Introduction of Solid Foods

Feeding Your 4-7 Month-Old

This is the time when most infants are introduced to solid foods. The American Academy of Pediatrics (AAP) currently recommends gradually introducing solid foods when a baby is about 6 months old. Your doctor, however, may recommend starting as early as 4 months depending on your baby's readiness and nutritional needs. Be sure to check with your doctor before starting any solid foods.

Your baby may take a little while to "learn" how to eat solids. During these months you'll still be providing the usual feedings of breast milk or formula, so don't be concerned if your baby refuses certain foods at first, or doesn't seem very interested in food. It may just take some time.

Is My Child Ready to Eat Solids?

How can you tell if your baby is ready for solids? Here are a few hints:

- Is your baby's tongue-thrust reflex gone or diminished? This reflex, which prevents infants from choking on foreign objects, also causes them to push food out of their mouths.
- Can your baby support his or her own head? To eat solid food, an infant needs good head and neck control and should be able to sit up.
- Is your baby interested in food? A 6 month old baby who stares and grabs at your food at dinnertime is clearly ready for some variety in the food department.

If your doctor gives the go-ahead but your baby seems frustrated or uninterested as you're introducing solid foods, try waiting a few days or even weeks before trying again. Since solids are only a supplement at this point, breast milk and formula will still fill your baby's basic nutritional needs.

How Should I Start Feeding My Baby Solids?

When your baby is ready and the doctor has given you the OK to try solid foods, pick a time of day when your baby is not tired or cranky. You want your baby to be a little hungry, but not all-out starving; you might want to let your baby breastfeed a while, or provide part of the usual bottle. Have your baby sit supported in your lap or in an upright infant seat. Infants who sit well, usually around 6 months, can be placed in a high chair with a safety strap.

Typically, a baby's first food is a little iron-fortified infant rice cereal mixed with breast milk or formula. The first feeding may be nothing more than a little cereal mixed in a whole lot of liquid. Place the spoon near your baby's lips, and let the baby smell and taste. Don't be surprised if this first spoonful is rejected. Wait a minute and try again. Most food offered to your baby at this age will end up on the baby's chin, bib, or high-chair tray. Again, this is just an introduction.

Do not add cereal to your baby's bottle unless your child's doctor instructs you to do so, as this can cause babies to become overweight and doesn't help the baby learn how to eat solid foods.

Once your infant gets the hang of eating cereal off a spoon, it may be time to introduce a fruit or vegetable. When introducing new foods you will want to go slow. Introduce one food at a time and wait several days before trying something else that is new. This will allow you to identify foods that your baby may be allergic to.

Foods to Avoid for Now

Some foods are generally withheld until later. Do not give eggs, cow's milk, citrus fruits and juices, and honey until after a baby's first birthday.

Eggs (especially the whites) may cause an allergic reaction, especially if given too early. Citrus is highly acidic and can cause painful diaper rashes for a baby. Honey may contain certain spores that, while harmless to adults, can cause botulism in babies. Regular cow's milk does not have the nutrition that infants need.

Fish and seafood, peanuts and peanut butter, and tree nuts are also considered allergenic for infants, and shouldn't be given until after the child is 2 or 3 years old, depending on whether the child is at higher risk for developing food allergies. A child is at higher risk for food allergies if one or more close family members have allergies or allergy-related conditions, like food allergies, eczema, or asthma.

Some possible signs of food allergy or allergic reactions include:

- rash
- bloating or an increase in intestinal gas
- diarrhea
- fussiness after eating

For more severe allergic reactions, like hives or breathing difficulty, get medical attention right away. If your child has any type of reaction to a food, don't offer that food until you talk with your child's doctor.

Tips for Introducing Solids

With the hectic pace of family life, most parents opt for commercially prepared baby foods at first. They come in small, convenient containers, and manufacturers must meet strict safety and nutrition guidelines. It's a good idea to avoid brands with added fillers and sugars.

