become red and shiny, and the woman can have a fever and feel ill.



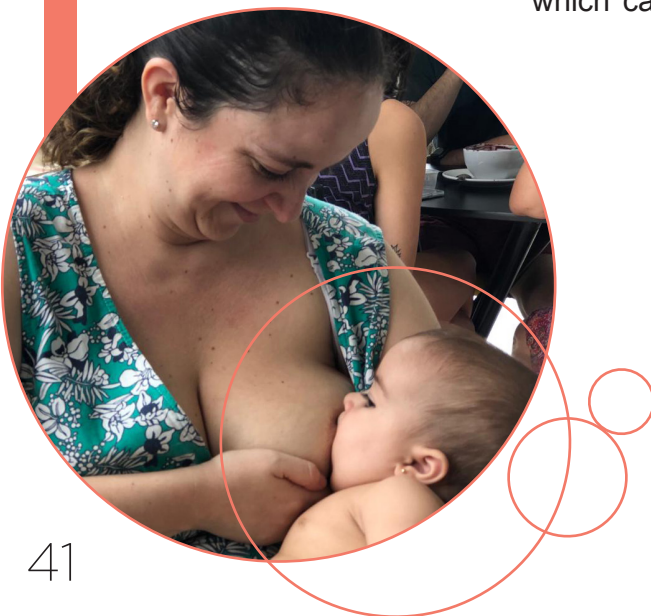
Figure 5 – Improper latch: child sucking only the nipple

What can be done: the first step is letting babies nurse whenever they wish, with no rigid schedules and no rush, so they can extract as much milk as possible from both breasts. Other procedures can help: massaging the breasts with soft, circular motions and expressing a little bit of milk, preferably manually or using a pump, in order to make the latch easier; wearing bras with wide, firm straps that provide more support. Health professionals can help define the best way to solve this problem and the family should encourage the woman to continue doing the most important thing: keep breastfeeding the child.

- **Mastitis** – Mastitis is an inflammation of the breast that may or may not lead to an infection. In this situation, one part of the breast becomes swollen, red and painful, which usually leads to body aches, fever and feeling ill. It can happen when the milk spends too much time inside the breast and/or because of a crack in the nipple, which can be a point of entry for bacteria.

What can be done: women with mastitis symptoms should immediately go to a health service in order to undergo the appropriate treatment. Breastfeeding does not need to be interrupted during treatment for mastitis.

- **Blocked milk ducts** – Milk ducts are the ducts through which milk passes inside the breast. They can become blocked when the milk produced in a given area of the breast, for whatever reason, isn't drained properly. Often, this happens when the breast isn't properly emptied, which can happen when there are long intervals



You can find more details in the section “How to express, store and offer breast milk”.



Figure 6 – Mastite

between feedings or when the child is unable to extract milk from the breast efficiently. It can also be caused by a localized pressure on an area, such as, for example, because of very tight bras, or because of the use of creams on the nipples, which obstructs the pores through which the milk leaves the breast. Generally speaking, women with blocked ducts have localized, sensitive and painful lumps, accompanied by pain, redness and heat in the affected area.

What can be done: any measure that helps empty the breasts helps prevent milk duct blockages. Thus, an adequate breastfeeding technique and frequent feedings reduce the likelihood of this complication, as does using a bra that does not block milk drainage and refraining from using creams on the nipples. When a milk duct is already blocked, frequent feedings, massages, emptying the breasts and using different positions while breastfeeding, offering the affected breast first, with the baby's chin directed at the affected area (which makes it easier to get milk from that area), can help solve the problem.

- **“Not enough milk”** – The feeling of not having enough milk is the most common reason for offering other milks and foods to infants. It is important to know that most women produce enough milk, just as long as the baby sucks often enough, for a long enough time and with a proper latch, stimulating milk production and emptying the breast. Crying or other reactions that show dissatisfaction, as well as going a few days without pooping, don't necessarily mean that the mother isn't producing enough milk. If the baby appears satisfied after feedings; is alert and responds to stimuli, urinates several times per day (at least 6 times); and, most importantly, is growing, gaining weight and developing adequately (which can be followed in the Child's Booklet), there are no problems with the amount of milk the mother is producing; therefore, the milk being offered is enough.

What can be done: some measures help increase milk production, such as improving positioning and latch, if necessary; increasing the frequency of feedings, including over night; offering both breasts when breastfeeding; massaging the breasts during the feedings; expressing the milk that remains in the breast after feedings, either manually or with a pump; giving the baby plenty of time to nurse from one breast before switching to the other; encouraging the child to suck, stroking their feet, talking to them, removing some of their clothes if they are sleepy or if they're not sucking vigorously; avoiding use of bottles, pacifiers and nipple shields; eating a healthy diet; drinking enough water to quench your thirst; resting, whenever possible. There are controversies surrounding the use of medication to increase milk production and it is important to talk to a health professional to evaluate each situation. Regardless of the situation, women need and must be supported by their families, support networks and health professionals in order to continue breastfeeding.

- **Hyperlactation** – Hyperlactation is when the woman produces more milk than the baby is able to consume and, though it isn't a problem, sometimes it can create difficulties when breastfeeding. Children may become irritated, throw their body back during the feeding, choke, regurgitate, or "fight" with the breast. Babies can also have a lot of gas and colic.



Figure 7 – How to remove the baby from the breast when it is necessary to interrupt the feeding, introducing the mother's finger into the corner of the baby's mouth

Proper positioning and latch are important for protecting the nipple and preventing the main breastfeeding difficulties. Pay attention and, along with your baby, figure out which are the most comfortable positions for you.

What can be done: avoid manually expressing milk from the breasts before feedings and only do so when they are very full, causing discomfort. Only offer one breast in each feeding, expressing a little bit of milk from the breast that isn't offered, only for comfort. Do not use breast shells, because they smother the breasts and create an environment that is conducive to bacteria and fungi. Put the baby to nurse in a more vertical position (Figure 1, item 5), such as the koala hold, because this helps the baby to have more control over the feeding. Another option is to breastfeed lying down or in a reclined position, instead of the more traditional sitting position, because, in this situation, these positions make milk ejection more difficult and, consequently, reduce the flow. If the baby chokes or lets go of the breast, wait until they have composed themselves again before placing them back on the breast to nurse. If a woman produces a large amount of milk, she can consider donating some of it to a Human Milk Bank.

If you have problems during breastfeeding (cracked nipples, hardened breasts, pain while breastfeeding, feeling like you don't produce enough milk and others), it is important not to use home remedies or medications without guidance from health professionals.

Early introduction of other milks

It is very common for a child to be breastfed, but also be given other milks. In most cases, as a result of insecurity, families decide to offer another milk because

they associate children's crying with hunger, because they think the mother's breast milk is weak or the amount of breast milk she produces is insufficient. A baby's cries usually cause concern, but it is important to remember that babies also cry when they feel cold, hot, when they need to be held and for many other reasons. Over time, the family will learn to recognize these situations. Being breastfed soothes and comforts children.

Offering another milk, other liquids or foods to a child who is breastfed is not recommended before the age of 6 months. This can reduce milk production and lead the child to no longer accept the breast. Offering foods at this age increases the likelihood of colic, allergies and/or infections. It is possible, and recommended, for a woman to return to exclusive breastfeeding after the child has spent a period receiving another milk during breastfeeding.

Weaning

Weaning is the end of breastfeeding. It is a process, not an event. It does not usually happen overnight.

Weaning is natural. Little by little, mother and baby prepare for this. Under the mother's leadership, some decisions and limits to accessing the breasts are gradually imposed on the child, until breastfeeding is completely suspended. Generally speaking, weaning should not be forced. It should happen naturally after the age of 2 years. Less interest in feedings; accepting different foods; security in the relationship with the mother; accepting other forms of comfort beside the breast; accepting not being breastfed in certain occasions or places; going to sleep without nursing; preferring to play or do some other activity with the mother instead of nursing are signs that the child is ready to be weaned.

Care must be taken if there is a need or desire to wean children before they are ready. The woman must be sure that she wants or needs to wean her child. Otherwise, she will have greater difficulty leading the process. Sudden, unplanned weaning should be avoided. It is important to understand that this process needs to be gradual and that it takes time, patience and understanding. Children will need extra support and attention

in this process and it is important that mothers not spend time away from their children – such as by traveling – during this period. Methods that seek to change the taste of the milk or make the child reject the breast, such as putting pepper or another product with an unpleasant taste on the nipples, are not recommended, nor is putting bandages on breasts to make them seem injured. The decision to continue breastfeeding until the child weans naturally or to interrupt it before then is exclusively up to the mother and the child. This decision should be respected and supported by everyone.

Questions and answers about breastfeeding

It is common for women and caretakers to have doubts regarding breastfeeding. The answers to the most common questions are presented here. However, you should read the entire chapter in order to have more information. When in doubt, a health professional is the main source for answers to your questions!

- **Is there such a thing as weak milk?**

All breast milk is adequate and not weak. You cannot judge breast milk based on its appearance, color or taste. Nature guarantees that all women, whether thin, obese, black, white, indigenous, poor or rich, even if they don't eat an adequate diet, produce milk with adequate amounts of calories, nutrients, vitamins, minerals, antibodies, water and everything else the baby needs.

- **Is the milk produced enough for the child?**

Most women are capable of producing enough milk to feed their babies. However, different things can cause the milk production to suffer a reduction. In most cases, this situation can be reversed if handled properly. Because of this, if a woman ever feels that she isn't producing enough milk, she should contact a health professional, who can assess the situation and provide guidance. It is very common for a health professional to conclude that the mother's milk is enough to meet all of the child's needs, which puts the family at ease.

- **How can you know if the baby is getting enough milk?**

In order to determine if a baby is getting enough milk, you need to pay attention to certain signs. If the baby is active and responds to stimuli; if the baby pees several times per day, at least 6 times every 24 hours, producing light-colored urine; and, especially, if the baby is growing and developing properly. All of this leads to the conclusion that the child is well and nursing enough. Because of this, it is crucial that you follow your child's weight gain through the Child's Booklet. The number of times a child poops in a single day can vary a lot. Therefore, it is not a good indicator to determine whether the child is getting enough breast milk. It is normal for babies who are exclusively breastfed to poop several times a day or go several days without pooping. Usually, in this period, the feces are more liquid and yellow.

- **How can you tell if the baby's crying is a sign of hunger?**

Babies cry for many reasons: because they're sleepy, cold, hot, in pain, because of colic, dirty diapers; or because they need attention and affection, to be held and nurse; and also because they are hungry. Over time, the mother and the people who take care of the child learn to interpret their behavior, identifying what they need when they cry. If you have doubts, talk to a health professional.

- **Is giving the baby a bottle at night a problem?**

It is very common for people to offer babies bottles with infant formula or another type of milk at night, so they will sleep longer. However, this is not recommended. The risks to children's health and to breastfeeding don't justify this practice. Additionally, if you offer the breast less, this can reduce the amount of the milk the mother produces. Breastfeeding at night stimulates milk production.

- **Do small breasts produce a small amount of milk?**

What determines the size of breasts is the amount of fat accumulated in them. The amount



of milk a woman produces does not depend on the size of her breasts, because milk is produced by the mammary glands, and not by the fat present in the breasts.

- **Does having had breast surgery (to reduce their size and/or to get silicone implants) harm breastfeeding?**

In some cases, these surgeries can interfere with breastfeeding, especially breast reduction surgeries, depending on the surgical technique that is used. However, each case must be individually assessed by health professionals.

- **Does breastfeeding a child past the age of 2 impair the child's natural process of becoming independent?**

Although many people believe this, the opposite has been shown to be true. Breastfeeding promotes a safe emotional bond with the mother and, because of this, children who are breastfed longer tend to be more independent. It is easier for them to be apart from their mothers and have new experiences with greater security and stability.

- **Is it harder to wean older children?**

In general, the opposite is true. As children grow older, little by little, they prepare to be weaned.

- **Do children who are breastfed have more difficulty accepting other foods?**

Actually, children who are breastfed accept new foods more easily because they become accustomed to the family's diet through the different flavors and smells present in breast milk. The same does not happen with children who are fed with other milks, whose taste and smell don't change and have nothing to do with the family's diet. There are cases in which women report that their children only want to be breastfed and either refuse other foods or only accept very little of them. In these situations, families should talk to health professionals in order to handle the situation better, without having to wean their children.

- **Does breastfeeding make your breasts sag?**

The increase in breast volume that happens during pregnancy and breastfeeding won't necessarily cause the breasts to sag. Genetics, excessive weight gain during pregnancy and weight increases over time, among other factors, contribute to changing the shape of the breasts.

- **Is it safe to breastfeed during a new pregnancy?**

Generally speaking, a new pregnancy isn't a reason to stop breastfeeding, except when there is a risk of miscarriage or premature labor. Women should know that, during pregnancy, if they're breastfeeding, milk production usually decreases and the milk's taste can change. Because of this, some children may find it strange. You should seek a health service for guidance.

- **Can a woman breastfeed children of different ages?**

If a woman wishes to breastfeed her newborn baby along with another, older child, she can do so, as long as she doesn't harm the younger baby, who must always be given priority for breastfeeding. Nature protects the younger baby because, after birth, the woman goes back to producing milk with the characteristics that meet a newborn baby's needs.



- **When a woman is breastfeeding, can her diet cause colic in the child?**

Baby colic is characterized by intense crying and usually happens after the first six weeks of life. It usually resolves spontaneously between the ages of 3 and 6 months. As a general practice, it is not recommended that women exclude foods from their diet while they are breastfeeding. However, they should pay attention to see if the colic appears or becomes worse on the days they eat a certain type of food. In these cases, talking to health professionals is very important, so they can help manage the situation.

- **Can a child have allergies if they're exclusively breastfed?**

Children who are exclusively breastfed can become allergic to certain foods, because they come into contact with these foods through the breast milk. The food that mothers eat that most causes allergies in babies is cow's milk, but other foods can also cause allergies. Presence of blood in the feces, reflux and irritability are some of the signs that a child has an allergy. In these cases, the most important thing to do is to talk to a physician in order to receive a diagnosis and treatment. If the allergy is confirmed, the woman doesn't have to stop breastfeeding. Treatment consists on removing the food that is allegedly causing the allergy from the mother's diet.

- **Is it possible to breastfeed twins?**

Women can breastfeed twins for two years or more, and exclusively in the first six months. This is possible because the milk production is proportional to the amount of milk being consumed by the children. If there are two or more children being breastfed, the woman will produce more milk than for

Figure 8 – Woman breastfeeding twins



a single child. You should talk to a health professional to get a few tips on how to breastfeed twins. This is extremely important because it makes it easier for the mother to rest and optimizes her time.

- **Is it possible for a woman to breastfeed after not breastfeeding for a while?**

A woman who stopped breastfeeding can start breastfeeding again, even if she is no longer producing milk. The process of returning to breastfeeding after an interruption is called relactation. Women in this situation should seek a health professional with experience in relactation in order to receive guidance as to how to proceed to start producing milk again and return to breastfeeding.

- **Can a woman who adopts a child breastfeed?**

It is possible for an adoptive mother to breastfeed, even if she hasn't been pregnant. To do so, she needs to talk to a health professional with experience in adoptive lactation to receive the proper guidance and support.

- **Who can donate human milk?**

Every woman who breastfeeds is a potential human milk donor. According to Brazilian rules, human milk donation must be voluntary and, to become a donor, women only need to be healthy and not be on any medication that can interfere with breastfeeding. In order to donate milk, you should contact a collection unit or a human milk bank to receive the necessary guidance on collecting, storing and transporting donated human milk. At the milk bank, the donated milk is pasteurized, subjected to quality control and, later, distributed to premature and/or sick newborns admitted to hospitals. On the Brazilian Human Milk Network's website, there is a list of milk banks and human milk collection units. After checking the list, you can contact the milk bank closest to your home.



How to express, store and offer breast milk

Here are a few situations in which it may be necessary and useful to express milk from the breasts during breastfeeding:

- When the milk “comes in”, the breasts can become very full and swollen, which can be uncomfortable for the woman and can make it difficult for the baby to latch on to the areola, the dark part surrounding the nipple. Expressing a little bit of milk makes the areola softer, relieving the woman’s discomfort caused by excess milk and making it easier for the baby to latch on, which leads the child to nurse better.
- After the milk “comes in”, any time the woman feels discomfort because her breasts are too full, expressing a little bit of milk relieves the sensation caused by the excess milk and makes her more comfortable.
- If the woman needs to be apart from her child for a few hours or if she goes back to work, expressing milk helps maintain milk production and also enables her to store the milk to be offered to the baby while she’s away.
- Even if the woman, for whatever reason, is temporarily unable to breastfeed (in one or both breasts), expressing milk helps make her more comfortable and to maintain production for when she goes back to breastfeeding.

It is recommended that women express their milk manually. There are manual or electric pumps that can help with milk extraction, but you should be careful when using and cleaning them, because they can lead to milk contamination, cracks and other traumas to the breast.

Attention: expressing a small amount of milk doesn’t mean you don’t produce enough for your baby. Expressing milk manually takes practice. Be patient and don’t give up!

Step-by-step instructions

Now is the time to learn about good milk expression practices. They involve preparing the bottle that will store the milk, the choice of environment, the mother's preparation, the technique itself and proper storage. You need to pay attention, stay calm and be patient in the first attempts. With practice, the procedures will become part of your routine.

A – How to prepare a bottle to store milk

- Choose a glass bottle with a plastic lid and a wide mouth. Do not use bottles with metal lids.
- If you choose to use a glass bottle from any kind of food product, you should first remove all the glue and paper from the label, including what is inside the lid. Wash the jar with water and soap, scrubbing and rinsing it well.
- Put the bottle along with the lid in a pot and cover them with water, letting it boil for 15 minutes. Count the time from when the water starts to boil.
- Drain the water from the pot. Place the bottle along with the lid upside down on top of a clean cloth or a paper towel to dry.
- Let the water drain from the bottle and the lid. Do not dry it with a cloth.
- The bottle may be used once it's dry. Store it in a container with a lid.

1



Figure 9 – Cleaning the bottles

1. Pot without a lid.
2. Partially-lidded pot.

B – How to prepare to express milk

- Milk should be expressed after the child has nursed or when the breasts are causing discomfort because they are too full. When the child isn't around, a good strategy is to think of them. This stimulates the production of oxytocin, the hormone responsible for the milk let-down.
- Choose a clean, tranquil place with no animals.
- Put your hair up and cover it with a cap or a scarf.



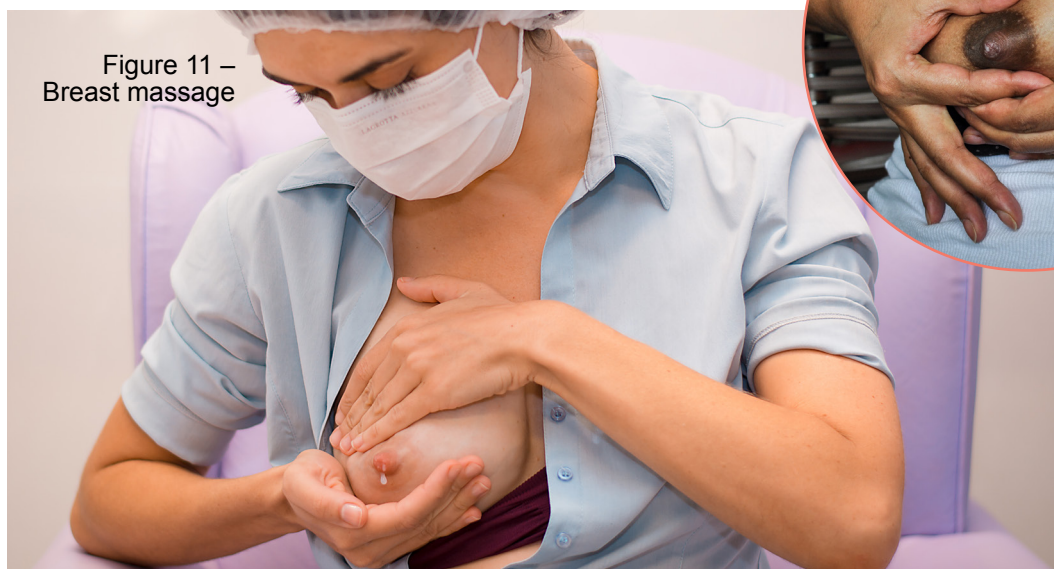
Figure 10 – Woman preparing to express milk

- Avoid talking while you're expressing milk and use a mask or cloth diaper to cover your mouth and nose.
- Remove rings, wedding bands, bracelets and watches. These can be a source of microbes.
- Wash your hands and forearms with soap and water and dry them with a clean towel or a paper towel.

C – How to manually express milk

- Massage the entire breast with the tips of your fingers or the palm of your hand, in circular motions, starting with the dark part of the breast, the areola (Figure 11).

Figure 12 – With firm fingers, pushing the areola back towards the body



- With the fingers making a “C”, put your thumb next to the areola on the top part of the breast. The other fingers should support the breast from below (Figure 12).
- With firm fingers, push the areola back towards the body. Softly press one finger against the other, without sliding them over the areola, repeating this motion many times until the milk starts to come out. Do not put too much pressure on the breast, because this can block the milk ducts. At first, the milk may not come out, but after pressing a few times, it will start to drip. Bend your body forward, positioning your breast over your stomach, in order to make it easier for the milk to come out and to increase the flow.
- Throw out the first squirts or drops.



Figure 13 – Expressing milk

1

- Position the bottle that will store the milk close to the breast.
- Begin collecting milk. Press and release, press and release (Figure 13).
- Change the position of the fingers around the areola in order to empty all areas.
- Switch breasts when the milk flow decreases, repeating the massage and the cycle many times.
- Expressing milk usually takes between 20 to 30 minutes for each breast, especially the first few times. As you become more accustomed to the process, it will become easier and faster.
- Following these procedures, milk expression will not hurt.



2

Figure 14 – Bottle
1. Bottle to be labeled.
2. Bottle with label.

D – How to store the milk

- The bottle or jar with the milk should be stored in the freezer (for up to 15 days) or in the refrigerator, on the shelf closest to the freezer (for up to 12 hours). Breast milk should not be stored in the refrigerator door. If the milk will be donated, it should be stored frozen for ten days at most. At this point, it must be transported to a human milk bank or collection unit.
- Close the lid tightly, write the date in which the milk was expressed with a pen on a label or tape and stick that onto the bottle.
- The next time you express milk, use another sterilized glass container (glass, cup, mug, bottle or jar with a wide mouth) and, once you've finished, add that milk to the bottle that is in the freezer. The bottle used to store milk should only be filled up to about two fingers below the lid. If it's too full, it might break when the milk freezes.
- When multiple milks are stored in a single bottle or jar, the expiration date will be the date of the first collection. For this reason, you must identify the bottle or jar with the date and time of the first collection.
- Bottles or jars should be stored in order of collection, with the oldest ones in front. These should be the first to be used.
- Milk that stays in the freezer for more than 15 days must be discarded.



E – How to offer the milk to the child

- Children should only be given milk expressed from their own mothers' breasts. If they are premature, low-weight and in the Neonatal Unit of a hospital, they should be given pasteurized human milk from a human milk bank.
- If the milk is frozen, it should be heated in its bottle, using a water bath, with the heat turned off. The milk should not be boiled or heated in the microwave.

- The utensil used to offer the milk must be boiled for 15 minutes.
- Softly shake the bottle in order to fully mix the milk.
- Open the bottle and put a little bit of the milk in a clean glass or cup.
- Put the child on your lap. The child should be awake and calm and should be positioned, as much as possible, sitting upright, with a firm head and the neck aligned with the body. The neck should not be twisted.
- Touch the rim of the glass or cup to the child's lower lip and let the breast milk touch the child's lip. The child will make licking motions, swallowing the milk. If you prefer, you can use a spoon to offer the milk. Do not pour the milk into the child's mouth, so as to avoid choking.
- Any breast milk that was defrosted and remained in the storage bottle should remain in the fridge (do not use the fridge door) and can be used for up to 12 hours. It should be heated in a water bath, with the heat turned off. After this 12-hour period, the milk should be discarded. Breast milk should not be frozen a second time.
- After feeding the child, any milk that remains in the glass, cup or spoon must be discarded.
- The amount of milk to be offered to the child should be determined by a health professional.



Figure 15 – Breast milk offered in a cup

Figure 16 – Breast milk offered on a spoon

If you have difficulty expressing, storing or offering breast milk to your child, go to a Primary Health Unit, a maternity hospital, the Human Milk Bank closest to you or the unit where your child is being, or will be, followed.



If you want to donate breast milk to other babies, visit the Human Milk Bank closest to you or call the **Health Hot-Line – 136.**



GETTING TO KNOW FOODS



Starting at 6 months of age, in addition to breast milk, children's meals should include other foods. The first step to providing a varied, balanced and tasty diet that respects the family's traditions is getting to know these new foods.

Choosing the foods that will be used in meals is crucial for an adequate and healthy diet and, generally speaking, if the food prepared for the family is adequate and healthy, it can also be given to a child over the age of 6 months, after the necessary changes to its texture.

In the first two years of a child's life, the process of choosing foods deserves special attention, because this is when eating habits are formed. The family's role in this process is very important: adults and children should participate in different ways. Adults choose healthy and adequate foods and children can choose from among them. For example, it is up to adults to buy fruits instead of sweets, such as cookies with filling, for example, and children can help choose which fruits should be purchased or eaten during meals. You should encourage children to participate in choosing foods and preparing meals, because this enables them to experience the daily tasks related to eating. If a child refuses a food because they don't like it, it is important that the family keep offering it without forcing the child to eat it, because the more the family offers the food, the more likely it is the child will accept it.

For the child to like a variety of foods, you must offer the greatest possible diversity of healthy foods that your family can obtain and which are traditionally eaten by your family and available in your region. To do so, it's important that you get to know the different types of foods, according to the extent and purpose of their processing.

Foods and their processing

During production, foods undergo different types of processing. The type of processing interferes with the food's nutrient profile and flavor, the presence and types of additives, the circumstances under which it is consumed (when, where, and with whom) and the quantities that will be consumed. Additionally, the type of processing also has an environmental impact, as we will later discuss.

The *Dietary Guidelines for the Brazilian Population* classifies foods into four categories, according to the extent and nature of their processing: natural or minimally processed foods; processed cooking ingredients; processed foods and ultra-processed foods. Understanding this classification is important when choosing foods for a healthy, adequate diet.

1) Natural or minimally processed foods

Natural foods are obtained directly from plants or animals and do not undergo any alteration after being extracted from nature. Minimally processed foods go through some modification, such as cleaning, removal of undesirable parts, division, grinding, drying, fermenting, pasteurizing, refrigerating, freezing or similar processes that do not involve adding salt, sugar, oils, fats or any other substance to the original food.

Examples of natural or minimally processed foods are:

- **Legumes:** beans of every kind, peas, lentils, chickpeas and other legumes.
- **Cereals:** white, brown or parboiled rice; corn, in grains or on the cob; wheat grains; cassava, corn, wheat or rye flour; oat flour, bran or flakes; noodles or fresh or dry pasta made with these flours and water.



- **Roots and tubers:** potato, cassava and other roots and tubers, either in their natural form or packaged, fractioned, refrigerated or frozen.
- **Vegetables:** fresh or packaged, fractioned, refrigerated or frozen.
- **Fruits:** fresh and dry fruits, natural fruit juices and pasteurized fruit juices (with no added sugar or other substances or additives).
- **Meats and eggs:** meat, entrails and other internal parts of cows, pigs, fowl, fish, sea foods and other animals, as well as eggs.
- **Milks:** human milk, milks from other animals (liquid or powder), yogurt and curds (with no added sugars or other substances)
- **Nuts:** chestnuts, almonds, peanuts, hazelnuts, walnuts and nuts with no added salt or sugar.
- **Potable water.**
- **Other:** fresh or dry mushrooms; fresh or dry spices and herbs; seeds, such as linseed, sesame and chia; teas (chamomile, lemongrass, mint, etc.), coffee and yerba-mate (with no added sugar).



A few foods in this group are not recommended for children, such as coffee, yerba-mate, green tea and black tea. In the next pages, you'll learn more about this.

Natural or minimally processed foods should be the basis of children's diet, and that of the whole family, that is, most foods you eat should be from this group.

Eating foods from this group:

- promotes health, because they're rich in nutrients;
- favors encounters and transmission of recipes and cooking skills between generations, because they are prepared at home and eaten by the whole family;
- favors traditional ways of producing food, greater diversity and the preservation of natural resources and the environment, especially if they are organic and agro-ecological.

Organic foods are those that do not use pesticides or other chemical products. Agro-ecological foods, in addition to not using pesticides, are produced based on social justice, valuing small producers and family farms, promoting fairer working conditions, in addition to protecting the environment and the natural resources, including caring for the soil, plants, animals, water, air and biodiversity. Additionally, foods produced this way are especially tasty!

2) Processed cooking ingredients

These are products used to prepare meals. They are industry-made, based on substances that exist in natural foods.

Examples of processed cooking ingredients are:

kitchen salt; white, granulated, demerara, brown or coconut sugar; molasses and *rapadura*; bee honey; oils and fats, such as soy, sunflower, corn or olive oil; butter (with or without salt); lard; starch extracted from corn or other plants; vinegars.

Sugars, molasses, *rapadura* and honey, which are also in this group, should not be given to children under 2 years of age.



Processed cooking ingredients should be used in moderation to season and prepare natural or minimally processed foods.

Home-made food should be culinary preparations, that is, home recipes made mainly with natural or minimally processed foods and seasoned with processed cooking ingredients.

3) Processed foods

These are made from natural foods, however, with the addition of salt or sugar (or some other cooking ingredient) so they will last longer or so as to enable other forms of consumption.

Examples of processed foods are:

Vegetable, cereal or legume preserves; tomato extract or concentrate (with sugar and salt); nuts with salt or sugar; salted meats; fish preserved in oil or salty water; canned or crystallized fruits; cheeses (white, yellow, mozzarella, ricotta, gouda, brie, *coalho*, *canastra*, provolone, cottage) and breads (made from refined or whole wheat flour, yeast, water and salt).



For children aged between 6 months and 2 years, only some processed foods can be a part of the diet.

Even though they're not modified to the same extent as ultra-processed foods, excessive consumption of processed foods is also related to heart diseases, high blood pressure, diabetes, obesity and cancer. Thus, processed foods can be eaten occasionally and in small amounts, as ingredients in culinary preparations or as part of meals based on natural or minimally processed foods. These foods can be eaten in small amounts by adults, but only some processed foods can be part of children's diets, such as breads made from refined or whole wheat flour, yeast, water and salt, as well as cheese.

4) Ultra-processed foods

Ultra-processed foods are industry-made, using several processing techniques and stages, and include many ingredients, such as salt, sugar, oils, fats and food additives (artificial coloring, preservatives, sweeteners, artificial aromas, flavor enhancers, among other ingredients not used at home). In these foods, sugar may be present in different ways. The most common are: maltodextrin, dextrose, corn syrup, malt syrup and inverted sugar syrup.

Examples of ultra-processed foods are:

Soft drinks; drink mixes; ready-to-drink sugary beverages (tea, *guaraná*, *açaí*, grape and other fruit concentrates); fruit-based beverages, with or without soy (juices, nectars, refreshers); chocolate and fruit-flavored beverages; “energy” drinks; packaged savory snacks; ice cream, chocolate, candy and sweets;

powder gelatin; sweet, sliced, hamburger or hot dog bread; cookies, cakes and cake mixtures; “breakfast cereals” and “cereal bars”; chocolate milks and flavor powder mixes; instant cereal flours (thickeners) with sugar; flavored and *petit suisse* yogurt; processed UHT cheese (processed cheese packed in small squares); cheddar cheese; growing-up milks; “instant” meat, chicken or vegetable seasoning (in cubes, powder or liquid); ready-to-eat mayonnaise and sauces; frozen products that only require heating, such as pre-prepared pies, doughs and pizzas; meat, chicken or fish nuggets, sausages, hamburgers, and other reconstituted meat products; and “instant” soup, pasta and dessert. Also included in this group are natural, minimally processed or processed foods that contain additives with the purpose of changing the final product’s color, aroma, flavor or texture, such as yogurts with food coloring or sweeteners and breads with emulsifiers.



Ultra-processed foods should not be given to children and should be avoided by adults.

Generally speaking, they contain excessive amounts of calories, salt, sugar, fat and additives.

- When eaten excessively, they can lead to problems, such as high blood pressure, heart disease, diabetes, obesity, tooth cavities and cancer.
- These foods are designed to be extremely tasty, leading to frequent consumption or even addiction. This is especially critical in the first years of life, because that’s when children form the basis of their eating habits. Eating these foods can lead children to be less interested in natural or minimally processed foods.

- They draw attention away from the process of eating, because they're frequently eaten standing up and/or without using cutlery or even while the person is engaged in another activity.

Attention: the examples of natural and minimally processed foods, processed cooking ingredients, processed and ultra-processed foods described here are meant to help you recognize foods in each group, but not everything listed should be part of a child's diet. In the next pages, you'll learn which of these foods are recommended and which should not be given to children.

What are food additives?

Food additives are chemical substances such as food coloring, preservatives, antioxidants, artificial aromas, flavor enhancers, sweeteners, among others, mostly not used at home, that are added to ultra-processed foods in order to provide or enhance their color or flavor, or to preserve them and extend their shelf life. Although each additive used in these products must go through tests and be approved by health authorities, their long-term effects on health and the cumulative effects of exposure to many additives is not always known. The health risks are higher when consumption is higher than the maximum recommended dosage, determined according to the person's weight. Since children weigh much less than young people and adults, even if they eat small amounts of these products, they have bigger chances of going over the maximum amount of additives.

Examples of additives found on labels of ultra-processed foods:

Artificial coloring: tartrazine yellow, caramel IV.

Preservatives: sodium benzoate.

Chemical leavening agent: sodium bicarbonate, ammonium bicarbonate and monocalcium phosphate.

Flavor enhancers: monosodium glutamate, monosodium guanylate.

Stabilizers: xanthan gum, carrageenan and carboxymethyl cellulose, soy lecithin.

Artificial aromas.

Sweeteners: sodium cyclamate, acesulfame potassium, aspartame.

Sweeteners are not recommended for children

In order to reduce the amount of sugar they contain, some ultra-processed foods, such as powdered beverages, gelatins, industrialized fruit juices, cakes, cookies, ice cream, among others, contain sweeteners (aspartame, sodium cyclamate, acesulfame potassium, saccharin sodium, stevia, mannitol, sorbitol, xylitol and sucralose). Because their effects on children's health are not fully understood, these substances should not be given to children, unless recommended by a health professional. Additionally, making children accustomed to very sweet flavors in the early years of their lives stimulates excessive consumption of foods and beverages that contain sugar and sweeteners, which can become a lifelong habit.

