



INTERNATIONAL
FOOD INFORMATION
COUNCIL FOUNDATION

Pediatric
NATIONAL
ASSOCIATION OF
Nurse
Practitioners®

STARTING SOLIDS

a nutrition guide for **INFANTS** and **CHILDREN** 4 to 12 months of age

You may have many questions about this important milestone. When are babies ready for solid foods? Which foods should be given? How much food is enough?

This resource provides tips for **STARTING SOLID FOODS** and **KEEPING INFANTS SAFE** when they are eating. Keep in mind that each infant is different. Their diets may vary depending on things such as age, development, and nutritional needs. Ask your pediatric nurse practitioner, pediatrician, registered dietitian or other healthcare provider for more feeding advice.

NEWBORNS

BREAST MILK is recommended, but some infants may require iron-fortified infant **FORMULA**. They both provide all the nutrients and calories your infant needs for growth during the first four to six months of life. Young infants are

not ready for solid foods. They are unable to safely swallow solid foods, and their stomachs are not able to digest solids well. Solid foods or thickened formula should **not** be given to help infants go longer between feedings, help them sleep through the night, or improve their nutrition.

Your infant may be ready to begin solids when:

- Holds head up by self
- Does not push food out of mouth with tongue
- Sits up with support

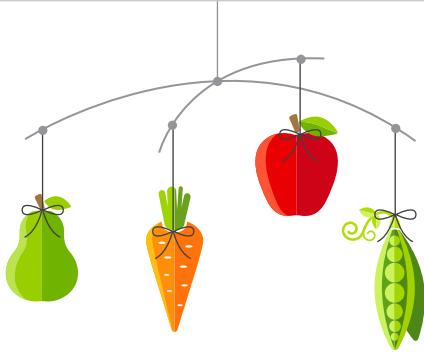
4 TO 6 MONTHS

Most experts recommend starting solid foods sometime between four and six months of age. Remember, breast milk or formula is still the most important food for your infant during the first year of life. Solid foods are given only so your infant gets used to eating different **TEXTURES**.



BY INTERNATIONAL FOOD
INFORMATION COUNCIL FOUNDATION
AND NATIONAL ASSOCIATION
OF PEDIATRIC NURSE PRACTITIONERS





IRON RICH FOODS, such as single grain baby cereal or pureed meats, are good first foods to introduce. Breastfed infants especially benefit from earlier meat introduction. Your healthcare provider will advise you on what food to start first.

How to feed your infant:

- If giving cereal, mix one tablespoon with 4 or 5 tablespoons of breast milk or formula
- Use a small rubber coated spoon with a long handle to feed
- Position your infant in a high chair sitting in front of you so you can see each other's face
- Place about ½ teaspoon of cereal or pureed food on the back of your infant's tongue. This will help them suck the food off the spoon.
- Start with small serving sizes: 1 to 2 small spoonfuls at a time

At first, your infant may not like the taste of solid food. Don't be discouraged. Most infants will make a face and push the food right out. They are **LEARNING** what to do with food in their mouth and soon become comfortable with eating. You may first want to try giving the food after your infant has taken a little breast milk or formula. That way, feeding solid foods will be associated with an enjoyable event. Your infant will eventually be **EAGER** to eat.

What not to do during feedings:

- Do not put cereal in the bottle unless directed by your healthcare provider.
- Try not to feed your infant when you are in a hurry or distracted, or if he or she is too tired.
- Do not force food when your infant is showing signs of fullness. Infants are full when they turn their heads away from food or keep their mouth closed when food is offered.

Once your infant has **MASTERED** their first food, other new foods can be tried toward the end of this stage of growth. Begin with one to two spoonfuls of a single strained or pureed **VEGETABLE**, such as squash, carrots or sweet potatoes, or strained fruits. These foods contain no wheat, milk, or egg to which some infants may be sensitive. Some healthcare providers recommend starting vegetables before fruits. There is no evidence that your infant will develop a dislike for vegetables if fruit is given first. Infants are born with a preference for sweets. The order of introducing foods does not change this.