If you do plan to prepare your own baby foods at home, pureeing them with a food processor or blender, here are some things to keep in mind:

- Protect your baby and the rest of your family from food-borne illness by following the rules for food safety (including frequent hand washing).
- Try to preserve the nutrients in your baby's food by using cooking methods that retain the most vitamins and minerals. Try steaming or baking fruits and vegetables instead of boiling, which washes away the nutrients.
- Freeze portions that you aren't going to use right away rather than canning them.
- Avoid home-prepared beets, collard greens, spinach, and turnips. They can contain high levels of nitrates, which can cause anemia in infants. Serve jarred varieties of those vegetables.

Whether you buy the baby food or make it yourself, remember that texture and consistency are important. At first, babies should have finely pureed single foods. (Just applesauce, for example, not apples and pears mixed together.) After you've successfully tried individual foods, it's OK to offer a pureed mix of two foods. When your child is about 9 months old, coarser, chunkier textures are going to be tolerated as he or she begins transitioning to a diet that includes more table foods.

If you are using commercially prepared baby food in jars, spoon some of the food into a bowl to feed your baby. Do not feed your baby directly from the jar, because bacteria from the baby's mouth can contaminate the remaining food. It's also smart to throw away opened jars of baby food within a day or two.

Juice can be given after 6 months of age, which is also a good age to introduce your baby to a cup. Buy one with large handles and a lid (a "sippy cup"), and teach your baby how to maneuver and drink from it. You might need to try a few different cups to find one that works for your child. Use water at first to avoid messy clean-ups. Serve only 100% fruit juice, not juice drinks or powdered drink mixes. Do not give juice in a bottle and remember to limit the amount of juice your baby drinks to less than 4 total ounces (120 ml) a day. Too much juice adds extra calories without the nutrition of breast milk or formula. Drinking too much juice can contribute to overweight and can cause diarrhea.

Infants usually like fruits and sweeter vegetables, such as carrots and sweet potatoes, but don't neglect other vegetables. Your goal over the next few months is to introduce a wide variety of foods. If your baby doesn't seem to like a particular food, reintroduce it at subsequent meals. It may take quite a few tries before your child warms up to certain foods.

Reviewed by: Mary L. Gavin, MD
Date reviewed: January 2006
Originally reviewed by: Steven Dowshen, MD

Note: All information is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult your doctor.

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Establishing Good Sleep Habits

It is important to make sure that your child gets enough sleep and sleeps well. The value of sleep can be measured by your child's smiling face, happy nature and natural energy. A tired child may have development or behavior problems. A child's sleep problems can also cause unnecessary stress for you and the other members of your family.

Many parents are unsure of how much their child should sleep. Experts recommend that your child get the following amount of sleep at each stage of growth:

- Infants (3 to 11 months): 14 to 15 hours
- Toddlers: 12 to 14 hours
- Preschoolers: 11 to 13 hours
- School-age children: 10 to 11 hours

According to reports from parents, many American children are not getting enough sleep. Some children sleep different lengths of time, either shorter or longer. But most children do have the ability to sleep through the night. Children who do not sleep well may have a sleep problem.

These are some signs that your child has a problem with sleep:

- You spend too much time "helping" your child fall asleep.
- Your child wakes up repeatedly during the night.
- Your child snores very loudly or struggles to breathe during sleep.
- Your child's behavior, mood or school performance changes.
- Your child who used to stay dry at night begins to wet the bed.
- You lose sleep as a result of your child's bedtime and sleeping patterns.

Two Common Sleep Problems in Young Children

Many children have behavioral insomnia of childhood. This sleep disorder involves one or both of the two following problems:

1. Sleep-onset association

All of us wake up briefly a number of times during the night. This occurs most often during the stage of sleep when we have most of our dreams. This sleep stage is known as rapid eye movement (REM) sleep. Usually, we are unaware of these awakenings and return to sleep quickly.

Young children may cry when they wake up. Parents naturally may feel that they need to "help" their child return to sleep. Parents do this by feeding, rocking, holding or lying down with their child. As a result, many young children become unable to fall asleep on their own.