To better understand the classification of foods according to the extent and nature of their processing, see Figure 17. Strawberry is a natural food. Strawberry jam is a processed food, because the strawberry was cooked and sugar (one of the processed cooking ingredients) was added. Strawberry-flavor *petit suisse* cheese is an ultra-processed food that contains strawberry pulp, sugar, other ingredients used by the food industry and many additives.

Figure 17 – Example of the degrees of processing of a food



Pesticide residues are also present in ultra-processed foods

Pesticides are products used in food production, but they are harmful to our health and to the environment. In Brazil, pesticides are widely used in agriculture. Pesticide residues are also found in ingredients included in ultra-processed foods, such as wheat, corn, sugarcane and soy. Because of this, it is useless to replace natural or minimally processed foods with ultra-processed foods to try to reduce your consumption of pesticide residues. Even when organic or agro-ecological foods aren't available, natural or minimally processed foods are the best option.

Ultra-processed foods made for children should be avoided

Some ultra-processed foods are perceived to be healthy and are frequently offered to children. However, they all contain additives, such as food coloring, preservatives, sweeteners and stabilizers which are not healthy and hinder children's acceptance of natural foods. See below examples of foods that contain excessive amounts of sugar, salt and/or fat:

Food that contain too much sugar:

- Chocolate milk.
- Sugary and carbonated beverages – soft drinks, powdered beverages, fruit-based beverages, with or without soy (juices, nectars), other vegetable drinks, flavored syrups (redcurrant, *guaraná*, grape, etc.), chocolate and fruit-flavored beverages and “energy” drinks. Soft drinks made from cola and drinks made from yerba-mate, black tea or “natural” *guaraná* contain substances that make it difficult for the body to absorb iron and calcium, in addition to containing caffeine, a substance that can make children agitated.
- Sugary breakfast cereal.
- Instant cereal flours (made from rice, corn, among others) that contain sugar.
- Flavored powder gelatin. Common versions often also include artificial sweeteners.
- Industrialized *mocotó* jelly.
- Sweets, such as candy, chewing gum, lollipops and chocolate.
- Flavored and *petit suisse* yogurt.
- Fermented milk.

Foods that contain too much sugar, salt and/or fat

- Sweet and savory cookies and crackers (such as *biscoito Maria*, Maizena, cream crackers) with or without filling or icing (sandwich cookies, wafers), industrialized cakes.
- Packaged chips.
- Chicken nuggets.
- Instant noodles (pasta and seasoning).
- Sliced bread, brioche and pre-made *pão de queijo*.
- Packaged savory snacks.
- Sausages.
- Industrialized ice cream.

Why avoid industrialized baby foods when feeding your child?

There are many brands of industrialized baby foods, made from fruits, vegetables, meats, cereals and legumes, that are made for children aged between 6 months and 2 years. Although the most popular brands do not contain additives, they should not be part of children's diets for many reasons:

- Their textures do not favor the development of chewing, even though they have different consistencies according to age.
- They are made from several foods mixed in the same jar, which makes it difficult for children to perceive the different flavors.
- They do not help children to become accustomed to the way their families season their food or with the foods available in their region.
- The vitamins and minerals found in natural foods are better absorbed by the body than those added to baby foods.





Labels and ultra-processed foods

Reading food labels is very important. They contain a great deal of information: the list of ingredients, the manufacturer, the expiration date, the lot, the amount contained in the package and the nutritional information.

In order to identify ultra-processed foods, you need to look at the **list of ingredients**. In it, ingredients are listed by amount in decreasing order, that is, the first ingredient of the list is the one found in the greatest amount in the product and the last ingredient is the one found in the least amount. If the product has five or more ingredients and if it includes ingredients with strange names that are unfamiliar or that we never use at home, it is very likely that the product is ultra-processed.

Here is an example of lists of ingredients from a minimally processed food and from an ultra-processed food.

Regular noodles Wheat semolina, natural <i>urucum</i> and turmeric coloring.	Instant noodles Wheat flour, vegetable fat, salt, garlic powder, acidity regulator, potassium and sodium carbonate, sodium tripoliphosphate stabilizer, pyrophosphatopotassium sodium and sodium phosphate monobasic, synthetic coloring identical to natural beta-carotene. And the seasoning includes another 11 ingredients!
Can you tell the difference? In this example, the regular noodles have 3 ingredients, while the instant noodles have 21. Instant noodles are an ultra-processed food.	

Getting to know natural and minimally processed foods

Natural or minimally processed foods, which are crucial to health and ideal recipe ingredients, both for day-to-day meals and on special occasions, can be grouped according to the types and amount of nutrients they contain and to their use in cooking. Over the next few pages, we will describe the main food groups that are part of the Brazilian diet. They are: legumes; cereals; roots and tubers; vegetables; fruits; meats and eggs; milk and cheeses; nuts; natural condiments, spices and fresh and dry herbs; and water.

What are nutrients?

Nutrients are substances found in foods that are essential for the body's functions. They include proteins, carbs, fats, vitamins, minerals and fibers. Each has a specific function that helps guarantee children's growth and health. There is a lot of variation in terms of the nutrients present in foods. This is why it is important that diets are composed of different foods.

When choosing foods from each group, it is important to consider which are available in the region where the family and the child live and which are already part of their diet. If, in families' everyday life, different foods from all groups are present, children will probably get all the nutrients they need. The more varied the diet, the better.

Legumes group

This group includes all kinds of beans (great northern, pinto, fava, black, borlotti, kidney, navy, as well as cowpeas and black eyed peas) and also peas, chickpeas, soy and lentils. They are a good source of proteins, fibers, iron, zinc and B vitamins.



Figure 18 – Examples of foods in the legumes group
1. Raw. 2. Cooked.

Legumes are part of the Brazilian diet. All kinds can be offered to children starting at 6 months of age. It is common for caretakers to see the peels of beans in children's feces. This is normal and is not a reason to refrain from offering these foods. To improve this, you should soak the beans in water for 8 to 12 hours before cooking them. At 6 months, you can mash legumes with a fork and, starting at 8 months, you can observe whether the child accepts the whole grain without mashing it.

Figure 19 – Examples of foods from the cereals group

Cereals group

This group includes rice, brown rice, oats, rye, corn, wheat, wheatgrass (wheat used for making kibbeh) and the different types of flours, with all kinds of textures and degrees of refinement, such as corn flour, *flocão*, corn starch, wheat flour, among others. Pasta, both fresh and dry, refined or whole-wheat, are made from cereals. These foods contain carbohydrates, or carbs, the nutrient that gives children energy to play, grow and develop. They also contain fibers, minerals and vitamins, especially whole wheat cereals.



Rice, pasta and corn are very present in Brazilians' lunches and dinners. They have the advantage of being quick to prepare and cook. Although fruits are the best option for snacks, home-made bread is also a cereal-based option that can be eaten in those meals.

Snack

A snack is a small meal comprised of natural or minimally processed foods that is eaten between breakfast and lunch or between lunch and dinner.

Do not offer popcorn to children under 2 years of age

Popcorn is made from a type of corn. It is very often eaten as a snack, but, because it is harder, children under the age of 2 years may have difficulty safely chewing it, since they are still learning to chew and are usually easily distracted. The husks that are located inside the white part increase the risk of choking and suffocation. Because of this, giving popcorn to children younger than 2 years is not safe.

Gluten

A practice that has been widely publicized is removing gluten from diets. Gluten is a protein found in rye, barley and wheat. At present, there is no proof that gluten is harmful to most children or adults. Gluten should only be removed from the diets of people who have been diagnosed with Celiac disease or some other gluten-related disease.

Some things only look like cereals

In many ultra-processed foods, cereals are the main ingredient. These include savory biscuits and cookies, both plain and with filling, cereal bars, sweet breads, breakfast cereals, instant flours made from rice, oats, corn and/or wheat, used for making porridge or as thickeners or complements for milk. Although these foods contain cereals, they should not be offered to children because of their other ingredients.

The same recommendation applies to ready-to-eat industrialized foods (frozen foods). Lasagnas, pizzas and sweet and savory pastries are ultra-processed foods that should be avoided in children's diets.

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Another product that should be avoided is instant noodles. Many people include this food in their day-to-day lives because it is quick to prepare. Others serve it as a soup. However, the industrial processing of instant noodles involves frying the noodles, leading them to have an excessive amount of fats and calories, in addition to a great deal of sodium and many additives. Therefore, instant noodles and their seasoning should not be given to children.

Want a quick, cheaper, adequate and healthy option?

Try “angel hair” or “Ave Maria” pasta. Just add boiling water and it’s ready in 3 to 5 minutes.

Is bread a processed or ultra-processed food?

Breads can be processed or ultra-processed, depending on their list of ingredients. In general, industrialized breads, like sliced bread and brioches, are ultra-processed. Ultra-processed breads have more than five ingredients, such as hydrogenated vegetable fat, starch, whey, emulsifiers and/or many additives, and should not be given to children. On the other hand, breads with few ingredients, like wheat flour, water, salt and yeast, are processed and can be eaten by children in small amounts. Read the list of ingredients found on product labels and choose those with few ingredients that you are familiar with, with no complicated names.

The best option for children is home-made breads. Simple breads with no filling made in bakeries, such as baguettes, can also be given to children. However, many bakeries bake breads using ready-made mixtures. The composition of these mixtures transforms the bakery’s bread into an ultra-processed food. This information is not available to consumers unless requested. So, the next time you go to the bakery, ask which ingredients are used to make their bread.

Roots and tubers groups

This group is composed of potatoes – *baroa* (also known as *mandioquinha*, *batata-salsa* or *cenourinha-amarela*), sweet and white potatoes, among others; taro; yam and cassava, also known as manioc, *aipim* or *macaxeira*. The foods in this group have a similar nutrient profile to foods in the cereals group. They contain carbohydrates, a small amount of fibers, some vitamins and minerals.

Also in this group are cassava flour, potato starch, tapioca starch and other flours made from roots and tubers. Although these foods made from refining roots and tubers are important ingredients in many preparations, they have fewer vitamins and minerals than the foods from which they originate.

Foods in this group play a big role in Brazilian cooking, going by different names in recipes from the many Brazilian regions. They can be cooked on their own or used as ingredients in preparations, such as purees, home-made dough and *farofa*. Generally speaking, children and adults accept these foods very well. Roots and tubers can replace or complement cereals in lunch and dinner, and may also be consumed at breakfast or as a snack, a common practice in many regions.



Figure 20 – Examples of foods from the roots and tubers group

Some things only look like roots and tubers

Potatoes are used as ingredients in many ultra-processed foods, such as potato chips, pre-prepared french fries for frying or baking and mashed potatoes preparations in the shape of smiling faces or balls for frying or baking. However, these products should not be offered to children, including those sold in packages with kids' advertising, because they have many additives and are nutritionally unbalanced.

Vegetables group

There are many vegetable options in Brazil. Some examples of vegetables are: pumpkin, zucchini, eggplant, beets, carrots, chayote, *gueroba*, snow peas, scarlet eggplants, *jurubeba*, cackrey, cucumbers, bell peppers, okra, tomatoes and green beans. Leafy greens are also vegetables and include: chard, cress, lettuce, chicory, purslane, broccoli, puntarelle, onion, kale, cauliflower, spinach, *jambu*, fame flower, mustard, blade-apple cactus, cabbage, *taioaba*.

Vitamin A is present in orange vegetables and dark green leafy vegetables. The latter also contain iron, a mineral that prevents anemia. Vegetables also contain fiber, which helps prevent constipation and some diseases. People whose diets include a good amount of foods from this group are less likely to develop diseases such as obesity, diabetes, heart diseases and some types of cancer.

Despite all of these advantages, vegetables still have a limited place in Brazilians' meals. There are so many kinds, with such varied flavors, but sometimes families always eat the same vegetables and in small amounts. Vegetables are usually less accepted by children, especially because they're not usually offered to them.

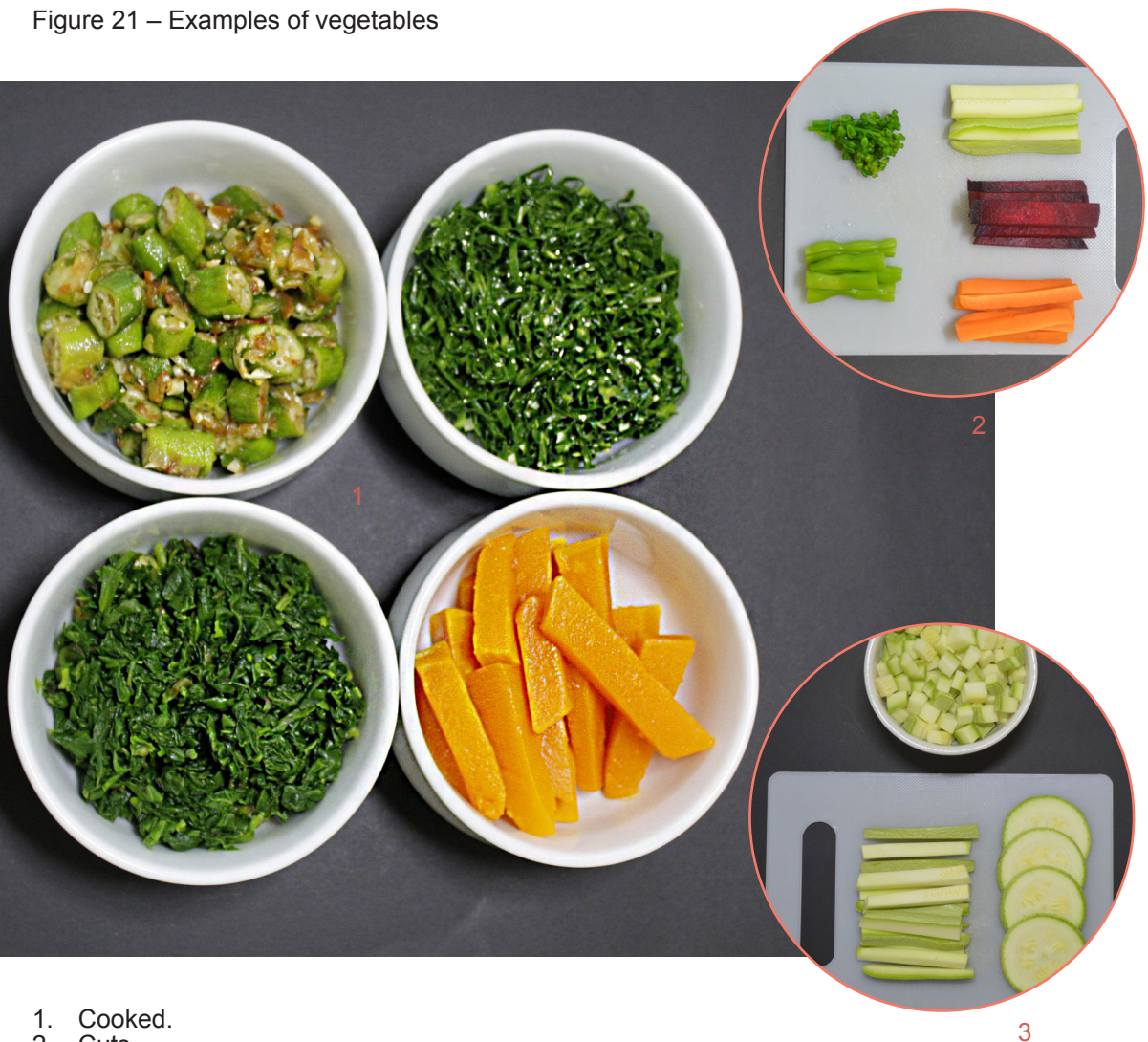
Whether or not children accept vegetables is directly related to the family's consumption of these foods. Often, families buy them only for the child, and adults and older children do not eat them. Over time, the child realizes that the rest of the family does not eat vegetables and begins to reject them. There are also families that don't eat vegetables because they don't know how to prepare them.

All vegetables, in all possible manners of preparation, with no exceptions, should be offered to children. There is no reason not to offer cleaned raw vegetables. Just make sure they have the appropriate consistency, since younger children may

have difficulty chewing harder vegetables, even when they're grated. As children grow, foods such as beets and carrots can be offered raw and grated or in strips, so that they can grab them with their hands.

Cleaning natural foods is easy. Learn how in the section "Cooking at home".

Figure 21 – Examples of vegetables



1. Cooked.
2. Cuts.
3. Types of cuts of the same vegetable.

Fruits group

There are many fruit options: avocado, pineapple, *abiu*, *açaí*, *acerola*, plum, blackberries, *araçá*, banana, *cajá*, cashew, persimmon, star fruit, cherry, *cupuaçu*, fig, guava, soursop, *jabuticaba*, jackfruit, *jenipapo*, orange, tangerine, lime, apple, *mangaba*, papaya, passion fruit, watermelon, melon, strawberry, *pequi*, peach, *pitanga*, *pomelo*, pomegranate, *umbu*, grape. Fruits are rich in fiber, vitamins and minerals, in addition to having substances that protect against diseases.

Artisanal or industrial *açaí* production must respect hygiene and processing norms that prevent contamination, such as bleaching or pasteurization.

Figure 22 – Examples of fruits

1. Fruit shavings.
2. Mashed fruit.
3. Fruit in pieces for children to grab with their hands.
4. Cut fruit without risk of suffocation.

Açaí is a fruit commonly found in Northern Brazil and sold throughout the country. It is very rich in different vitamins and minerals. But you must pay attention to where the *açaí* comes from, because there is a risk of contamination from “kissing bugs” carrying the parasite that transmits Chagas disease.



All fruits can be offered to children. Since the amount and types of vitamins and minerals varies between fruits, it's best to eat different kinds. One suggestion is to prioritize fruits from your region and buy fruits when they're in season, when they're tastier and cheaper. Brazil has an enormous variety of fruits. Each region has its most common, most accessible and cheapest options. In many places, fruits are available in backyards or neighborhoods or even along streets and avenues.

Fruits must be offered with no added sugar, so children do not become accustomed to very sweet tastes and are better able to recognize the natural flavor of foods. Fruits can be scraped or mashed with a fork and/or offered in slices so children can hold them in their own hands. Small fruits and those with pits, such as grapes or cherries, demand greater attention, because they can lead to choking. In these cases, the seeds should be removed and the fruits should be cut into very small slices (you should divide each fruit into two or four slices).

In order to add more variety to the diet, you can also cook or bake fruits without adding sugar or sweeteners. These preparations are a useful way to preserve and make the most of these fruits, avoiding waste. Bananas that are very ripe can be cooked and turned into a puree; apples can be sliced and cooked with a little bit of orange juice, instead of sugar.

Why should you offer fruits instead of fruit juice?

There are many reasons that justify offering fruits to children in slices, rather than as a liquid:

- By chewing a fruit, children exercise the muscles in the mouth and face and can feel the fruit's texture.
- If the juice is strained, there is a reduction in the amount of fibers (which prevent constipation) present in the fruit.
- Since fruit juices also usually contain added sugars, drinking them is associated with dental cavities and excess weight, among other health problems.
- Drinking fruit juice close to mealtimes can lead children to feel satiated, which can reduce their consumption of other foods.



- When children become accustomed to drinking fruit juice to quench their thirst, they can have difficulty drinking pure water. Additionally, they can drink too much fruit juice increasing the likelihood that they'll become overweight.

Therefore, you should not give children under the age of 1 any fruit juice, not even those made exclusively from fruit. Between the ages of 1 and 3 years, fruit juices continue to be unnecessary, but, if you choose to offer them, you can give children up to 120 mL per day, just as long as it's made from the fruit with no added sugar. It can be part of a meal and should ideally be offered at its conclusion.



Some things only look like fruit juices

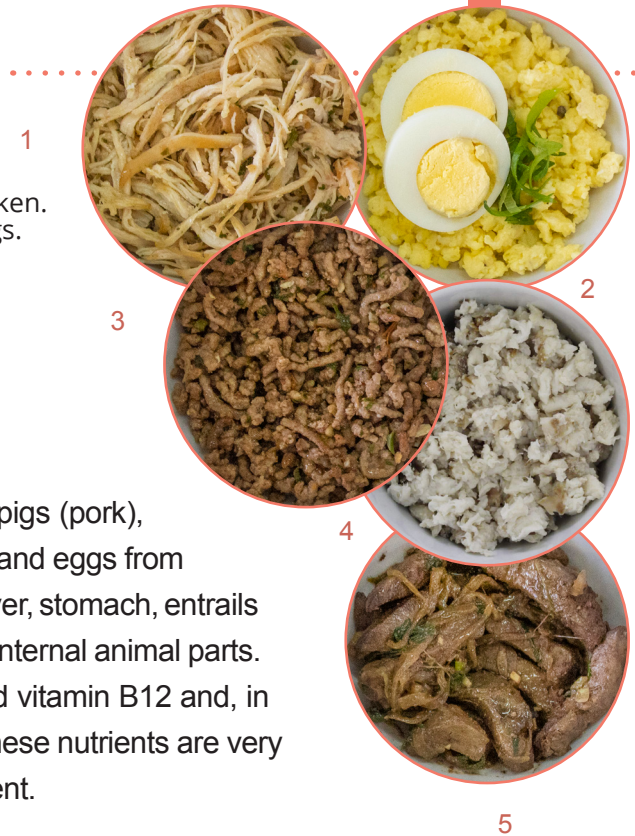
Juice, nectar, refresher, powder juice: what's the difference?

Figure 23 – Comparison of the amount of fruit in juice, nectar, refresher and powder juice

1. Powder juice – 1% of fruit obtained from dehydrating sweetened juice.
2. Refresher – 20% fruit or pulp diluted in potable water. Can be sweetened.
3. Nectar – 40% or more of fruit dilute in potable water and sweetened.
4. Juice – At least 60% of fruit diluted in potable water.

Figure 24 – Examples of foods from the meats and eggs group.

1. Shredded chicken.
2. Scrambled eggs.
3. Ground beef.
4. Shredded fish.
5. Chopped offal.



Meats and eggs group

This group includes meats from cows (beef), pigs (pork), lamb, goat, buffalo, fowl, rabbit, fish, seafood, and eggs from chicken and other birds. It also includes offal (liver, stomach, entrails from cows or fowl, chicken gizzard) and other internal animal parts. These foods contain protein, fat, iron, zinc and vitamin B12 and, in the case of liver, also a lot of vitamin A. All of these nutrients are very important for children's growth and development.

All foods in this group may be offered to children and you should vary what you offer as much as possible. For many years, it was recommended that people should avoid giving children under 1 year of age pork, fish and egg whites. However, we now know that they're not harmful to children and are good sources of nutrients. This is why these foods can be offered starting at 6 months of age.

Meats and eggs can be prepared in different ways, but you should make sure they're properly cooked, never rare or raw. Children are more likely to accept meats that have been boiled, sauteed or stewed because they're more moist and easier to cut. As for fish, the most important thing is to carefully remove all bones. You should choose fish with fewer bones or those whose bones are easier to remove. Examples of boneless fish are *caçãõ*, *pirarucu*, spotted *sorubim*, *tambaqui*, jaú and catfish, which may be offered according to the family's eating habits. Eggs can be boiled, scrambled, poached or prepared as an omelette, with a little bit of oil, making sure not to overheat the oil.

Some things only look like meat

Meats are the main ingredient in many ultra-processed foods, such as hamburgers, nuggets, sausages, salami, ham, pâté and breaded fish that are ready to be heated, as well as ready or semi-ready-to-eat meals made from meat. These products contain many additives, sodium and saturated fat. Excessive consumption of sodium and saturated fat has been shown to be related to heart disease. Additionally, consumption of ultra-processed foods made from meat is related to cancer. Therefore, like all ultra-processed foods, they should not be offered to children and should be avoided by the family.

Milk and cheese group

For children under the age of 2 years, the most important food in this group is breast milk. This group also includes milk from other animals, curds, natural yogurts without sugar, and cheese. They are rich in proteins, fats, calcium and vitamin A.

Breast milk is a complete food. There is no need to offer cow's milk, milk from other animals or infant formulas to children who are being breastfed.

Milk coffee is a preparation that is part of Brazilian culture, however, it is not recommended for children under the age of 2 years. Caffeine – which is present in coffee, black and green tea, mate, chocolate and cola drinks – is a stimulant and can make children agitated. This is why these beverages should not be offered to children. Additionally, these beverages can contain substances that reduce the absorption of the calcium present in milk.

Teas such as chamomile, lemongrass, mint can be offered to children starting at 6 months of age, with no added sugar or sweeteners, just as long as they don't replace any meal.



Some things only look like milk

Many products that are sold as “kids’ foods” use milk as an ingredient, but add sugar and additives. Flavored milks, chocolate milk, sweetened growing-up milks, yogurts with sugar, flavor, artificial colors, honey and *petit suisse* yogurts, cheddar and processed cheese are very common in the diets of Brazilian families. Don’t be fooled: these are ultra-processed foods and should not be offered to children.

Nuts group



This group includes foods such as: almonds, peanuts, hazelnuts, cashew nuts, Brazilian nuts, baru nuts, pecans and pistachios. These foods are rich in minerals, vitamins, fibers, healthy fats and anti-oxidant substances that prevent diseases. **Because of their hard consistency, they can cause choking and suffocation. For this reason, offering whole nuts to children is not safe.** However, if they are crushed or finely chopped, they can be offered to children. On the other hand, nuts coated in sugar or salt should not be offered to children because of the added sugar and the excess salt.

Natural condiments, spices and fresh and dry herbs

These are natural types of seasoning which add flavor, aroma and nutrients to foods and enable children to perceive flavor subtleties in each food. Some examples of natural condiments used in Brazil are: rosemary, turmeric, cinnamon, chives, parsley, culantro, cilantro, cumin, clove, ginger, bay leaf, basil, oregano, different types of peppers, sage and thyme. Foods such as onion, garlic, lemon, orange, olive oil, other types of oils and other natural or minimally processed foods can also be used as condiments.

Some things only look like natural seasoning

Cube, powder or liquid stock and ready-to-eat sauces are ultra-processed foods with large amounts of salt, fat, sugars, monosodium glutamate and other chemical additives. They should not be used in culinary preparations given to children.



Water

An essential source of life, water is also a food. Children who are exclusively breastfed don't need to drink water, because breast milk keeps them sufficiently hydrated. After 6 months, when the child starts to eat other foods, you should offer water in a glass, especially in the intervals between meals.

Offering water is important because children don't realize they are thirsty and don't ask for water. Always leaving a lidded glass or bottle of water within reach is a good strategy. In very hot places, children need more water.

Good drinking water

In order to avoid contamination and diseases, you should only drink potable water. Potable water has no taste, smell or color that gives it an unpleasant aspect. It must be clean and should not contain micro-organisms or substances that can cause diseases. You must also pay attention to water tanks, cisterns, clay filters, bottles and other containers that store water for home consumption. They must be cleaned regularly.

In general, the water that is provided by the public water supply is adequate after filtration.

In places where there is no water treatment, water must be filtered and treated with a 2.5% sodium hypochlorite solution (mix two drops of the hypochlorite solution for every liter of water and wait 30 minutes) or according to the manufacturer's instructions, printed on the label. Ideally, water treated with hypochlorite should be used on the same day or, at most, the following day.

If you don't have access to hypochlorite, you must filter and boil water for five minutes before using or drinking it. The five minutes should be counted after the water has started boiling, that is, after the first bubbles have appeared.

Foods that contain iron and vitamin A

These nutrients are especially important for children. Iron deficiency causes anemia, which hinders children's development and learning ability. Vitamin A deficiency increases the risk of infections and causes important vision-related problems and may even lead to blindness.

In order to prevent these problems during childhood, it is very important that children be breastfed for the first 2 years of life or longer, and exclusively breastfed in the first 6 months. Starting at 6 months of age, although breast milk continues to offer well-absorbed iron and almost half of the vitamin A that children need, other foods that contain these nutrients must also be offered every day.

- **Foods that contain iron include:** meats; beans; liver; eggs; dark green vegetables, such as spinach, chicory, *jambu* and Malabar spinach. Iron from animal sources is easily absorbed by the organism. Iron from vegetable sources is better absorbed when the meal also includes foods rich in vitamin C, such as oranges, pineapples, *acerola*, guava, mango, cashew, lime, papaya, tangerine, pomegranate and camu camu, among others.
- **Foods that contain vitamin A include:** liver; eggs; orange-colored vegetables such as pumpkin, carrots; dark green vegetables, such as kale, *taioba*, chicory and spinach; and some fruits, such as papaya and mango.

Because children aged between 6 months and 2 years are at a higher risk for developing iron and vitamin A deficiencies, they may require supplements of these nutrients. Only health professionals can prescribe supplements. You can access the supplement programs recommended by the Ministry of Health of Brazil in Primary Health Units.



*For more
information:*

Access the website of the
Ministry of Health's Secretariat
of Primary Health Care or go to
the **Primary Health Unit**
closest to you.





CHILDREN'S DIET STARTING AT 6 MONTHS OF AGE

Starting at 6 months of age, children should continue to be breastfed and new foods should be offered. Children should be introduced to a wide diversity of colors, flavors, textures and smells. An adequate and healthy diet is crucial for children's growth and development. In this section, you'll get to know these new foods and how to offer them to children at different ages.

Children's development and diet

The first two years of a child's life are crucial for their growth and development. In addition to gaining weight and height, during this period, children learn to do new things. Their skills and agility grow and important changes take place to their relationship with the environment and the people around them. In this period, children develop the ability to lift their heads, grab objects, sit, crawl, stand, walk and talk, as well as the ability to chew. They start out being nursed, then eat mashed and chopped foods, until they accept the same food consistency as the rest of the family.

Children's growth and development depend on their own characteristics and their relationship with the social environment. In order to fully grow and develop, children need an adequate and healthy diet, care, protection and affection, so they will feel safe, loved and valued.

For the first 6 months, breast milk is the ideal food for children. It provides everything children need to grow and develop, without the need of any other food, not even water. Additionally, through breast milk, children subtly notice the flavors of the foods eaten by their mothers. This makes it easier for them to accept the foods that will later be offered.

After 6 months, children need more nutrients and other foods must be offered along with breast milk. At that age, most children are capable of making chewing motions, even before they begin teething. They show interest in food and enjoy participating in family meals.

The flavors, textures, smells and colors of foods are an essential part of the evolution of chewing and of development as a whole. Additionally, the foods children eat contribute to shaping their identity because they enable children to learn about themselves and their environments. Families' eating habits – what, how and when children eat – play an important role in the development of lifelong healthy habits and will influence children's relationship with food.

To learn more about child growth and development, read the Child's Booklet. All children must be taken to routine visits to health services so their growth and development can be tracked. Pay close attention to the number and times of routine health appointments recommended in the Child's Booklet.

The moment when other foods should be introduced to premature children must be determined by a health professional. When the family starts offering other foods, the guidance regarding the types of foods and the manner in which to offer them will be the same as those described in this section and in the section "Getting to know foods".

A learning experience for everyone

Taking care of a child, including providing their food, is a collective task that must be shared by all family members – mother, father, their partners, grandparents and other relatives – and also by people close to the family, caretakers or any other person in the child's life. It is important that everyone involved with a child's diet knows how to recognize and differentiate between the needs for food, hygiene, interaction and affection. Talking about issues related to education and diet helps avoid conflicting behaviors.

The whole family can be involved in the child's diet, but it is best to assign responsibilities and divide the daily tasks of planning, preparing and offering meals. These activities can be rotated so no single person is overburdened.

Eating in an adequate and healthy manner

The home is children's main food environment. This environment involves the foods that are available and people's relationship with them. Eating should be a moment of positive experiences, learning and affection! A welcoming, calm environment and a good relationship between children and caretakers can positively influence their acceptance of foods. Sharing meals with family helps children learn. It is crucial that those who feed children have a relationship of affection, trust and, of course, patience with them. This is a learning process that takes time and this must be considered when organizing children's routines and those of their families.

Respecting signs of hunger satiety

When children are very young, they're not yet able to communicate wants and needs through words, so they use other forms of expression: making sounds with their mouths, crying, laughing, moving their hands, heads and bodies. With regard to eating, from the first moments of life, children exhibit signs of hunger to show that they want to eat.

Children also exhibit signs of satiety to show they're full and don't want to eat anymore. For example, when they've nursed enough, they let go of the breast or fall asleep; when they've eaten enough in a meal, they turn their faces or refuse to open their mouths again.

Starting at 6 months of age, when they start being given other foods besides breast milk, it is crucial that you pay attention to and respect their signs of hunger and satiety. This is important to children's process of learning about foods and eating, and to their full development. Signs of hunger and satiety vary according to age. When you notice these signs, you must respond actively, affectionately and with respect, offering the child food when they show that they're hungry and stopping when they show that they're satisfied.

Figure 25 – A child accepts the food being offered



Thus, if the child shows that they want to eat more, you should offer more food; if they don't want to continue eating, you shouldn't insist or force them to eat. You shouldn't force the child to always "clean their plate" because this can harm their ability to control their appetite and can lead to excessive weight gain. You must pay attention to the child's rhythm and behavior. Sometimes, children can stop eating for a while just to rest and, later, go back to eating. Or they can become distracted with what's going on around them and stop eating before they're satiated. You need to get to know the child's reactions in order to tell these situations apart.

Figure 26 – A child rejects the food being offered



Interacting with your child during meals

Children's relationship with food is built over time and demands attention and patience from caretakers. The way in which adults care for children and offer meals can help or hinder this learning process. Eating together, with satisfaction, complimenting the food, encouraging children to eat and to enjoy eating, talking to children during meals, talking about the food on the plate, looking at the children and smiling usually lead to good results.

On the other hand, giving food in response to any crying, rushing or pressuring children to eat through threats, blackmailing and/or punishment; offering excessive amounts of foods or forcing children to eat all the food on their plates are practices that lead children to eat more than they should or less than they need, and contribute to the development of a negative relationship with food, creating moments of stress and frustration for both caretakers and children.

Figure 27 – A child closes her mouth and turns her head, rejecting the food



When dealing with confrontations, you should not use tricks, such as offering rewards for eating foods the child doesn't like or hiding them underneath other foods. When caretakers give children rewards, children can associate eating "well" or in proper amounts with some benefit or feeling, such as getting a toy or engaging in an activity they enjoy. This can lead to a dependent relationship between food and the reward.

