# Food Reactions and Your Infant: A Parental Guide\*

#### Risk factors for food allergy

• If either one parent or one sibling has a history of allergic disease—and this includes any type of allergy including hay fever, asthma, or food allergies—infants are at greater risk for becoming allergic themselves, often first to cow's milk protein in formula, or less often, cow's milk protein from the mother's diet that is excreted in breast milk.

#### How infants may react

- There are two types of allergic reactions: one in which symptoms appear immediately after the infant has been fed and the second reaction that occurs more slowly over a longer period of time.
- Symptoms of the first type of reaction include eczema (often on the infant's face); hives; wheezing and signs of respiratory distress; swelling of the lips and eyes and abdominal pain and vomiting. Infants only need to be given small amounts of milk to develop these immediate symptoms.
- Symptoms of the second type of reaction usually involve the GI tract and include reflux (spitting up), vomiting, abdominal pain and diarrhea. Blood in the stools is a key symptom of a more delayed allergic reaction to cow's milk protein. In severe forms of this type of reaction, infants fail to thrive.

## Prevention of allergies in infants

- Only infants who have a family history of allergies are at a higher risk for developing allergies themselves, including food allergies. Infants without a family history can develop allergies but are at a lower risk.
- There is little evidence that mothers can prevent allergies in at-risk infants by eliminating cow's milk and eggs from their own diet during pregnancy or lactation.
- The best protection against allergies in an allergy-prone infant is to breastfeed exclusively for four to six months.
- If a mother cannot breastfeed, and the infant is at high risk to develop allergies, an extensively hydrolyzed infant formula such as Alimentum or Nutramigen may reduce the risk of the infant becoming allergic to food or other allergens.
- Partially hydrolyzed formulas may have an effect, in the prevention of atopic disease, although it seems to be less than that of an extensively hydrolyzed formula at present.
- Solid foods should not be introduced into the infant's diet before four to six months of age; after this period, the timing of the introduction of foods such as dairy, eggs and nuts does not seem to affect the development of allergies.
- Even fruits and vegetables which are not likely to cause allergies should be introduced one at a time to make sure infants can tolerate each individual ingredient.



• When introduced individually, fruits and vegetables should be introduced in their cooked form, which is less likely to provoke allergies when cooked.

#### Treatment of cow's milk allergy in infants who develop immediate symptoms

- Infants who develop immediate symptoms on being fed cow's milk may be switched to a soyprotein formula such as Isomil, as only about 15% of infants with allergy to cow's milk are also allergic to soy protein.
- Infants who develop immediate symptoms to both cow's milk and soy protein should be switched to an extensively hydrolyzed formula such as Alimentum or Nutramigen.
- If Alimentum or Nutramigen are not tolerated, infants may be switched to an amino acid-based formula.
- Infants with immediate reactions to cow's milk usually do not outgrow the allergy until they are four to six years of age. For those with delayed reactions, most babies outgrow symptoms by the age of one year and almost all by three years of age.
- Parents should consult with their pediatrician or allergist before introducing cow's milk to previously allergic infants, as they should be tested to see if they are still allergic to it.

# Treatment of cow's milk allergy in infants whose symptoms to cow's milk are delayed:

- Infants who have delayed symptoms to cow's milk protein that are largely confined to the GI tract should not be switched to a soy protein-based formula as they are likely to react to the soy protein as well.
- For infants with this type of allergic reaction, parents should use an extensively hydrolyzed formula such as Alimentum or Nutramigen amino acid-based formula if the extensively hydrolyzed formula is not tolerated.
- Most infants with this type of allergy outgrow it by the age of one and almost all of them by the time they are three years of age, at which point they should tolerate cow's milk.

## Symptoms of lactose intolerance

- Symptoms of lactose intolerance include diarrhea, gas and bloating.
- Lactose intolerance is not an allergy but rather an inability to digest milk sugar, leaving the sugar to ferment inside the GI tract, which leads to symptoms.
- Lactose intolerance is most likely in those of Asian descent, First Nations people and Blacks and least likely to occur in people of European descent.

## Treatment of lactose intolerance

• Infants who are lactose-intolerant should receive a lactose-free formula to improve tolerability.

\*This parental guide can be accessed at www.mednet.ca/2008/ho08-002pge