They depend on their parents' help instead of learning to comfort themselves. The child learns to connect or "associate" going to sleep with a person or activity. If this describes your child, then he or she may have a problem with sleep-onset association.

A parent may recognize this problem by saying something like this:

"I'm exhausted. I have to rock my child to sleep every night and for every nap. If she wakes up during the night, she won't fall asleep until I rock her again."

This parent's child appears to be connecting the action of falling asleep with being rocked. She is unable to fall asleep when that action is missing.

2. Limit-setting problems
Limit-setting problems usually begin after the age of two. It occurs when your child refuses to go to bed, stalls, or makes it hard for you to leave the bedside. Limit-setting problems can occur at bedtime, nap time, or when your child wakes up during the night.

Parents need to assert that they are the ones who decide when it is time for bed. They should enforce this time even if the child disagrees or seems active and alert. Children can get very creative when they want to stay up later.

They may ask for one more hug, a tissue, a drink of water, another story, to have the light turned off or on, or to "tell you something important." It can be hard to know what is real and what is simply a delay tactic.

You need to be firm and consistent when you respond to the delays. Giving in to them will only encourage the behavior. Parents need to give their children well-defined limits.

These are some tips to help your child sleep better:

- Follow a consistent bedtime routine. Set aside 10 to 30 minutes to get your child ready to go to sleep each night.
- Establish a relaxing setting at bedtime.
- Interact with your child at bedtime. Don't let the TV, computer or video games take your place.
- Keep your children from TV programs, movies, and video games that are not right for their age.
- Do not let your child fall asleep while being held, rocked, fed a bottle, or while nursing.
- At bedtime, do not allow your child to have foods or drinks that contain caffeine. This includes chocolate and sodas. Try not to give him or her any medicine that has a stimulant at bedtime. This includes cough medicines and decongestants.

A child who gets enough sleep and sleeps well is more likely to be cheerful during the day. The better the child sleeps, the happier the entire family will be. Most sleep problems in children are not a result of bad parenting. These problems also do not mean that there is something seriously wrong with your child.

If your child has an ongoing sleep problem, then you should talk to your child's doctor or to a sleep specialist.

By Carin Lamm, MD
AASM Education Committee
Updated February 3, 2006

ACAAI American College of Allergy, Asthma & Immunology

About Food Allergies

While an estimated 40 to 50 million Americans have allergies, only 1 percent to 2 percent of all adults are allergic to foods or food additives. Eight percent of children under age 6 have adverse reactions to ingested foods; only 2 percent to 5 percent have confirmed food allergies. The following information addresses commonly asked questions regarding food allergy.

What Are Symptoms of Food Allergy?

Allergic reactions to foods typically begin within minutes to a few hours after eating the offending food. The frequency and severity of symptoms vary widely from one person to another. Mildly allergic persons may only suffer a runny nose with sneezing, while highly allergic persons may experience severe and life-threatening reactions, such as asthma or swelling of the tongue, lips or throat.

The most common symptoms of food allergy involve the skin and intestines. Skin rashes include hives and eczema. Intestinal symptoms typically include vomiting, nausea, stomach cramps, indigestion and diarrhea. Other symptoms can be asthma, with cough or wheezing; rhinitis, often including itchy, stuffy, runny nose and sneezing; and rarely, anaphylaxis, a severe allergic reaction that may be life threatening.

Because these symptoms can be caused by a number of different diseases other than food allergy, your allergist-immunologist may want to examine you to rule them out as the source of your problem.

What Causes My Symptoms?

A food allergy is the result of your body's immune system overreacting to food proteins called allergens. Normally, your immune system and defense mechanisms keep you healthy by fighting off infections and inactivating proteins such as food allergens, which could potentially cause allergic reactions. Therefore, the majority of people develop a tolerance to a wide variety of different foods in their diet.

In the individual with food allergy, the immune system produces increased amounts of immunoglobulin E antibody, or IgE. When these antibodies battle with food allergens, histamine and other chemicals are released as part of the body's immune reaction to these substances. These chemicals can cause blood vessels to widen, smooth muscles to contract, and affected skin areas to become red, itchy and swollen. These IgE antibodies can be found in different body tissues - skin, intestines and lungs - where specific allergy symptoms, such as hives, vomiting, diarrhea and wheezing are observed.