During meals, children's attention should be focused on that moment. Children should not eat while walking around the house and playing. Other things that children find attractive, such as television, smartphones, computers or tablets, can distract them, leading to a disinterest in food. This harms the learning process. When children eat using these distractions, even though it may seem like they are eating better, they eat automatically, without paying attention to the food and, often, in excess. This can lead to future harm, such as losing control over the hunger and satiety mechanism, in addition to excessive weight gain or loss.

Another important aspect related to the use of electronic devices is children's exposure to ads for ultra-processed foods. They're usually attractive and can be associated with cartoon characters and toys, such as superheroes and princesses. These aspects lead children to desire the advertised food. Because of this, avoiding their exposure to smartphones, computers, tables and television helps to protect them and prevents harms to an adequate and healthy diet. You should also bear in mind that if the person offering food to a child uses these devices, this can also interfere in their interaction with, and acceptance of, the food. Make sure that eating is a source of pleasure and try to separate the moment of eating from those of distraction and agitations.

To learn more about this, read the section "Adequate, healthy diets: dealing with challenges in everyday life".



The way in which you care for your child and offer meals can help or hinder their food-related learning process.

Encourage children:

- by having them share their meals with the rest of the family, and preparing a plate just for them;
- by giving them freedom to hold foods/utensils;
- by varying the ways in which you present food: a dish that is pretty, colorful, tasty and smells good motivates children to eat;
- by interacting with them and always saying the names of the foods they are eating;
- by dedicating time and patience to their meals;
- by congratulating and complimenting them when they eat foods/meals.

Avoid attitudes such as:

- forcing children to eat;
- offering to let children watch TV or play with a smartphone, tablet or computer while they eat;
- using electronic devices while you feed children;
- feeding children while they are walking around the house and playing;
- hiding foods that children do not like in preparations.

Avoid saying things like:

- “If you clean your plate, you’ll get dessert!”;
- “I’ll be so sad if you don’t eat!”;
- “If you don’t eat, you won’t play!”;
- “Please, just another bite!”.

And pay attention to children’s signs of hunger and satiety!

It is crucial that the entire family value mealtime. Children always pay attention to everything in their surroundings. They tend to imitate and repeat what other people do. Eating with the family makes meals a shared experience. This also helps children to become interested in trying new foods and makes meals more pleasurable. If children notice that their family likes to eat healthy foods, they will accept them more easily.

Figure 28 – Family meal



The best practices for an adequate, healthy diet for children aged between 6 months and 2 years

Breast milk should still be offered

Children should nurse whenever they wish. Right from the beginning, new foods can be offered after nursing. If a child is agitated or crying, breastfeeding may be a way to calm them before offering other foods. Children may sleep after nursing. That's not a problem. As soon as they wake up, offer the meal that is appropriate for that time of day.

As children grow and accept lunch and dinner better, breast milk should only be offered if they show they're interested in nursing. This is a transition period, so families must observe what is the best strategy for getting their children to continue to nurse and also accept new foods. If a child is resistant to accepting new foods, you must have patience and persist. When you start to introduce other foods, you don't need to worry about how much they are eating, because breast milk continues to be their main food. If you postpone the introduction of other foods, this can make it difficult for the child to accept new foods in the future.



If a child is being breastfed, you should not give them another milk or infant formula because these foods are unnecessary and can discourage them from nursing. If the mother must be away from her child, she can express and store breast milk so it can be offered to the child.

To learn more about this, see the topic “How to express, store and offer breast milk”, in the section “Breast milk: the first food”.

To quench thirst, offer water

Water is an essential food for hydrating children. It must be given from the moment that new foods besides breast milk are included in their routine. Often, instead of water, mothers, fathers, relatives and other caretakers offer children coconut water, natural fruit juices or industrialized beverages, such as refreshers, fruit-based beverages with or without soy (juices, nectars, refreshers), currant, *guaraná* or grape-flavored syrups, iced teas (even homemade ones, if sweetened), soft drinks or carbonated beverages. This is not recommended, not only because these beverages may contain sugar, sodium and chemical additives, but also because this practice may make children accustomed to only quenching their thirst with sugary or flavored beverages and increases the odds that children will become overweight or have cavities and diabetes.

To learn more, read the topic “Water”, in the section “Getting to know foods”.

Adequate consistency for children’s food

In the beginning, children should be given food that has been mashed with a fork. Next, foods should be chopped into small pieces, scraped or shredded, so children will learn to chew them. You can also offer soft foods in large pieces, so the child will grasp them and bring them to their mouth. When they’re a little older, children can eat the same food as the family. Just cut the bigger pieces, when needed.

Do not offer liquid preparations and do not use blenders, mixers or sieves. If children continue with liquid consistency, it will be harder for them to accept more solid foods in the future, which could lead to choking and an urge to vomit. Liquid foods such as soups, juices and stock, because they contain more water, provide less energy and nutrients than what children require. Foods with

an adequate consistency don't drip from the spoon, are firm, and take some effort to chew, helping to develop the face and the bones in the head, as well as with adequate breathing and in learning to chew.

The images below show examples of meals with different consistencies, according to age.



Figure 29 – Evolution of preparation consistency – lunch and dinner

The images show the amounts of food for different ages. Meals for children aged 6, 8 and 12 months are shown in a dessert plate, while the adult meal is shown in a large, shallow plate.

The amount of food you should offer increases over time

When children begin to eat other foods, they usually only accept a small amount, which may generate anxiety for the family. Children may also only try the foods. Don't worry! Remember that everything is new to children. As they grow and develop, the amount of food they eat grows gradually. You must respect each child's time and individuality. While they are going through this phase, breast milk is still their main food.

The best way to know if the amount of food a child is eating is adequate is to assess their growth. Weight and height growth curves should be followed by health professionals and recorded in the Child's Booklet. If a child's growth and development are within what is expected, that is a sign that they're eating an adequate diet. Some events that are common in this phase may temporarily interfere in a child's willingness to accept food, such as teething, being

separated from the mother for long periods and the occurrence of diseases. Frequent rejection of foods may hinder children's growth. Solutions for this vary according to each case. Visit your health unit for guidance regarding this situation.



Figure 30 – Consistency evolution – snacks

New experiences every day

Experiences with new flavors, smells and textures when children begin to eat foods, especially in the first year of life, help them to have a varied diet in the future. The bigger the variety of natural or minimally processed foods from different food groups that are included in the diet, the greater the diversity of nutrients, which contributes to healthy growth. The foods that are offered to children should be part of their family's food culture and should be produced and commercialized in the region where they live, giving priority to foods that are in season. This can be an opportunity for the whole family to expand the variety of foods they usually eat. It is never too late to try new foods. In order to stimulate children's learning, different foods should ideally be kept separate on the plate, without mixing them together. In addition to making the meal more attractive, encouraging children to eat, this practice helps them get to know foods with different flavors, colors and textures.



Family food with natural seasoning and minimum amount of salt

Children can and should, from the beginning, eat the same food as the family, which should be prepared with small amounts of vegetable oil, natural seasoning and a minimum amount of salt. Vegetable oils, such as soy, sunflower, corn or olive oils, are sources of energy and are important in child development. They can be used in small amounts when preparing food for the family. Using excessive amounts of these oils isn't recommended because this can dramatically increase the amount of calories present in the preparation. For this reason, fried preparations should be avoided. Natural seasonings such as onion, garlic, parsley, cilantro and other herbs and spices that the family enjoys can be used to season food. You should avoid ready-to-use seasonings that come as powders, cubes or liquids.

Use the minimum amount of salt possible

Brazilian families consume almost three times more sodium than the recommended limit. Sodium is present in table salt and is also added to practically all processed and ultra-processed foods, even those that are sweet, and often in large amounts. Excessive sodium consumption increases the likelihood of developing high blood pressure and is related to the development of stomach cancer. Because of this, you should be careful when using salt at home. Avoid ultra-processed foods and reduce the use of salt in preparations. For a family of four who prepare and eat meals at home every day, 1 kg of salt should last at least two and half months. Ultra-processed seasonings, sold as cubes, sachets or liquids, also include excessive amounts of sodium and should not be used when preparing the family's meals, especially not for children.

In the section "Cooking at home", you'll find seasoning ideas for children and the whole family.



Sugar should not be offered to children under 2 years of age

In the first years of life, fruits and beverages should not be sweetened with any kind of sugar: white, brown, refined, demerara, raw, coconut sugar, corn syrup, honey, molasses or *rapadura*. You should also not offer preparations that include sugar as one of the ingredients, such as cakes, cookies, sweets and jams. Sugar is also present in most ultra-processed foods (soft drinks, chocolate drinks, instant flours with sugar, cake mixes, cookies, yogurts, industrialized juices, among others). This is one of the reasons why they should not be offered to small children. Using artificial sweeteners instead of sugar is also not recommended because they contain chemical substances that are not appropriate at this stage of life.

Sugar consumption increases the likelihood of excessive weight gain and of other diseases, such as diabetes, hypertension and cancer, and can cause cavities and plaque. Additionally, since children already prefer sweet tastes from birth, if they become used to sugary preparations, they may find it harder to accept vegetables and other healthy foods. Not offering sugar and products that contain it in the first two years of life contributes to the development of healthier eating habits.

Can I offer honey?

Although honey is a natural product, it should not be offered to children under 2 years of age. This is because of two reasons: honey contains the same components as sugar, which already justifies avoiding it. Additionally, there is a risk of contamination with a bacterium associated with botulism. Children under 1 year of age are less resistant to this bacterium and may develop this serious disease, which causes gastrointestinal and neurological problems.

Appropriate and safe utensils

The utensils used by children should be age-appropriate and made from resistant materials. Spoons should fit in children's mouths and liquids should be offered in glasses. Older children may also use appropriately-sized forks. Disposable cutlery should not be used because they can break and injure children. There is no need to buy utensils specifically for children. But, if you do, avoid cups with straws or that include many details in their shapes, as this makes cleaning them harder. Plainer and straighter cups and plates are preferable.



Figure 31 – Examples of utensils

Figure 32 – Offering food on a spoon

The use of bottles harms children's ability to regulate appetite, which can lead to excessive weight gain. In addition, it can cause nipple confusion for the child who is breastfed, which can lead to early weaning.



It is not recommended even for children older than 1 year because they are harder to clean, which can lead to infections. Bottle use leads to a tongue motion and position that harms the development of swallowing, chewing and speaking. From an early age, children accept liquids offered in glasses very well.

Clean hands at mealtimes

Before preparing food or offering it to a child, you should wash your hands with water and soap. Dirty hands can carry micro-organisms and parasites that cause diseases, such as worm infections. Children's hands should also be washed before they eat.

Pay attention to the food's temperature

Check to see if the food isn't too hot by tasting it on the plate with a different spoon than the one used by the child. If you need to cool the food down, stir it with the spoon. Avoid blowing on it because the micro-organisms present in your mouth may be transferred to the food.

Children's position helps with food acceptance

Children should be sitting in an upright position in a comfortable, safe place. That is, they should not be leaning back, they should not be at risk of falling and should be sufficiently free to move their arms and body. The best way to feed children is to sit in front of them, at the same height, so they don't have to tilt their heads sideways or lift their chins while they eat. This height should also

Figure 33 – Appropriate position for offering food to a child



enable them to interact with whoever is feeding them and with the other family members, if they're present.

Mealtimes are a moment for stimulating development

From the first meals, you should encourage your child to participate while they eat. Interact with them, look and talk to them. Children like challenges and activities that test their skills. In this phase, things can get a bit messy and dirty. But, in very little time, children start eating on their own and require less work during mealtimes.

Don't forget that, in addition to taste, offering new foods also involves touch. Using the hands is crucial to developing different abilities, such as touching one's own body, grasping objects, feeling them and letting them go. Children should be allowed to use their hands to pick up the spoon. Even if they're a little clumsy, this makes the moment more interactive and encourages them to eat on their own, even if they're not yet able to do so. Children should be encouraged to use their hands to touch foods and feel the different textures, or even to bring foods close to their nose to smell them and then bring them to their mouth.

Children can eat even if their teeth haven't come in yet

Starting at 6 months, teeth start to appear, but, if that hasn't happened yet, don't worry. Since the gums become hardened, because the teeth are preparing to emerge, children are able to crush foods. Additionally, friction with food helps to break the gums for the teeth to come out.

Children don't always accept foods the first time they're offered

Children may like a food the first time they try it or they may need to try it multiple times before becoming familiar with it. When children make faces, this doesn't mean they don't like the food, just that it is a new flavor, different from what they're used to (for example, breast milk). If your child continues to reject a food, don't give up. Wait a few days and offer it prepared in different ways. Some children need to try a food more than eight times in order to like it.





Having a routine helps children to develop good eating habits

Establishing an eating routine is important for children and the families. Children should become used to regular intervals between meals, without rigid schedules. Avoid offering foods between meals so your child will have an appetite at mealtimes.

Children's feces change when other foods are offered

When new foods start to be included in their diet, children's feces, which used to be soft and yellowish, become more similar to those of adults. Since they are learning to chew, it is common to find pieces of beans, vegetables and fruits in their feces, due to the large amounts of fibers found in these foods. These changes are normal and are not cause for concern. Offering water multiple times a day, in the intervals between meals, contributes to good intestinal functioning, avoiding constipation.



Exposing children to sunlight complements their diet

Exposure to sunlight is the main stimulus for producing vitamin D, which is very important for bone formation. The moments when children are exposed to sunlight can be an opportunity to play and interact with family members or other children, aspects that are important in their development.

Taking care of oral health

Cavities in baby teeth, called "early childhood caries", can cause pain and harm chewing and even speech. Controlling plaque is crucial for maintaining oral health and preventing cavities and gum disease. For this, ideally, adults should begin the practice of brushing children's teeth as soon as they appear, at least twice a day, especially before going to sleep. You should put a little bit of fluoride toothpaste on the toothbrush and tell your child to spit it out after brushing their teeth (Figure 34, item 2). For those who still don't know how to completely spit out the toothpaste, the amount should be minimal – a

small blob, the size of a grain of rice, on the toothbrush (Figure 34, item 1). When the molars, the bigger teeth located in the back of the mouth, appear, spaces between teeth become smaller. At this point, flossing becomes important for removing plaque from these spaces and from the points of contact between teeth.

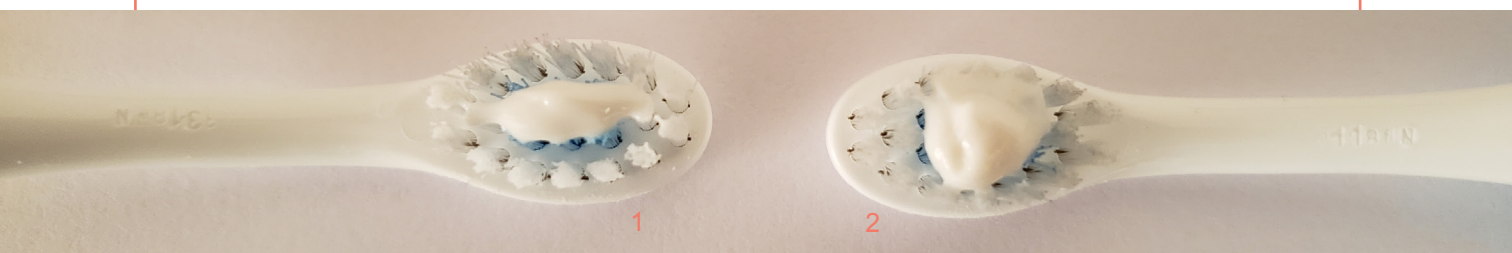
Avoiding cavities in baby teeth

In order to avoid cavities, you should take the following steps:

- Exclusively breastfeed babies up to 6 months of age.
- Encourage an adequate consumption of fruits and vegetables.
- Not offer foods that have sugar or sugary drinks.
- Avoid offering liquids (except water), especially at bedtime.
- Avoid letting children eat out of established mealtimes.
- Brush children's teeth with fluoride toothpaste and floss, at least twice a day, especially before bedtime.

Figure 34 – Examples of amounts of toothpaste on toothbrushes

1. Amount of toothpaste equivalent to a grain of rice, ideal for children who don't yet know how to spit.
2. Amount of toothpaste equivalent to a pea, appropriate for children who know how to spit.



Mixing and varying foods in different meals and during the week

Knowing how to mix foods when preparing meals with natural or minimally processed foods is crucial for offering an adequate and healthy diet. Below, you'll find some options for lunch and dinner and for breakfast and snacks.

Lunch and dinner

Eating a variety of foods helps to construct an adequate and healthy diet that includes different nutrients and contributes to preventing nutritional deficiencies, such as anemia and vitamin A deficiency. In order to guarantee the variety of nutrients children need, you should, as much as possible, offer plates including one food from each group: legumes; cereals or roots or tubers; meat or eggs; vegetables. Whenever possible, you can put more than one food from the vegetables group in the meal. If these foods are present in the family's meal, it's easy to put together a plate for a child. Put a small amount of each food on the plate and observe whether your child accepts them, respecting their signs of hunger and satiety. If they want more, put a little bit more food on their plate. If they don't want any more food, stop offering it.

Figure 35 – Example of a plate with foods from all groups

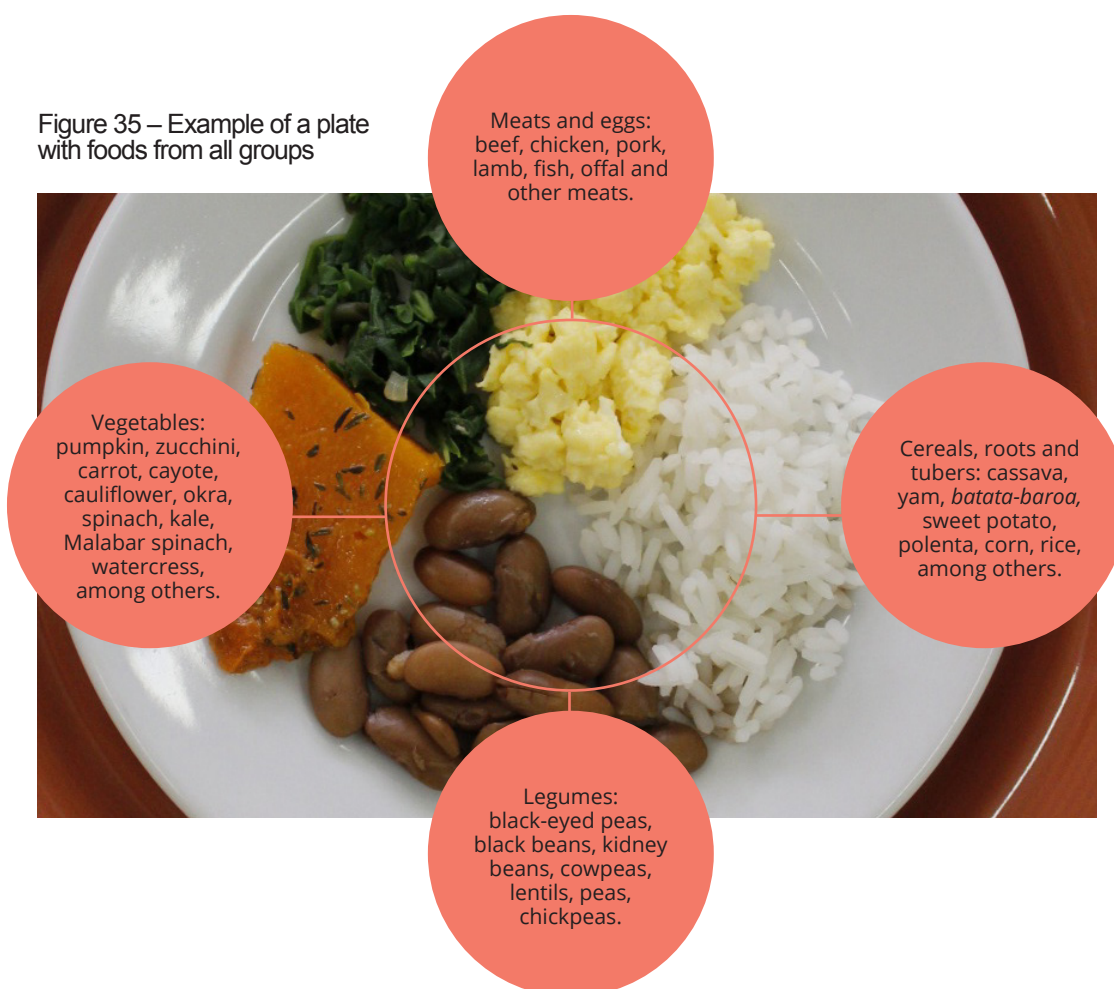


Figure 35 shows an example of a meal made from natural or minimally processed foods. It includes a cereal (rice), a legume (pinto beans), two foods from the vegetables group (Malabar spinach and pumpkin) and one food from the meat or egg group (scrambled eggs). A healthy and colorful combination that creates a beautiful meal. To complete the meal, you can offer a piece of fruit along with or after the meal. Most fruits contain vitamin C, which helps the body to absorb iron from beans and vegetables, which helps prevent anemia.

If one day you have a food from the cereals group, such as rice, and another from the roots and tubers group, such as potatoes, you can put a little of each on the child's plate. As for the vegetables group, you can include at least one in the lunch and another in the dinner, but if you want to include more than one food from this group, the meal will be more varied.

Over the course of the day and week, whenever possible, you should offer foods from all four groups and vary the foods from each. We recommend choosing from foods that are in season because they're tastier, more nutritious and cheaper.

If the family's diet is healthy, the child's meals don't have to be different from those eaten by the family. This practice makes the cooking routine easier and gets the child used to the family's diet. In some cases, you just need to change the foods' consistency:

- Beans can be mashed with a fork.
- Cereals, roots, tubers and vegetables can be mashed with a fork or offered in well-cooked and soft pieces.
- Meats can be offered in small pieces or well shredded.

For families used to very spicy seasoning and to using pepper, a good solution is to separate a little bit of food for the children before adding this type of seasoning.

As children grow and adapts to their families' eating habits, once in a while they may eat meals that don't include the four food groups, but that are also

prepared with natural or minimally processed foods and are, therefore, healthy. Some examples of these meals are:

- *Mujica de peixe* (a typical dish from the North, made from fish, seasoning and cassava flour).
- *Escondidinho de frango* (common in the Northeast and other parts of Brazil, made with mashed potatoes, cassava or pumpkin, and shredded chicken).
- *Galinhada* (typical in the Center-West, made from rice, chicken and many spices).
- *Bambá de couve* (a chunky soup from Minas Gerais made from corn meal, kale and pork).
- *Arroz de carreteiro* (a typical dish from the South, made from rice, sun-dried meat and seasoning).

Figure 36 – Examples of meals

The images show the appropriate amounts of food for different ages. The meals are shown on dessert plates.



2

3

4

1. Mashed cassava, mashed peas, chopped cow liver and sauteed chicory.
2. Polenta, pinto beans, chicken and cooked okra.
3. Rice, black beans, ground beef, beets and *taioaba*.
4. Noodles, pinto beans, shredded fish and carrot.



1

Breakfast and snacks

In smaller meals, such as breakfast and afternoon snacks, breast milk continues to be an important food and must be offered until children are 2 years old or older, whenever they wish.

After 6 months of age, in addition to breast milk, you should offer fruit in the middle of the morning and in the middle of the afternoon. After 1 year of age, you can alternate, offering a food from the cereals, roots or tubers groups instead of fruit on certain days, according to the family's habits. If the family usually eats vegetables at these times, the child can also eat them. The only foods that are not recommended for any meals are ultra-processed foods.

Children's diet in each age group

The guidance we've offered so far must be taken into account when caring for all children, regardless of age. There are also recommendations for each age group. But do not forget that each child is unique and has their own tastes and reactions. If necessary, you can adapt the following guidelines according to each child.

At 6 months of age

Around 6 months of age, most children are ready to begin eating new foods. This is a moment when everything is new: the flavors and the solid consistency of foods, the spoon, the plate. The family must try to make this experience as enjoyable as possible.

When you offer food, the child might spit it out, seemingly not enjoying it. But this happens because, since birth, in order to nurse, children stick out their tongues. This motion decreases starting at 4 or 5 months, but can still be present at 6 months, causing the impression that they're refusing food. At that age, children are still teething, but even if a child has no teeth yet, they will still be able to accept food mashed with a fork.

Children’s development and signs of hunger and satiety at 6 months of age

Food-related aspects of child development	Most common signs of hunger and satiety
<ul style="list-style-type: none">• Sits with little or no support.• Reduces the motion of pushing foods out of their mouth with their tongue.• Can chew.• Teething begins.	<p>Signs of hunger: crying and leaning forward when the spoon is near, holding the hand of the person who is offering them food and opening the mouth.</p> <p>Signs of satiety: turning the head or the body, losing interest in the food, pushing the hand of the person who is offering the food away, closing the mouth, seeming anxious or crying.</p>

What to offer?

- Breast milk should still be offered until children are aged 2 years or older. There is no need to offer cow’s milk or infant formula. **New foods should complement breast milk and not substitute it.**
- At this age, children should begin to eat three meals, which may be lunch (or dinner) and two snacks; or lunch, dinner and one snack. There is no rule regarding which meal should be initiated first. What matters is that, at 7 months old, children should already be eating three meals.



Figure 37 – Fruit for breakfast and as a snack

Figure 38 – Example of diet of a 6-month-old child



Offer water over the course of the day

You can find options for substituting foods from the same group in the section “Getting to know foods”.

How to offer it?

- Put only small amounts of food on the plate. You can start with around two teaspoons of one food from each group. This amount is only a starting point. The child may not accept everything or may want some more, and may reach three tablespoons in total. This amount should only serve as a reference for the family and should not be rigidly followed as the individual characteristics of the child must be respected.

- Foods must be separated and mashed well with a fork and should not be put in a blender or through a sieve. Meats should be cooked well and offered in small pieces (chopped or shredded). Raw foods, such as fruits and some vegetables, can be scraped or mashed.
- If the child refuses some food, wait a few days and offer it again, along with foods they already like. If the child continues to refuse it after several attempts, try to change the way it is prepared. Did the child not like mashed carrot? Try offering it in bigger pieces so they can grasp it with their hands.
- If the food is a little dry, add a little bit of the stock left over from cooking vegetables, legumes or meats. Moist preparations are more readily accepted, since at this age children's ability to chew is still under development.
- Help your child to eat, but let them use their hands to hold the food or an adequately-sized spoon to pick it up. Maintain visual contact with them.



Figure 39 – Example of different ways of offering foods

Figure 40 – A child grabs the food

Children's diet over the course of the day

At 6 months of age	
Breast milk can be offered whenever the child wishes	Breakfast: breast milk.
	Morning snack: fruit and breast milk.
	<p>Lunch:</p> <p>Children's meals should include:</p> <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. <p>Along with the meal, you can offer a small slice of fruit.</p> <p>Approximate amount: two to three tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.</p>
	Afternoon snack: fruit and breast milk.
	Dinner: breast milk.
	Before bedtime: breast milk.

Ages 7 to 8 months

As children grow, they develop other abilities, such as sitting without support, accepting foods with a firmer consistency or in small pieces. They increasingly notice the meals and the foods they are given and accept a greater variety and quantity of food.

Children's development and signs of hunger and satiety between 7 and 8 months of age

Food-related aspects of child development	Most common signs of hunger and satiety
<ul style="list-style-type: none">• Sits without support.• Grasps foods and brings them to their mouth.• New teeth come in.	<p>Signs of hunger: leaning in toward the spoon or food, grabbing or pointing to food.</p> <p>Signs of satiety: eating more slowly, closing the mouth or pushing food away, keeping food in the mouth without swallowing.</p>

What to offer?

- Breast milk should still be offered as much as the child wants, without substituting lunch or dinner. It continues to be their main food and can be offered between meals. If a child is still nursing, there's no need to substitute or complement breast milk with cow's milk, or infant formula, or other milk-based beverages.
- Start offering four meals: lunch, dinner and two snacks including fruits.
- Vary the flavors and introduce new foods. You should prioritize foods that are in season and typical foods from your region. These are usually cheaper in street markets and supermarkets.

You can find options for substituting foods from the same group in the section “Getting to know foods”.

Offer water over the course of the day.

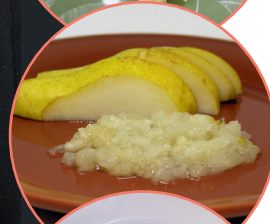


Figure 41 – Meal plan at 7-8 months of age

How to offer it?

- The foods you offer should be less mashed than before or finely chopped, according to what your child will accept. Offer slightly larger amounts of food than what you offered at 6 months, always respecting their signs of hunger and satiety. At this age the child can accept three to four tablespoons in total. This amount is only meant as a general reference for the family and should not be rigidly followed since each child's individual characteristics must be respected. Arrange foods side by side, so the meal will be more beautiful and so your child will learn the different flavors and colors of foods.
- Offer some soft foods in big enough pieces so your child can grasp them with their own hands and eat on their own.
- Give your child a small spoon to stimulate the motion of bringing it to their mouth. If they prefer to grab the food with their hands, that's not a problem.

Children's diet over the course of the day

Between 7 and 8 months of age	
Breast milk can be offered whenever the child wishes	Breakfast: breast milk.
	Morning and afternoon snack: fruit and breast milk.
	<p>Lunch and dinner:</p> <p>Children's meals should include:</p> <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. <p>Along with the meal, you can offer a small slice of fruit.</p> <p>Approximate amount: three to four tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.</p>
	Before bedtime: breast milk.



Ages 9 to 11 months

At this age, children continue to gain new skills and greater autonomy. There are new developments every day: they start crawling and maybe even walking with little or no support; they develop a pincer grasp, which means they are able to hold small objects and foods; they are able to bring a spoon to their mouths; they bite down on and chew harder foods better. Although they are able to eat independently, they still need help. The food you offer should follow these changes. You should encourage your child so they will pick up food with their hands, stimulating the pincer grasp and, also, teach them to cut foods with their front teeth in order to stimulate the growth and development of the mandible (chin).

Although breast milk continues to be very important to children at this stage, food begins to play a larger role in meeting their nutrients and energy needs. Therefore, at this point, you must pay close attention to your child's signs of hunger and satiety and to the amount of food they are eating.

Children's development and signs of hunger and satiety between 9 and 11 months of age

Food-related aspects of child development	Most common signs of hunger and satiety
<ul style="list-style-type: none"> • Crawls or walks with support. • Holds small objects in a pincer grasp. • Can eat independently, but still needs help. • Bites into and chews harder foods. 	<p>Signs of hunger: pointing to or picking up foods, becoming excited after seeing food.</p> <p>Signs of satiety: eating more slowly, closing the mouth or pushing the food away, keeping food in the mouth without swallowing.</p>

What to offer?

- The types of meals remain the same even after the 9 months: lunch, dinner and two snacks including fruits.
- Children should continue to be given breast milk whenever they wish.
- Continue to vary foods and to experience new forms of preparing them.

How to offer it?

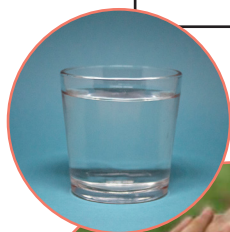
- Children can be given chopped foods in the same consistency as the family's food. Meats can be shredded.
- Offer slightly larger amounts of food than what you offered at 7 or 8 months. At this age, the child can accept four to five tablespoons in total. This amount is only meant as a general reference for the family and should not be rigidly followed since each child's individual characteristics must be respected.
- Encourage your child to grab foods with their hands in order to stimulate grasping with the tips of the fingers.

Figure 42 – Child eating with a spoon



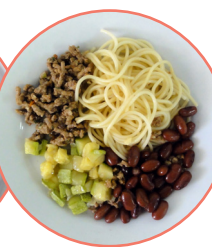
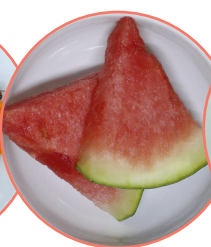
Children's diet over the course of the day

Between 9 and 11 months	
Breast milk can be offered whenever the child wishes	Breakfast: breast milk.
	Morning and afternoon snack: fruit and breast milk.
	<p>Lunch and dinner:</p> <p>Children's meals should include:</p> <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. <p>Along with the meal, you can offer a small slice of fruit.</p> <p>Approximate amount: four to five tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.</p>
	Before bedtime: breast milk.



Offer water throughout the day.

Figure 43 – Example of meals for a child aged 9 to 11 months





From 1 to 2 years of age

Major changes take place after the first year of life. One of them is the reduction in the speed at which children gain weight. In the first year, children's weight triples. For example, a child who weighs 3 kg at birth will weigh approximately 9 kg on their first birthday. Between 12 and 24 months, children gain far less weight, between 2.5 kg and 3 kg over the course of the entire year. Children also learn to walk and become very curious about their environment. This makes mealtimes and foods less interesting to them. They also learn to talk and are able to ask for the foods they prefer, are better able to control spoons and hold glasses with both hands, developing the ability to eat on their own. New teeth come in and the ability to grind more solid foods is further developed.

Over the course of the second year of life, children can resist trying new foods or refuse foods they previously enjoyed. This situation is not permanent and acceptance can improve with repeated offers or by modifying the ways in which food is prepared.

In this phase, it is common for families to think children aren't eating properly and to become concerned. In order to get children to eat more, it is common for families to offer food in inappropriate ways, such as using threats or bribes or giving them their favorite foods often, even if they're not healthy. Another common practice is to distract children with television, smartphones and other electronic devices. This should be avoided, because it distracts children's attention away from the food and leads them to eat excessively. At that age, children begin to interact more at daycare centers, parties and outings. On these occasions, it is common for them to come into contact with treats such as sweets, lollipops and chocolates. In order to avoid offering sugar and ultra-processed foods, a good strategy is bringing along options such as a fruit or some other food they enjoy.

To learn more about how to deal with situations that disrupt your routine, read the section "Adequate, healthy diets: dealing with challenges in everyday life".

Children's development and signs of hunger and satiety between 1 and 2 years of age

Food-related aspects of child development	Most common signs of hunger and satiety
<ul style="list-style-type: none"> • Walks with some or no support. • Eats with a spoon. • Holds foods with their hands. • Holds a glass with both hands. • Has a greater ability to chew. • The molars start to come in. 	<p>Signs of hunger: using words and gestures together to express a desire for specific foods, leading caretakers to the place where foods are stored, pointing to foods.</p> <p>Signs of satiety: shaking the head, saying they don't want food, leaving the table, playing with food, throwing it.</p>

What to offer?

