

Shelly C. Bernstein, MD
Joshua Gundersheimer, MD
Robert Andler, MD
Colleen Brownell-Krupat, MD

Weston Pediatric Physicians

486 Boston Post Road, Weston, MA 02493
(781) 899-4456
www.westonpediatrics.org

Rosemarie Dieffenbach, MD
Katherine Bui, MD
Karen Ashworth, FNP

Nutrition and Feeding Guidelines: Four to Twelve Months

Providing foods for your baby that are healthy as well as age appropriate is a rewarding, but sometimes stressful, aspect of parenting. In the next few months your baby will progress from a diet consisting of all breast milk or formula feedings to one that includes solid foods. As your baby starts to consume solid food, you have the opportunity to start your baby on a lifetime of good eating habits.

You may encounter well-meaning friends, relatives, and neighbors with lots of advice on how, when, and what to feed your baby. We are providing you with suggestions in accordance with the American Academy of Pediatrics. In addition to your own good sense, your child will provide you with clues as to what and how much to feed him.

In general, between 4 and 6 months of age, your child is learning to eat solid foods, but is still getting most of his nutrition from breast milk and formula. He will continue to take about 24 - 32 ounces of formula or 4 - 5 feedings of breast milk per day. Between 6 months and 1 year of age, he is transitioning from milk as his primary source of nutrition to solid food as his primary source. At 1 year, babies generally consume between 16 - 24 ounces of milk per day and eat 3 meals and 2 snacks. Generally, only one of these meals is a "good" meal, where you would feel anything significant is actually consumed!

How will I know when my baby is ready for solid foods?

You do not need to be in a rush to start your baby on solid food. Contrary to popular belief, studies have shown that starting cereal early will not help your baby sleep through the night. It is easier, more convenient, and possibly cheaper (especially if breastfeeding) to delay introduction of solid foods until 4 - 6 months as milk, either formula or breast milk, should be the major source of nutrients during the first year of life. A typical amount of milk consumed around four months is either 4 - 6 feedings a day of breast milk or 24 - 32 ounces of formula. Medical studies have shown a higher incidence of food allergies in babies started on solid food at a young age. If you have a strong family history of food allergies, you should consider waiting until 6 months to start solid foods. Babies are ready to start solid foods when they are waking more at night, looking eagerly at you as you eat, or taking more than 36 ounces a day.

When you do start solid foods, you may want to give your baby part of the milk feeding first so it will be easier for him to settle down and try the new foods. If your baby does not appear interested, do not force him to eat; wait several days and try again. Don't expect your baby to eat much at first - probably a couple of teaspoons. Feed your baby with a small spoon. Do not add food to the bottle. Introducing solid foods is a time not only to provide for your baby nutritionally but also to encourage and support developmental changes as well.

What should I feed my baby first?

The best first food is iron fortified infant cereal mixed with formula or breast milk. Rice cereal is the least likely grain to cause an allergic reaction and the iron is well absorbed by the baby's system. Start out with about two teaspoons of cereal once daily and gradually increase until he is taking it easily off the spoon. Encourage your baby to take about

1/3 - 1/2 cup daily to prevent iron deficiency anemia. If no signs of allergy or intolerance are present you may start iron fortified baby oatmeal, barley, or mixed grain cereals. Discontinue any new foods if your baby vomits, develops diarrhea, constipation, or draws his knees up to his chest and cries following a feeding. Wait about five days between introducing new foods so you can pinpoint what may be causing allergy symptoms or intolerance. You can mix the infant cereals to the texture your baby accepts best (from runny to fairly thick). Begin with one feeding per day and gradually increase to three feedings per day at about 6 months. Your baby is finished eating when he fusses, turns away or spits his food out, but not usually before!

What do I add next?

Once your baby is taking iron enriched cereals well (this usually takes about 2 - 4 weeks to learn how to work-up to 1/2 cup of cereal per day), then fruits and vegetables can be added to the diet. Nutritionally, fruits and vegetables supply good sources of vitamins A, C, and carbohydrates; they also introduce your baby to foods of different flavors and textures.

Fruits and their juices are naturally sweet and many children can eat large quantities of them. Don't overdo it, since more than 3 - 4 oz of fruit juice daily can reduce appetite for other foods, cause stomachaches and diarrhea. Diluted fruit juice is also acceptable, but be sure your child is not carrying his cup or bottle around and sipping it all day. This is terrible for their teeth; it is like sucking a lollipop all day. Always use 100% unsweetened fruit juices, not fruit drinks, cocktails, or Kool-Aid, which contain added sugars and very little fruit juice. Never send your baby to bed with a bottle or sippy cup of milk or fruit juice as this can cause cavities, even in baby teeth.

Start with 1 - 2 teaspoons of a new fruit or vegetable and gradually work up to 1/4 cup to 1/3 cup per serving. There is no certain order in introducing fruits and vegetables. Again, offer the new food several times and observe how your baby reacts, waiting 3 - 5 days before starting another new food. Provide your baby with a wide variety of fruits and vegetables to obtain a good mix of all the needed nutrients.

Remember to introduce new foods with a good attitude and a smile. Saying "I'm sure this tastes good" and "Yum-Yum" is better than an expression of disgust. Just because you don't like something does not mean your baby won't! If, however, a food is continually rejected, even after waiting a few days in between, respect your baby's preference and move on to other foods.

Should I use commercial baby food or homemade baby food?

