

Pediatric People Baby Food Guide

Infant feeding recommendations have changed dramatically in the last few years. The American Academy of Pediatrics, based on studies looking at the development of allergy to foods in infants and children, determined that infants can be introduced to a wide variety of foods as early as 6 months of age. Pediatric People offers the following guidelines in starting solids:

- Infants should be fed by breast or with formula only until 4 to 6 months of age. (Solids may be started as early as 4 months in some infants, but first discuss with your doctor.)
- First foods should be high in iron content (such as iron fortified whole grain infant cereals, meats, fish, eggs, and non-animal proteins.)
- All foods, other than honey (which can contain botulism spores), can be given to an infant without a strong family history of food allergy. Foods should be chosen based on NUTRITIONAL VALUE and TEXTURE. Start with purees, and proceed to coarse puree, chunky, then solid dice over 6-9 months of age.
- New foods can be introduced fairly quickly- no need to feed an individual food multiple times to determine tolerance.
- More allergenic foods (peanut, tree nut, sesame, soy, dairy, egg and fish) should be introduced on their own as a new food (not in a mixture of other new items), so that if an adverse reaction occurs you know that food is the culprit. If your infant develops a rash, excessive gas or fussiness, vomiting or diarrhea, discontinue that food until meeting with your doctor. Some infants do develop a mild red irritative rash on their chin/cheeks as a reaction to saliva and food on their skin- this alone does NOT represent a food intolerance.
- Does this mean my young infant can eat eggs, fish, nuts, berries, citrus, sesame? YES!!! As long as they are in a manageable texture. We now believe early exposure to these foods (after 6 months of age) can actually reduce the likelihood of allergies. (This does not mean your child won't be allergic- so be sure to have Benadryl in the house to use if your child develops hives after eating one of these foods. Signs of more severe allergy (persistent vomiting, swelling of the mouth/lips, difficulty breathing) need immediate treatment with an epipen- please call 911. If your child has hives or a more severe reaction to a food, please discontinue it and schedule a visit for us to discuss possible testing and treatment.

Where to start?

By tradition, single-grain cereals are usually introduced first. However, there is no medical evidence that introducing solid foods in any particular order has an advantage for your baby.

Though historically many have recommend starting vegetables before fruits, there is no evidence that your baby will develop a dislike for vegetables if fruit is given first. Babies are born with a preference for sweets, and the order of introducing foods does not change this.

If your baby has been mostly breastfeeding, he may benefit from baby food made with meat, which contains more easily absorbed sources of iron and zinc that are needed by 6 months of age.

Once your infant starts solids, you can expect his stools to change dramatically. They may become more or less frequent, more pasty/firm, and quite colorful! Sometimes foods may appear to pass thru undigested- this is not abnormal. If your infant has hard, pellet like stools or is straining excessively, avoid constipating foods such as rice, apple, banana and soy. A daily serving of stone fruits (prunes, apricots, peaches) will help get things moving.

Cereals. Baby cereals, found as powdered flakes in the supermarket, are the one baby food we recommend purchasing instead of making yourself. These cereals are iron fortified, which is important for your fast-growing infant, and easy to prepare. Start with whole grain OATMEAL cereal. White rice is a simple starch that should not be a part of your child's diet. BROWN RICE cereal is fine in limited amounts, but recent FDA precautions advise limited intake due to very small amounts of arsenic found in rice and rice products. Mixed grain cereals containing barley and wheat are also fine after 6 months of age. Once your infant has mastered the art of eating with cereal, we recommend introducing meats and other proteins as dietary mainstays. Your infant's first meal can be at any time of the day, just be sure to pick a time when he is alert, happy, and not starving (30 minutes before a scheduled feeding works well.) Your infant should be on your lap, in a bouncy seat, or a high chair (provided she can hold her torso and head steady.) Use a bib, or feed naked!

- **Day 1.** Mix 1 teaspoon of cereal with enough formula or breast milk to make a very thin paste. Tickle her chin or cheek to get her to open wide, then place a small baby-spoonful of cereal in the middle of her tongue. Wipe, then repeat. Follow with a bottle or nursing.
- **Day 2.** Increase to 1 tablespoon of cereal, mixed to a paste.
- **Day 3.** Increase to 2-5 tablespoons of cereal, again mixed to a slightly thicker paste. Your infant may not finish a full bottle feeding after this, which is OK. Many infants prior to 6 months of age will still have a "tongue thrust" whereby they push the food out rather than in. Some infants may have no interest in food yet, and get upset with feedings. If this persists, wait a week and try again.