- In addition to breast milk, children should be given breakfast, morning snack, lunch, afternoon snack and dinner.
- In the afternoon snack, on some days of the week, the fruit can be substituted by a food from the roots and tubers group, such as cassava, sweet potato or yam, or from the cereals group, such as bread (home-made or baguette). For example, one day you can offer breast milk and a fruit and, on the other, breast milk and a cooked sweet potato. Vegetables can also be offered during these meals, if that's a habit in the family.
- There is no need to substitute breast milk by cow's milk or infant formula. Foods derived from milk, such as cheese and curds, and cow's milk can be used as ingredients in home cooked recipes, starting at 6 months of age.

Offer water throughout the day.

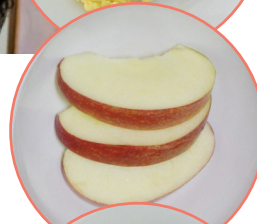


Figure 44 – Example of meals for a child aged 1 to 2 years

If you choose to offer bread in the snacks, check out important information for choosing which bread to offer children in the section “Getting to know foods”.

How to offer it?

- Offer foods in larger pieces and in the same consistency as the family’s food. At this age, the child can accept five to six tablespoons in total. This amount is only meant as a general reference for the family and should not be rigidly followed since each child’s individual characteristics must be respected.
- Encourage your child to eat on their own.
- Continue to broaden the variety of foods you offer.
- Establish a calm place where your child will eat and avoid distracting them with electronic devices.

Children's diet over the course of the day

Between 1 and 2 years of age	
Breast milk can be offered whenever the child wishes	Breakfast: <ul style="list-style-type: none"> • Fruit and breast milk; or • cereal (home-made or processed bread, oats, corn couscous) and breast milk; or • roots and tubers (cassava, sweet potato, yam) and breast milk.
	Morning snack: fruit and breast milk.
	Lunch and dinner: Children's meals should include: <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. Along with the meal, you can offer a small slice of fruit. Approximate amount: five to six tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.
	Afternoon snack: <ul style="list-style-type: none"> • Breast milk and fruit; or • breast milk and cereal (homemade breads, processed breads, oats, corn couscous) or roots and tubers (cassava, sweet potato, yam).
	Before bedtime: breast milk.

After one year of life, until around the age of 2, breast milk continues to be an important source of nutrients. It is estimated that, in the second year of life, two glasses (500 mL) of breast milk provide almost all the necessary vitamin C and practically half the needed amount of vitamin A, in addition to a good amount of proteins and energy. Breast milk continues to be a source of natural protection against infectious diseases.

Diets of vegetarian children

Vegetarianism is the diet that excludes foods from the meats and eggs group. It can be classified as follows:

- **Ovo-lacto vegetarians:** include eggs, milk and dairy in their diet.
- **Lacto vegetarians:** include milk and dairy in their diet.
- **Strict vegetarians:** do not include any animal-origin products in their diet.
- **Vegans:** do not include any animal-origin product in their diet or use any product that leads to animal exploitation/suffering.

As all children, those who are vegetarian must be breastfed for 2 years or more and, during the first 6 months, they should only be given breast milk. From 6 months of age on, if a child is breastfed, a good portion of the calcium they need will come from breast milk. The rest should come from plant-based foods, such as spinach, kale, Malabar spinach, broccoli, leek, tofu and almonds.

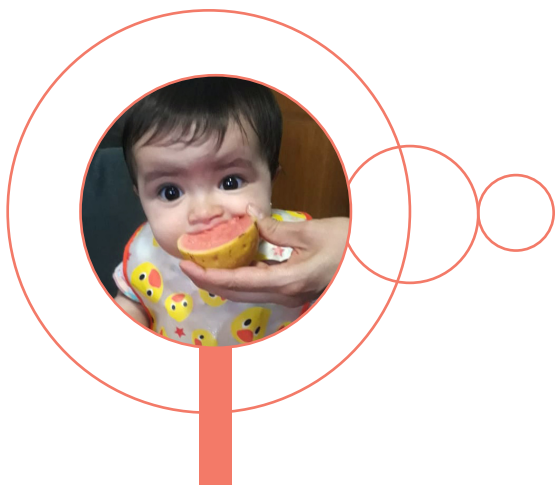
Since foods from the meat and eggs group provide nutrients that are very important to growth and development, if children follow vegetarianism along with their families, they will need extra attention when choosing and mixing foods so as to guarantee an offer of varied foods that provide sufficient amounts of nutrients, especially iron and calcium, to meet their needs and prevent nutritional deficiencies. Eating fruits rich in vitamin C after meals is important for absorbing iron from plant-based foods.

At lunch and dinner, daily, the following should be present:

- One food from the cereals group or from the roots and tubers group.
- One food from the legumes group.
- Two or more foods from the vegetables group, with one dark green leafy vegetable and one colorful vegetable.
- One food from the fruits group.

In the first 6 months of life, if children are not breastfed, ultra-processed vegetable milks (soy, coconut, rice, oat, sesame, chickpea, among others) do not replace breastfeeding. Using them as breast milk replacements puts children's growth and development at risk. After 6 months of age, they may be included in the diet along with foods from the different groups.

It is crucial that vegetarian children, like all children, be followed by health professionals who monitor their growth and development, provide guidance about their diet and about supplementation of vitamins and minerals. Special attention must be paid to vitamin B12, especially in the case of strict vegetarians and vegans, since this vitamin is not found in plant-based foods.



My child has turned 2. What now?

Starting at age 2, children begin to socialize more, communicate their preferences more easily, strengthen their emotional relationship with food and experience new things. Around this age, they gain control over urinating and defecating, which increases their self-confidence. They increase their autonomy with regard to eating, refusing or accepting the foods that are offered. Because of this, caretakers must define what they will or won't negotiate with children and what limits they will establish.

The growth rate is smaller than in the first two years of life and only accelerates again during adolescence. Because of this, it is common for there to be a reduction in their appetite. At this age, they also become more interested in what happens in their environment and become distracted playing. Thus, in addition to respecting children's signs of hunger and satiety, caretakers should, as much as possible, strive to provide a calm environment at mealtimes. Not distracting children with television or electronic devices is a practice that contributes to a healthier, more thoughtful diet and to child development. Although establishing regular mealtimes is necessary, they can be flexible, due to children's changes in appetite and in their social interactions.

It is possible to continue breastfeeding, according to what the mother and child wish. Ideally, weaning should happen naturally. If a mother has





difficulties with this process, she can talk to health professionals for help.

The amount of foods children can eat is still small. Since they need different nutrients in order to develop, it is important to offer the greatest possible variety of foods. Mealtimes can be the same as for the rest of the family. No food or beverage (except water) should be eaten during intervals so as not to harm acceptance of lunch or dinner. Children must be hungry in order to accept meals in adequate amounts. Even children who used to eat everything can start to refuse some foods after turning 2 years old. Vegetables should be put on children's plates at lunch and dinner, even if they reject them and say they won't eat them.

Families should encourage children to eat, but without pressuring or forcing them. Family members can set an example when they eat these foods. In addition, putting vegetables in children's plates every day is a good strategy for getting them to realize that vegetables are part of their routine and to begin to accept them. If a child refuses vegetables, you should allow them to choose any of the options available in the meal. Avoid making "not eating vegetables" an option. Varying the ways in which you prepare and present vegetables can also be a good strategy for increasing your child's acceptance of them.

Natural fruit juices continue not to be necessary. It is better to offer whole fruits than juices, because children have to chew fruits, and because they

receive more fiber from these foods. If you are going to offer fruit juice, the best option is natural juice with no added sugar, in a small amount (no more than a small, 120 mL glass per day) as part of a meal, preferably as part of a snack, and never during intervals.

Use as little salt as possible. Sugar should still be avoided. After the age of 2, offering small amounts of foods with sugar will not affect acceptance of other foods. However, you should not add sugar, instant flours or chocolate to milk and other beverages. Children who are not given sugary foods in the first two years of life easily accept milk and natural yogurt without sugar, if they are accustomed to these foods from the very first time.

You should not offer ultra-processed foods because they are nutritionally unbalanced and contain many additives. Additionally, eating or drinking ultra-processed foods, even in the intervals between meals, can harm children's appetite in the following meals.

Involving children in meal choices, in their planning and preparation is an excellent strategy for getting them to appreciate foods more. When grocery shopping, explain to your child that those foods will be part of the family's meals and involve them in the selection. During meal preparation, depending on their age, children can help with some tasks, such as mashing or mixing together ingredients. It is important to remember that, when in the kitchen, children must be watched at all times to avoid accidents.





It is common for family members and friends to be anxious or even pressure families to include foods not previously offered in children's everyday diet. Many foods, such as party sweets and soft drinks, will appear in children's day-to-day life, but care should be maintained, avoiding the consumption of unhealthy foods, so as to favor adequate growth and development. Caring for a child's diet remains a collective task, shared among family members, school and other social spaces that are part of the child's life.

Starting at 2 years of age, the *Dietary Guidelines for the Brazilian Population* is the reference for children, adolescents, young people, adults and the elderly. Get to know these Guidelines and continue to practice and live an adequate, healthy diet.



CHILDREN UNDER 6 MONTHS WHO ARE NOT EXCLUSIVELY BREASTFED

There are many situations, conditions and choices that happen during the breastfeeding period that can lead a child under 6 months of age not to be exclusively breastfed. In this section, we emphasize the importance of breastfeeding and present recommendations for feeding children who, before 6 months of age, are given any other food, besides breast milk.

Although it is recommended that babies be exclusively breastfed in the first 6 months of life, they may be given other milks or other foods before this age for a number of reasons. Often, mothers or caretakers give children other milks because they believe the mothers' milk isn't enough to feed them, or because they were given INADequate guidance regarding managing breastfeeding, or as a choice, or due to life and work situations that make exclusive breastfeeding difficult. Children under 6 months of age who are not exclusively breastfed require additional attention when following their growth and development. You should consult a health professional because a child's diet will depend on their age and the amount of breast milk they are given.

It is possible to go back to exclusive breastfeeding. The health service can help you to continue breastfeeding and even go back to breastfeeding exclusively until your child is 6 months old. Doing this is worthwhile due to all the benefits this practice offers.

Why children should be exclusively breastfed

Breastfeeding exclusively protects against infectious diseases, such as diarrhea, pneumonia and ear infections because breast milk includes protective factors. It also protects against allergies. In addition, babies who are exclusively breastfed are less likely to develop malnutrition or obesity during childhood, or obesity and type 2 diabetes in adulthood. Additionally, babies who are breastfed are less likely to develop certain types of childhood cancers, such as leukemia.

Formula feeding has a high cost

Offering children infant formula or modified cow's milk has a high cost, which can endanger the family's budget. In addition to the money spent buying these foods, there are expenses related to utensils, sterilization, cooking gas. There are also expenses related to treating children when they become ill because they were given infant formula or home-modified cow's milk. The purchase of infant formula alone costs families between 20% and 30% of the minimum wage. Until the 6th month of age, these expenses rise as the child grows, and the amount of milk needed to feed them increases. Using infant formula and cow's milk also impact the environment, as discussed in the topic "Why is breastfeeding so important?", in the section "*Breast milk: the first food*".

When other milks are offered to children, they nurse less and the production of breast milk decreases, which can lead to the complete interruption of breastfeeding. It is common for families to think that the milk has "dried" or that the woman is producing very little milk. However, this is usually the consequence of offering other milks. Therefore, it is worth insisting that children continue to nurse freely, that is, with no set schedules.

How to stimulate exclusive breastfeeding and avoid its interruption

- Increase the frequency of feedings and offer the breast whenever your child demonstrates the desire to nurse, including at night. This way, you will increasingly produce more milk.
- If you need to be away from your child for some time, you should previously express and store breast milk so someone can offer it to them while you're away. Since breast milk can be stored in the freezer or the fridge, you should set aside a small stock for these occasions. This way, your child continues to only drink breast milk and the milk production is not decreased.
- Any time you feel uncomfortable because your breasts are full and you're away from your child, you should express a little bit of milk to decrease your discomfort.
- If you need to offer another milk, offer breast milk first, whenever possible.

To learn more about this topic, read the topic "How to express, store and offer breast milk", in the section "Breast milk: the first food".

When offering other foods besides breast milk is necessary

When children are not exclusively breastfed, diet recommendations vary with age. This section will give answers to the most common questions about this subject, but you should talk to a health professional for a more individualized guidance.

What to do if the mother needs to be away from her child

The best food is always breast milk. You should express breast milk and store it in the fridge or freezer. The person who takes care of the child while the mother is away can offer the expressed milk in a glass, cup or spoon. Using a bottle is not recommended as this may lead the child to have problems nursing later. You may need to offer other foods. The choice of foods will depend on the child's age, how much time they will be apart from their mother and their acceptance of other foods.

- **For children under 4 months of age**

If you have a little bit of breast milk stored and it isn't enough for the period that the mother will be away, you should offer it and complement with infant formula. However, many Brazilian families can't afford to buy infant formula and use cow's milk as an alternative. In these cases, it should be modified at home, following a health professional's instructions, because cow's milk cannot be offered undiluted to children under 4 months of age.

If there is no stored breast milk, offer infant formula or, if this option isn't accessible, home-modified cow's milk.

For more information regarding infant formula and home-modified cow's milk, read the section "Children who are not breastfed".

- **For children aged between 4 and 6 months**

If you have a little bit of breast milk stored and it isn't enough for the period that the mother will be away, you should offer it and complement with other foods. The foods that should be offered, including infant formulas or other milks, and the number of meals depend on how long the mother will be away from her child, the child's development and their acceptance of other foods. Health professionals should provide guidance regarding the adequate diet in these cases. Depending on the professional's assessment of the child's development, you may offer fruit (as a snack), lunch or dinner. If you must offer the child another milk, you should offer it in a glass, cup or spoon and avoid using bottles.

If there is no stored breast milk, offer other foods, which may be fruit, lunch dinner and/or infant formula or other milks, depending on how long the mother will be away from her child, the child's development and their acceptance of other foods.

In order to maintain milk production, depending on how long the mother will be away from the child, it is important that she express milk once or more times, even if she can't store it. And, when she is with the child, she should breastfeed on free demand (with no set schedule).

To know more about how to express milk, see the instructions in the topic “How to express, store and offer breast milk”, in the section “Breast milk: the first food”.

When to start offering other solid foods?

As we've already discussed, the moment when you should begin offering other foods to children who are not exclusively breastfed can vary according to the amount and the number of times they are given other milks. A child who gets most of their nutrition from breast milk can begin to be given other foods at 6 months of age, in the same way that children who are exclusively breastfed (see the section “*Children's diet starting at 6 months of age*”). However, there may be different situations in which a child is given other milks in varying quantities and frequencies and, therefore, you should request guidance from a health professional when you begin to offer other foods.

When is it important to offer children water?

Children's water needs are exclusively met by breast milk when they are exclusively breastfed. Children who are only given infant formula, if properly prepared, also do not require water.

If you start to give a child home-modified cow's milk or other foods in addition to breast milk, you should offer them water in the intervals between meals. Water should be offered in a glass, cup or spoon and you should avoid using bottles. When you offer water to a child, they should be sitting, with the head and neck firm and aligned. If they refuse water, offer it in other moments until they are used to it. Coconut water, teas and other beverages do not replace water.

Water must be filtered, treated with sodium hypochlorite or boiled. You can find instructions about treating water with sodium hypochlorite in the topic “Good drinking water”, in the section *“Getting to know foods”*.

Guidance regarding the preparation
and offer of fruits, lunch or dinner
can be found in the section
“Cooking at home”.



CHILDREN WHO ARE NOT BREASTFED

Children who are not breastfed require additional attention when following their growth and development. Clear and precise information is also crucial for families in this situation. Here, you'll find information on feeding children who are not breastfed.

There are situations in which the offer of another food, other than breast milk, can be necessary before the age of 6 months. Some diseases, maternal or child conditions and, further, some few and specific medications, which may be passed on to breast milk and affect children, prevent breastfeeding. These conditions should be assessed by health professionals. There are also children who have rare diseases or other special conditions, children who have lost their mothers and/or who have been adopted early in life. Additionally, there are women who, due to different reasons, are unable or unwilling to breastfeed.

Caretakers of children who are not breastfed should seek out guidance from health professionals about how to feed them. Substituting breast milk with other foods requires special care.

Adoption and breastfeeding

Adoptive mothers who wish to breastfeed may be able to do so with the proper techniques and guidance. Visit a Human Milk Bank or the nearest health service.

When a child is not breastfed, the first alternative is to offer infant formula, because it is more appropriate for the child's immature organism than whole fat cow's milk.

However, studies have shown that the milk most commonly used by children under the age of 1 year in Brazil is whole fat cow's milk, in powder or liquid form, also identified as "boxed" or "bagged" milk, due to its packaging.

If the family opts for whole cow's milk, it needs to be modified at home before being offered to children under 4 months of age. We will call this preparation **home-modified cow's milk**.

The differences between this preparation and infant formula are detailed below. We recommend that the family talk to health professionals in order to be given guidance regarding how to feed a child who isn't breastfed and about the need to supplement micronutrients.

Infant formula and home-modified cow's milk: the main differences between these two foods

Infant formula

It is classified by the National Health Surveillance Agency (Anvisa, in Portuguese) as a special-purpose food and represents the best alternative for feeding non-breastfed or partially-breastfed children.

The food industry modifies cow's milk, altering the amount of proteins, sodium, fats, sugars, vitamins and minerals, seeking to formulate a product that is compatible with the maturity of young children's organisms and that meets their nutritional needs.

Following the reconstitution amounts indicated on the product's label is important for avoiding harms to children's growth, that is, low weight gain, if less formula than necessary is offered, or excessive weight gain, if the amount offered exceeds what is recommended.

There are many types of infant formula, some of which are only recommended for children with special dietary needs, such as those who are allergic to milk proteins. Only health professionals can prescribe these products, the ways in which they should be prepared and the amounts that should be offered. They can also advise caretakers on whether micronutrient supplementation is necessary.

Home-modified cow's milk

Cow's milk does not provide children with all the nutrients they need. The excessive amount of proteins, sodium, potassium and chlorine found in cow's milk can overload children's kidneys in the first years of life.

The proteins in this milk take longer to digest. Cow's milk also has insufficient amounts of vitamins A, D and C. Additionally, the iron it contains is not as well absorbed by children as the iron present in breast milk, which can lead to anemia. This is most concerning among children in their first months of life.

In some cases, whole-fat cow's milk (in liquid or powder form) can be used diluted according to a health professional's instructions.

Skimmed milk and semi-skimmed milk are not recommended for children under 2 years of age because they have less fat, which is important for children's neurological development.

Children fed with modified cow's milk need supplementation of vitamins and minerals under the guidance of health professionals. After 4 months of age, it is no longer necessary to dilute liquid whole cow's milk, and milk powder can be prepared as recommended on the label.

Some things only look like infant formula or whole-fat cow's milk

Attention: There are products called “growing-up milks” that should not be mistaken for infant formula or whole-fat cow’s milk.

They are produced with a mixture of milk (at least 51%) and other milk or non-milk ingredients, and usually contain sugar and other food additives.

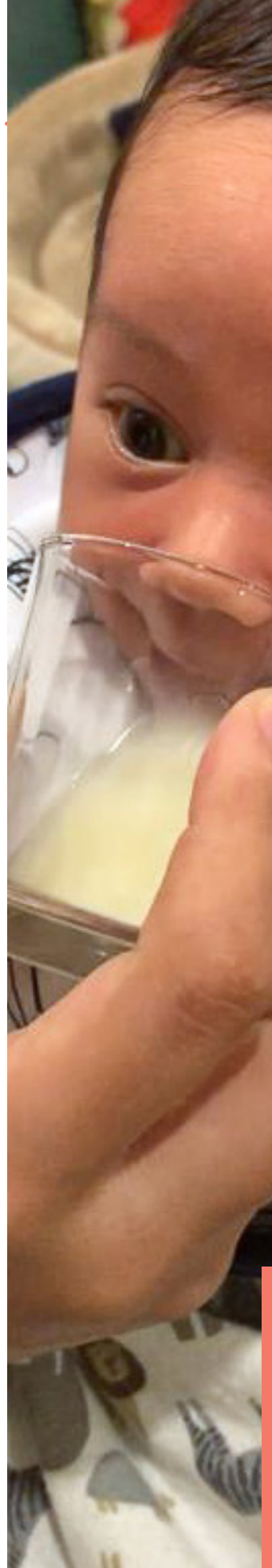
Although the packaging carries the information that these products should not be used to feed children under 1 year of age, in fact they are not intended for children under 2 years of age because of the presence of sugar and food additives. They do not replace breast milk or infant formula.

Growing-up milks have packaging and labels that are very similar to those of infant formula, are usually placed next to infant formulas on supermarket and pharmacy shelves and have lower prices. Read the labels carefully.

Growing-up milks have this name written on the front or the back of the package and the manufacturer has to state on the label: “growing-up milk is not powdered milk” or “this product is not powdered milk”.

Important precautions when preparing infant formula or home-modified cow's milk

The instructions below are important for preventing diarrhea and other problems related to using infant formula or home-modified cow’s milk.





- Before you begin preparing infant formula or home-modified cow's milk, you must thoroughly wash your hands and under your nails with soap and water, and dry them on a clean cloth or paper towel.
- The area where you prepare the infant formula or home-modified cow's milk (counter, sink, table) must be clean.
- Begin preparing it shortly before the moment when you will feed the child.
- Respect the preparation instructions and the amounts recommended by health professionals.
- To prepare infant formula, boil as much treated water as necessary for the time of day for five minutes. Bottled water should also be boiled. The powder should be added to very hot water in order to avoid contamination. To do this, after the water boils, wait at most 15 minutes to add the powder. Do not add the powder while the water is boiling to avoid changes to the infant formula's composition.
- To prepare home-modified cow's milk, the milk should be boiled. If you use powdered milk, you should follow the same instructions described for infant formula. In both cases, the water used must be filtered and boiled for five minutes.
- Boil the utensils you will use to offer milk. When boiling utensils, use the burners in the back of the stove to avoid burns. Do not boil water, milk or utensils while holding the child or while the child is near the stove.
- To cool off the infant formula, put it in a jar with a closed lid inside a container with enough cold water or ice to reach the middle of the jar. You can also cool it by putting it under an open tap, being careful not to waste water.



- To prevent burns to the child, test the temperature putting one or two drops on the back of your hand or on the inside of your arm. If it's still too hot, cool it down a little more.
- When offering the food, try to sit with the child on your lap, making as much eye-to-eye contact as possible. This is an important moment of affection between child and caretaker. Never let the child feed themselves.
- After the meal, throw out any infant formula or home-modified cow's milk that hasn't been consumed and wash the utensils with water and soap. Before using them again, sterilize them. To sterilize them, that is, to avoid any kind of contamination, put the jars in a pot, cover them completely with water and boil them for 15 minutes. Start counting from the moment the water starts boiling. After boiling, let the water cool off and then drain it.
- Another way to sterilize jars is to place them in a preparation of water with sodium hypochlorite for at least one hour, as instructed in the section "*Cooking at home*", in the topic "Preparing the chlorinated solution".
- After sterilizing the utensils, set them upside down on a clean cloth or paper towel to dry. Do not dry them with a towel. After they are dry, store them in a lidded container.

Do not heat infant formula or home-modified cow's milk in the microwave because the high temperatures it reaches can alter the composition of these products.

To learn more about how to prepare infant formula or home-modified cow's milk and how much to offer your child, always talk to a health professional. If you use infant formula, you should also read the product label and follow the preparation instructions.

Vegetable milks, such as rice, soy, yam, etc., are not recommended for children under 6 months old, unless in specific cases under guidance from a health professional.

Introducing new foods to children who are not breastfed

The age at which new foods should be offered to children who are not breastfed can differ depending on whether they are given infant formula or cow's milk. The suggestions below explain how to offer foods in both cases and at different times during the child's development.

The other recommendations in these Guidelines about variety, how to prepare food, food consistency and foods that are not recommended apply to all children equally, including those who are not breastfed.

Children who are given infant formula

New foods should be offered starting at 6 months of age, including water. Starting at 9 months, the infant formula can be replaced with whole-fat cow's milk.

Below, you'll find information on feeding children who are given infant formula according to age. These are general suggestions and should be adapted for each child. If the family wishes to offer foods in a different manner than what is described below, they should first talk to a health professional.

Diets of children who are given infant formula according to age

At 6 months of age
Breakfast: infant formula.
Morning snack: fruit.
Lunch: Children's meals should include: <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. Along with the meal, you can offer a small slice of fruit. Approximate amount: two to three tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.
Afternoon snack: infant formula and fruit.
Between the snack and the supper: infant formula.
Supper: infant formula.



Between 7 and 8 months of age
Breakfast: infant formula.
Morning snack: fruit.
<p>Lunch: Children's meals should include:</p> <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. <p>Along with the meal, you can offer a small slice of fruit. Approximate amount: three to four tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.</p>
Afternoon snack: infant formula and fruit.
Dinner: same as lunch.
Supper: infant formula.



Between 9 and 11 months of age

Breakfast: whole-fat cow's milk.

Morning snack: fruit.

Lunch:

Children's meals should include:

- one food from the cereals group or from the roots and tubers group;
- one food from the legumes group;
- one or more foods from the vegetables group;
- one food from the meats and eggs group.

Along with the meal, you can offer a small slice of fruit.

Approximate amount: four to five tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.

Afternoon snack: whole-fat cow's milk and fruit.

Dinner: same as lunch.

Supper: whole-fat cow's milk.



Between 1 and 2 years of age	
Breakfast:	<ul style="list-style-type: none"> • Whole-fat cow's milk and fruit; or • whole-fat cow's milk and cereal (home-made or processed bread, oats, corn couscous) or roots and tubers (cassava, sweet potato, yam).
Morning snack:	fruit.
Lunch:	<p>Children's meals should include:</p> <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. <p>Along with the meal, you can offer a small slice of fruit.</p> <p>Approximate amount: five to six tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.</p>
Afternoon snack:	<ul style="list-style-type: none"> • Whole-fat cow's milk and fruit; or • whole-fat cow's milk and cereal (home-made or processed bread, oats, corn couscous) or roots and tubers (cassava, sweet potato, yam).
Dinner:	same as lunch.
Supper:	whole-fat cow's milk.

Get to know foods and learn how to mix them together and how to prepare them in the sections "Getting to know foods", "Children's diet starting at 6 months of age" and "Cooking at home".

Children who are given modified cow's milk

Children who are given home-modified cow's milk can be given new foods starting at 4 months of age in order to avoid nutritional deficiencies, since cow's milk does not contain all the nutrients that children need. **Starting at this age, cow's milk should no longer be diluted and powdered cow's milk should be prepared according to the instructions on the label.**

If a child shows signs that they're ready to eat new foods, at 4 months of age, you should give them fruit (in the morning and in the afternoon), lunch *or* dinner, in addition to water in the intervals. Foods should be mashed. If you have doubts about whether or not a child is sufficiently developed to be given new foods, or if they don't accept the mashed foods, talk to a health professional.

Signs that a child is ready to be given solid and semi-solid foods are: being able to sit up and hold their head steady, showing eye-hand-mouth coordination, chewing and swallowing without choking.

At 5 months of age, you should offer fruit (in the morning and in the afternoon), lunch, dinner and water in the intervals. At other times during the day, whole-fat cow's milk should be offered. The total amount of milk offered per day should not exceed 500 mL because higher amounts can pose a risk to the child's health, such as anemia.

Below, you'll find information of feeding children who are given cow's milk according to age. These are general suggestions and should be adapted for each child. If the family wishes to offer foods in a different manner than what is described below, they should first talk to a health professional.

Diets of children who are given cow's milk according to age

At 4 months of age
Breakfast: whole-fat cow's milk.
Morning snack: fruit.
Lunch: Children's meals should include: <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. Along with the meal, you can offer a small slice of fruit. Approximate amount: two to three tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.
Afternoon snack: whole-fat cow's milk and fruit.
Dinner: whole-fat cow's milk.
Supper: whole-fat cow's milk.



Between 5 and 11 months	
Breakfast:	whole-fat cow's milk.
Morning snack:	fruit.
Lunch:	<p>Children's meals should include:</p> <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. <p>Along with the meal, you can offer a small slice of fruit.</p> <p>Approximate amount between 5 and 6 months: two to three tablespoons in total.</p> <p>Approximate amount between 7 and 8 months: three to four tablespoons in total.</p> <p>Approximate amount between 9 and 11 months: four to five tablespoons in total.</p> <p>These amounts are only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.</p>
Afternoon snack:	whole-fat cow's milk and fruit.
Dinner:	same as lunch.
Supper:	whole-fat cow's milk.

Between 1 and 2 years of age	
Breakfast:	<ul style="list-style-type: none"> • Whole-fat cow's milk and fruit; or • Whole-fat cow's milk and cereal (home-made or processed bread, oats, corn couscous) or roots and tubers (cassava, sweet potato, yam).
Morning snack:	fruit.
Lunch:	<p>Children's meals should include:</p> <ul style="list-style-type: none"> • one food from the cereals group or from the roots and tubers group; • one food from the legumes group; • one or more foods from the vegetables group; • one food from the meats and eggs group. <p>Along with the meal, you can offer a small slice of fruit.</p> <p>Approximate amount: five to six tablespoons in total. This amount is only a reference for the family and must not be followed rigidly, since each child's individual characteristics must be respected.</p>
Afternoon snack:	<ul style="list-style-type: none"> • Whole-fat cow's milk and fruit; or • Whole-fat cow's milk and cereal (home-made or processed bread, oats, corn couscous) or roots and tubers (cassava, sweet potato, yam).
Dinner:	same as lunch.
Supper:	whole-fat cow's milk.

Get to know foods and learn how to mix them together and how to prepare them in the sections "Getting to know foods", "Children's diet starting at 6 months of age" and "Cooking at home".

How to offer water

Water should be offered in a glass, cup or spoon, avoiding the use of bottles. When you offer water, the child should be sitting, with the head and neck steady and aligned. If the child refuses water, offer it at other times, until they get used to it. Coconut water, teas and other beverages do not replace water.

Water should be filtered or treated with sodium hypochlorite or boiled.

You can find instructions about treating water with sodium hypochlorite in the topic “Good drinking water”, in the section “Getting to know foods”.



COOKING AT HOME

Traditionally, mothers and other female family members have been exclusively responsible for cooking, but they shouldn't be. Cooking can be a task shared by the entire family. With planning and basic cooking knowledge, home cooking can become the best option for children and their families. In this chapter, you will find suggestions for putting our recommendations into practice and for making your child's meals tastier, healthier and uncomplicated.

Historically, cooking activities have been the sole and exclusive responsibilities of female family members or domestic workers. In Brazil, the kitchen was also a space where slavery oppressed black women for nearly four centuries. Work in the kitchen, even after slavery was abolished, came to represent something of low social prestige, largely carried out by poor, black women.

Our history has led us to believe that everyday cooking is not a valuable practice because it is carried out in a separate space, is poorly paid (or unpaid) and is understood as an obligation of those who do not work outside the home.

Cooking meals for a child and the whole family has health benefits and is better for the family's budget. Since there are other activities which take up our time during the day, such as taking care of a child or working outside the home, making this daily activity more practical is important in order to avoid falling into the trap of ready-to-eat or ultra-processed foods. For this, it is worth reflecting on three important questions regarding cooking at home.

Why cook at home?

Because when a person or family cooks, they know what they are eating, since they're making their own decisions about which ingredients to use and how to prepare them. Through home cooking, food gains a greater meaning than just feeding the body, satisfying hunger and/or providing energy, vitamins and minerals. Cooking means bringing to life the memories of our ancestors, of the different cultures and ethnicities that are transmitted from one generation to another in each family. Ready-to-eat and ultra-processed foods offer none of this.

Preparing meals mainly using natural or minimally processed foods may seem like a step backwards, an old-fashioned way of cooking. But it isn't. Cooking is good for your health and contributes to the planet's sustainability, reducing, for example, the amount of waste we produce, because natural foods, unlike ultra-processed foods, don't need packaging. Additionally, using foods produced agro-ecologically, locally or by family farms is also a way of taking care of the environment because these producers are generally committed to the responsible use of natural resources, with soil and water quality, and they don't use pesticides in their crops. Cooking at home isn't going back to the past. It's living in the present and taking care of the future.

Cooking is an activity that promotes health and interaction between family members, preserves cultures and protects the environment. You should create more space in your routine for cooking activities.

By recognizing that real food is made at home and by the entire family, these Guidelines affirm the kitchen's value for health and for the environment, for strengthening cultural traditions and reformulating family relationships, addressing head on the need to share food-related domestic tasks.

For future generations to value cooking, we must bring back the pleasure involved in the act of cooking and encourage children from an early age. As they grow, children should be allowed to follow cooking activities and to feel part of the process. Children can carry out simple cooking activities, such as mixing preparations and adding ingredients. It is a good way to involve them

in the tasks and help them to develop. And remember: children should stay away from the stove and from sharp objects and should never be left alone in the kitchen. “Make-believe” activities related to cooking also help in childhood development and in bringing children closer to the world of cooking and foods.

Who can cook?

The whole family can and should participate, sharing cooking tasks. Often, women are the only ones responsible for these activities, as well as other domestic chores. When everyone participates, no one is overburdened. With so many chores over the course of the day, especially after the arrival of a child, it seems like there’s no time left for anything. Getting the whole family to help is a good alternative.

Routinely cooking at home requires organization, especially in terms of buying and storing foods, in addition to the cooperation and desire of all family members for an adequate, healthy diet.

Over time, families define who will be responsible for buying foods; organizing groceries; cleaning, peeling and chopping foods; seasoning preparations; washing dishes and cleaning the kitchen. It can be useful to vary functions until you find out what each family member does best. With the shared experiences, family members can organize themselves so to make their routine easier, according to each home’s dynamics, and home cooked meals can become a source of health and pleasure to all.

What do I need in order to cook?

In order to cook, you need to have access to healthy foods and water. These are crucial conditions that must be guaranteed for all families. You also need willingness and desire to cook, because peeling, chopping and using the stove are skills that become easier with practice. Getting to know different foods and ways to prepare them, recipes and combinations also helps. Smelling the aromas of different foods and tasting the food as you cook are good practices for gaining confidence.

If you know how to cook, try to hone and share that knowledge. If you don't, talk to family members, neighbors and greengrocers, ask for healthy recipes, research books, magazines and online, and, when possible, take classes. Start cooking because you learn by doing.

Instructions for cooking at home

In order to have natural or minimally processed foods at home and prepare meals with them, you need planning and organization.