Not all adverse reactions to foods are due to allergy. Some reactions to cow's milk, for example, are related to a deficiency of an enzyme (lactase) that normally breaks down a sugar in milk (lactose). When individuals with lactase deficiency drink cow's milk or eat other dairy products, they may experience intestinal symptoms, including stomach cramping, gas and diarrhea. This is sometimes misinterpreted as a food allergy.

Why Me? Why Have I Developed Food Allergy?

Heredity seems to be the prime reason some people have allergies and others don't. If both your parents have allergies, you have approximately a 75 percent chance of being allergic. If one parent is allergic, or you have relatives on one side with allergies, you have a 30 percent to 40 percent chance of developing some form of allergy. If neither parent has apparent allergy, the chance is 10 percent to 15 percent.

Although food allergy occurs most often in infants and children, it can appear at any age and can be caused by foods that had been previously eaten without any problems. Finally, excessive exposure to a particular food may affect the overall rate of allergy to that food, as testified to by the high prevalence of fish allergy among Scandinavians and of rice allergy among the Japanese.

Which Foods Are Most Likely To Cause Allergy?

Eggs, cow’s milk, peanuts, soy, wheat, tree nuts, fish and shellfish are the most common foods causing allergic reactions, but almost any food has the potential to trigger an allergy. Foods most likely to cause anaphylaxis are peanuts, tree nuts and shellfish.

Keep in mind that, if you are allergic to a particular food, you might be allergic to related foods. For example, a person allergic to walnuts may also be allergic to pecans and persons allergic to shrimp may not tolerate crab and lobster. Likewise, a person allergic to peanuts may not tolerate one or two other members of the legume family, such as soy, peas or certain beans. Clinical research of individuals with food allergy, however, has demonstrated that the overwhelming majority of patients with food allergy are only allergic to one or two different foods. Complete restriction of all foods in one botanical family based on an allergy to one of its members is rarely necessary. Discuss these issues with your allergist.

How Do Allergists Determine Which Foods Make Me Sick?

Some people know exactly what food causes their allergic symptoms. They eat peanuts or a peanut-containing product and immediately break out with hives. Other individuals need their allergist's help in determining the "culprit," especially when the specific food cannot be identified or when the symptoms show up many hours after ingesting an offending food.

Your allergist-immunologist will typically begin by taking a comprehensive medical history. Specifically, you'll be asked about the symptoms you experience following the food ingestion, how long after the food ingestion they occurred, how much of the offending food was ingested, how often the reaction has occurred and what type of medical treatment, if any, was required. Moreover, you will be asked about your overall diet, your family's medical history and your home environment.

These questions are necessary because your allergist wants to eliminate the possibility that another problem or allergic condition may be causing or adding to your symptoms. For example, a patient's allergy to inhalant pollen such as ragweed may be related to allergic symptoms in the mouth and throat following the ingestion of certain melons, such as watermelon, cantaloupe or honeydew.

What Is Allergy Testing?

You may be asked to undergo some allergy testing. Your allergist-immunologist may employ skin testing, in which a diluted amount of the appropriate food extract is placed on the skin and the skin is then lightly punctured. This procedure is safe and generally not painful. Within 15 to 20

minutes, a positive reaction typically appears as a raised bump surrounded by redness, similar to a mosquito bite, and indicates the presence of allergic, or IgE, antibodies to the particular food. In some cases, an allergy (IgE) blood test can be used to provide similar information to that obtained by the skin test. The IgE blood test is generally more expensive than skin testing and the results are usually not available for one to two weeks.

If properly performed and interpreted, skin tests or IgE blood tests to foods are reliable and good screening tests for food allergy. However, it's entirely possible to test "allergic" to a food (by skin testing or IgE blood testing) and yet have no symptoms when that food is eaten. Thus, confirmation requires appropriately designed oral challenge testing with each suspected food.