Proteins. Meats and non-meat proteins are a valuable source of iron and zinc. Infants generally outgrow the supply of iron they are born with by 6 months of age, making this category of solids the most important for young infants to start with. Easy proteins to prepare include eggs, poached fish or chicken, lentils, beans and chickpeas. Meats are best prepared baked, as the food will retain the most

nutrients. Once cooked, chill before pureeing for best results, and add a bit of water to the puree to create the right consistency. You can also boil, poach or stew meats (try a slow cooker.) You may lose very small amounts of nutrients in the water, so use the cooking liquid when pureeing the food. Add vegetables and grains such as barley, quinoa, or brown rice when cooking the meat to create a meal all at once. Not enough time to cook your own purees? Prepared baby foods can be both easy and nutritious- look for brands such as Earths Best and Happy Baby which avoid fillers and additives. You can also often adapt parts of your own meals into baby purees (throw the leftover baked salmon and sweet potato into a blender, puree and freeze in ice cube trays. Small amounts of spice and seasonings are fine!) If you plan on bringing up your child vegetarian, we do recommend a daily multivitamin (such as Polyvisol with iron) for both iron and B vitamin supplementation.

Dairy. You can introduce yogurt and cheeses at 6 months of age as part of a balanced meal. Start with plain, tart yogurt (whole or reduced fat is fine) as infants usually enjoy the taste, and it is far healthier than sweetened versions. Add pureed fruit if you wish. Whole milk in large amounts is not advised, as it is not a whole food like breast milk or formula and can cause anemia in infants less than 12 months. However, milk in small amounts for baking or pureeing is safe. Goat milk is low in folate and can cause a severe anemia. It is not recommended as a sole food or formula.

Fruits and vegetables. Use STAGE 1 (smooth puree form.) Many fruits can easily be made at home by pureeing with water to the correct texture (banana, pear, peach, prune, apricot.) Vegetables and some fruits (apple) will need to be cooked before pureeing to improve texture and digestibility. Do not add sweeteners or salt.

NOTE: If you make your own baby food, be aware that home-prepared spinach, beets, green beans, squash, and carrots are not good choices during early infancy. They may contain large amounts of nitrates. Nitrates are chemicals that can cause an unusual type of anemia (low blood count) in young babies. Commercially prepared vegetables are safer because the manufacturers test for nitrates. Peas, corn, and sweet potatoes are better choices for home-prepared baby foods. Once your infant is eating table foods, these vegetables are fine to prepare at home (once not pureed and given in concentrated form.) Cereal or meat and fruits/vegetables can and should be given at the same feeding as Vitamin C increases iron absorption. It doesn't matter if you mix the two or give them separately. A good ratio is about 3:1 protein:fruit/vegetable (i.e. 6 tablespoons of cereal or meat plus 2 tablespoons of fruit/vegetable.) Do not worry about exact measurements, and if your infant has finished their meal and seems eager for more you can certainly offer more fruit or vegetable (a good lesson to carry on thru childhood!) Once your infant is happily eating a variety of foods, you may advance to 2 meals a day, consisting of a protein and fruit/veg. An average feeding is 4 ounces, but your child may eat a little more or less depending on the time of day and infant preference. By 9 months of age, you can advance to 3 meals, at which point you may decrease breastfeedings to as little as 3 times a day, or bottle feedings to a minimum of 16 ounces a day.

Finger foods. Once your baby is tolerating chunky purees (try mashing an avocado, banana or baked sweet potato) you can start giving finger foods to encourage self-feeding. To avoid choking, we recommend not giving hot dogs, whole grapes, raisins, whole nuts, popcorn, raw vegetables or apple, chunks of peanut butter, or other firm pieces of food not cut into small dice. Good starters include small pieces of banana or ripe melon, wafer style crackers, scrambled egg, well cooked whole grain pasta or noodles, soft bits of meat from stews/soups, mashed beans or peas, chunks of sweet potato/squash, cut up whole grain pancakes and waffles, and soft cheeses.

Water. Until your infant is weaned from breast milk or formula at 12 months of age, the majority of their fluids should be from those sources. However, at 6 months we encourage you to start offering a sippy or straw cup with a few ounces of water at each meal. If the cup has a valve, initially remove it to help reduce the suction needed to get water out. Soft straw cups that can be squeezed to push water up the straw are ideal- as sucking hard on a sippy cup while tilting the head back can push secretions up into the middle ear.

Introducing Whole Milk. You can try introducing whole milk into your child's diet at 12 months of age (11.5 months is fine if you need to wean early, or want to try prior to your 1 year appointment.) Many children will accept a cup of milk straight up. Fussier infants may require gradual dilution of breastmilk or formula with milk over a few days. Whole milk should be limited to 16-24 ounces a day, less if they are constipated with the change. If your infant drinks as little as 8 ounces a day, but eats other sources of calcium (yogurt, cheeses, dark green veggies) the rest of their liquid can be water. NO JUICE!!! It is straight sugar with minimal nutritional value.

Resources. Child of Mine: Feeding with Love and Good Sense by Ellen Satter – a terrific book to take you from first purees thru childhood, how to encourage healthy and conflict free eating habits in your children.

Food Fights. Winning the Nutritional Challenges of Parenthood Armed with a Bottle of Ketchup by Laura Jana MD and Jennifer Shu, MD – tons of practical advice on how to handle routine introduction to feeding thru to picky eating, behavioral issues with feeding and more. Nutrition: What Every Parent Needs to Know, American Academy of Pediatrics – a comprehensive guide to pediatric nutrition.