Basic utensils and some devices

You need basic utensils and some devices in order to cook quickly and efficiently every day. They must be in good condition, organized and stored in places that are easy to access but outside children's reach. Keeping utensils and devices clean and organized saves time. There is no need to set aside specific utensils to prepare a child's meals.

If possible, you should choose more resistant utensils that last longer. It is better to have fewer, higher-quality, useful utensils than many lower-quality or fragile ones. Some of the most common utensils are pots and pans, knives, cutting boards for vegetables and meats, spoons for stirring food in the pot, sieves, jars, skimmers, ladles, graters, cups, glasses, plates and cutlery.

Be careful not to flake off or scratch pots and pans with metal spoon. Pressure cookers make it possible to cut cooking times in half or less while using less gas, when compared with regular pots, which makes them ideal for preparing beans and tougher meats. If possible, it is worth having one at home and learning how to use it.

How to use a pressure cooker

- Respect the pressure cooker's indicated maximum level. Don't let the amount of food and liquid go above this level. If your pressure cooker doesn't have any marks indicating the maximum level, you should only fill it a little more than halfway.
- When you put the lid on, observe if the rubber seal fits properly. If it is dry or has any cracks, it should be replaced.
- The vent through which the vapor is released needs to be cleaned regularly so it won't clog. Use a piece of wire or plastic to do this. Avoid using wooden sticks because they can break inside the vent.
- When the vent starts to whistle and shake, lower the fire. This saves gas.
- Once you've removed the pressure cooker from the fire, wait for the pressure to naturally dissipate before opening it. This is safer. Avoid forcing the pressure to dissipate by lifting the vent or putting the pressure cooker under water. Never open the cooker while it is still pressured.
- If the whistling suddenly stops, turn off the fire: something may have clogged the vent. To avoid this, don't cook foods with very finely chopped seasoning (like onions or garlic) that can clog the vent. Always maintain the safety valve clean since that's what will release the vapor if the vent is clogged.

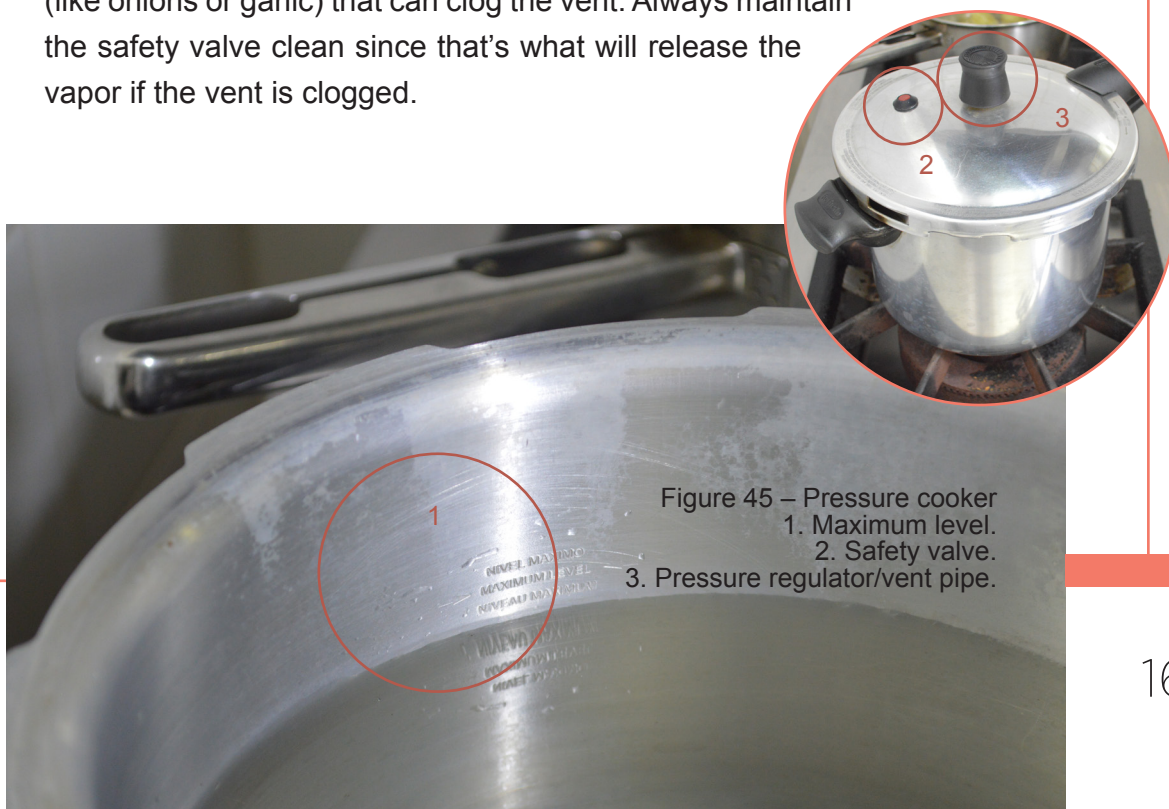


Figure 45 – Pressure cooker
 1. Maximum level.
 2. Safety valve.
 3. Pressure regulator/vent pipe.

Planning what the family eats over the course of a week

Meal planning makes things easier for those who prepare food at home. You can choose basic recipes that are part of your day-to-day routine, for example, the ones from the family's cookbook, from friends or from the internet. To avoid waste, the first step is checking the foods you already have at home, especially those close to their expiration dates. It is important that you include foods produced locally and those that are in season (harvesting time). Usually, they are tastier, fresher and more nutritious, are easy to find and cheap. There are many season charts, but the most practical way of figuring it out is looking at the prices. Seasons vary according to region and in each place there are "winter" and "summer" vegetables.

If you can't plan all meals ahead, one suggestion is to buy some types of colorful vegetables and some leafy greens and alternate recipes that include them over the course of week, along with rice, beans and some kind of meat or egg. When the food served at lunch is the same as the food served at dinner, it makes life easier. For snacks, you can choose different fruits that are in season, if possible in sufficient quantities to last the whole week. These are only suggestions. It's up to the family to figure out what works best in their day-to-day lives and, at the same time, avoids wasting food.

Children's meals can be the same as their families, as long as they are healthy, made from natural or minimally processed foods and have an appropriate consistency. Offering different vegetables whenever possible is a way to introduce children to new flavors. Offering your child a specific food, even if it's not part of your family's habits or if you don't like it, can be an opportunity to rethink everyone's diets. Although children under 9 months of age should not be given cow's milk as a meal, it, and foods derived from it, can be given to children starting at 6 months of age, in small amounts, as ingredients in home-cooked recipes, such as, for example, mashed potatoes.

In the section “*Children’s diet starting at 6 months of age*”, in the topic “Mixing and varying foods in different meals and during the week”, you’ll find suggestions for preparing meals with vegetables. Below, we present some examples of preparations for lunch and dinner for the whole family.

Figure 46 – Examples of menus

1. Rice

Beans

Pot roast with cress

Mashed pumpkin

2. Rice

Beans

Boiled egg

Tomato

Sauteed maroon cucumbers

3. Noodles

Beans

Chicken with tomatoes and carrots

Lettuce

4. Polenta

Beans

Chicken

Okra

5. Mashed potatoes

Fix stew

(fish + onions + tomatoes + bell peppers + coconut milk)

1



2



3



4



5



6. Bean soup with noodles,
muscle and cress

7. Potato

Beans

Chicken

Carrots

8. Rice *mexidinho* with spinach and eggs

9. *Canjiquinha*

Boiled egg

Varied vegetables with tomato sauce

10. Cream of cassava and *taio*

Chicken with tomato sauce

11. Mashed yams

Beans

Sauteed Malabar spinach

12. Bean *tutu* (beans + cassava flour)

Sauteed kale

Chopped boiled egg

The images show the appropriate amounts of food
for a child aged 9 months. All meals are shown on
dessert plates.

6



7



8



9



10



11



12



Planning your grocery shopping

After deciding what you will cook during the week, it's time to go shopping or to pay a visit to your backyard. Even in big cities, it's possible to plant foods at home. Home or community gardens located near where you live can make it easier to access fresher foods.

In order to guarantee healthy foods at home, you must have access to establishments that produce or sell natural or minimally processed foods. In many realities, it is easier to buy foods that last longer, such as rice and beans, than fruits and vegetables. If there are no places near your home that sell these foods, seek out a market or street market on your way to work or school.

Whenever possible, you should buy organic and agro-ecological foods. If you don't know where to find these foods, talk to your neighbors or search online for street markets and groups that collectively buy these foods.

There are many things involved in buying groceries: the amount, quality and variety of foods to buy; the space available for storing foods; the size and rhythm of the family's consumption; the number of people involved in the purchase; the mode of transportation used to bring the groceries home; the frequency with which the family receives their income (once a month, over several weeks or every day) and the amount of money available for buying foods.

Planning makes grocery shopping easier and helps avoid too many trips to the market, the accumulation of food that can lead to waste and the purchase of unnecessary items, such as sweets and other ultra-processed foods.

Bi-weekly or monthly purchases: foods that last longer, such as rice, beans, corn meal, cassava flour, noodles and frozen meats.

Weekly purchases: eggs, fruits, vegetables and fresh meats.

Keep pen and paper close at hand to write down what has run out or is close to running out. On the day you go grocery shopping, don't forget to check the fridge and the cupboards to see what you still have at home. The well-known advice not go grocery shopping when you're hungry still applies, because it helps avoid unnecessary purchases.

Buying foods

Depending on the quality and price of the products available at the supermarket, street market or greengrocers, you may need to adapt the family meals you had planned. For example, if you planned to buy carrots, but the pumpkin (or squash) was cheaper, you can swap one for the other. Planned on buying potatoes, but yams were on sale? Buy yams. To carry out these substitutions, you need to know the food groups. To learn more about this, read the section *"Getting to know foods"*.

Some precautions are crucial when conserving and displaying food. All establishments that sell food must be clean, organized, with good-quality food options in a good state of conservation. When you enter any establishment, observe how clean the foods are and how they are displayed.

Below, you'll find guidance regarding how to select the most appropriate foods for your family.



How to choose foods when buying groceries

- When buying natural foods, it is important to remember that each has unique characteristics – smell, color, flavor, texture – which must be observed. Avoid buying foods with spoiled or moldy parts or whose color or texture is altered. Remember that organic foods have varying forms and appearances.
- Fresh fish should be refrigerated and have well-adhered scales or firm skin, wet gills that are pink or red and shiny, transparent eyes. Frozen fish should be properly packaged and preserved at appropriate temperatures. Avoid buying products with excessive water or ice in their packages because they may have been unfrozen and refrozen.
- Fresh meats should be refrigerated and have a shiny, red color (or light color, in the case of poultry), the texture should be firm and the fat should be well-adhered and lightly colored. You should not buy meats with dark or greenish color, unpleasant smell or altered consistency. You should check to see if they have a seal from the health inspection federal agencies – SIF (Federal Inspection Service of the Ministry of Agriculture).
- Packaged foods should not be bought past their expiration date. Packages should not be torn, bloated, crumpled, rusty or dirty, the content's color, smell and consistency should not be altered and the expiration date written on the label should be legible.

Choosing foods can be difficult at first, but, with practice, it gets easier to know which ones are safe for consumption.

The order in which you choose foods while buying groceries also helps: first, non-perishable foods (rice, flour, beans, milk), then perishable ones (fruits and vegetables) and, lastly, perishable foods that need to be refrigerated (meats and cheeses).

You should not offer ultra-processed foods to children. If you have difficulty recognizing them, read the label. To know how to interpret food labels, read the item “Labels and ultra-processed foods”, in the section “*Getting to know foods*”.

Usually, in supermarkets, ultra-processed foods are in visible, easy-to-reach locations, while natural or minimally processed foods are kept in the back or in sections close to the walls.

Children and grocery shopping

In supermarkets, children come into contact with ultra-processed foods and their colorful packaging, which often includes characters from kids' shows. It is common for children to insist on bringing home many of these foods, which, in addition to often being expensive, are superfluous and should be avoided. This should be turned into a teachable moment, in which you explain the low quality of ultra-processed foods and the benefits and flavors of fruits and vegetables. If there are street markets in the region where you live, they are a good option for going grocery shopping with your child and involving them in the family's food-related activities. Learn more about this in the item "Massive exposure to food advertising", in the section *"Adequate, healthy diets: dealing with challenges in everyday life"*.

Organizing foods in your kitchen

It's best if you organize foods in your kitchen as soon as you come home from buying them. When foods are organized and placed somewhere that's easy to see, you avoid, for example, opening more than one package of the same food at a time, or losing vegetables because they were hidden in the back of the fridge and spoiled. Food waste at home is usually the result of lack of planning and organization.

Ideally, fruits and vegetables should be stored cleaned and dry, while meats should be cut into sufficient amounts for each meal. Each food should be put in a separate container and stored in the appropriate place in the fridge and/or freezer. Although this takes work, it makes preparing meals much easier, because it's one fewer step that needs to be accomplished.

Eggs should not be washed before being stored in the fridge. However, if they're very dirty, you should remove the excess dirt with a clean cloth or a wet paper towel and, if possible, store them in a specific container in the fridge, separate

from other foods. Before you crack eggs, wash them to remove dirt from their shells.

If you have more than one unit of the same food at home, you should use the one closest to its expiration date first, and you should first use fruits and vegetables that are more sensitive and fragile, before using those that last longer. This way, you'll have adequate foods every day and you'll avoid waste.

For example, lettuce should be eaten before kale, cress should be eaten before cabbages and papayas should be eaten before apples.

Below, you'll find storage times for different foods.

Food storage times

Fridge	Raw meats (beef, pork, poultry and fish): 3 days. Cooked fish: 1 day. Seasoned raw meats: 1 day. Other cooked meats and prepared foods: 3 days.
Freezer (single-door fridges)	Fully prepared home-made meals: 10 days.
Freezer (double-door fridges. Reaches much lower temperatures than freezers in single-door fridges)	Fully prepared home-made meals: 30 days. Raw meats: 30 days.



1



2



3

Storage temperatures of frozen or refrigerated foods must respect manufacturers' recommendations printed on the labels.

Figure 47 – 1. Fridge with freezer. 2. Single-door freezer. 3. Freezer attached to a double-door fridge.

Hygiene in the kitchen

Before starting to cook, it is very important that you ensure hygiene when preparing and offering foods. These are simple procedures that avoid food contamination and disease risks. Hygiene in the kitchen involves four aspects: water quality, washing hands and forearms, cleaning utensils and surfaces and cleaning foods.

Figure 48 – The four aspects involved with hygiene in the kitchen



Water quality: if the water is provided by the public water supply system, all you need to do is filter it at home. In places where there is no water treatment, it needs to be filtered and treated, as explained in the topic “Good drinking water”, in the section “*Getting to know foods*”. This water will be used in the initial food preparation. For the cooking stage, when there’s boiling, the water just needs to be filtered.

Washing hands and forearms: before you begin preparing foods and offering food to your child, you should wash your hands and forearms with water and soap, rinse them and dry them with a paper towel or a clean towel.

Cleaning utensils and surfaces: all utensils and surfaces which will come into contact with food at any preparation stage – such as the stove, counters, table, sink, cutlery, plates, containers and trays – must be washed and rinsed with clean water. Dish towels and sponges can be sources of food contamination. After using them, keep sponges in a dry place and replace them once a week, preferably avoiding using them if they look very used. If you have a microwave, you can use it to clean foam sponges with no metallic parts. Place the sponge

in a container, cover it with water, add a few drops of dish-washing soap and heat it for two minutes. Wait until it cools and use it normally. Avoid drying dishes with a kitchen towel. The best way is to let them dry naturally, protected from insects and other animals.

Cleaning foods: you should pay special attention when cleaning fruits and vegetables that will be eaten raw and with their peels. Cleaning isn't just washing. Proper cleaning includes removing spoiled parts and dirt, washing, eliminating small animals and microscopic germs we can't see.

Cleaning fruits and vegetables

- Discard spoiled leaves and parts.
- Wash all fruits, vegetables and leafy greens (lettuce, cress, kale, waterleaf, endive, spinach, *jambu*, mustard, arugula, among others) with treated running water, going leaf by leaf, to remove all impurities from the surface.
- If necessary, use a small brush set aside just for this purpose.
- For fruits and vegetables that will be eaten raw and with their peels, leave them in a bowl covered with a chlorinated solution (see options for preparing it below) for between 10 and 15 minutes. Next, rinse them one by one in potable water. **Remember: clean water and vinegar are not enough to eliminate micro-organisms, and dish-washing soap should not be used for cleaning foods.**
- Keep them refrigerated until it's time to serve them.

Preparing the chlorinated solution

The chlorinated solution can be prepared using bleach, sodium hypochlorite or products designed for disinfecting foods. Depending on the product's concentration, the way in which it is prepared will vary.

Bleach – The only type of bleach that can be used to clean foods is the one that only contains water and sodium hypochlorite (at a concentration that can vary from 1.0% to 2.5%). Some brands include other substances and cannot be used for cleaning foods. Read the label in order to identify the appropriate product.

Sodium hypochlorite – Sodium hypochlorite can be bought at 1.0% or 2.5% concentrations in 1 liter bottles.

Preparation:

- Bleach with 1.0% of sodium hypochlorite or 1.0% sodium hypochlorite: two tablespoons for each liter of potable water.
- Bleach with 2.5% of sodium hypochlorite or 2.5% sodium hypochlorite: one tablespoon for each liter of potable water.

Figure 49 – Steps for cleaning fruits and vegetables

1. Discard spoiled parts.
2. Wash leaves in running water.
3. Add the chlorinated solution to water.
4. Soak the leaves in the solution.
5. (5.1 and 5.2) Soaking times.
6. Rinse under the tap.
7. Store in the refrigerator (dry).



5.1



Food disinfectants – There are products that come in liquid or pill form that can be purchased at supermarkets. You should follow the instructions on the product label.

Be careful with products that don't have a label because they can include substances that are unknown and harmful to health.

5.2



After foods are cleaned, they can be stored. If you prefer, some can be peeled and chopped, according to their use. After leaves have dried, they should be stored in containers so they'll remain fresh longer.

6



In the kitchen, you learn by doing!

Cooking is a skill acquired, above all, through practice. By practicing, you learn: how to brown foods in order to enhance flavor without making them bitter; to identify the cooking point according to the change in the consistency, color and texture of foods; to recognize aromas that fill the kitchen and create fond memories of home-made foods for children and their families.

7



In order to cook well, try to taste the food while you cook. The practices of tasting and following the preparation of food are important for correcting the amount of salt and the seasoning, and to know if the foods' cooking point is near. It also helps to provide greater security while cooking and to vary forms of preparation, which makes it possible to find better practices for each type of food.

Avoid contamination. If you use the same spoon to stir food and to taste it, remember to wash it before putting it back into the pot.

Some preparations can be made in advance so that day-to-day cooking is easier. By reducing time spent in the kitchen, more time is left over for other activities in the family's day-to-day life.

Beans

- First, the grains should be selected, removing imperfections such as small stones and other particles, and then washed.
- Leave them soaking for 8 to 12 hours, preferably in the fridge. If it is not possible, leave them at room temperature in a covered container with, at least, twice as much water as beans. This stage, in addition to speeding up the cooking, reduces the presence of substances that cause intestinal gases and substances that interfere in the absorption of certain nutrients. The water used to soak beans should be discarded before cooking.
- If you can't leave the beans soaking the day before, in order to reduce cooking time and save gas, beans should be boiled for a few minutes, just until the water is very hot, and left in the pot, with the lid on and the stove off, for 30 minutes to 1 hour. After this time, you should turn the stove back on and begin cooking, which will be faster, because the beans will be softer.
- Add new water and bay leaves, if the family likes them, and cook the beans with no other seasoning, preferably using a pressure cooker.
- When the beans have cooked, separate some portions and freeze them in small containers or plastic bags meant for food storage.
- Beans that are left in the pot and will not be frozen can be seasoned. You should avoid using sun-dried meat, sausages or pig's feet. Cook the natural seasonings of your choice in a little bit of oil, just so they won't stick to the pot, and add the cooked beans. Add very little salt, just to enhance the taste. The amount of seasonings will vary according to the family's tastes and to the

natural seasonings that are used. Adding one shallow teaspoon of salt and one shallow tablespoon of oil is enough to prepare one cup of raw beans. You should avoid higher quantities than that. Don't use ready-made seasoning, or cube, powder or liquid seasoning. When beans are seasoned at the beginning, cooking can take longer, because the grains will take longer to soften.

While the beans are cooking, you should prepare the other foods that are part of the meal.

Vegetables

- Vegetables can be cooked in a regular pot with a little water. They can also be steamed in a couscous pot until they're soft. Avoid adding too much water when you cook vegetables in order to preserve the vitamins in the foods. If there's some water left over after cooking, you can use it to cook rice, beans and meats.
- Vegetables can also be cooked in a pressure cooker. After the pressure starts, all it takes is three to five minutes to cook, using half of the water used in a regular pot. The pressure should dissipate naturally, that way the food finishes cooking in the steam. However, the food should not become mushy or fall apart. When foods are cooked, but still have a soft texture and vibrant, beautiful and attractive colors, that's a sign that the cooking point is just right.
- Vegetables can also be roasted in the oven, with or without herbs, or cooked previously and kept in the fridge for up to three days, and then heated to be eaten.
- When well cooked, vegetables are easily mashed with a fork or cut into smaller parts to be offered to children.



Figure 50 – Roasted vegetables

Fruits

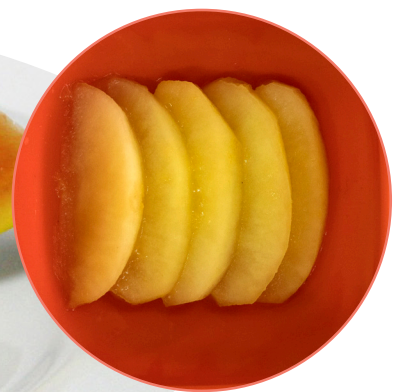
- Fruits, which are great snacks for children, can be stored in the fridge clean, some already peeled, chopped and packaged in a closed container for up to three days. Fruits that don't become dark, such as papaya, mango, strawberry and pineapple can be stored clean, peeled and chopped, in order to make eating them easier.



- In addition to being eaten raw, fruits can be eaten cooked or baked, as purees or jams without sugar. Give priority to riper foods for these preparations. Another tip is to use orange juice when cooking fruits. This makes the preparation sweeter without the need to add sugar.

Figure 51 – Chopped and mashed papaya

Figure 52 – Cooked apple



Meats and eggs

- Children can eat all kinds of meat. They accept softer meats well. What's important is that they're in good condition, well stored and prepared in a hygienic fashion.
- Ideally, you should clean meats right after buying them so you can then store and freeze them in the right amounts for the family's consumption. For proper storage, the freezer should be clean, with no accumulated ice. Once defrosted, meat should not be frozen again, because this can lead to health risks, especially for small children.
- Whenever possible, use an easy-to-clean chopping board and a well-sharpened knife. Put a clean cloth or wet paper under the board so it won't slip and cause an accident. This way, the board won't move around the counter.
- Excess fat and nerves should be removed from meats. There are meats that naturally have a lot of nerves in their middle, such as muscles. In these cases, these parts don't need to be removed. You just need to cook them with water, stock or a natural sauce until they're soft.
- The type and cut of meats should follow the family's preferences, for example: ground, in cubes, flakes, slices, or whole parts, such as drumsticks and thighs.
- Beef and poultry can be stored seasoned in the fridge to be cooked at mealtime. Seasoning meats in advanced is a way to soften them. To do this, use the home-made seasoning of your choice.
- Unlike vegetables, meats can be cooked longer without losing as many nutrients. A good strategy for saving time is to cook meats in a pressure cooker. This can be a good alternative to guarantee that meats are ready and soft in less time and using less cooking gas.
- When cooking, you should not add too much water, unless you're preparing a stock or sauce. Browning meats in a pan before adding water helps make the stock and adds more flavor to the preparation. To do so, using a little bit of oil to brown foods helps to give them a nice color.



- Roasting is a good alternative on days in which you can dedicate more time to cooking. With the oven on, you can cook larger amounts and make more than one preparation. This is also a way to save time. Afterwards, you can just store the food in the fridge or freezer.
- Meat offered to children must be finely chopped and cannot contain excessive amounts of salt. Roast meats are firmer than meats cooked in a pot and some children may have difficulty eating them.
- Another way to save time is to cook tubers and vegetables, such as potatoes, carrots, onions, tomatoes and chayote, along with the meat. Since vegetables take less time to cook, they should be added to the pot after you've started cooking the meat. In addition to making the preparation more flavorful, this saves cooking gas.
- Steaming is a good alternative for fish, which cook in a few minutes. Use a couscous pot for this too! For fish with bones, you should first remove them before cooking, sliding your fingers over the open fish. To avoid choking and accidents, before serving fish to a child, check again to see if there are any bones left.

Figure 53 – Remove bones from fish while they are still raw

- Egg yolks should be firm and a vibrant yellow. When the egg yolk becomes dark or greenish, that's a sign that the egg has been cooked more than necessary and has even lost some nutrients. For boiled eggs, you only need to cook them for 7 to 8 minutes after the water starts boiling. After this time, cool and peel the egg, otherwise it will continue to cook inside the pot or inside the hot shell. Scrambled eggs are ready in a few minutes. As soon as the eggs are consistent, with no liquid parts, it's time to remove them from the fire.

Below, you'll find some ways of cooking meats and other foods for children.

Different ways of cooking foods for children

Technique	Procedure
Steaming	Cooking with water vapor: you can use a specific pot or couscous pot.
Boiling	Cooking in a pot with boiling water on the stove.
Sauteeing	Cooking in a pot or frying pan with a small amount of oil.
Stewing	Sauteeing the food and then cooking in a small amount of liquid (water, stock or sauce).
Pressure cooking	Cooking the food in a pressure cooker.
Baking	Cooking in the stove on a tray or a refractory tray (made of heat-resistant material).

Vegetable oils

All foods can be prepared using small amounts of vegetable oils (soy, corn, sunflower, olive oil) and seasoned with natural seasoning and the minimum amount of salt.

Vegetable oils have important substances for health. However, you should not exaggerate their use, because that can significantly increase the amount of calories in the preparation. Children should not eat fried foods because, in addition to using excessive amounts of oil, they also make foods harder and greasier. Additionally, the frying process itself produces substances that are harmful to health.

Natural seasoning

Natural seasoning can be previously prepared and stored in the fridge to be used in all recipes, from meats and beans to salads. In addition to giving a personal or family touch to recipes, it enhances the flavor of home-cooked meals. Each person or family has their favorite seasoning ingredients and most can be prepared in advance.

To make it easier to peel garlic, you can leave cloves in water in the fridge overnight. This way, they're easier to peel and can be used or stored without the peel for a few days.

Another easy way to peel garlic is to crush lightly it with the side of a knife, putting pressure with your hand. Onions can also be stored peeled.

Having clean, chopped herbs in containers in the fridge also makes preparing food faster. They can even be frozen so they last longer. A mix of seasonings can be prepared in advance and used when preparing meats and cooking foods. To make it, mix together a small amount of different



Figure 54 – Garlic crushed with the side of a knife

dry herbs, such as oregano, bay leaf, rosemary, parsley, cilantro, chives. You can mix them together with a mortar and pestle or even use a blender. You can also increment it with garlic, onion, bell pepper, saffron, cumin, paprika, etc. There are not set amounts of each herb or a perfect combination of them.

Discover the recipe that the family most enjoys, have it in the kitchen at all times and use it with moderation.

When a separate meal must be prepared for the child

Whenever possible, and as long as the family's diet is healthy, the same foods and preparations can be offered to the child, only modifying the consistency, when necessary. However, sometimes the food prepared for the family isn't appropriate for children and, therefore, it's necessary to cook just for the child. There are easy ways to this. One of them is to steam foods, using a couscous pot, or similar utensils. You can add onions, tomatoes and fresh herbs for seasoning. Chop foods, cook them at the same time, without mixing them, until they're soft. But pay attention: the couscous pot is not recommended for preparing larger meat cuts.



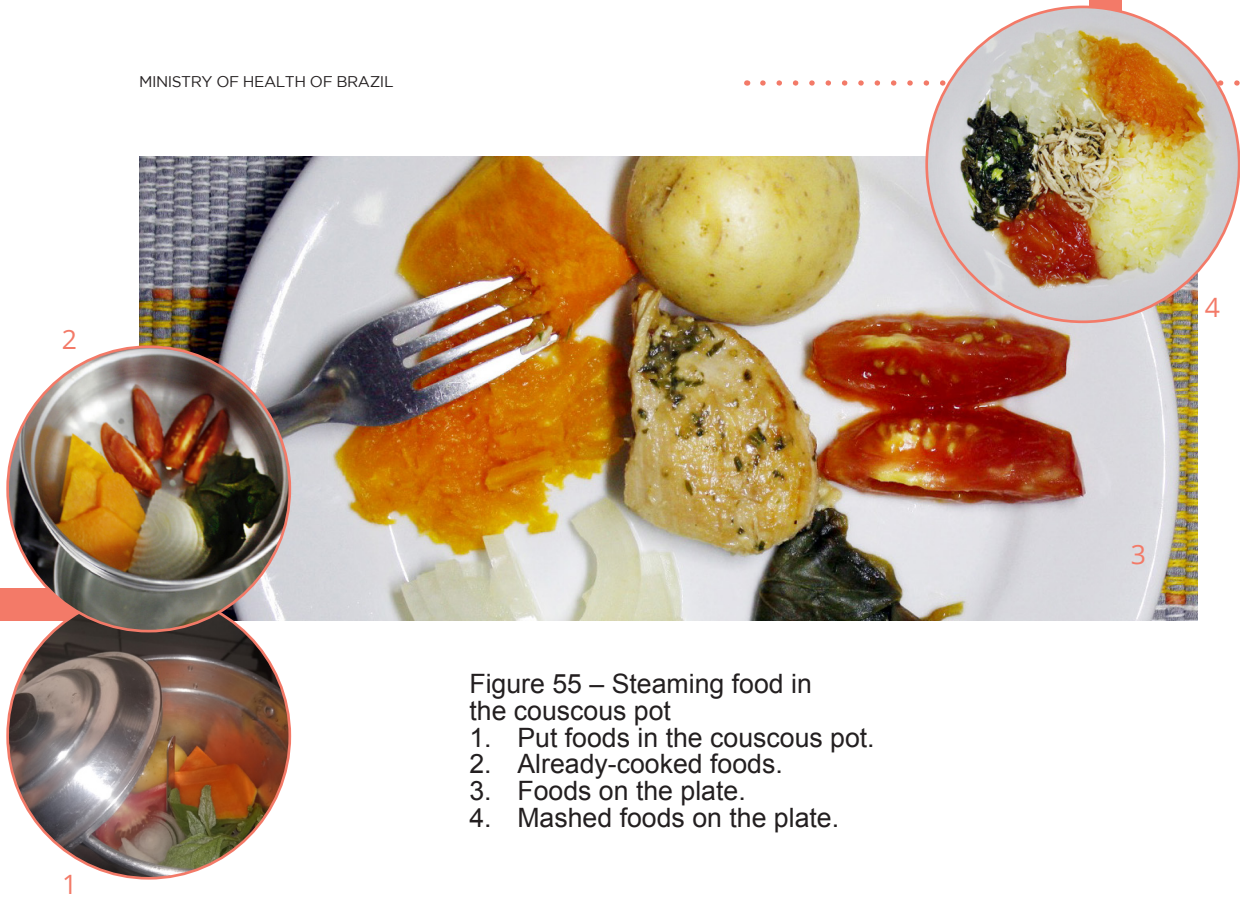


Figure 55 – Steaming food in the couscous pot

1. Put foods in the couscous pot.
2. Already-cooked foods.
3. Foods on the plate.
4. Mashed foods on the plate.

Another way is to cook all foods in a single pot. What's important is that you avoid mixing them and consider the time needed to cook each one. Use the minimum amount of water so that there is no loss of nutrients and use natural seasoning. Begin by cooking the meat, then add roots or tubers or noodles or rice.

Next, vegetables that contain more liquid (for example, zucchinis, tomatoes) or leafy greens. If the meat is fish, put it in the pot along with the softer vegetables, because they require less cooking time. If you use eggs, add them last. If you only add salt, use as little as possible to enhance the taste of the foods. The sequence in which you add foods to the pot can vary according to the food's quality and the child's acceptance. For example, if the pumpkin is harder, begin cooking it with the cereals, roots or tubers, so it will be soft enough for the child to accept it.

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Figure 56 – Cooking chicken a single pot

1. Food that will be cooked.
2. Sauteeing garlic and onion in a pot: in a heated pot, sautee the seasoning of your choice, such as garlic, onion, chives, etc., with a little bit of oil.
3. Adding chicken or beef: sautee the meat, in small or medium-sized cubes, until it's golden. This stage is important for adding flavor. At this point, you can also add different herbs, to add even more flavor, such as bay leaf, rosemary, thyme, etc.
4. Adding cereals, roots or tubers: add cereals, roots or tubers cut to a medium size.
5. Adding water for cooking: add enough water so that the foods become soft. At this moment, add salt. Let it cook for a few minutes.
6. Adding vegetables: add whole or shredded leaves (example: *taio*ba, spinach, chicory, cress, kale, etc.) and/or vegetables cut to a medium size (example: zucchini, maroon cucumber, pumpkin, chayote, etc.). Delicately mix the foods in the pot and let them cook for a few more minutes. If necessary, add more water. It's important that no water is left over after the food has been cooked.
7. Chicken, potato, cassava, okra and tomatoes cooked in the same pot.
8. Serving the child: set the preparation on the child's plate without mixing the different foods. Chop or mash foods when necessary.

Figure 57 – Cooking fish in a single pot

1. Foods that will be cooked.
2. Sauteeing garlic and onion in a pot: in a heated pot, sautee the seasoning of your choice, such as garlic, onion, chives, etc., with a little bit of oil.
3. Adding cereals, roots or tubers: add cereals, roots or tubers cut to a medium size.
4. Adding water for cooking: add enough water so that the foods become soft. At this moment, add salt. Let it cook for a few minutes.
5. Adding vegetables: add whole or shredded leaves (example: *taio*ba, spinach, chicory, cress, kale, etc.) and/or vegetables cut to a medium size (example: zucchini, maroon cucumber, pumpkin, chayote, etc.). Delicately mix the foods in the pot and let them cook for a few more minutes. If necessary, add more water.
6. Adding the fish: add the already-cleaned and boneless fish on top of the preparation. Put a lid on the pot in order to cook the fish more quickly.
7. Noodles, pumpkin, kale and fish cooked in the same pot.
8. Serving the child: set the preparation on the child's plate without mixing the different foods. Chop or mash foods when necessary.



