

- ▶ **Anisakis:** Anisakis is a parasitic nematode whose larvae occupy several types of fish and cephalopods such as cod, sardine, tuna, mackerel and squid. Raw or undercooked fish and cephalopods can be infected by Anisakis. It is widespread in all seas, but the reported infection rate varies. IgE antibodies to Anisakis have been measured in patients with bronchial asthma, atopic dermatitis, allergies and in children with inhalant and/or food allergy.
- ▶ **Carob Bean Gum (Locust Bean Gum):** A vegetable gum extracted from the seeds of the carob tree. Carob bean gum is used as a thickening agent in many foods and products, including: jams, preserves, juices, liqueurs, cosmetics, as well as, a flavoring in cigarettes, baked goods and candy. Symptoms of an allergen may include rhinitis, asthma-like symptoms, urticaria, rashes, and various digestive issues.
- ▶ **Cochineal Extract (Carmine Red):** Produced from the cochineal insect. Used as a red/pink/purple coloring in foods, beverages, candy and cosmetics. Allergic reactions have been reported from hives to anaphylactic shock. Classified as E120 or natural Red #4, Cochineal Extract or "Carmine" must be listed on food labels.
- ▶ **Cottonseed:** Both the oil and the meal are used widely in many processed foods such as breads, candy, shortening, margarine, and salad dressing. Cottonseed flour can be used as a coloring agent in food products. Frequently, cottonseed oil is mixed with olive oil to make a less expensive oil. Symptoms of an allergy vary from asthma to anaphylaxis.
- ▶ **Formaldehyde:** A highly reactive aldehyde used as a precursor in many industrial processes, including the production of urea-formaldehyde foam and adhesives used in the manufacturing of plywood, furniture and carpeting. It is used in the production of textiles, cosmetics and inks as well, and serves as a disinfectant and sterilizer in some industries. Formaldehyde is not used as a food additive but does occur naturally in low levels in a variety of foods. Dried mushrooms and seafood can contain elevated levels of formaldehyde. Formaldehyde is both acutely toxic and a common allergen. Allergic reactions to formaldehyde may present as asthma-like symptoms. Formaldehyde can directly react with proteins to form haptens (small molecules that can elicit an immune response when attached to a protein).
- ▶ **Guar Gum:** Produced from the endosperm of the guar bean. It is used to thicken foods and to make foods such as ice cream and yogurt creamier. Many gluten-free baked goods contain guar gum. Guar gum is also used as a thickener in toothpastes, cosmetics, shampoos and lotions. Rhinitis and asthma-like symptoms are common with individuals with an allergy to guar gum.
- ▶ **Gum Arabic:** A gummy exudate derived from Acacia Senegal trees. Often used as a thickener, emulsifier, stabilizer or as a glazing and flavoring agent. Other times, gum arabic is used as a lickable adhesive to seal envelopes and rolling papers. In addition, it is frequently used in cosmetics, medicines, toiletries and inks. An allergy to this gum may induce symptoms such as asthma, rhinitis, eczema and contact dermatitis.
- ▶ **Ispaghula (Psyllium):** A food and pharmaceutical ingredient, it has been used as a bulk laxative, functioning through its high water binding capacity. Psyllium containing laxatives are used by over 4 million Americans daily. It is added to breakfast cereal as a cholesterol lowering agent.
- ▶ **Latex:** Latex is the major protein in natural rubber. It is commonly used in latex gloves, catheters, condoms, balloons and sports equipment. Pathways for latex exposure can be due to inhalation of powder from latex gloves or direct skin contact. Many foods cross react with latex, in particular banana, kiwi, avocado and papaya.
- ▶ **Tragacanth Gum:** Made from the sap of the astragalus shrub found in the Middle East. Used as a thickener, stabilizer, and emulsifier in candy, salad dressings, sauces, fruit jelly, ornamental icings, fruit sherbets, and yogurt. It is an approved additive to food with the reference E413. This gum is used to thicken shaving cream, toothpaste, lotions and cosmetics. Though rare, allergy symptoms may include asthma and contact dermatitis.