How Do Special Diets Help Pinpoint the Problem?

With the information gained from your history, physical exam and testing, your allergist may further narrow down the suspected foods by placing you on a special diet. If your symptoms occur only occasionally, the culprit is likely a food that is eaten infrequently. Your allergist-immunologist may ask you to keep a daily food diary listing all food and medication ingested, along with your symptoms for the day. By reviewing and comparing "good days" with "bad days," you and your allergist may be able to determine which food is causing your reaction.

If only one or two foods seem to be causing allergic reactions, it may be necessary for the patient to go on a food elimination diet. The suspect food must be completely eliminated in any form for a short time - one to two weeks. If the allergic symptoms subside during abstinence and flare up when the food is ingested again, the likelihood of identifying the problem food can be increased.

If several foods appear to cause problems and/or the diagnosis of food allergy is equivocal, your allergist may want to confirm the role of each suspected food by oral food challenge testing. Not all positive skin tests and/or IgE blood tests equal a definite food allergy. With this in mind, food challenges are the best way to determine whether or not a food allergy really exists.

During an oral food challenge test the patient will eat or drink small portions of a suspected food in gradually increasing portions over a given period of time, usually under a physician's supervision, to see if an allergic reaction occurs.

Once My Allergy Is Identified, How Is It Treated?

Once the diagnosis of food allergy is confirmed, the most effective treatment is not eating the offending food in any form. Therefore, the patient must be vigilant in checking ingredient labels of food products and learning other names of identification of the responsible food or food additive to make sure it is not present. When you eat in a restaurant, you must be particularly vigilant and you should take emergency medicines with you if you have a history of severe reactions. Waiters (and sometimes the kitchen chef) are not always aware of the exact ingredients of each item on the restaurant's menu.

All patients with food allergies must make some changes in the foods they eat. Special food-allergy cookbooks, patient support groups and registered dietitians can provide valuable assistance regarding your diet. Your allergist can direct you to these resources.

What if I Accidentally Eat a Food I'm Allergic to?

Individuals with food allergy should have a clearly defined plan of action for handling situations in which they accidentally ingest a food allergen. Have a list of symptoms and your doctor's

instructions for treatment posted in a prominent place in your kitchen. Oral antihistamines can be very useful in treating many of the early symptoms of a mild allergic reaction to a food.

Persons with histories of severe reactions need to be instructed in when and how to give themselves a shot of epinephrine (adrenaline) in the event of a severe allergic reaction. This medication is available in easy-to-use injectable devices and should be carried by persons with histories of severe allergic reactions. You should be taken to the hospital or call 911 and arrange for follow-up medical care for a severe reaction. Bracelets or necklaces may be worn to quickly alert medical personnel or other caretakers about food allergies.

Will I Ever Be Able To Eat These Foods Again?

In some cases, particularly in children, strict adherence to an elimination diet appears to promote the process of outgrowing a food allergy. For example, the vast majority of patients with documented allergic reactions to eggs, cow's milk and soy eventually become tolerant to these foods. Allergies to peanuts, tree nuts, fish and shellfish, however, typically last a lifetime and are not outgrown. Overall, approximately one-third of children and adults will eventually be free of their allergic reactions to foods after rigorously following appropriate diets free of the offending food allergens.

After you have eliminated foods responsible for allergic reactions for a period of at least six months, your allergist may recommend that you undergo an oral food challenge under observation to reassess your symptoms. If you have no reaction and can ingest a normally prepared portion of the food, you will be able to safely reintroduce this food into your diet. If any symptoms of an allergic reaction do occur, the dietary restriction will need to be continued.

If you have had a severe immediate-type allergic reaction to a certain food, such as an anaphylactic reaction to peanuts, your allergist-immunologist may recommend that you never again eat this food and rarely would a food challenge be needed to confirm the history. Remember, in some very allergic persons a very small quantity of an allergenic food can produce a life-threatening reaction.

Patients who use caution and carefully follow an allergist's advice can bring food allergy under control. Please contact your allergist-immunologist with further questions and concerns about food allergy.

Updated March 2000

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