**Education**

**Tree Nut Allergy**

**What is a tree nut allergy?**

Tree nuts include all nuts that grow on trees (such as walnuts and cashews). A tree nut allergy is a reaction by your child's immune system to tree nuts. Our immune systems normally respond to invaders that attack the body such as bacteria or viruses. With a food allergy, the body's immune system mistakenly attacks harmless things, such as the substances found in tree nuts. Tree nuts are among the 8 foods responsible for most food allergies in children. The other foods include milk, soy, eggs, peanuts, wheat, fish, and shellfish. It is common for children to grow out of food allergies such as to egg, milk, or soy, but rarely do people grow out of a peanut or tree nut allergy.

Most health care providers warn not to feed children highly allergic foods, such as shellfish, and food containing peanuts and tree nuts, until age 2. If you have a family history of allergies, some recommend waiting until 3 years.

**What are the symptoms of an allergic reaction to tree nuts?**

If you suspect your child is having an allergic reaction to nuts or any other food, it is important to get a diagnosis from your health care provider or allergist. You should look for the following symptoms, which can develop over several hours or be immediate and severe:

- skin reactions such as itching, hives, eczema or swelling
- diarrhea, nausea, vomiting, stomach pain or itching around the mouth
- running nose, wheezing or trouble breathing
- rapid heartbeat.

With a tree nut or peanut allergy, it is more common to have an anaphylactic reaction. This is a serious reaction that is sudden, severe, and can involve the whole body. The reaction can cause swelling of the mouth and throat, dangerously lower blood pressure, and closure of the airways leading to trouble breathing. This type of reaction calls for immediate medical attention. It is treated with epinephrine (a medicine that is given by a shot). Typically parents or caregivers of children that have severe reactions to allergies carry their own injection kits in case of emergency.

**Is my child also allergic to peanuts?**

Peanuts grow underground and are not considered to be a "true nut." Peanuts are in the legume family (peas and lentils are also legumes). Nuts such as walnuts, almonds, pecans and cashews grow on trees. About half of the people with a peanut allergy are also allergic to tree nuts. You'll need to check with your health care provider whether it is safe for your child to eat peanuts. Dietary restrictions for those with peanut allergy are more difficult to follow because so many processed foods and ethnic foods contain peanuts and peanut products.

**How will this affect my child's diet?**

You will need to change the way you shop and be extremely careful when dining away from home. The only treatment for someone with a tree nut allergy is to avoid all sources of tree nuts.

The first step is to be informed about all the ingredients that indicate the presence of a tree nut. Reading labels and having an awareness of ethnic and convenience foods that may not have labels is key. If you are unsure, call the food manufacturer at the 800 number provided on the label. When in doubt, don't use the product.

**Nuts and foods that contain nuts**
• Mixed nuts
• Artificial nuts (can be peanuts that have been re-flavored with another nut, such as walnut or almond)
• Almonds, cashews, filbert/hazelnuts, chestnuts, pecans (Mashuga nuts), walnuts, pistachio, Brazil, hickory, macadamia nuts
• Pine nuts (also called Indian, pinon, pignoli, pignon, pignolia nuts)
• Mandelonas (peanuts soaked in almond flavoring)
• Marzipan/almond paste
• Nan-gai nuts
• Nut Butters
• Natural nut extract
• Nut pieces
• Nut meal, nut oil, or nut paste
• Pesto (contains pine nuts, but often other nuts are substituted)
• Gianduja (nut mixture in some chocolate)
• Caponata (Italian dish made with pignolia nuts)
• Pralines and nougat.

Nutmeg is safe (made from the seed of a tropical plant) and coconut is usually safe, but it is wise to consult your health care provider first. Note that non-food items such as Hacky Sacks (kick sacks) and beanbags are sometimes filled with crushed nutshells. Inquire about the filling before purchasing.

Foods that often contain nuts

• Sauces (such as barbecue)
• Baking mixes
• Cereals
• Prepared salads and salad dressings
• Hydrolyzed vegetable protein (usually soy based, but may come from any non-animal source)
• Emulsified ingredients (may have been thickened with nuts)
• Natural and artificial flavorings may contain tree nuts and are used in many foods, such as crackers, cereals, sauces, and ice cream.

Hidden sources of nuts

Cross contamination is one of the biggest problems when trying to avoid nuts. It is common for nuts to come in contact with other foods during processing and in preparation, even if the nut is not included in the recipe.

The following foods are sometimes contaminated with nuts:

• Chocolate candies and ice cream
• Pastries, cookies, and cakes where ingredients aren't listed.

When dining out, always tell the waitperson about the allergy and order simple dishes without sauces unless you're sure there are no nuts present. Cross contamination can be a problem in restaurants.

• Food preparation equipment (such as food processors, cutting boards, pans and knives) may be used for nuts as well as for other recipes.
• Italian, Chinese and Vegetarian dishes often include nuts.
• Pure refined nut oil, if properly processed, should not contain nut protein and therefore should not cause reactions in allergic children. However, nut oils are also available unrefined. Unrefined oils may be called cold-pressed, unprocessed, expelled or extruded oils. These unrefined oils may have nut proteins and could cause allergic reactions. If in doubt, call the manufacturer.

How can I provide my child with an adequate diet that tastes good?

Your child can still have a nutritionally complete diet. The primary nutrients found in nuts are protein, healthy fats, fiber, vitamin E, and magnesium. There are many other foods that contain the same nutrients as tree nuts, so the challenge is not providing adequate nutrition, but to keep your child from unknowingly eating foods that contain
them. You can prepare desserts from scratch or mixes you know don't contain nuts. Some ice cream and chocolate companies make products without nuts and that have been processed separately from those prepared with nuts to eliminate the risk of "cross-contamination." This would be stated clearly on the label.

**How can I keep my child safe at school?**

- Prepare your child's lunch at home.
- Educate your child to the dangers of sharing foods (even young children can grasp this concept, especially once they have experienced feeling sick after eating a particular food).
- Talk with teachers and the school administrator regarding your child's needs. Request that teachers keep an eye out and explain the situation to other children when appropriate.
- Have the teacher call you if there is a special event or party planned so that you can bring a few modified treats that your child enjoys and can share with other kids.
- Make a card that lists foods and ingredients that should be avoided and give one to the teacher. The card can also be helpful to older children in making decisions when out with friends.
- Children who have had previous life-threatening anaphylactic reactions should have access at all times (including school) to an injectable epinephrine and an antihistamine (such as Benadryl).

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