

**Vickerstaff Health Services Inc.**

**FACTSHEET**

**FEEDING THE ALLERGIC INFANT:  
INTRODUCING SOLID FOODS**



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## **FEEDING THE ALLERGIC INFANT: INTRODUCING SOLID FOODS**

### **General Information**

When adding solid food to the allergic infant's diet, there are two goals:

1. To increase the chances of the development of *tolerance*.
2. To avoid *sensitization* and the development of allergic reactions.

**Allergic sensitization:** Priming of the immune system to respond to an allergen as if it were a threat to the body. The response usually results in *symptoms* of allergy (atopy)

**Tolerance:** Recognition by the immune system that the food components are foreign *but safe*. The immune system does not respond, there is no adverse effect, and no signs of allergy.

### **Immune Mechanism Leading To Tolerance**

We need to ensure that as foods are introduced to the developing baby its immune system develops tolerance to them. The precise immunological mechanisms that will lead to tolerance or sensitization are not fully known. However, we do know that the immunological process that most effectively results in tolerance is “low dose continuous exposure”. We take advantage of this process by exposing the potentially allergic baby to small quantities of foods during the early stages of the infant’s development. By this means the immune system learns that food is “foreign but safe”.

Starting at four to six months of age, each new food is introduced separately, beginning with a very small quantity. As the baby tolerates the food (that is, does not show any symptoms of allergy) we gradually increase the quantity until baby tolerates a full serving. We then proceed to another food and introduce it in the same manner.

When a baby has tolerated a food it can be included as part of the baby’s regular diet. No mixed foods should be given to the baby until all of the ingredients in the mix have been introduced and tolerated.

The following guidelines will assist you through this process.

## Guidelines for the Introduction of Solid Foods

- ◆ Each food should be introduced first in its pure form. For example, introduce cooked and pureed rice before feeding your baby a rice cereal such as rice pablum
- ◆ Cook the chosen food in plain water. Sieve or puree.
- ◆ Some Heinz Beginner Foods (carrots, green beans, squash, sweet potatoes, peaches, pears, plums) and Gerber First Foods (carrots, green and yellow beans, squash, sweet potatoes, peaches, pears) are suitable.
- ◆ Gerber and Heinz Infant chicken, beef, veal are suitable, but the lamb has citrus added.
- ◆ Pure grains should be cooked in water and pureed for initial introduction.
- ◆ Some infant cereals (Pablum) contain other ingredients including milk, malt and soy, which might cause an adverse reaction. Introduce the pure grain (for example, pureed boiled rice, oatmeal, etc) before giving the grain in the form of manufactured baby cereal or pablum.
- ◆ Once tolerance to the single grain is established, proceed to the complete cereal product (pablum). If the baby shows signs of allergy to the baby cereal, each additional ingredient in the product can be tested separately if you wish. Otherwise, continue to feed the pure grain, introduce other foods, and wait a few weeks before trying the cereal again.
- ◆ When a baby is exclusively breast-fed, he or she needs a source of iron from its solid food by the age of six months. It is a good idea to introduce meats early. Meat provides a source of heme iron which is more readily absorbed than the iron in plant-based foods such as iron-enriched baby cereals. Contrary to popular belief, a baby can usually digest and tolerate meats at four to six months of age without any problems.
- ◆ There is no particular order in which foods should be introduced. Recent research has shown us that there is no benefit in delaying the introduction of any food beyond six months of age. Even foods that are considered to be highly allergenic may be introduced at any age as long as caution is taken in monitoring the baby's response during its introduction (see below).
- ◆ Research is indicating that there may be some "windows of opportunity" during the introduction of certain foods in which a baby is more likely to develop tolerance. For example, the most opportune time to introduce wheat both for the baby at risk for celiac disease (gluten-sensitive enteropathy) or wheat allergy, as indicated by a family history of the condition, is between 4 and 7 months of age. Six months would be ideal. The introduction of fish and peanuts is most effective before 1 year of age. At the present time we do not have sufficient data to suggest the ideal age of introduction for other foods.