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Figure 58 – Cooking eggs in a single pot

1. Foods that will be cooked.
2. Sauteeing garlic and onion in a pot: in a heated pot, sautee the seasoning of your choice, such as garlic, onion, chives, etc., with a little bit of oil.
3. Adding cereals, roots or tubers: add cereals, roots or tubers cut to a medium size. Adding water for cooking: add enough water so that the foods become soft. At this moment, add salt. Let it cook for a few minutes.
4. Adding vegetables: add whole or shredded leaves (example: *taio*ba, spinach, chicory, cress, kale, etc.) and/or vegetables cut to a medium size (example: zucchini, maroon cucumber, pumpkin, chayote, etc.). Delicately mix the foods in the pot and let them cook for a few more minutes. If necessary, add more water.
5. Adding a raw egg onto the preparation: add the egg over the preparation just before it's ready.
6. Put a lid on the pot and let it cook just until the yolk becomes firm; it becomes a fried egg over the preparation.
7. Rice, zucchini, watercress and egg cooked together in the same pot.
8. Serving the child: set the preparation on the child's plate without mixing the different foods. Chop or mash foods when necessary.

In the three recipes listed above, while preparing the meal, taste the foods, observing their texture, consistency and flavor. Before serving them, mash small portions directly on the child's plate with a little bit of vegetable or olive oil. If you need to further soften the food, add a little bit of the water used to cook it.

Freezing foods for later

In order to make life even easier, you can prepare multiple meals in one sitting. Having frozen home-cooked food makes the whole family's meals – and, of course, the child's as well – easier. For this, you need to be careful when storing foods that have already been prepared.

- They should be stored in small containers, preferably made of glass, in the amount that will be served to the child or in larger containers for the whole family. You'll find information on the storage time for different types of food in the box on page 168.
- Only defrost what you will eat in that meal. Foods should be defrosted inside the fridge or frozen foods can be taken directly to be cooked. Foods should not be defrosted at room temperature. Once defrosted, they should not return to the freezer, since this can lead them to spoil. However, raw foods that have been defrosted can be frozen again after cooking. For example: you can defrost raw chicken, cook it in cubes and then freeze the cooked chicken in portions, so you can eat it on other days.
- If you use a microwave to heat the food, it is better to use a plate or glass container, with no metal parts, instead of plastic containers. Plastic wrap (PVC) used to cover foods should also not be subjected to heat.

What to do with leftovers and scraps

A leftover is food that hasn't been eaten that is left in the utensils (pots, trays or containers) used to serve it. They should not be left in these utensils on the stove, but stored in the fridge. Don't wait for the food to cool down before you store it in the fridge. If you can't store foods in the fridge, you should prepare the meal as close to the time it will be served as possible. Scraps are foods left on the plate. Even if the child hasn't touched them, they should not be offered again in another meal.

Suggestions for a more practical routine in the kitchen

Here are some suggestions for speeding up the process of preparing meals:

- Organize the shelves in the fridge and in the cupboards so you know what foods are about to run out and need to be replaced.
- Keep the kitchen organized and clean, so it's safe and inviting for preparing meals.
- Organize seasonings, salt and oil together in an accessible place.
- Keep knives sharp.
- Clean meats and store them in containers in the fridge or freezer in the exact amounts you'll need for the preparations. When you cook, you just need to grab the necessary containers, with no waste.
- Keep previously prepared foods in the fridge: natural seasonings, chopped garlic, peeled onions, chopped pumpkin, cleaned leaves, etc. This way, you don't have to start every meal from scratch.
- Set a pot of water to boil before you start preparing foods and use the already-hot water to cook them.
- Cook a larger amount of food than is needed for one meal and store the rest properly.
- Share cooking tasks with other family members.





ADEQUATE, HEALTHY DIETS: DEALING WITH CHALLENGES IN EVERYDAY LIFE

In their everyday lives, families can come across challenges to making an adequate, healthy diet a routine, shared practice. Acknowledging and reflecting upon the causes behind these challenges contributes to developing a critical view and exercising rights and helps us to maintain an adequate, healthy diet.

The process of writing the recommendations found in these Guidelines took into account the diversity of Brazilian families; their different living arrangements and situations; food-related habits and traditions, so that the information in this material would actually be useful and could be put into practice. Within this perspective, we must also identify the challenges to practicing an adequate, healthy diet, starting with the people to whom this diet is directed, that is, children under 2 years of age.

For children, this is a moment of learning and experiencing many situations that cause emotions, reactions and feelings. Changes in their routine, the arrival of new faces and the departure of beloved people, visual and auditory stimuli – everything is new to children. Still unable to speak, children can use food to express fears, insecurities and dissatisfaction. Eating practices are a way of relating to the world. Learning to recognize these signs and noticing what might be harming children's diets is a responsibility shared by all members of the family and their support network.

Each family will discover their own way of facing challenges. There is no magic recipe or single answer. Solutions that work for one family may not be as effective for another. Within the same family, what worked for one child may not work for another. Each child is unique and comparisons between children are not always positive. Thinking of diets in a broader way, that is, considering environmental, cultural, economic, health, nutritional and human rights aspects, as presented in these Guidelines, can help you identify possible solutions.

In addition to family and community issues, there are also more general challenges, such as access to an adequate, healthy diet; the availability of full-time public daycare services; how adequate workplace spaces are for breast milk expression and storage, among others, which demand public policies for promoting an adequate, healthy diet for the population.

Below, you'll find some of the most common challenges in this stage of life and possible ways of overcoming them.

Keeping up breastfeeding after returning to work

Nowadays, many mothers work outside the home and are responsible for the family's income, in part or in full, which forces them to go back to work after their children are born. The participation of fathers, family members, friends and coworkers is crucial to building a support network for women to care for their children and continue their paid work.



Some working women make use of the right to maternity leave and other forms of paid leave. **This is a right that should be exercised and enjoyed in the best possible way.**

Another group of working women is inserted into the informal job market, and is therefore not covered by laws that protect breastfeeding. In these situations, the mother-child pair becomes more vulnerable to early weaning, because the woman needs to divide her time between motherhood and work right at the start of the child's life.

In most cases, it is possible for women to continue breastfeeding after going back to work. If a mother returns to work before her child turns 6 months old, the biggest challenge is maintaining exclusive breastfeeding. Breast milk is the best food in any situation and, for babies under 6 months of age, it should not be substituted by water, teas, juices, porridges or other preparations made from milk.

A short time before the mother goes back to work, the family must organize themselves and experiment with ways to guarantee the exclusive offer of breast milk. The mother will need to express breast milk before returning to work to have a frozen milk supply to be offered when she is at work. Breast milk can be frozen for up to 15 days. Support from health professionals, family members, friends and coworkers (support network) contributes to the success of this initiative.

If a mother returns to work after her child turns 6 months old, the main guidance is to keep breastfeeding until they're 2 years old or older and begin introducing foods following the recommendations in these Guidelines.

In order to keep breastfeeding after returning to work, mothers can:

- breastfeed when they drop off or pick up their children from daycare or from the place where they are under someone else's care;
- breastfeed during work breaks, if they work from home or near their homes or the place where their children are being cared for;
- express milk at home and store it to be offered to their children while they're away;
- express and store milk at the workplace and/or daycare, if there are conditions to do this.

Want to learn more about the steps for expressing breast milk and storing it properly? Read the topic "How to express, store and offer breast milk", in the section "Breast milk: the first food".

Some companies have a "breastfeeding room", which facilitates and protects breastfeeding.

If a company has not adhered to this initiative established by law, workers can organize to request its implementation. For mothers who are students, schools and universities should also accommodate them as much as possible.

Want to know more about laws that guarantee breastfeeding? Read the section “Getting to know rights related to child nutrition”.

The moment when mothers return to work can be an opportunity to broaden children’s socialization, when they start daycare or when a new caretaker becomes part of their routine.

Whenever possible, there should be an acquaintance period between the mother, child and caretaker, so everyone becomes familiarized with the new routine and with the proper ways to store and offer breast milk and foods (for children older than 6 months). It is crucial that the family members, including the child, feel secure in their decision and that these Guidelines be used as a reference for supporting and promoting an adequate, healthy diet.

In some situations, it may not be possible to maintain exclusive breastfeeding for children under 6 months of age whose mothers have returned to work. Get to know the recommendations for this situation in the section “*Children under 6 months who are not exclusively breastfed*”.

Starting daycare

The moment when children start daycare is an important time for socialization. They come into contact with other children of the same age and with people who are not part of their family, which makes this moment rich in new experiences. In daycare, they will eat with other people, other utensils and seasonings. All of this is very positive, because it’s a learning experience.

The mother, father, their partners and family members who care for a child are entitled to visit the daycare, whether public or private, to get to know its physical space and working conditions.

For your child to have the best possible adaptation, it is crucial that you speak to the daycare team about their eating habits, preferences, intolerances and food allergies, if any.

On the other hand, families should also be open to the idea that their children will probably be exposed to new practices and rules, different from those experienced at home, such as: putting all the foods in the menu on the plate – even those they still don't know; sitting at a table to eat; eating without help from adults, etc.

All of this is part of the learning process and must be put in practice through dialogue, respecting each child's limits.

If a child has special dietary requirements, the family should inform the daycare staff, who should record it, in order to guarantee the child's safety. The family can bring a medical report that explains the special dietary requirements. In public daycare centers, included in the National School Food Program, a complete medical report must be presented for the menu to be adapted.

Public and private schools must follow the Brazilian legislation that demands that they provide a healthy diet for children during the school period. Families are entitled to knowing, accompanying and giving opinions regarding the menu offered at daycare centers.

It is usually sent along with children's notebooks or planners, or affixed to murals and, when adequately planned, it can be a source of suggestions for culinary preparations made at home. In the menu, you can see how many meals are provided per day and the types of foods that are served. Just as at home, daycare meals should be prepared using natural or minimally processed foods, such as rice, beans, meats, vegetables and fruits. Ultra-processed foods, such as cookies, chocolate milk, soft drinks and other sweetened beverages, savory snacks, sweets and other foods should not be present in the menu.



There's no need to repeat meals offered at the daycare after your child comes home. However, it's important to know if your child accepted what they were offered during the day and at what time the last meal was served, as well as how hungry they are when they come home, to decide what they'll eat: a full meal (rice, beans, meats and vegetables); a fruit; or just breast milk. In any

case, children can follow mealtimes with the rest of their families, and this is a good opportunity to share and encourage food habits and traditions.

Sometimes, ultra-processed foods are not present in the day-to-day menu, but are used in special dates, which are highly valued in this stage of the school routine. Additionally, when children bring food from home, it's possible that other children will bring ultra-processed foods and share them with their classmates.

A strategy for dealing with these situations is to present these Guidelines to the daycare staff, thus creating a wonderful opportunity to talk about the subject, reflect upon the daycare's role as a space that promotes adequate, healthy diets and stimulate a discussion with the entire school community.

Families can request spaces to interact with nutritionists and other professionals working in the daycare to discuss the quality of the food and to carry out educational activities about healthy diets. They can also suggest, for example, that ultra-processed foods not be present in special dates, that sweets not be used as rewards or gifts and that care be taken with the practice of sharing foods brought from home, considering that some children have food intolerances and allergies.

Some families may struggle to place their children in public daycare or to afford the costs of private daycare, and therefore seek alternatives. Informal spaces that bring children together under the care of adult members of the community are common. Just as with daycare, good environmental, safety and hygiene conditions are crucial for children's health, growth and development.

Mothers who choose to drop off breast milk to be offered to their children while they're under someone else's care must explain the procedures for storing and offering breast milk, as well as the other recommendations presented in these Guidelines, to caretakers.

See the topic “How to express, store and offer breast milk”, in the section “Breast milk: the first food”.

Changes to the routine

Sometimes, a child’s routine can be altered and, in these cases, special planning is required. If a child goes to environments that are close, but with different food routines, such as the homes of relatives and neighbors, there’s a great chance that ultra-processed foods will be offered. The practice of offering these foods is very common when people wish to please or comfort children due to the parents’ absence or any other reason.

It is important that you take this opportunity to talk to these caretakers about an adequate, healthy diet. They can nurture and please children through playful activities, such as playing, singing, drawing, etc.

Sending along foods, plates and cutlery that the child typically uses is an attitude that contributes to avoiding the offer of inappropriate foods. Meals divided into individual portions can be taken to be eaten outside the home in outings, parties, doctor’s visits and other situations. Raw fruits and vegetables and dry fruits can be left at room temperature for some time. For fruits that become darker after being sliced, a couple drops of lemon can help preserve them. Lunch and dinner can be taken in a thermal bag to better preserve the meal.

On weekends, the family’s mealtimes can be greatly altered. However, in this stage of children’s development, it’s important to maintain their mealtimes. When families eat, children can sit at the table or be nearby and, if they are old enough, be given small portions of foods such as vegetables, fruits, meats. This way, children can participate in their families’ meals.



Ruptures and changes in family arrangements

The traditional nuclear family – father, mother and child – is one of many possible family arrangements present in the Brazilian society. Nowadays, it is common to see same-sex or different-sex couples, or unions between people who are separated, divorced, who have been married before, often with children from previous relationships. There are single mothers with children from different fathers, single fathers with children from different mothers, grandparents with grandchildren, parents with adopted children – a variety of compositions that reflects our current reality.

When thinking of diets of children under 2 years of age, their family arrangements must be taken into consideration. When other people, besides the legal guardians, also take care of a child, they must also be informed about decisions related to the child's eating routine. Sharing the information about an adequate, healthy diet included in these Guidelines can be very helpful in this situation.

Ruptures in the family structure can happen. When parents separate, for example, the changes often also interfere with the child's diet. When parents share custody, agreements concerning the child's diet should be discussed between the guardians and relayed to all other caretakers.

Another rupture is the loss of a family member, which can affect the mother's milk production or change the household's routine. In extreme situations, you should pay extra attention to the child's diet, because they may become more sensitive and have difficulty eating.

A new pregnancy, the birth of a sibling, the arrival of new people and any change in the family's composition can also interfere, positively or negatively, with children's eating behaviors. On these and other occasions, it is crucial to be sensitive and notice children's signs, supporting and encouraging their evolution, avoiding strong censorship or violent behaviors, but without giving in to all of their wishes. The support from a health professional can help in these moments.

The child who doesn't want to eat (and isn't sick)

At some point, the family may notice that the child is eating less than usual. This may start to happen after the child turns 1 year old, a period in which their appetite decreases because they're growing at a slower rate. At that age, children also pay more attention to the details of the foods on their plates and may eat less or refuse some foods that they had previously accepted.

It's important to be patient during mealtimes, respect children's signs of hunger and satiety and avoid behaviors that may worsen the situation, such as: forcing them to eat, not letting them leave the table until they finish eating, lecturing or hitting them.

You should also not offer rewards or prizes, such as gifts or sweets, to convince children to eat. Another important practice is to pay attention to the amount of food you serve. It is very important that you respect each child's appetite, bearing in mind that, for those under 1 year of age, breast milk is still the main source of energy and nutrients. Often, caretakers put too much food on the plate and, when the child doesn't accept everything, they feel like the child has not eaten enough.



In the section “Children’s diet starting at 6 months of age”, you’ll find suggestions of how much food to offer according to the child’s age.

Another common situation is children refusing specific foods. The family thinks the child isn’t eating, when in reality they are choosing what they want. When they reject one food, but accept others from the same group – for example, they don’t like carrots, but enjoy pumpkins –, this rejection is no cause for concern.

You should avoid forcing children to eat the food they rejected, because this can lead them to develop an aversion to it. However, whenever the food is prepared for the family, it should be offered to the child. Changing the way you prepare and present the food can increase its acceptance. In the example of a child who rejects carrots, you can offer them cooked, sauteed, raw or pureed. Some children need to try a food eight or ten times, or even more, in order to accept it.

When a child refuses lunch or dinner many days in a row, it’s common for caretakers to replace the meal with a snack, so the child won’t go without eating. This is not a good practice, since the child will learn that, when they reject food, they will receive another food in return.

Aspects related to behavior or to their relationship with their families can also interfere with food acceptance, since children can use food to express feelings. Because of this, it’s important that you reflect on the following questions: have there been any problems during mealtimes? Does the caretaker show dissatisfaction or irritation when offering food? Was the child reprimanded for some reason and is using the refusal to eat as blackmail or to signal that something isn’t right? Is the family going through some problem that can influence the child’s behavior?

Understanding the moment, and how the child is reacting to it, helps the family to develop strategies so that the child will be less exposed to negative impacts on their well-being and development. Seeking to identify what is happening is crucial to promoting changes. Health professionals can help with this process and build solutions alongside the family.

In addition to these issues, children may have less of an appetite because they're eating in between meals, or because they're sleepy or irritated at mealtimes. A child may also not eat properly for no apparent reason and then go back to their normal appetite. This is common and also happens with adults. Observe whether this is an occasional or recurring situation.

A very common, but inappropriate, measure for dealing with a child who doesn't eat enough is to stop breastfeeding, believing that this will lead the child to eat more food. You should continue to offer breast milk, because it continues to be a very important food during the phase in which new foods are offered.

If your child isn't eating and no cause has been identified, talk to a health professional to try to find out what is happening. It's important that you assess the child's growth, observing the graph in the Child's Booklet. If the child is gaining enough weight, this means the amount of food is adequate and they're growing well. If not, it's a warning sign.

To deal with a child who doesn't want to eat and isn't sick, try:

- making sure that mealtimes are calm and pleasurable;
- putting together a plate with an attractive presentation so the child will feel motivated to eat;
- using appropriately-sized cutlery for the child;
- varying foods and offering new foods, prepared in tasty ways and arranged separately on the plate;
- putting different foods on the plate to give the child more options;
- if possible, remaining calm and patient while offering foods, not showing concern;
- singing or talking to the child during mealtimes;
- not forcing the child to eat and not insisting that they scrape the plate. Stop offering food when you notice the child is satisfied;
- observing whether the intervals between meals are short;

- encouraging the child to eat on their own – this will lead them to be interested in the meal;
- sharing family eating moments, encouraging the child to interact and get to know foods;
- avoiding offering water during meals;
- not offering rewards (such as candy, toys, television, cartoons) to encourage the child to eat more;
- not stop offering certain foods; if the child frequently rejects them, try to present them in a different manner;
- not substituting a meal with a snack or some food the child prefers if the child refuses it. Wait a while and, if you notice the child is hungry, prepare a new plate with the food that was offered in the refused meal. Or you can wait until the next meal instead;
- not offering other foods, including breast milk, too close to mealtimes.

Feeding a child who is sick

When children are sick, they tend to eat less and show fewer signs of hunger. In this phase, it's important that caretakers pay attention to how much water and food is being offered. It's important to keep children who are sick fed and hydrated, offering them small amounts of food and water more frequently over the course of the day. The best thing to do is to offer varied healthy foods that help with their recovery. If this period lasts many days, children may lose or stop gaining weight.

Figure 59 – Take care so that the place is attractive



Vomiting, acute diarrhea, the flu or colds cause significant liquid loss and it is very important to replace them through the diet. There's no need to remove any natural or minimally processed foods from the diet. These foods are healthy and help re-establish children's health.

If the child is sick at home, try:

- offering breast milk more frequently;
- for children who are no longer being exclusively breastfed: offering more water over the course of the day, in the intervals between meals, especially if they have a fever or diarrhea or if they are vomiting;
- feeding the child more times per day and being flexible with mealtimes;
- using the child's favorite foods more often, just as long as they're not ultra-processed;
- keeping natural or minimally processed foods in the child's diet;
- arranging the plate in a way that stimulates the child to eat;
- being patient when feeding the child;
- offering foods in the child's preferred consistency.

As children recover, it is common for their appetite to grow. Because of this, the amount of food offered in each meal can be a little bit bigger and other small meals can be included over the course of the day to compensate for the period when they lost their appetite because of the disease.

Statements and behaviors that discourage healthy eating practices

During pregnancy and when a baby is born, it is common for family members and friends to offer advice, accounts and opinions regarding the baby's diet. This is to be expected: eating is a very important activity for the development and health of children under 2 years old and is a cultural practice handed down from one generation to the next. It is natural for the family's community and close circles to want to help and share knowledge and practices. Talking to

trusted, more-experienced people is good and can be useful when caring for a child, in addition to providing support to caretakers. However, each experience is unique and, as knowledge progresses, a practice adopted in the past is not always the most recommended one today.

Often, advice from family members and friends come into conflict with recommendations from health professionals. In other cases, some recommendations made by professionals are in opposition to what is recommended in these Guidelines.

Recommending these Guidelines to the entire family and everyone else involved in caring for the child, including health and daycare professionals, can be very helpful. It is easier to feed small children when everyone cooperates and acts in the same direction.

Unhealthy practices should be discouraged and avoided. Children are very curious and spend much of their time observing the world around them, including the way older children and adults eat. Because of this, older family members should encourage, support and respect healthier eating practices. You should also take care of what other people offer your child. For example, when someone gives your child a food that isn't recommended for their age, ideally this situation should not cause a conflict in the family, but you should explain and share the reasons not to offer this food, to keep this practice from happening again.

In the age of the internet and knowledge, the challenge is how to filter the excess of inaccurate information, often from dubious sources, that circulates and generates confusion. There are people who divulge information and ideas online (through social media, blogs, messaging apps, etc.) with no concern for their origin or the impact they may cause. It is very common to find blogs written by people based only on their personal experiences or even giving accounts that are actually an advertisement for some product. Because of this, **checking information with trustworthy professionals or on governmental websites is crucial.**

Massive exposure to food advertising

One characteristic of modern life is the constant presence of advertising. It appears on television commercials, but also in many other spaces and vehicles, such as radio, outdoors, signs on buses and elevators, food labels, magazines, newspapers, electronic games, websites and social networks. Many ads are for food and, among these, the vast majority are for ultra-processed foods.

Parents, family members and children are highly exposed to advertising. Many families spend much of their family time watching news or entertainment shows. Although this is a form of leisure, these shows highly encourage consumption. Channels and series directed at children contain advertising both within the cartoons and shows and in their breaks and it is common for children to spend much of their days sitting being distracted by a television, computer or so many other screens. Unlike adults, children aren't able to differentiate advertising from entertainment. This justifies the need for government regulation of food advertising directed at children.

However, publicity that is supposedly targeted at adults often uses strategies to attract children's attention and encourage them to insist that their parents and other caretakers buy products or services. Even without knowing how to read, the presence of songs, children's characters, cartoons and logos occupies children's imaginations and contributes to encouraging the desire to consume a certain product. For example, many cookie and industrialized boxed juice brands use cartoons and children's characters to attract children.



A crucial strategy for protecting children from excessive use of digital media and technologies is to control “screen time”, including television, computers, tablets and smartphones. Children under 2 years of age should not have access to these devices.

Another equally important strategy is playing with children. Activities such as dancing, singing, running and playing stimulate development more than staring at a screen. The more a child actively plays and interacts with objects and people, the better.

Everything is new in this developmental stage. Special toys aren't necessary for play. Colorful objects, objects that make sounds when touched, balls, cars that can be pulled, objects that can be thrown with or without a target, structures that can be stacked, simple, common toys – as long as they're safe – are great sources of stimulation and can be part of the universe of children aged up to 1 year.



Spending your free time with fun games can be an opportunity for the whole family to move and have fun. Contact with environments such as parks, playgrounds, beaches, rivers and green areas stimulates not only children's physical development, but also their senses, in addition to promoting interactions with other children, animals, sounds, smells and realities that are different from the ones they already know.

Going grocery shopping can also expose children to advertising, through labels and gifts associated with ultra-processed foods. Additionally, they often also have characters or are sold along with toys. One strategy used by the industry in order to get caretakers' attention is to add messages, which can be misleading, for the purpose of influencing food choices. Messages that indicate the addition of fibers, vitamins and minerals often attract the attention of both adults and children and can lead them to think that the food is healthy. However, ultra-processed foods usually contain excessive amounts of fats, sugars and salt. Additionally, the vitamins and minerals that are artificially added are not

equivalent to those found in natural or minimally processed foods. It is also common for food advertising to emphasize how practical a product is, along with its low cost.

In supermarkets, different communication strategies (signs, playful activities, etc.) and the distribution of the food in prominent positions, on low shelves and next to the cashiers, encourage the purchase of ultra-processed foods. Dealing with children's wishes is not always easy.

Some tips that help make this process easier and to avoid buying ultra-processed foods are: feeding your child before leaving the home or bringing a healthy snack to eat while grocery shopping; talking to your child about where you're going, what are the rules and agreements between the two of you; keeping the child busy while buying groceries, asking them to help organize the shopping cart, grab some item from the shelf, etc. Additionally, taking children to farmers' markets and street markets is an experience that broadens their knowledge about food and promotes a pleasurable interaction with healthy foods.

Policies that regulate publicity can also help families to avoid children's exposure to unhealthy foods. **The Consumers' Defense Code (CDC, in Portuguese) has been used to fight misleading and abusive practices by the food industry**, but it's still not enough to avoid excessive advertising. **Another important achievement was the Decree no. 9.579, issued on November 22nd, 2018, which regulated Law no. 11.265, issued on January 3rd, 2006, regarding the commercialization of foods and products directed at children up to 6 years old, also known as the Brazilian Norm for the Commercialization of Foods for Infants and Children in Early Childhood, Nipples, Pacifiers and Baby Bottles (NBCAL, in Portuguese).** There is also Resolution nº 163 of the National Child and Adolescent Rights Council (Conanda, in Portuguese), dated March 23rd, 2014, which considers publicity and other forms of marketing communication (messages and practices with the goal of commercialization) directed at children and adolescents to be abusive. Knowing these laws and regulations helps society to mobilize in favor of wider-reaching norms that effectively protect children and to alert consumer defense agencies when any of these abusive practices are identified.

The section “Getting to know rights related to child nutrition” has more information on these laws.

In addition to the challenges addressed in this section, there are others which can get in the way of, or even make it impossible to implement the recommendations presented in these Guidelines. Unfortunately, the reality of many Brazilian families is still marked by extreme social vulnerability, lack of resources and lacking or low public policy coverage.

Regular access to adequate, healthy foods, in adequate amounts and quality, without compromising other life necessities, is a human right established in the Brazilian Constitution, but not yet fully guaranteed. There are many factors that contribute to families’ food and nutrition insecurity: difficulty buying good-quality natural or minimally processed foods at accessible prices; lack of access, or hindered access, to potable water; lack or INADequacy of sanitation and housing; difficulty dedicating more time to the family’s meals, among others. There are also factors that involve our entire food system and the increasingly larger presence of ultra-processed foods in the diets of Brazilian families. Natural emergencies and disasters, or those caused by the excessive exploitation of natural resources, such as flooding or aggradation, can also lead to food and nutrition insecurity.

Facing these challenges

Individual and collective actions are needed, especially public policies and governmental regulation to guarantee the right of all children to an adequate, healthy diet.

The National School Food Program (PNAE, in Portuguese), which guarantees meals for students in all stages of basic public education; popular restaurants and community kitchens, which offer meals free of charge or at an accessible price; credit for family and agro-ecological agriculture; and measures to encourage, support and protect eating practices are some example of actions already put in place by the government which contribute to guaranteeing the population's access to an adequate, healthy diet.

Another important action which contributes to the implementation of the recommendations presented in these Guidelines is offering full-time public daycare, where children can eat good-quality meals in safety, in addition to receiving other stimuli for their full development.

It is the right and duty of the society as a whole to demand and participate in the implementation of practices that promote an adequate, healthy diet. One way of doing this is to engage in collective actions in defense of citizens' rights and to participate in spaces for social control, such as the Health, Education, Food and Nutrition Security and Child and Adolescent Councils, helping to formulate and following the development of policies that promote children's full development.







GETTING TO KNOW RIGHTS RELATED TO CHILD NUTRITION

Breastfeeding and an adequate, healthy diet, in addition to being good for children's health and for society, are children's rights. The recognition of these rights and the legal mechanisms for guaranteeing them are the product of struggles, debates and social mobilization over the course of Brazilian and world history. Here, you'll find laws, norms and public policies that guarantee conditions for breastfeeding and for children's diets. Know your rights and make sure they're respected whenever necessary.

The Right to Adequate and Healthy Food is guaranteed by the Federal Constitution and is re-affirmed in the Child and Adolescent Statute (ECA, in Portuguese) – Law no. 8.069, issued on July 13th, 1990. In order to respect, protect and promote the human rights to health and nutrition, Brazil created the **National Food and Nutrition Policy** (PNAN, in Portuguese) – Annex III of the Consolidation Ordinance no. 2, issued on September 28th, 2017, regarding the consolidation of national health policy norms for SUS. This policy seeks to improve the food, nutrition and health conditions of the Brazilian population by promoting adequate and healthy eating practices and food and nutrition-related care, directed at health promotion and protection, as well as harm prevention, diagnosis and treatment.

Another policy that reinforces children's adequate nutrition is the **National Integral Child Health Policy** (PNAISC, in Portuguese) – Annex X of the Consolidation Ordinance no. 2/2017, regarding the consolidation of national health policy norms for SUS). This policy broadens the perspective on child health because it addresses it from pregnancy until the 9th birthday, including promotion, protection and support for breastfeeding and healthy complementary diets.

Given the importance of the first years of life (early childhood) for human development, the **Early Childhood Legal Framework** (Law no. 13.257, issued on March 8th, 2016) establishes health, food and nutrition as priorities for social protection actions during this phase. The document provides guidance to parents, family members, other caretakers and professionals regarding public policies, programs, services and initiatives directed at children's integral development in the first six years of life, addressing issues such as responsible parenting, breastfeeding, adequate and healthy diets, integral child growth and development, accident prevention and education with no physical punishment.

There are other laws directed at protecting children's nutrition, as we will discuss. Supporting breastfeeding and adequate and healthy diets is a priority for the Unified Health System (SUS).

Maternity leave

Maternity leave is established by the Constitution. It guarantees women 120 days away from their work, with no harm to their employment or salary, and applies to rural and urban workers, including domestic workers, whose working situation should be formalized (signed *carteira de trabalho*). Women who are formally hired by companies, whether public or private, receive their full salaries from their companies during the maternity leave. Domestic, rural and indigenous workers must request their maternity salary from Social Security. The Brazilian legislation forbids firing a woman without just cause from the moment her pregnancy is confirmed until five months after birth.

In order to access the maternity salary, rural workers (special insurance) must be at least 16 years old and prove a minimum period of ten months of rural activity, even if intermittent. Rural workers receive a benefit equal to the minimum wage for a period of 120 days, plus a proportional value as the 13th salary. Domestic workers receive a benefit equal to their last salary, below the Social Security cap.

Indigenous women are also entitled to maternity leave, in the same conditions as rural workers, except with regard to the age restriction (of 16 years): the indigenous mother who engages in community work and is under 16 years of age can receive her maternity salary from Social Security.

In cases of adoption, regardless of the child's age, the Brazilian legislation (Law no. 12.873, issued on October 24th, 2013) also supports parents, through INSS, with a 120-day maternity leave. Another rule established by this law is the possibility of the father acquiring the mother's maternity leave if she passes away, including leaving work, which enables him to follow the child's development.

According to the Consolidation of Labor Laws (CLT, in Portuguese), the maternity leave can be extended beyond the 120 days. Article 392 of CLT, 2nd paragraph, states that: "In exceptional cases, the periods preceding and following delivery can be increased in two weeks each, after presenting a medical certificate". For an extension to be granted, the child or mother's doctor must assess whether there is justification for issuing a certificate. If so, the 14 days should begin right after the 120 days of maternity leave end, while vacations, if the woman so wishes, should begin after this extended period.

Since 2008, the 120-day license can be increased to 180 days in federal, state and most municipal public institutions and in companies that have adhered to the Citizen Company Program (established by Law no. 11.770, issued on September 9th, 2008).

If you are a worker in one of the situations listed above and did not have access to one of these rights, contact your city's Prosecutor's Office. There, you'll receive guidance regarding your rights and will be directed to the institution or agency responsible for guaranteeing the rights that were violated. Depending on your city's structure, these institutions and agencies may be connected to the Ministry of Labor, Social Security and Health Secretariats, Bar Association, Public Defenders' Office, Child and Youth Prosecutor's Office, among others.

To learn more, visit <https://www.inss.gov.br/beneficios/salario-maternidade>.

Student mothers

Students are also entitled to maternity leave. Starting on the eighth month of gestation and for three months, students are entitled to home exercises upon presenting a medical certificate to the school's direction. Students are also guaranteed the right to take final exams (Law no. 6.202, issued on April 17th, 1975). In exceptional cases, attested by a medical certificate, the rest period can be increased, before and after delivery. Students who are research grant recipients are also entitled to 120 days of maternity leave, including adoption cases. During this period, even though the academic activities are suspended, they will continue to receive the grant (Law no. 13.536, December 15th, 2017).



According to the Ordinance no. 604, issued on May 10th, 2017, breastfeeding mothers and infants are entitled to breastfeed in publicly-accessible or collective-use areas of federal educational institutions. This ordinance highlights that breastfeeding is a free act between mother and child and that the right to breastfeed should be ensured regardless of the existence of places, equipment or installations reserved for that end. It is also the mother's decision whether or not to use these places, equipments or installations.

If you are a student in one of the situations listed above and did not have access to one of these rights, contact your city's Prosecutor's Office. There, you will receive guidance regarding your rights and will be directed to the institution or agency responsible for guaranteeing the rights that were violated. Depending on your city's structure, these institutions and agencies may be connected to Social Security and Health Secretariats, Education Secretariat, Bar Association, Public Defenders' Office, Child and Youth Prosecutor's Office, among others.

Paternity leave

The father's presence is crucial for supporting the woman after birth. The first days are very important for the success of breastfeeding and for promoting a bond between family members. A five-day paternity leave is guaranteed by the Constitution and can be extended by 15 days for formal employees of companies that adhered to the Citizen Company Program and for public servants under the purview of Law no. 8.112, issued on December 11th, 1990. The benefit should be required within two business days after the child's birth or adoption. In adoption cases, those who adopt children aged up to 12 incomplete years can request the paternity leave.



If you are a father in one of the situations listed above and did not have access to one of these rights, contact your city's Prosecutor's Office. There, you will receive guidance regarding your rights and will be directed to the institution or agency responsible for guaranteeing the rights that were violated. Depending on your city's structure, these institutions and agencies may be connected to the Ministry of Labor, Social Security and Health Secretariats, Bar Association, Public Defenders' Office, Child and Youth Prosecutor's Office, among others.