Give **ONE NEW FOOD** every 3-5 days. This allows your infant's system to adjust. You should watch for any unusual reactions. It is normal for an infant's stool to change color when eating new foods. However, a skin rash, diarrhea, or vomiting may be signs of a food allergy or intolerance. Stop feeding the new food and tell your healthcare provider about the reaction at the next visit. **KEEP A DIARY** of new foods introduced and any reactions.

6 TO 8 MONTHS

Continue to give breast milk or formula as well as add **THICKER** pureed fruits, vegetables, and meats to your infant's diet. Do not mix foods until your infant has had every food in the combination by itself. If there is no family history of milk allergies, you can also consider introducing small amounts of whole-milk yogurt. Yogurt is easier for infants to digest than cow's milk at this stage. Your infant may be ready to practice **CUP DRINKING**. Give some formula or breast milk in a sippy cup (training cup with a spout).

Breast milk or formula is the only fluid your infant needs at this stage.



8 TO 10 MONTHS

At this time, most infants are ready to eat more textured foods such as mashed and diced foods. New foods, such as **FINGER FOODS**, may be introduced. Chop food into small bite size pieces.

FOOD ALLERGIES

The most common foods that cause an allergic reaction are milk, soy, eggs, peanuts, tree nuts, wheat, fish and shellfish. If there is a strong family history of food allergy, ask your healthcare provider for advice about these foods. Otherwise, most experts agree that these foods can be slowly included as early as 4 to 6 months of age.

STARTING SOLIDS



Ripe banana, well cooked vegetables, and teething biscuits are all good choices. Avoid giving foods that can cause your infant to choke. Uncooked vegetables or fruits (except bananas and avocados), chunks of cheese, whole grapes, peanuts, popcorn, and hot dog pieces should not be given. Poorly chewed food can block the airway and infants can't cough or clear their throats well enough to remove the food.

Your infant may begin finger foods when able to:

- Sit up straight in a high chair
- Grasp food with hands or fingertips
- Move food from hands to mouth

10 TO 12 MONTHS

Even without all of their teeth, infants can still use their gums and tongue to mash food with lumps. Keep offering new foods. It can take **8-15 TIMES** of trying a new food for an infant to accept it. Your infant is becoming more independent and may be able to hold a spoon when being fed. Encourage self-feeding as much as possible. While you are feeding your infant, name the food, utensils being used, or colors of the food. Remember, each feeding is a special time for you to **COMMUNICATE** together.

Whole cow's milk (aim for 16-20 ounces per day) should only be introduced after your infant turns one. Young infants can't digest cow's milk as easily as breast milk or formula. This is because cow's milk contains higher amounts of protein and some minerals. Whole milk yogurt can be introduced earlier, since it's easier for infants to digest than cow's

milk. The fat in **WHOLE MILK** is important for proper growth and development. Low-fat dairy should not be given until two years of age, unless your healthcare provider recommends it. If your infant was put on a special formula for a milk allergy or intolerance, talk to your healthcare provider before introducing dairy.

The National Association of Pediatric Nurse Practitioners and the American Academy of Pediatrics recommend **BREASTFEEDING** until at least one year of age. Breastfeeding can be continued past this time if you and your infant choose to do so. The AAP recommends that fruit juice not be introduced until after the age of twelve months, unless clinically indicated. Juice should not replace the amount of breast milk or formula your infant is drinking. Between the ages of 1 and 3 years old, limit juice to no more than 4 ounces a day and offer it only with a meal or snack. Give it in a cup, never in a bottle or sippy cup as this can lead to tooth decay.