## METHOD OF INTRODUCING PURE FOODS TO ALLERGIC INFANTS

The following method introduces a new food every four days. Some practitioners advocate even faster introduction, such as every two days. However, experience has demonstrated that the four day method is optimum. Indeed why the rush? Introducing a new food every four days allows 3 or 4 new foods every two weeks. If he or she experiences no signs of allergy, in one month the baby will be eating as many as 8 foods, which is quite sufficient for a well-balanced diet at this age.

### Pre-feeding Precautions

- Apply a small amount of a new food to the baby's cheek and wait for 20 minutes to see if a reddened area appears at the site of application. If redness does appear, this "early warning sign" indicates a probable allergic response to the food. Do not give this food to the baby. Wait a few months before trying this food again.
- If a reddened area does not appear, apply a little of the food to the outer border of baby's lower lip. If there is no reaction such as reddening, irritation (baby rubs the area), or appearance of a blister, at the site of application after about half an hour, a small amount of the food should be applied to the baby's tongue. Again wait about 20 minutes.
- If there is no sign of any adverse reactions, feed the food to baby in the following manner:

### Day 1.

**Morning** (breakfast): Feed ½ teaspoon of the new food.

Monitor the child's reaction. Wait four hours.

If no adverse reaction is apparent, proceed:

**Afternoon** (lunch): Feed 1 teaspoon of the same food.

Monitor the child's reaction. Wait four hours.

If no adverse reaction is apparent, proceed:

**Evening** (supper): Feed 2 teaspoons of the same food.

Monitor the child's reaction. Be alert for any changes in sleeping patterns (restlessness, crying, difficulty settling down to sleep), which might indicate a reaction to the new food.

### Day 2.

**Do not feed any of the new food.** Monitor the child's reactions during the day.

Look for delayed reactions to the food eaten yesterday.

### Day 3.

If no adverse reactions have appeared, test the same food as on Day 1 (eliminating the cheek and lip test), but use larger quantities at each feeding:

**Morning** (breakfast): Feed 2 Tablespoons of the food.

Monitor baby's reactions as on Day 1.

If no adverse reaction is apparent:

**Afternoon** (lunch): Feed ¼ cup of the same food.

Monitor baby's reactions.

If no adverse reaction is apparent:

**Evening** (supper): Feed as much of the food as baby wants.

Monitor baby's reactions.

### Day 4.

Monitor baby's reactions as described for Day 2.

If no adverse reactions occur, the food may be considered "safe" and can be included in the infant's diet.

### If Symptoms of Allergy Appear

If the child has an **adverse reaction** to the food at any time, discontinue the food immediately and do not test the same food again for about 2 months. Wait *at least 48 hours after the symptoms have subsided* before testing a new food.

If the food is **tolerated**, include it in the child's diet. Some authorities believe that by including the food in the child's diet at least once every 4 days, tolerance to the food will be maintained. Including large doses frequently every day, on the other hand, is thought to risk sensitizing the baby to develop an allergic reaction to the food. Moderation is the best strategy.

### Adverse reactions to look for:

- ◆ If baby obviously rejects the food by grimacing or spitting it out forcibly, she/he may be responding to an unpleasant sensation due to an allergic reaction inside the mouth. Discontinue the food.
- ◆ If baby takes the food, but a visible reaction appears around the mouth (reddening, red patches, hives), or hives (itchy, flat, red patches) appear anywhere on the body, discontinue the food.
- ◆ If baby shows obvious signs of abdominal discomfort (increased crying, drawing up of the legs, abdominal bloating), itching, or irritability, it is a clear sign of an adverse reaction. Discontinue the food.

- ◆ Abdominal reactions may be followed by spitting up, vomiting, and diarrhea. These are all strong adverse reactions and the food must be discontinued.
- ◆ Delayed reactions (occurring 6-8 hours or longer after eating the food) often include respiratory symptoms (stuffy nose, frequent sneezing, persistent coughing, wheezing), or skin reactions (exacerbation of eczema, hives).

**CAREFUL, WELL SPACED, WELL OBSERVED FOOD INTRODUCTION IS ESSENTIAL**