Breastfeeding pauses

If the mother goes back to work before the child turns 6 months old, article 396 of the CLT establishes that, to feed her child, she will be entitled to one hour of rest over the course of a single working day, which can be divided into two half-hour periods, until the child is 6 months of age. These periods cannot be confused with, or substituted by, the normal rest and eating breaks. The period can be increased if the child's health demands special care. If the woman is unable to make use of these breaks, she can negotiate with her employer the accumulation of two half-hour periods. In these cases, she can finish working one hour early or come in to work one hour late.

Breastfeeding pauses should not be confused with the 14-day maternity leave extension stipulated by a doctor through a medical certificate. A woman can make use of these 14 days and also the breastfeeding pauses, after she returns to her activities.

If you are a formal worker in the situation listed above and did not have access to your right to a breastfeeding pause, contact your city's Prosecutor's Office. There, you will receive guidance regarding your rights and will be directed to the institution or agency responsible for guaranteeing the right that was violated. Depending on your city's structure, these institutions and agencies may be connected to the Ministry of Labor, Social Security and Health Secretariats, Bar Association, Public Defenders' Office, Child and Youth Prosecutor's Office, among others.

Breastfeeding support rooms

Any company, public or private, regardless of the number of female employees, can have a breastfeeding support room. The space serves to let women safely express and store breast milk during working hours and then bring it home, at the end of the working day, in order to offer it to their babies.

To know more about how to use a support room and other laws that support breastfeeding working women, read the Breastfeeding Working Woman Support Leaflet: http://bvsms.saude.gov.br/bvs/publicacoes/cartilha_mulher_trabalhadora_amamenta.pdf.

Children of INCarcerated mothers

Health is a crucial human right and the State has the obligation to provide the indispensable conditions for its full exercise to all people. Thus, the government, along with institutions and employees, should also provide adequate breastfeeding conditions to children of mothers subjected to INCarceration, that is, those who are in prison. Law no. 11.942, issued on May 28th, 2009, determines that female penal establishments should have a nursery where INCarcerated women can care for their children, including breastfeeding them, for at the least the first 6 months of

life. Additionally, it clarifies that women's penitentiaries should have a section for pregnant and parturient women and daycare for children older than 6 months and younger than 7 years, in order to assist destitute children whose primary caregiver is INCarcerated.

For women in preventive custody who are pregnant or have children aged under 12 years, article 318 of the Penal Process Code establishes that a judge can revert that sentence into house arrest (Collective *Habeas Corpus* no. 14.3641/2018, issued on February 20th, 2018). Article 117 of the Penal Execution Law also establishes the same rights for women in work release programs. However, this possibility does not exist for INCarcerated women outside of these circumstances. For more information on this, contact your city's Public Defender's Office.

Complementing these laws, Resolution no. 9 of the National Human Rights Council of the Ministry of Human Rights, issued on December 2017, regarding the Human Right to an Adequate and Healthy Food of INCarcerated women and adolescents, especially those who are pregnant, breastfeeding and have children, establishes guarantees for providing an adequate, healthy diet for individuals in these situations, in convergence with the *Dietary Guidelines for the Brazilian Population*.

For more information on this, contact your city's Public Defender's Office or the Prosecutor's Office responsible for criminal cases.

The right to daycare

According to the CLT, any establishment that employs more than 30 women over 16 years of age must have an appropriate place where their children can stay under surveillance and care during the breastfeeding period. This demand can be met through daycare maintained directly by the employer or through partnerships with other public or private entities, such as Sesi, Sesc and LBA, or union entities. If the company is unable to meet this demand, it must pay a daycare benefit.

If the company you work for fits this profile and does not offer daycare or daycare benefits, contact your city's Prosecutor's Office. There, you will receive guidance regarding your rights and will be directed to the institution or agency responsible for guaranteeing the right that was violated. Depending on your city's structure, these institutions and agencies may be connected to the Ministry of Labor, Social Security and Health Secretariats, Education Secretariat, Bar Association, Public Defenders' Office, Child and Youth Prosecutor's Office, among others.

School meals

The Brazilian legislation also establishes the offer of an adequate and healthy diet in schools through the **National School Food Program (PNAE)**, as defined by Law n. 11.947, issued on June 16th, 2009.

PNAE offers school meals and food and nutrition education actions to students in all stages of public basic education.



School menus should be designed by nutritionists and must contain varied, safe foods that respect the culture, traditions and healthy eating habits of students, meeting their nutritional needs according to age group and health state. Foods must preferably be produced locally, through family agriculture and by rural family producers. Additionally, PNAE restricts the purchase and offer of ultra-processed foods.

If your child's public school does not follow the National Food Nutrition Program law, contact your city's Prosecutor's Office. There, you will receive guidance regarding your rights and will be directed to the institution or agency responsible for guaranteeing the right that was violated. Depending on your city's structure, these institutions and agencies may be connected to the Education Secretariat, Social Security and Health Secretariats, Bar Association, Public Defenders' Office, Child and Youth Prosecutor's Office, among others.

HIV-positive women

HIV-positive women should not breastfeed in order to avoid transmitting the virus through breast milk. Because of this, the Brazilian federal government guarantees that these women receive infant formula until their children are 6 months old, according to the SUS Consolidation Ordinance no. 6, issued on September 28th, 2017. If you are in this situation, contact your city's health secretariat for information.

If you have HIV and have not received infant formula for your child under 6 months of age, contact your city's Prosecutor's Office. There, you will receive guidance regarding your rights and will be directed to the institution or agency responsible for guaranteeing the right that was violated. Depending on your city's structure, these institutions and agencies may be connected to the Social Security and Health Secretariats, Bar Association, Public Defenders' Office, Child and Youth Prosecutor's Office, among others.

Advertising and commercialization of foods for children

Messages from food advertising can influence food choices made by children and their families. The Brazilian Consumer Defense Code bans abusive advertising, which takes advantage of children's immaturity to promote their products, whether through television commercials, radio spots, banners, websites, packaging, internet channels or promotions geared directly toward children. It also considers any marketing communication inside preschools, primary schools and daycare centers abusive.

In order to protect babies, children up to 3 years old and their families, legislators passed the Brazilian Norm for the Commercialization of Foods for Infants and Children in Early Childhood, Nipples, Pacifiers and Baby Bottles, also known as NBCAL (Law no. 11.265, issued on January 3rd, 2006, regulated by Decree no. 9.579, issued on November 22nd, 2018). In order to regulate the commercial promotion, labeling and other commercialization practices of foods and products such as milks, baby foods, nipples, pacifiers and bottles, NBCAL seeks to reduce interference from these products' publicity in breastfeeding.

This law bans special product displays in commercial establishments (pharmacies, supermarkets, grocery stores), as well as price reduction warnings, gifts and joint sales, among other practices used to induce purchases, for infant formulas, bottles, nipples, pacifiers and nipple shields. Additionally, they should include phrases to warn parents, health professionals and other caretakers regarding the risk of commercializing and using these products. Advertising these products in mass communication media, such as television, radio, magazines, websites and outdoors, is expressly prohibited.

As to product labeling, NBCAL bans packaging with photos of children; humanized drawings or figures that resemble babies; expressions that identify the product as more adequate for child nutrition ("baby", "kids", "ideal for the baby"), phrases that suggest a strong resemblance to breast milk ("humanized milk", "maternized milk") or cast doubt on mothers' ability to breastfeed their children ("if your milk isn't enough..."). The products' label should visibly show at what age they can be consumed.

Society has a very important role to play in reporting any violation of this law. It is common for pharmacies, supermarkets and department stores to break this law. When you visit these places, observe product labels, the presence of children's elements and the sales of foods with toys!

If you see a violation of this law, report it to consumer defense agencies and to the Prosecutor's Office in your city.

The agencies that receive reports, complaints, suggestions and other manifestations always respect citizens' privacy and the confidentiality of the information.





TWELVE STEPS TO A HEALTHY DIET

Here are the summarized guidelines for breastfeeding and adequately feeding children, with tips that also apply to the rest of the family.

01 BREASTFEED FOR THE FIRST TWO YEARS OR LONGER AND ONLY OFFER BREAST MILK IN THE FIRST SIX MONTHS

Breast milk is very important in the first two years (or more) of a child's life and it is the only food children should be given in the first six months. During this time, there is no need to give children water, tea or any other food. Starting breastfeeding right after birth, in the first hour of life, has benefits for the child and the mother. The composition of breast milk is unique and personalized. It meets children's nutritional needs according to their age, protects them against diseases in childhood and adulthood, helps their brains to develop and strengthens the bond between mother and child. The existence of a support network for mothers is important for breastfeeding to be successful.

02

OFFER NATURAL OR MINIMALLY PROCESSED FOODS, IN ADDITION TO BREAST MILK, AFTER THE 6TH MONTH OF LIFE

Eating other foods besides breast milk is necessary for children's full growth and development starting at the 6th month of life. Children's diets should be composed of real food, that is, meals made from natural or minimally processed foods from different groups (for example, legumes, cereals, roots and tubers, fruits, vegetables, meat). The number of meals per day and the amount of food in each meal should increase as children grow in order to meet their needs. At the age of 1 year, children should be sharing the main meals with their families (breakfast, lunch and dinner), in addition to eating snacks and nursing. Meals that include a variety of foods are the most appropriate and healthiest for children and the whole family. You should vary the foods offered over the course of the day and week as much as possible.

03

OFFER CHILDREN POTABLE WATER INSTEAD OF JUICES, SOFT DRINKS AND OTHER SUGARY BEVERAGES

Access to potable water for drinking and preparing food is also a human right. Water is food and should be part of eating habits as soon as other foods start being offered. Water is essential for children's hydration and shouldn't be substituted by any other liquid, such as tea, juice or coconut water, and especially not soft drinks and other ultra-processed beverages. When children become accustomed to drinking sugary beverages, this increases the likelihood that they will become overweight and have dental cavities, while also discouraging water consumption. You should offer water to children frequently, between meals, even if they don't ask for it.

04

OFFER MASHED FOODS WHEN CHILDREN START TO EAT OTHER FOODS BESIDES BREAST MILK

Foods with appropriate consistency contribute to child development, in addition to generally having more energy and nutrients than more liquid meals. Chewing stimulates the development of the face and the bones of the head. From the beginning, foods should be thick enough not to “drip” from the spoon. In the beginning, mashing foods with a fork and finely chopping harder foods, like meats, is enough. To reach the appropriate consistency, don’t put foods in a blender or through a sieve. In the following months, you should progressively decrease how much you mash foods and start to offer them in small pieces so that, gradually, the child begins to eat foods with the same consistency as the family.

05

DO NOT OFFER SUGAR, OR PREPARATIONS OR PRODUCTS THAT CONTAIN SUGAR, TO CHILDREN UP TO 2 YEARS OF AGE

Sugar consumption is not necessary and causes health problems, such as cavities and childhood obesity, and can lead to chronic diseases in adulthood, such as diabetes. Additionally, when children become accustomed to excessively sweet tastes from an early age, it can be difficult for them to accept natural or minimally processed foods. Children’s diets should not include honey or any type of sugar (brown, demerara, raw, granulated or refined [“white”], *rapadura*, molasses) and you should not offer preparations or off-the-shelf products that contain any of these ingredients (such as cookies; cakes; yogurts; among others). Sweeteners (powder or liquid) should also not be used in foods given to children up to 2 years old because they are ultra-processed foods and contain chemical substances that are not appropriate for this life stage.

06

DO NOT OFFER CHILDREN ULTRA-PROCESSED FOODS

These foods usually have very few nutrients and may contain a lot of salt, fats and sugar, in addition to additives, such as sweeteners, food coloring and preservatives. Eating these foods can lead to problems such as high blood pressure, heart disease, diabetes, obesity, cavities and cancer. Additionally, these foods have a negative impact on the environment, both through their industrial manufacturing process and by generating trash (in the form of packaging), as well as on food culture, by restricting families' eating practices. Ultra-processed foods are sold in attractive packages and the ingredient lists on their labels often include items that are largely unknown, many of which have strange names and are not used in home cooking. You must stay alert: some ultra-processed foods are viewed as healthy kids' food and are often offered to children.

07

PREPARE THE SAME FOOD FOR THE CHILD AND THE REST OF THE FAMILY

The arrival of a child is an opportunity to improve the whole family's diet. Preparing the same food for everyone, with natural or minimally processed foods, without too much fat, salt and condiments, makes the cooking routine easier and is an opportunity for offering an adequate, healthy diet to the family and to the child. Planning the week's meals in advance, organizing grocery shopping in order to have the ingredients at home and cooking in larger amounts in order to freeze part of the meal (and eat it on other days) are strategies that make cooking easier and guarantee real food every day and in every meal.

08

MAKE SURE THAT CHILDREN'S MEALTIMES ARE MOMENTS FULL OF POSITIVE EXPERIENCES, LEARNING AND AFFECTION WITH THE WHOLE FAMILY

It is crucial that the whole family value mealtimes. Eating together helps children to become interested in trying new foods and makes meals more pleasant. A welcoming, calm environment and a good relationship between children and their caretakers can positively influence children's acceptance of foods and preparations. If children see that their families enjoy eating healthy foods, they are encouraged to accept them. Additionally, eating with the family is a cultural act that contributes to eating foods and preparations connected to the family's history, preserving and transmitting food traditions. You should create moments for sharing meals with the whole family that involve the child.

09

PAY ATTENTION TO CHILDREN'S SIGNS OF HUNGER AND SATIETY AND TALK TO THEM DURING THE MEAL

From the beginning, children are capable of communicating when they are hungry and when they have eaten enough. Signs of hunger and satiety should be recognized and responded to actively and affectionately. Feeding children is a process that demands patience and time. Stimulate children to eat without forcing them, even if they are sick. The way in which food is given to children, and not just the food itself, is important for their development. Talk to them and encourage them to get to know foods. Avoid distractions such as television, smartphones, computers or tablets, because they can draw children's attention away from the food. The pleasure of eating is in the flavors, aromas and the way food is presented.

10

ENSURE HYGIENE IN ALL STAGES OF THE CHILD AND THE FAMILY'S DIET

Ensuring the hygiene of the person tasked with preparing the food, the kitchen and the foods themselves prevents diseases in children and their families. You should always wash your hands before cooking and feeding children, after going to the bathroom, changing diapers or doing other household chores. You should also wash children's hands before they eat. Kitchen hygiene involves water quality and cleaning surfaces and utensils. Leave foods that are eaten raw and with their peels, such as fruits and vegetables, soaking in water with chlorine. Properly clean utensils that come into contact with raw meats as soon as you've finished using them. Cook meats until there are no raw parts. After meals, store leftovers in the fridge.

11

OFFER CHILDREN ADEQUATE AND HEALTHY FOODS EVEN WHEN YOU'RE NOT AT HOME

It is possible to maintain a healthy diet outside the home. On trips, parties and when you visit the health team, continue to offer the foods children eat at home, because many natural or minimally processed foods (such as raw fruits and vegetables and dry fruits) can be left at room temperature for some time. Even lunch and dinner can be carried in thermal containers. Research the foods that are offered in daycare centers and other child care spaces and talk to the people responsible for providing child care about adequate, healthy diets.

12

PROTECT CHILDREN FROM FOOD ADVERTISING

Children easily confuse reality with fiction from television programs and advertising because they have not yet developed the ability to make judgments and decisions. It is crucial that children be protected, avoiding as much as possible their exposure to advertising. Advertising can be found in TV programs and the ads that run during their breaks, on the internet, in electronic games, among others. Children under the age of 2 should not watch television or use smartphones, computers or tablets.



FOR MORE INFORMATION



In this section, you will find suggestions for additional reading to go further into the themes addressed and discussed in each chapter of the *Dietary Guidelines for Brazilian Children Under 2 Years*.

THE DIETARY GUIDELINES FOR BRAZILIAN CHILDREN UNDER 2 YEARS OF AGE AS A TOOL FOR PROMOTING FOOD AND NUTRITIONAL SAFETY

BORTOLINI, Gisele Ane *et al.* Consumo precoce de leite de vaca entre crianças brasileiras: resultados de uma pesquisa nacional. **J. Pediatr. (Rio J.)**, Porto Alegre, v. 89, n.6, p. 608-613, dez. 2013. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0021-75572013000600015&lng=en&nrm=iso. Accessed on: 26 Nov. 2018. DOI: <http://dx.doi.org/10.1016/j.jped.2013.04.003>.

This study presents the types of milk consumed by Brazilian children under 60 months of age and shows that most were given cow's milk in substitution of breast milk.

BORTOLINI, Gisele Ane *et al.* Social inequalities influence the quality and diversity of diet in Brazilian children 6 to 36 months of age. **Cad. Saúde Pública**, Rio de Janeiro, v. 31, n. 11, p. 2413-2424, nov. 2015. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2015001102413&lng=en&nrm=iso. Accessed on: 26 Nov. 2018. DOI: <http://dx.doi.org/10.1590/0102-311X00153414>.

This study assessed the eating practices of Brazilian children and the factors associated with the quality and diversity of their diet and found that children

belonging to underprivileged socioeconomic classes and living in food-insecure households had lower odds of having a high-quality diet.

BORTOLINI, Gisele Ane; GUBERT, Muriel Bauermann; SANTOS, Leonor Maria Pacheco. Consumo alimentar entre crianças brasileiras com idade de 6 a 59 meses. **Cad. Saúde Pública**, Rio de Janeiro, v. 28, n. 9, p. 1759-1771, set. 2012. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2012000900014&lng=es&nrm=iso. Accessed on: 26 Nov. 2018. DOI: <http://dx.doi.org/10.1590/S0102-311X2012000900014>.

This study sought to assess the diets of Brazilian children aged between 6 and 59 months, according to region and zone of residence. Its results show a low daily consumption of fruits, vegetables and meats and a high consumption of soft drinks, fried foods, savory snacks and sweets. Children in rural areas had a smaller consumption of recommended foods and also of non-recommended foods, when compared with children in urban areas. The eating habits found by this study are not in agreement with healthy diet recommendations for children.

BRASIL. Ministério da Saúde; INSTITUTO NACIONAL DO CÂNCER. **Posicionamento do Instituto Nacional de Câncer José Alencar Gomes da Silva acerca dos agrotóxicos**. 2015. Available at: http://www1.INCA.gov.br/INCA/Arquivos/comunicacao/posicionamento_do_INCA_sobre_os_agrotoxicos_06_abr_15.pdf. Accessed on: 25 Nov. 2018.

This document sets the National Cancer Institute's (INCA, in Portuguese) position on pesticides in Brazil, emphasizing their risks.

CASTRO, I. R. R. *et al.* A questão alimentar nas políticas públicas: cenário atual, desafios e perspectivas. In: DIEZ-GARCIA, R. W.; CERVATO MANCUSO, A. M. (org.). **Mudanças alimentares e educação alimentar e nutricional**. 2. ed. São Paulo: Guanabara Koogan, 2017. v. 1. p. 99-121.

This chapter of the book addresses the complexity of the food system, its influence on people's lives and its inter-relation with public policies; the different dimensions of diets; the concept of public policies and the food and nutrition policies in place in Brazil. It presents recent initiatives for addressing food and nutrition in the policy realm. It points out that, despite advancements, there is still a need to broaden and consolidate public policies and to transform government policies into State policies, formulated through social participation.

ORGANIZAÇÃO PAN-AMERICANA DA SAÚDE. **Sistemas alimentares**

e nutrição: a experiência brasileira para enfrentar todas as formas de má nutrição. Brasília, DF, 2017. Available at: <http://iris.paho.org/xmlui/handle/123456789/34289>. Accessed on: 25 Nov. 2018.

This publication documents a set of policies, programs and actions developed in Brazil over the past few years that have positively contributed to the relationships between food systems and nutrition.

REDE VIRTUAL IDEIAS NA MESA. **Educação Alimentar e Nutricional:**

uma estratégia para a promoção do Direito Humano à Alimentação Adequada. Brasília, 2014. Available at: https://ideiasnamesa.unb.br/upload/midia/1392831199Apostila_curso_DHAA_e_EAN.pdf. Accessed on: 1 Jul. 2017.

This text presents the concepts of Human Rights and Human Right to an Adequate and Healthy Food and presents Brazilians' diet, nutrition and health. It also addresses Human Rights enforceability in public institutions and the role of food and nutrition education as a strategy for increasing families' empowerment and autonomy.

RIBEIRO, H.; JAIME, P.; VENTURA, D. Alimentação e sustentabilidade.

Estud. av., São Paulo, v. 31, n. 89, p. 185-198, abr. 2017. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-40142017000100185&lng=en&nrm=iso. Accessed on: 25 Nov. 2018. DOI: <http://dx.doi.org/10.1590/s0103-40142017.31890016>.

This essay seeks to present a reflection regarding food-related issues from the perspective of sustainability, addressing food production in rural areas, with growing use of chemical products and increase in areas for agricultural production. It further discusses the relationship between the urban food environment and excess weight and persistence of poorly-fed populations.

PRINCIPLES

BRASIL. Lei nº 13.257, de 8 de março de 2016. Dispõe sobre as políticas públicas para a primeira infância e altera a Lei no 8.069, de 13 de julho de 1990 (Estatuto da Criança e do Adolescente), o Decreto-Lei no 3.689, de 3 de outubro de 1941 (Código de Processo Penal), a Consolidação das Leis do Trabalho (CLT), aprovada pelo Decreto-Lei no 5.452, de 1o de maio de 1943, a Lei no 11.770, de 9 de setembro de 2008, e a Lei no 12.662, de 5 de junho de 2012. **Diário Oficial da União**: seção 1, Brasília, DF, 2016. Available at: http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2016/Lei/L13257.htm. Accessed on: 27 Nov. 2018.

This law establishes principles and guidelines for designing and implementing early childhood policies, with the absolute priority of guaranteeing children's rights, in order to guarantee their integral development. In its 5th article, it presents the priority areas for public policies, namely, food and nutrition, child education, family and community life, social assistance to the child's family, culture, playing and leisure, space and the environment, as well as the protection against all forms of violence and consumerist pressure, accident prevention and the adoption of measures that avoid early exposure to marketing communication.

BRASIL. Lei nº 8.069, de 13 de julho de 1990. Dispõe sobre o Estatuto da Criança e Adolescente e dá outras providências. **Diário Oficial da União**: seção 1, Brasília, DF, 16 jul. 1990. p. 13563. Available at: http://www.planalto.gov.br/ccivil_03/LEIS/L8069.htm. Accessed on: 27 Nov. 2018.

This law regards the integral protection of children and adolescents. In its 4th article, it establishes that the family, community, the society as a whole and the government have the responsibility of guaranteeing, as an absolute priority, the enforcement of the rights to life, health, nutrition, education, sport, leisure, professional training, culture, dignity, respect, freedom and family and community life.

BRASIL. Ministério do Desenvolvimento Social e Combate à Fome. Secretaria Nacional de Segurança Alimentar e Nutricional. **Marco de referência de educação alimentar e nutricional para as políticas públicas.** Brasília, DF, 2012. Available at: http://www.mds.gov.br/webarquivos/publicacao/seguranca_alimentar/marco_EAN.pdf. Accessed on: 27 Nov. 2018.

This framework addresses the principles for child food and nutrition education actions within public policies and considers the promotion of self-care and autonomy as important for individuals to develop a critical perspective when faced with different situations and to be able to establish strategies and make adequate choices to deal with them.

MOREIRA, S. A. Alimentação e comensalidade: aspectos históricos e antropológicos. **Ciência e Cultura**, São Paulo, v. 62, n. 4, p. 23-26, out. 2010. Available at: http://cienciaecultura.bvs.br/scielo.php?script=sci_arttext&pid=S0009-67252010000400009. Accessed on: 27 nov. 2018.

This article addresses the issue of diets and commensality, presenting studies that reinforce the important role of family meals and of eating as a social and cultural practice.

SILVA, Giselia A. P.; COSTA, Karla A. O.; GIUGLIANI, Elsa R. J. Alimentação infantil: além dos aspectos nutricionais. **J. Pediatr. (Rio J.)**, Porto Alegre, v. 92, n. 3, p. 2-7, jun. 2016. Supl. 1. Available at: http://www.scielo.br/scielo.php?pid=S0021-75572016000400002&script=sci_arttext&lng=pt. Accessed on: 27 Nov. 2018.

This article discusses the importance of the way in which children are fed, the interaction between caretakers and children during mealtimes and how strategies used by caretakers influence in the development of eating habits. It emphasizes the importance of parents/caretakers being sensitive to children's signs of hunger and satiety and respecting them, making eating a pleasant, tension-free moment.

BREAST MILK: THE FIRST FOOD

ROLLINS, N. C. *et al.* Why invest, and what it will take to improve breastfeeding practices? **Lancet**, v. 387, n. 100017, p. 491-504, 2016.

VICTORA, C. G. *et al.* Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. **Lancet**, v. 387, n. 10033, p. 2089-2090, 2016.

These two articles were published by Lancet as part of a series on breastfeeding. Both deeply analyze the health and economic benefits that breastfeeding brings. The first confirms that breastfeeding reduces the likelihood that a child will develop infections, obesity, diabetes and dental malocclusions, in addition to increasing their IQ (intelligence quotient); and, for women, it protects against breast and ovarian cancer and diabetes. The second addresses the factors that determine breastfeeding, the effects of breastfeeding promotion, protection and support interventions and the economic dimension, concluding that breastfeeding is one of the most impactful interventions in terms of benefits for children, women and the society.

BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. **Saúde da criança: nutrição infantil: aleitamento materno e alimentação complementar**. Brasília, DF: MS, 2015.

This publication is part of the series *Cadernos de Atenção Básica*, from the Ministry of Health of Brazil. It is directed at Primary Care professionals, but is accessible enough to be read by laypeople. It is divided into two sections. The first addresses general aspects of breastfeeding, such as recommendations as to how long it should last, its importance for

children, women, families and society, how breast milk is produced, the main difficulties and how to deal with them and the importance of the health system and social support for breastfeeding to be as pleasurable as possible.

BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas e Estratégicas. Área Técnica de Saúde da Criança e Aleitamento Materno. **Amamentação e uso de medicamentos e outras substâncias**. 2. ed. Brasília, DF: MS, 2010. Available at: http://bvsms.saude.gov.br/bvs/publicacoes/amamentacao_uso_medicamentos_2ed.pdf. Accessed on: 25 Nov. 2018.

This manual was published by the Ministry of Health of Brazil. It contains basic information on use of medication and other substances – such as nicotine and illicit drugs, environmental agents, repellents, herbal medicines and cosmetics – during breastfeeding. It is directed at health professionals, but can be read by laypeople. It classifies medication and other substances according to risk: those marked with a green dot can be used while breastfeeding because there's no evidence that they harm children; those marked with a yellow dot require caution and physicians need to rigorously weigh risks and benefits when prescribing them; and those with a red dot are those that cannot be used while breastfeeding, requiring the permanent or temporary interruption of breastfeeding, if they are indispensable.

REECE-STREMTAN, S.; KATHLEEN, A.; MARINELLI, K. ABM Clinical Protocol #21: Guidelines for breastfeeding and substance use or substance use disorder, Revised 2015. **Breastfeeding Medicine**, v. 10, n. 3, p. 135-141, 2015. DOI 10.1089/bfm.2015.9992.

This is a protocol from the Academy of Breastfeeding Medicine that seeks to provide evidence-based guidelines for assessing and dealing with situations in which women who are breastfeeding – or intend to breastfeed – use substances that are potentially harmful to children, such as illicit drugs, alcohol and tobacco.

GETTING TO KNOW FOODS

BRAZIL. Ministry of Health of Brazil. Secretariat of Health Care. Primary Health Care Department. **Dietary Guidelines for the Brazilian population.** Brasília, 2015. Available at: World Wide Web: http://189.28.128.100/dab/docs/portaldab/publicacoes/guia_alimentar_populacao_ingles.pdf. Accessed on: 11 Jan. 2021.

MONTEIRO, C. A. *et al.* NOVA. The star shines bright. Food classification. Public health. **World Nutrition** v. 7, n. 1-3, p. 28-40, Jan./Mar. 2016. Available at: World Wide Web: <https://worldnutritionjournal.org/index.php/wn/article/view/5/4>. Accessed on: 11 Jan. 2021.

The NOVA classification describes foods according to the extent and nature of their processing. It was adopted in the *Dietary Guidelines for the Brazilian Population and the Dietary Guidelines for Brazilian Children Under 2 Years of Age*.

CHILDREN'S DIET STARTING AT 6 MONTHS OF AGE

BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. **O cuidado às crianças em desenvolvimento:** orientações para as famílias e cuidadores. Brasília, DF: MS, 2017.

This publication presents important information that families and caretakers need to know in order to stimulate children and help them to develop their skills in the first years of life.

GONZÁLEZ, C. **Meu filho não come!** São Paulo: Timo, 2012.

The book addresses the problem of children who don't eat, commonly reported by parents and caretakers. It contains explanations about this problem and advice for preventing and resolving this situation. The book's central idea is not to force children to eat, respecting their signs of hunger and satiety, dealing with mealtimes in a loving, respectful manner.

PEREZ-ESCAMILLA, R. *et al.* Feeding Guidelines for Infants and Young Toddlers: a Responsive Parenting Approach. **Healthy Eating Research**, Feb. 2017. Expert Panel on Best Practices for Promoting Healthy Nutrition, Feeding Patterns, and Weight Status for Infants and Toddlers from Birth to 24 Months. Available at: <http://healthyeatingresearch.org>. Accessed on: 25 Nov. 2018.

Dietary guidelines with evidence-based recommendations regarding children's diets with the purpose of promoting health, preventing chronic diseases and helping to maintain a healthy weight.

PAN AMERICAN HEALTH ORGANIZATION; WORLD HEALTH ORGANIZATION. Guiding principles for complementary feeding of the breastfed child. In: DEWEY, Kathryn. WHO Global **Consultation on Complementary Feeding**, Geneva: PAHO, Dec. 2001. p. 10-13.

This is a document from the Pan-American Health Organization (PAHO) that presents the principles for feeding children who are breastfed.

WORLD HEALTH ORGANIZATION. **Infant and young child feeding**: model chapter for textbooks for medical students and allied health professionals. Geneva: WHO, 2009.

This is a document from the World Health Organization (WHO) that presents essential knowledge about feeding babies and small children that health professionals must acquire as part of their basic training.

CHILDREN UNDER 6 MONTHS WHO ARE NOT EXCLUSIVELY BREASTFED AND CHILDREN WHO ARE NOT BREASTFED

CANADIAN PAEDIATRIC SOCIETY. **Dietitians of Canada and Health Canada**: Nutrition for Healthy Term Infants. Ottawa: Minister of Public Works and Government Services, 2005.

This is a document for health professionals with evidence-based principles and recommendations about feeding children aged between 6 and 24 months.

COOKING AT HOME

AGÊNCIA NACIONAL DE VIGILÂNCIA SANITÁRIA (Brasil); UNIVERSIDADE DE BRASÍLIA. **Manual de orientação aos consumidores**: educação para o consumo saudável. Brasília: Anvisa, 2005.

This is a manual with the laws regarding food labeling, with the purpose of encouraging people to read and understand the information included in food labels, contributing to improving their health and quality of life.

AGÊNCIA NACIONAL DE VIGILÂNCIA SANITÁRIA (Brasil). Resolução RDC nº 216, de 15 de setembro de 2004. Dispõe sobre Regulamento Técnico de Boas Práticas para Serviços de Alimentação. **Diário Oficial da União**: seção 1, Brasília, DF, 16 set. 2004.

This is a Technical Best Practices Regulation for Food Services approved by Anvisa with the purpose of constantly perfecting health control actions in the food sector, always seeking to protect the population's health.

INSTITUTO DE PESQUISA ECONÔMICA APLICADA (Brasil). **Uso do tempo e gênero**. Org.: Natália Fontoura, Clara Araújo, Maria de la Paz López Barajas e outras. Rio de Janeiro: UERJ, 2016. Available at: <http://repositorio.ipea.gov.br/bitstream/11058/8034/1/Uso%20do%20tempo%20e%20g%C3%AAnero.pdf>. Accessed on: 25 Nov. 2018.

This publication addresses studies that address individuals' compatibilization strategies as they move between paid and unpaid work.

MARTINS, Carla Adriano. **A influência das habilidades culinárias dos pais na alimentação de crianças em idade escolar**. 2017. Dissertation (PhD) – Faculdade de Saúde Pública, Universidade de São Paulo, São Paulo, 2017.

This is a doctoral dissertation that sought to study the influence of parents' (or caretakers') cooking skills on the eating patterns of school-aged children. Its results indicate that children of parents with greater cooking skills eat fewer ultra-processed foods.

MILLS, S. *et al.* Health and social determinants and outcomes of home cooking: a systematic review of observational studies. **Appetite**, v. 111, p. 116-134, 2017.

This is a systematic review on health and social determinants and outcomes of home cooking. Results show that the determinants of home cooking are more complex than merely having cooking skills and that possible positive associations between cooking, diet and health require further confirmation.

OLIVEIRA, Mariana Fernandes Brito de. **Autonomia culinária: desenvolvimento de um novo conceito**. 2018. 155 f. Dissertation (PhD) – Instituto de Nutrição, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, 2018.

This study develops the concept of cooking autonomy, which is the ability to think, decide and act in order to cook meals at home mainly using natural or minimally processed foods, under the influence of interpersonal relationships, the environment, cultural values, access to opportunities and rights guarantees.

ADEQUATE, HEALTHY DIETS: DEALING WITH CHALLENGES IN EVERYDAY LIFE

THE ECONOMIST INTELLIGENCE UNIT. **Os impactos da proibição da publicidade dirigida às crianças no Brasil**. São Paulo: ALANA, ago 2017.

This is a study carried out by the Economist Intelligence Unit (EIU) for the *Instituto Alana* regarding the impacts of the ban on publicity directed at children in Brazil. It discusses the main findings in three areas: international trends of publicity directed at children, the impacts of the ban on this type of publicity in Brazil and arguments in favor of an ethical approach by companies when making children the target of their publicity activities. It presents important findings regarding the issue that can inform authorities, companies, publicity agencies, consumer groups and non-governmental organizations about this subject.

BRASIL. Ministério da Educação. Fundo Nacional de Desenvolvimento da Educação. **Folhetos Caderno de Referência para Estudantes com Necessidades Alimentares Especiais**. Brasília, DF: MEC, 2017. (Série PNAE – necessidades alimentares especiais).

Leaflets from the National School Food Program (PNAE) containing the care flow for students with special dietary needs; the ten steps for an adequate and healthy diet, according to the *Dietary Guidelines for the Brazilian Population*; justifications for avoiding eating ultra-processed foods; definition, treatments and care for food allergies, celiac disease, diabetes *mellitus*, dyslipidemia, hypertension and lactose intolerance.