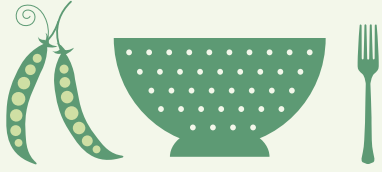
AGE	FOOD (PORTION SIZE)	FEEDINGS/DAY
0-4 MONTHS	BREAST MILK OR INFANT FORMULA (2-4 OZ)	8-12
4-6 MONTHS	BREAST MILK OR INFANT FORMULA (6-8 OZ)	4-6
	INFANT CEREAL OR PUREED MEATS, FRUITS, AND VEGETABLES (1-2 T)	1-2
6-8 MONTHS	BREAST MILK OR INFANT FORMULA (6-8 OZ)	3-5
	INFANT CEREAL (2-4 T)	2
	CRACKERS (2), BREAD (½ SLICE)	1
	PUREED FRUIT OR VEGETABLE (2-3 T)	1-2
	PUREED MEAT (1-2 T) OR LEGUMES (1-2 T)	1-2
8-12 MONTHS	BREAST MILK OR INFANT FORMULA (6-8 OZ)	3-4
	CHEESE (½ OZ) OR YOGURT (½ CUP)	1
	INFANT CEREAL (2-4 T), BREAD (½ SLICE)	2
	CRACKERS (2), OR PASTA (3-4 T)	1
	FRUIT OR VEGETABLE (3-4 T)	2-3
	MEAT (3-4 T) OR LEGUMES (¼ CUP)	2

HOW MUCH SHOULD MY INFANT EAT?

Typical portion sizes and daily intake for infants



OZ = OUNCE, T = TABLESPOON



HOMEMADE BABY FOOD

You may choose to make homemade baby food for your infant. Peas, corn, and sweet potatoes are good choices for home-prepared baby foods. Infants younger than 6 months of age should not eat homemade spinach, beets, turnips, collard greens, green beans, squash, and carrots. These vegetables contain large amounts of nitrates. Nitrates can cause a low blood count in young infants. Store-bought vegetables are safer because the manufacturers test for nitrates.

Baby food made at home should be steamed and then mashed with a fork. Never add honey or corn syrup because they may contain dangerous botulism spores. Do not add salt or seasoning while cooking fresh foods for your infant. Always refrigerate leftover food. Also, look for signs of spoilage before giving the food to your infant. Fresh foods will spoil more quickly than food from a can or jar.

Vitamin and Mineral Supplementation

Your infant may need more iron and vitamin D, even if they are growing well. **IRON** is needed to build red blood cells. Though infants are born with stored iron, it is used up around four to six months of age. After that, it must then be replaced with iron in the infant's diet. **VITAMIN D** is another important nutrient. It is needed to build strong bones. Breast milk alone does not provide infants with enough vitamin D or iron. The American Academy of Pediatrics recommends that all infants receive these nutrients either from food or supplements. Check with your healthcare provider about vitamin D and iron supplements during the first year.

Safety at the Plate

Follow these simple guidelines to help your infant **STAY SAFE** while eating:

- Always supervise your infant while eating. Choking often occurs when

infants are given foods they are not ready to eat.

- Cut foods into small pieces ($\frac{1}{4}$ inch or smaller). Place only a few pieces on the plate at a time.
- Encourage your infant to take small bites and chew food completely.
- It is important that your infant sits down when eating. Never let your infant eat while lying down or walking.



WHEN AN INFANT IS CHOKING | ADAPTED FROM AMERICAN RED CROSS

THE BASICS

- Check the scene for safety.
- Check the victim for consciousness, breathing, pulse and bleeding.
- Flick the bottom of a baby's foot to determine if they are conscious.
- Dial 9-1-1 or local emergency number.

IF CONSCIOUS, BUT CHOKING...

- Give 5 back blows between the shoulder blades and 5 chest thrusts.
- Support the head and neck securely when giving back blows and chest thrusts.
- Keep the head lower than the chest.
- Repeat blows and thrusts.

IF NOT BREATHING...

- Make a complete seal over the baby's mouth and nose.
- Give two 1-second breaths, one after the other.

IF AIR WON'T GO IN...

- Give CPR—30 chest compressions, pushing about 1½ inches deep.
- Look for and clear any object from mouth.
- Reattempt 2 rescue breaths.
- Repeat steps 1, 2, and 3 until breaths go in or help arrives.

IF NOT BREATHING AND NO PULSE...

- Give CPR—repeat sets of 30 chest compressions and 2 breaths.
- Do not stop CPR until the baby begins breathing or until help arrives.

INFANT CPR

30+2

30 CHEST COMPRESSIONS,
2 RESCUE BREATHS, REPEAT