The choice is yours - there are pros and cons to each. Commercial baby foods are safe and nutritious, and no longer contain added salt and sugar (except baby desserts, which contain added sugar and are unnecessary anyway). Read the food label for detailed ingredient information. When feeding your baby, put the portion you will use in a separate container and refrigerate the rest of the jar. If you spoon food directly out of the jar, the food will spoil quickly due to enzymes in your baby's saliva on the spoon. When preparing homemade baby foods, make sure your work area and equipment are spotlessly clean to avoid any possible contamination. A food processor or baby food grinder can be used to make baby foods. You may want to freeze large batches in ice cube trays and store cubes in zip lock bags or freezer containers for future use.

Do not add salt or sugar to suit your taste; your baby does not need either. Making your own baby food is great if you have the time and energy, but don't feel you're cheating your baby nutritionally if you don't. Commercial baby foods have improved in the last several years and are more natural than they used to be.

When your baby is eating a wide variety of pureed fruits and vegetables, plain or flavored (but no NutraSweet) yogurt and pureed meats may be introduced. No certain order of introduction is needed, but again, wait 5 days between new foods. Many babies do not care for meats. Don't worry if your baby does not care for meat - the protein requirement is fulfilled from breast milk or formula. Once your baby has had a variety of fruits and vegetables, you can offer the simple dinners, which mix meat and fruit or vegetables.

As your baby progresses through pureed baby foods, you can start to offer unsalted baby crackers, bread and unsweetened dry cereal to pick up and eat. In doing this, you will be helping developmental skills by allowing practice of the pincer grasp (using thumb and first finger), and hand-mouth coordination. Cheerios (avoid Honey Nut Cheerios until after 1 year). Chex cereals, rice cakes, breads, rolls, unsalted crackers and small pieces of soft fruit such as peaches, pears, and melon are usually favorites. Remember that the 5-day rule still applies.

When should I give my baby whole cow's milk?

Breast milk or formula provides the ideal balance of protein, carbohydrate, and fat until one year of age. After that, whole, pasteurized cow's milk (not 2% or skim milk) may be introduced. If your child has shown an allergy to cow's milk in the past, let your health care provider know.

When will my baby start eating table foods?

Between seven and ten months, your baby will be able to sit in a high chair and show good hand to mouth coordination. This means your child is ready to join the family for the three meals daily, and is also probably ready to progress from strained baby foods to semi-solid, mashed, or chunked foods.

Tender cooked fruits and vegetables or canned fruits that are chopped or mashed are a good way to try out your baby's new skills. Many fresh fruits such as peaches, pears, plums (all with skins removed) are good choices to chop or mash.

Remember that babies need to experiment and explore food with their fingers to feel the different textures. They also like to look at and smell food before eating, so expect messy and time-consuming meals.

As your baby progresses to table food, you want to serve as many foods as possible from your own menu so you are not cooking two separate meals. Cheese may be introduced at this time as well.

Many meats are too tough for your baby to chew, so cut them into very small pieces or stick to easily chewed meats like hamburger. Sliced cheese or cheese sticks and cooked beans are a good protein substitute if the meat is not appropriate for your baby. When making casseroles, limit the salt and spices or take your baby's portion out before you add them. The taste for salt is developed over a lifetime of eating high salt foods. Most of us eat too much salt anyway and need to cut down in later life, so start your baby early on a healthy diet!

Your baby's meal patterns will be changing from the demand-feeds of infants to the meal-plus-snacks routine of a toddler. Snacks can help tide your baby over between meals. Offer nutritious snacks such as:

- Graham crackers
- Unsalted crackers or rice cakes
- Cheese
- Unsweetened fruit
- Non-sugared cold cereal
- Leftover meals

Are there any foods my child should not eat?

Until your baby reaches one year of age, it is best to avoid:

- Egg whites, fish, seafood - highly allergenic foods
- Honey - babies under one year are at risk for botulism from spores in honey
- Fresh citrus fruits and juices - high acid content can cause rashes

Food to be avoided throughout infancy and toddlerhood since they are easily choked on includes:

- Nuts and peanuts (avoid all peanut products until age 2 due to its high allergenicity)
- Popcorn
- Raw carrots
- Hog dog rounds (ok if cut lengthwise)
- Hard candy
- Whole grapes (ok if cut lengthwise)
- Raisins

Vitamins

New guidelines from the American Academy of Pediatrics recommend that all infants and children get 200 IU of Vitamin D per day starting by 2 months of age and continuing throughout adolescents. The nutritional recommendation is met by drinking 16 ounces of infant formula or regular cow's milk, for children and adolescents. Breastfed infants, as well as children and adolescents who drink less than 16 ounces per day, should receive vitamin supplementation.

Variation in appetite and minimal requirements

Your baby's food consumption will vary greatly from day to day. He may eat a lot one day and next to nothing the next. Don't worry, as long over the course of a week he eats a reasonable amount and is growing appropriately. If your baby shows little interest in eating solid foods, watch the amount of juice or even formula he is drinking. You may need to impose a limit to save some hunger for solid foods. Offer plain water if your baby seems thirsty and is drinking excessive milk or juice. Generally, 16 - 24 ounces of formula or milk is sufficient. This often dips as you transition from the bottle or breast to a cup.

Listen to clues from your baby on what and how much he wants to eat. Your baby will certainly let you know his preference, but it may take repeated exposure for him to accept a particular food. Babies, like adults, like a variety of foods in their diet. Watching your baby progress in eating habits is exciting - just when you think you have all the preferences and abilities figured out, they change!