BRASIL. Ministério da Saúde. **Cartilha para a mãe trabalhadora que amamenta**. Brasília, DF: MS, 2010.

Educational material produced by the Ministry of Health of Brazil based on the Brazilian legislation with the goal of presenting: 1. the rights of working mothers; 2. the importance of breastfeeding, in order to support negotiations with coworkers and bosses regarding the best way of maintaining breastfeeding; 3. procedures for maintaining breastfeeding and to continue feeding babies with breast milk in a safe manner, even if the mother must be away from the baby.

BRASIL. Ministério da Saúde; UNIVERSIDADE DO ESTADO DO RIO DE JANEIRO. **A creche como promotora da amamentação e da alimentação adequada e saudável**: livreto para os gestores. Brasília, DF: MS, 2018.

Material directed at daycare and primary health unit directors with guidance regarding actions that daycare centers need to develop or improve, with emphasis on supporting breastfeeding and introducing an adequate, healthy complementary diet.

MARTINS, Ana Paula Bortoletto. **Publicidade de alimentos não saudáveis: os entraves e as perspectivas de regulação no Brasil.** São Paulo: Instituto Brasileiro de Defesa do Consumidor, 2014. (Cadernos IDEC – Série Alimentos, v. 2).

Analysis of law proposals (PL, in Portuguese) that regulate the marketing of unhealthy foods and beverages. It found that among the most appropriate proposals for defending the population's health and consumer rights were: 1. restrictions to food and beverage publicity directed at children; 2. banning the association of gifts and toys with food sales; 3. restrictions to commercialization and sales of unhealthy foods in schools.



GLOSSARY

Additives – Chemical substances such as food coloring, preservatives, antioxidants, artificial aromas, flavor enhancers, sweeteners, among others, which are generally not used at home and are added to ultra-processed foods to provide or enhance color or flavor, preserve and increase the duration of the product.

Adequate and healthy diet – A diet that is harmonious in quantity and quality, that follows the principles of variety, balance, moderation and pleasure; that meets each person's needs, according to their phase of life, preferences and specificities; and is produced through adequate and sustainable practices that protect the planet.

Antibiotics – Medication used to eliminate bacteria and treat the diseases they cause.

Antibodies – Proteins produced by our organism that help fight viruses, bacteria, fungi, protozoa and other microorganisms.

Areola – Dark part of the breast, around the nipple.

Bacteria – Microorganisms that are found in all places, coat the skin and the mucous membranes and cover the intestinal tracts of humans and other animals. Many bacteria are indispensable for the organism to function; others, though not crucial, are harmless; and others still can cause diseases.

Brazilian Norm for the Commercialization of Foods for Infants and Children in Early Childhood, Nipples, Pacifiers and Baby Bottles (NBCAL)

– Set of norms that regulate the commercial promotion and labeling of foods and products directed to newborn babies and children up to 3 years of age, such as milks, baby foods, pacifiers and bottles. Its objective is to ensure the appropriate use of these products so that there's no interference in breastfeeding practices. It is an important instrument for controlling the indiscriminate publicity of foods and products that compete with breastfeeding.

Breastfeeding support room – A space designed for women to privately and safely express milk so it can be later offered to their children.

Calories – A term commonly used to indicate the amount of energy that each food provides to the organism, if fully absorbed.

Candidiasis – A mycosis caused by a fungus of the Candida genus. Also known as thrush. The lesions range from superficial to deep; mild, acute or chronic and can occur in different places, such as mouth, throat, tongue, skin, scalp, genitalia, fingers, nails and, at times, internal organs.

Clavicle – Bone situated in the front of the shoulder that connects the torso to the arm.

Cleaning (foods) – Process that removes unwanted materials (food remains, foreign bodies, chemical residues and microorganisms) to such a degree that the residues that persist do not pose a risk to human health.

Collection units – Fixed or mobile units for collecting donated breast milk and that also carry out breastfeeding promotion, protection and support actions. They are connected to Human Milk Banks, but do not process breast milk.

Colostrum – Milk produced in the first days after birth, different from mature milk. It has more proteins and is rich in antibodies and other substances that help protect the child from diseases.

Creole seeds – Seeds passed down from generation to generation and that have not had their characteristics modified in a laboratory.

Cross nursing – When one woman breastfeeds another woman's child.

Ebullition – Act or effect of boiling; passing from liquid to gas as a result of heating, followed by the formation of bubbles.

Elective cesarean section – Scheduled surgery for delivering the baby, without the woman going into labor.

Energy drinks – Non-alcoholic beverages with ingredient combinations that generally include stimulants such as caffeine and/or taurine, as well as other substances, such as artificial aromas and food coloring.

Environmental sustainability – Maintaining the planet's equilibrium with regard to soil, water, air and climate conditions.

Ethnicity or ethnic roots – Refers to a group of people who believe they have a common ancestor and share the same language, religion, culture, traditions and world views, the same territory or the same historical conditions.

Exclusive breastfeeding – When a child receives only breast milk, with no other food, not even water, teas and juices.

Fiber – Indigestible part of foods that helps the intestines to function.

Food and nutrition security – The realization of every person's right to regular and permanent access to good quality foods, in sufficient amount, without compromising access to other essential needs, based on health-promoting food practices that respect cultural diversity and that are environmentally, culturally, economically and socially sustainable.

Food coloring – Substance or a mixture of substances that have the property of conferring or intensifying the color of foods and beverages.

Formula feeding – Offering infant formula or other milks to children instead of breast milk.

Free demand – Offering breast milk to children whenever they want, without a fixed schedule.

Fungi – Organisms that can be extremely harmful to human health, cause countless diseases and even poisonings. But there are also beneficial fungi which are used as foods and even those from which substances can be extracted for producing medication such as, for example, penicillin.

Gastroesophageal reflux – Reflux of the stomach's contents to the esophagus, which results in symptoms such as heartburn.

Genetically Modified Organism (GMO) – An organism whose DNA has been modified through the insertion of genes (characteristics) of another organism, or even through the creation of new characteristics.

Gluten – Protein found in rye, barley and wheat.

Harmful – That which causes damage; harms.

Healthy sustainable food systems – The process from the production of foods to their consumption and disposal of their residues which is carried out so as to guarantee the well-being of individuals and the planet.

Herbal medicines – Medication made exclusively from vegetable raw materials.

Home-modified cow's milk – Cow's milk diluted in water and prepared at home, for children under 4 months old, according to instructions from a health professional.

Hormones – Substances produced by the human organism that perform different functions, such as regulating growth, development, reproduction and the functions of many tissues.

Human milk bank – Located in or connected with maternity hospitals, they provide assistance to women who are breastfeeding and are responsible for the activities of collecting, processing and quality control of donated breast milk for later distribution, following a prescription from a doctor or nutritionist, to low-weight and/or premature children admitted to hospitals who cannot be directly breastfed by their mothers.

Hydrogenated vegetable fat – Fat produced by the food industry based on vegetable oils, using high temperatures and the modification of the composition of these oils. Its consumption has been associated with health risks.

Infant – Child up to 2 years of age.

Infant formula – Product in a liquid or powder form meant for feeding infants until the sixth month of life, according to prescription, in total or partial substitution of breast or human milk, to satisfy the nutritional needs of this age group.

Infection – A disease caused by the penetration and development or multiplication of an infectious agent in the organism of a human being or another animal.

Intestinal constipation – State caused by the abnormal retention of feces, which markedly reduces the number of evacuations.

Lactation – Process of producing milk and feeding a child with this milk.

Latch – Name given to the way the child's mouth fits onto the breast in order to nurse.

Mammals – Animals who feed their children with milk, including human beings.

Mandible – Mobile component of the skull that makes up the lower part of the head, the chin.

Minimally-processed foods – Foods that undergo some modification, such as cleaning, removal of undesirable parts, division, milling, drying, fermenting, pasteurizing, refrigeration, freezing, or similar processes that do not involve adding salt, oils, fats or any other substance to the original food.

Natural foods – Foods obtained directly from plants or animals that do not undergo any alteration after leaving nature.

Nipples (for bottles) – Objects used for the purpose of offering liquid foods to children.

Nipple shield – Device placed on top of the areola and nipple in order to protect injured nipples and facilitate latch in cases of flat or inverted nipples.

Nutrients – Substances found in foods that are essential for the body to function. They include proteins, carbohydrates, fats, vitamins, minerals and fibers.

Organic – Foods produced without pesticides.

Otitis – Inflammation in the inner ear or in the external auditory canal.

Pacifier – Artificial nipple meant for children to suck on without the purpose of administering food, medication or liquids.

Pasteurization – A process in which fresh foods are heated briefly to high temperatures and then cooled rapidly to render pathogenic microorganisms inactive, maintaining, at the same time, the food's sensory and nutritional quality.

Pesticides – Synthetic chemical products used to kill certain insects or plants in the rural or urban environment. However, they also contaminate other animals and plants, including those that are beneficial (such as worms, bees and fishes), in addition to human beings. Because of this, it is necessary to avoid and control pesticide use.

Premature – That which happens too early for habitual patterns; precocious.

Premature children – Those who are born before the 37th week of gestation.

Preservatives – Substances used to maintain a products' characteristics (flavor, consistency and appearance) and increase their shelf life.

Processed cooking ingredients – Substances extracted directly from natural foods or from nature which are used to prepare meals, such as salt, sugar and oil.

Processed foods – Foods made from natural foods, usually with the addition of salt or sugar (or some other cooking ingredient) in order to last longer or to enable other forms of consumption.

Publicity – Commercial practices for promoting products and services to the public in order to induce them to acquire the product and change or reinforce consumption habits.

Real food – Food that promotes a diet that is adequate and healthy for human beings and for the planet, accessible in adequate quality and quantity over the course of a person's life, that guarantees human rights, the right to land and to territory, that respects peoples' rights to diversity, from production to consumption, that protects and promotes food cultures, sociobiodiversity, ancestral practices, use of herbs and traditional medicine and generates pleasure.

Relactation – The process of re-establishing lactation after a period of little or no breastfeeding.

Satiety – Full satisfaction of one's appetite.

Scientific evidence – Scientific information used to confirm or deny a theory.

Season – Time of year of greater availability of a certain product in the market. During this period, the product tends to be more nutritive, flavorful and cheaper than at other times of the year.

Second-hand smoking – Smoke inhalation from tobacco derivatives, such as cigarettes, cigars, cigarillos, pipes, narguilé and other smoke-producing products, by non-smoking individuals who are around smokers in closed environments.

Sodium hypochlorite – Product obtained from the reaction of chlorine with a diluted solution of aqueous alkaline caustic soda containing between 10% and 13% of active chlorine. This product, which can only be used if dissolved in water, can be used to disinfect water meant for human consumption and for cleaning homes and hospitals. It is further used to produce bleach.

Sugary beverages – Contain large quantities of sugar and low nutritional quality and are associated with excess calorie consumption and also with excess weight and obesity.

Supplementation (of micronutrients) – Use of products that seek to complement nutrients (vitamins and minerals) provided by foods.

Support network – Set of individuals and institutions that make up a person's relationship bonds and that contribute to their support and physical, psychological and emotional protection.

Sweeteners – Natural or synthetic substances with extremely sweet taste, used in foods to partially or fully substitute sugar.

Thick – Having a dense consistency; food that does not drip from the spoon.

Traditional communities – Culturally differentiated groups that view themselves as such, who have their own forms of social organizations, who occupy and use natural territories and resources as a condition for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices generated and transmitted through tradition. For example, indigenous peoples, *quilombola* communities, roma peoples, African communities and peoples, *faxinalenses*, *mangaba* pickers, *quebradeiras de coco-de-babaçu*, *pantaneira* communities, artisanal fishers, *caiçaras*, extractivists, *pomerano* peoples, *retireiros do Araguaia*, *fundo e fecho de pasto* communities, *cerrado* extractivist communities, *ribeirinha* communities.

Ultra-processed foods – Produced by the food industry using various processing techniques and stages. They are often made with five or more ingredients and contain excess salt, sugar, oils, fats and food additives (artificial coloring, preservatives, sweeteners, artificial aromas, flavor enhancers, among others, not used at home). In many products, natural foods are not even used as ingredients or are only present in small quantities.

Virus – Infectious agent that causes diseases.



ANNEX – DRAFTING PROCESS OF THE NEW EDITION OF THE *DIETARY GUIDELINES FOR BRAZILIAN CHILDREN UNDER 2 YEARS OF AGE*

The *Dietary Guidelines for Brazilian Children Under 2 Years of Age* were published in 2002 and contained the first official food and nutrition recommendations for this age group. In light of the transformations that the Brazilian population has gone through and their impacts on health and nutrition conditions, the Ministry of Health of Brazil began, in 2015, the process of revising the publication, also seeking to align and harmonize it with the *Dietary Guidelines for the Brazilian Population*.

The drafting process of this new edition of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age* was led by the General Coordination of Food and Nutrition of the Primary Health Care Department of the Secretariat of Health Care of the Ministry of Health of Brazil (CGAN/DAB/SAS/MS) with the support of other coordinations from the same ministry and, also, from universities, researchers, academic groups, civil society institutions and international organisms, among other partners.

In order to promote a collective construction and enable wide participation and discussion regarding the contents of this document, the following stages took place:

Stage 1 – Planning and organizing the work process

The first phase of the process took place in 2015 and included the definition of a leading group, with members from CGAN/MS, that was responsible for planning the stages and organizing the entire review process.

The review of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age* was based on the experience of the *Dietary Guidelines for the Brazilian Population* and also on recommendations from the World Health Organization (WHO), the Pan American Health Organization (PAHO/WHO) and the Food and Agriculture Organization of the United Nations (FAO), as well as on a model proposed by Nutrition Institute of Central America and Panama (INCAp, in Spanish), which was later adapted by FAO for some Caribbean countries.

Stage 2 – Listening workshops with diverse actors

In order to guide the review, the Ministry of Health of Brazil carried out activities in order to hear the opinion of different actors regarding what should be the content of the new Guidelines, in order to define their scope. In 2015, there was a public call for selecting researchers from the fields of breastfeeding, complementary feeding and food and nutrition security, as well health professionals with experience in this area.

The individuals who were selected took part in workshops on the subjects of: What is the food and nutrition context of Brazilian children? What should be addressed in the *Dietary Guidelines for Brazilian Children Under 2 Years of Age*? To whom should the document be addressed? How should it be structured? The Ministry of Health of Brazil established a partnership with the International Baby Food Action Network (IBFAN) in order to carry out these listening workshops.

This stage also included a listening workshop involving strategic actors from the different federal government instances and representatives from civil society entities whose activities interface with the subject of child nutrition.

Stage 3 – Meetings with the Political Monitoring Group

The Political Monitoring Group was formed in order to follow the entire process of drafting the *Dietary Guidelines for Brazilian Children Under 2 Years of Age*. Its goal was to guarantee that the entire review process was shared with strategic actors, in order to improve it and guarantee its transparency. This group met at least twice a year, from 2015 until 2018, and was coordinated by CGAN/MS. In December 2017, the Political Monitoring Group issued an opinion on the first preliminary version

of the Guidelines, suggesting contents to be complemented, redirected, included or excluded.

Stage 4 – Listening workshops with parents and guardians

Children's families and guardians were important actors in this process. Following a suggestion from the Political Monitoring Group, the Health Ministry, along with the IBFAN network, organized workshops to listen to this audience regarding the Guidelines content and applicability. Five workshops were carried out with mothers, caretakers and family members of children aged between 6 and 24 months who were followed at Pediatrics and Growth Outpatient Clinics at Primary Health Units or in daycare centers. The workshops, in which social movement activists also participated, took place in São Paulo, Brasília, Curitiba, Rio de Janeiro and Manaus, in 2016.

Stage 5 – Consolidating the scope of the Guidelines

Based on the listening workshops, two reports were drafted consolidating participants' demands for the new version of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age*.

Stage 6 – Establishing a technical group

In 2016, a technical group tasked with writing the Guidelines was created. It included technicians from the Ministry of Health of Brazil and researchers from the fields of nutrition and pediatrics, as well as experts on breastfeeding and complementary feeding from different Brazilian regions.

Stage 7 – Defining the institution responsible for coordinating the Technical Group

The State University of Rio de Janeiro (UERJ, in Portuguese) was chosen by the Ministry of Health of Brazil to be the institution responsible for coordinating the technical group tasked with writing the *Dietary Guidelines for Brazilian Children Under 2 Years of Age*. It had the mission to coordinate, manage and monitor the review activities.

Stage 8 – Technical drafting of the Guidelines

The technical drafting process took place between 2016 and 2018. To facilitate this process, subgroups were formed for drafting the content. Each included at least one representative from UERJ. These members were responsible for drafting each new version of the document. Virtual meetings were carried out in order to monitor the process and also to discuss the document's contents. Additionally, experts carried out literature reviews, two of which were systematic. The authors of these reviews were selected through a public call. Experts in the fields of speech therapy, pediatrics, gastroenterology, allergies and dentistry were also consulted.

Stage 9 – Technical group workshops

The technical group carried out in-person workshops between 2016 and 2018 in order to define the scope of the publication, the drafting subgroups, the organization of their work process, the debate regarding controversial subjects and the analysis of intermediate versions.

Stage 10 – Selecting recipes

In 2017, the Ministry of Health of Brazil issued a public call in order to form a committee tasked with selecting healthy recipes for children under 2 years of age. It was open to researchers, university professors, health professionals, culinary experts, chefs, professional cooks, school cafeteria workers and people who cook at home. In order to participate in the committee, members needed to have prior culinary and/or diet technique and/or child nutrition experience. A public call for recipe submissions was issued through a reference term. The submissions are being analyzed by the technical group and will make up future Ministry of Health of Brazil publications and strategies, aligned with the *Dietary Guidelines for Brazilian Children Under 2 Years of Age* and which will support its implementation.

Stage 11 – Listening workshop with diverse actors

A new listening workshop was carried out in 2018 involving government representatives, managers, professionals, civil society representatives and breastfeeding and complementary feeding experts. The goal was to elicit evaluations and improvement suggestions from participants, after reading the second preliminary version of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age*. The workshop's methodology sought to favor knowledge exchange between participants and the construction of a proposal, with the development of critical analysis and follow-up suggestions. The groups' discussions were reported and discussed at a final plenary. The workshop results guided the drafting of the third version of the Guidelines.

Stage 12 – Drafting a new version

Improvements to the preliminary version of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age* were made in 2018. The third version was drafted by the technical group and was later evaluated and approved by the Ministry of Health of Brazil. This version was then submitted to public consultation.

Stage 13 – Public consultation

The third preliminary version of the Guidelines was published on the Ministry of Health's official public consultation platform and was available for contributions from July 12th until August 25th, 2018. This stage sought to make this version public and elicit contributions. In total, the Ministry received 5,463 contributions from 165 individuals, institutions or collectives, as detailed below.

User profile	Number of users	Number of contributions
Educational institutions	37	965
Individuals	77	742
Secretariats, departments, federal, state and municipal agency coordinations	38	3,218
Councils and entities from the food and nutrition/FNS area and non-profit institutions	5	203

User profile	Number of users	Number of contributions
Food industries, associations and unions	4	282
Others	4	53
Total	165	5,463

Stage 14 – Workshops in the states

Workshops were carried out in the states in order to encourage the health network and partners to submit suggestions to the public consultation so as to improve the publication. The workshops were promoted by the Ministry of Health of Brazil with support from reference professionals from the food and nutrition and breastfeeding areas from state health secretariats who were tasked with organizing the events and inviting participants.

Stage 15 – Consolidating recommendations and drafting the final version

After the public consultation, the technical group consolidated the recommendations and drafted the final version of the *Dietary Guidelines for Brazilian Children Under 2 Years of Age*. Part of the images included in the final version of the Guidelines was produced in a workshop carried out with Gastronomy professors and students from The Federal University of Rio de Janeiro (UFRJ, in Portuguese). The remaining images were produced by the educommunication team of the Ministry of Health's Department of Primary Health Care.

Stage 16 – Drafting the communication plan

In order to facilitate the Guidelines publicization after their release, a communication plan is being drafted with support from communication professionals.

Stage 17 – Release, publicization and implementation

The Guidelines release and publicization took place after the final version was drafted. The Ministry of Health of Brazil developed strategies for implementing it in the country.

Political Monitoring Group

Coordinated by the General Coordination of Food and Nutrition of the Ministry of Health of Brazil (CGAN/DAB/SAS/MS), with the participation of the General Coordination of Children's Health and Breastfeeding of the Department of Programmatic and Strategic Actions of the Secretariat of Health Care of the Ministry of Health of Brazil (CGSCAM/DAPES/SAS/MS) and the Children and Women's Health and Food and Nutrition Surveillance Group of the Department of Indigenous Health Care of the Special Secretariat of Indigenous Health (SESAI); the National Education Development Fund (FNDE); the Ministry of Social Development (MDS); the Pan American Health Organization/World Health Organization (PAHO/WHO); the United Nations Children's Fund (UNICEF); the Federal Nutrition Council (CFN); the Brazilian Society of Pediatrics (SBP); the Brazilian Association of Collective Health (Abrasco); the International Baby Food Action Network (IBFAN/BRASIL); and the National Food and Nutrition Security Council (CONSEA).

Participants of the listening workshops selected through a public call for researchers and health professionals

– Researchers: Ana Carolina M. Cavalcante (Centro Universitário Estácio do Ceará), Ana Elisa M. Reinaldi (UFU), Cristiano Boccolini (Fiocruz/RJ), Elisa Lacerda (UFRJ), Elsa Giugliani (UFRGS), Gabriela Bioni (UERJ), Inês Rugani (UERJ), Joel A. Lamounier (UFSJ), Juliana R. Bernardi (UFRGS), Maria Laura Louzada (NUPENS/USP), Márcia Regina Vitolo (UFCSPA), Patrícia Jaime (FSP/USP), Paula C. Saldan (Unicentro), Paula D.B. Campagndo (Unisinos/RS), Rafael Claro (UFMG), Regina Lang (UFPR), Rejane M. F. Leny (UFPR), Rosely Oselka S. Sarni (UNIFESP/SBP), Valdecyr Herdy Alves (UFF) and Viviane Vieira (FSP/USP).

– Health professionals: Ana Paula Gorgen (Encantado/RS), Camilla B. A. Koganva (IFG/Goiânia), Cleia Barbosa (Ouro Preto/MG), Cristiane Aparecida Machado (SMS/Curitiba/PR), Dafni Paiva Gomes (Nasf/SP), Edilma Fiel Barbosa (HMDR/TO), Ione Queiroz de Jesus (Prefeitura de SP/SP), Janine Guimarães

(Joinville/SC), Luciana Macedo (BLH/Tocantins), Márcia Faria (Petrópolis/RJ), Márcia Teixeira (SES/RJ), Miriam Oliveira dos Santos (SES/DF), Patrícia Araújo Souto (Nasf/MG), Tátilla Lima (SMS – Rio Verde/GO) and Tessa da Silva Barbosa (Nasf-Ribeirinhos/Prof. N.O. Norte/AM).

– Ministry of Health of Brazil technicians: Aline Okamura (CGAN/MS), Amanda Moura (CGSCAM/MS), Ana Maria Spaniol (CGAN/MS), Carolina Lima (DAB/SAS), Eliane Mara Viana Henriques (DSEI/CE/MS), Fabiana Azevedo (CGAN/MS), Fernanda Rauber (CGAN/MS), Gilsiane Espinosa (CGAN/MS), Gisele Bortolini (CGAN/MS), Kimielle Cristina (CGAN/MS), Laura Cordeiro Rodrigues (CGAN/MS), Lorena Melo (CGAN/MS), Maria da Penha F. F. Campos (CGAN/MS), Maria de Nazaré Moraes (DAB/MS), Neide Cruz (CGSCAM/MS), Rafaella Santin (CGAN/MS), Raquel Nunes (CGAN/MS) and Sara Araújo da Silva (CGAN/MS).

Participants of the listening workshop with strategic actors from several federal government instances and civil society representatives whose activities interface with the subject of child nutrition

Alice Medeiros (PAHO/WHO), Amanda Cabral (CGAN/MS), Ana Claudia Araujo (Anvisa), Ana Paula Bortoletto (IDEC), Bruna Pitasi Arguelhes (CGAN/MS), Carolina Chagas (MSD), Caroline C. Dolabona (Pastoral da Criança), Dionísia Nagahama (INPA), Elaine Santos, (CFN), Élide Amorim (SESAI/MS), Fernanda Rauber (CGAN/MS), Giovanna Soutinho (OPSAN/UNB), Gisele Bortolini (CGAN/MS), Helissa Moreira (CGAN/MS), Juarez Calil (FNDE), Letícia Toledo do Amaral (DAGEP/MS), Lorena Melo (CGAN/MS), Luan Nunes (CGAN/MS), Luciana Nascimento (MEC), Lucimeire Brockreld (Embu das Artes/SP), Maria Adriana Moreira (CONASEMS), Maria Fernanda Moratori (CGAN/MS), Marina Godoi de Lima (CONSEA), Mônica Gonçalves (CGAN/MS), Renara Araujo (CGSCAM/MS), Sônia Venâncio (SES/SP), Marina Rea (IBFAN) and Valdez M. de Aragão (UNICEF) and Thainá Alves Malhão (INCA), Vanessa Maestro (Anvisa).

Participants of the listening workshops with parents, guardians and social movement activists in 2016

February 23rd and 24th, 2016 – São Paulo

Anne Rammi, Giovanna Balogh, Giovanna M. F. Brito, Karian Andrade da Silva de Jesus, Killian Colombo Maciel, Maria Catarina Soares Borges, Marialice Levy, Mayra P. Concha Veneroni and Milena Guiotti.

March 7th and 8th, 2016 – Brasília

Amanda Branquinho, Brenda Valeria Almeida Contra Honorato, Camila Rangel Freire, Claudia de Lima, Débora Cristina Freitas, Dhener Ventura, Edgar José Canedo, Eva Barbosa Barros, Graciete Santos do Nascimento, Helen Altoe D. Bastos, Joyce Dourado Freire, Karistenn Casimiro Brandt, Keylla Virgínia da Fonseca, Letícia Carvalho Neuhauss, Livia Maria Pozzetti de Souza Minatel, Nina Schubart, Rosemberg da Silva Martins, Sonia Salviano, Sumara Santana, Telmanara de Padua Freitas and Úrsula Batista de Oliveira Nepomoceno.

March 7th, 2016 – Curitiba

Ana S., Isolina Antônia da Silva, Loane, Margarete Resende, Regina Rosa de Oliveira and Roseni Mira.

March 10th and 11th, 2016 – Rio de Janeiro

Aline dos Santos Vital, Aline Rodrigues Correa Sudo, Aline Rodrigues Padovani, Anne Louise, Ariane Domingos da Silva, Bruna Rezente Pinheiros, Carla Santos de Araújo, Daniela Guedes, Dayne Bernardo de Araújo, Gabriela Bioni, Joseane Souza Bendito, Juliana Dias, Juliana Martins Oliveira, Kelly Cristine Oliveira Gonzaga, Larissa Eliana F. Da Silva, Marcia Soares dos Santos, Monica Chippoteau and Monica de Souza Henrique.

March 21st and 22nd, 2016 – Manaus

Amanda Melina, Danielle, Edilane Porto Dias, Edilciana da S. Farias, Evelyn Alda, Geane A. dos Santos, Gleyciane Santos, Inêz Souza da Silva, Ingrid Passos, Jaila Borges, Josilda, Juliana O. de Lima, Julianne L. S., Kátia Medeiros, Karen Magalhães, Mara Varela, Maria de Lourdes, Marwyno Leão,

Mila Cristian, Patricia Carol Lopes, Patrícia Petrucielle Marinho, Richele M. de Souza, Rosemar Almeida, Sarah Oliveira, Thalia Martins, Vitória Braga P. Lima and Viviane Ferreira Martins.

Participants of the listening workshop with diverse actors in February, 2018

Adriele Sucino (UNIFESP), Alice Medeiros (PAHO/WHO), Aline Camargo Vieira (Sociedade Vegetariana Brasileira), Aline Sudo (IBFAN), Amanda Branquinho Silva (Procuradoria-Geral da República), Amanda Moura (CGSCAM/MS), Ana Carolina Feldenheimer (UERJ), Ana Carolina Lucena Pires (CGAN/MS), Ana Luísa Moura (CGAN/MS), Ana Maria Cavalcante (INAD/RJ), Ana Maria Maia (Fiocruz/BA), Ana Paula Bortoletto (IDEC), Ariane de Matos (CGSCAM/MS), Bruna Pitasi Arguelhes (NERJ/MS), Bruno Dias (Grupo Técnico – Comunicação), Carlos Monteiro (USP), Carolina Belomo (UFPR), Cleia Barbosa (IBFAN), Cristiano Boccolini (Fiocruz/RJ), Daniel Bandoni (UNIFESP), Daniela Neri (NUPENS/USP), Deutirene Cardoso (SES/AC), Diego Cardoso (MDS), Elda Lima Tavares (UERJ), Élide Amorim (SESAI/MS), Éldio Bonomo (CFN), Elisa Lacerda (UERJ), Elisabetta Recine (Abrasco), Elsa Giugliani (UFRGS), Enilce Sally (IBFAN), Fabiana Muller (IBFAN), Fabíola Sousa (UNIFESP), Fernanda Goedert (CGSB/MS), Fernanda Mainier (Põe no Rótulo), Fernanda Monteiro (CGSCAM/MS), Fernanda Rauber (NUPENS/USP), Gabriela Bioni (UERJ), Giovannna Meneses Barbosa (FNDE), Gisele Bortolini (CGAN/MS), Gisele Mêne (SESAI/MS), Helissa Moreira (CGAN/MS), Inês Rugani (UERJ), Irisléia Silva (FNDE), Isabel Diefenthaler (CGAN/MS), Ivone Marques (SES/AM), Janaína das Neves (UFSC), Janine Guimarães (Joinville/SC), Jorginete Damião (UERJ), Juliana Casemiro (UERJ), Karistenn Casimiro (SES/DF), Kátia Godoy Cruz (CGAN/MS), Lígia Amparo (UFBA), Lílian dos Santos (CECANE/BA), Luciana Castro (UERJ), Luciana de Oliveira (CECANE/UFRGS), Luciana Maldonado (UERJ), Luisete Bandeira (MDS), Máisa Beltrame Pedroso (SES/RS), Maria Aline Santos (CGDANT/MS), Maria Cristina Passos (UFOP), Maria Conceição Salomão (SES/RJ), Maria Janaína

Nunes (SES/GO), Maria Sandra Leocádio (COFEN), Mariana Pinheiro (MDS), Marina Rea (IBFAN), Miriam dos Santos (SES/DF), Nathália Ribeiro Beltrão (SES/MG), Neide Maria de Selercy (SESAI/MS), Pamela Leite (CONSEA), Patrícia Melo (FNDE), Paula D.B. Campagndo (Unisinos/RS), Priscila Tavares (CGAN/MS), Rafaella Santin (CGAN/MS), Regina Lang (UFPR), Renara Araujo (CGSCAM/MS), Renata Ferreira (Anvisa), Sara Araújo da Silva (CGAN/MS), Silvia Farias (UERJ), Simone Guadagnin (CGAN/MS), Simoni da Silva (CGDANT/MS), Sônia Salviano (IBFAN), Sueli I. O. Conceição (SES/MA), Tamara Pinheiro (CGAN/MS), Thainá Malhão (INCA), Thaynara Alves Nogueira (FNDE), Túlio Vonstanstuner (UNIFESP), Vânia Lúcia Leite (Pastoral da Criança), Vilma Ramos (SES/PE), Vilneide Serva (IMIP) and Zaíra Salermo (CIAN).

Image production workshop: foods and preparations coordinated by the Federal University of Rio de Janeiro Gastronomy course team – Rio de Janeiro – November, 2018

Ana Beatriz Silva Alves de Souza, Ana Carolina Sanches Fernandes, Bianca Eloi da Silva, Elisa Maria de Aquino Lacerda, Estêvão Lemuel de Souza Lima, Guilherme Shitomi Akiyoshi, Isis Fonseca Sá, Joyce Tarsia Garcia Cafieiro, Juliana Martins Oliveira, Letícia Ferreira Tavares, Mara Lima de Cnop, Marcelo Henrique Ferreira de Oliveira, Maria do Carmo Santos de Souza, Michael Boldi Maller Hermenegildo and Silvia Cristina Farias.

Photography

Adriana Cordeiro F. Pinheiro, Amanda dos Santos Franco, Ana Maria Cavalcante de Lima, Andrea Dória do Nascimento Silva, Andreia Mendonça Alves Pinheiro, Bruna Pitasi, Bruna Ruy da Silva Neta, Camila Akemi Karino, Camila Giugliani, Camyla Gonçalves Gouvêa, Carina Mendonça Becker, Caroline Andrade Fernandes, Cláudia Roberta Bocca Santos, Cléssia Dantas de Medeiros Daniel, Daniela dos Santos Almeida, Denise Eduardo de Oliveira Alencar, Eduardo Augusto Fernandes Nilson, Elsa Regina Justo Giugliani, Fernanda Almeida

S. Brum, Gabriela Maria de Carvalho Rodrigues, Gabriela Moura, Gisele Ane Bortolini, Gracielly Lopes Vieira Chaves, Graziela Marla dos Santos, Helena Fialho de Carvalho Torres, Jorginete de Jesus Damião, Juliana Maria Brandão Brasil, Juliana Melo Resende da Silva, Kátia Motta Galvão, Larissa Santos da Silva, Letícia Ferreira Tavares, Luís Oliveira, Luiza Lima Torquato, Márcia Costa Pinheiro Nery, Márcia Regina Souza Rodrigues, Mariana Fernandes Brito de Oliveira, Mariana Victor de Faria, Marina Maia Carneiro, Mayara de A. Ferreira, Michelle Delboni dos Passos Quinteiro, Michelle Rodrigues de Sousa, Muriel Bauermann Gubert, Natália Correia Loose, Patrícia Cabral de Arruda, Priscilla Golzio Correia Lima, Rachel Ferreira Tavares Mantovan, Rafaella da Costa Santin, Raquel Rodrigues Campos Machado, Renara Guedes Araújo, Renata Penna, Roberta Meirelles Gaspar, Rodrigo Barbosa Lopes, Rondon Rosário Vellozo, Sávio Cavalcante Marques, Sheila de Castro Silva, Thais Coutinho, Thalia de Oliveira Costa, Thiago Mares Castellan.

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