



Food Allergy and Chinese Herbs

Written by:

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Allergy is the over-reaction of the body's natural defenses to the exposure to a particular substance. Mild to moderate allergy may cause symptoms such as hives, eczema, redness of the skin, itchy mouth, nasal congestion or a runny nose, sneezing, and others. Severe allergy may cause obstructive swelling of the lips, tongue, and/or throat, trouble swallowing, and shortness of breath or wheezing.

Major categories of food allergies include milk, egg, fish, crustacean shellfish, peanuts, tree nuts, soybeans, and wheat, which together account for over 90% of food allergies according to the FDA. It is estimated by the CDC that food allergies affect 4 to 6% of children and 4% of adults. While these individuals may know their food allergies, they are not likely to know their Chinese herbs allergies. Therefore, the TCM practitioner must inquire the known allergies among their patients, and identify which Chinese herbs and formulas pose risk to induce direct allergy or cross allergy. Such prudent actions will minimize and prevent allergic reactions to Chinese herbs. Listed below are the major categories of allergen, relationship with Chinese herbs and formulas, and suggested substitutes.

MILK

- ☉ Approximately 2 to 3% of children under 3 years of age are allergic to milk and dairy products. Fortunately, 20% of children outgrow it by age 4, and 80% of children outgrow it by age 16.
- ☉ Milk is **not** used in Chinese herbs and formulas.

EGG

- ☉ Approximately 2% of children are allergic to eggs and the proteins in egg whites or yolks. Fortunately, 70% of children with an egg allergy will outgrow this condition by age 16.
- ☉ Egg is **not** used in Chinese herbs and formulas. Note: Though *Ji Zi Huang* (Galli Vitellus), literally egg yolk, is listed in *Chinese materia medica* in the past, it is rarely used today as herbal medicine.

FISH

- ☉ Fish allergy affects adults much more than children. Risk of cross allergy is relatively low with fish, as having an allergy to one type of fish (i.e., bass, flounder, or cod) does not mean there will be cross allergy to other type of fish (i.e., tuna) or shellfish (shrimp, crab and lobster).
- ☉ Fish is **not** used in Chinese herbs and formulas.

CRUSTACEAN SHELLFISH

- ☉ Shellfish is a category that includes both crustacea and mollusk. Approximately 0.5-2.5% of the general population has allergy to shellfish.

☉ Crustacea:

- Crustacea is shellfish with a hard shell and no backbone, such as crab, crayfish, lobster, prawns and shrimp. Crustacea has a high risk of food allergy.
- Crustacea is **not** used in Chinese herbs and formulas.

☉ Mollusk:

- Mollusk is shellfish with a hinged two-part shell, such as clams, mussels, oysters and scallops, and various types of octopus, snails and squid. Mollusk has a low risk of allergy, and there is only a minor risk of cross allergy from crustacean shellfish to mollusk shellfish.

- Chinese herbs/formulas that contain from mollusk shellfish include:

- *Ge Qiao* (Concha Meretricis seu Cyclinae)



- *Hai Piao Xiao* (Endoconcha Sepiae)
- *Mu Li* (Concha Ostreae)
- *Shi Jue Ming* (Concha Haliotidis)
- *Wa Leng Zi* (Concha Arcae)
- *Zhen Zhu* (Margarita)
- *Zhen Zhu Mu* (Concha Margaritiferae)

PEANUTS

- Peanut allergy is linked with anaphylaxis – a serious and potentially life-threatening condition that require immediate treatment. Fortunately, 20% of children who have peanut allergy eventually outgrow it, according to National Institute of Health. Note: A peanut is not a tree nut, but a legume (in the same family as soybeans, peas and lentils).
- Peanut is *not* used in Chinese herbs and formulas.

TREE NUTS

- Tree nuts come in many shapes and sizes. Though delicious, tree nuts may be linked to anaphylaxis. Tree nut allergies often last a lifetime, and the chance to outgrow it is less than 10 percent. Tree nuts with high risk of food allergy include: almond, beech nut, brazil nut, butternut, cashew, chestnut, chinquapin, coconut, hazelnut, ginkgo nut, hickory nut, lichee nut, macadamia nut, pecan, pine nut, pili nut, pistachio, sheanut, and walnut.
- Chinese herbs contain tree nuts with high risk of allergy include:
 - *Bai Guo* (Semen Ginkgo)
 - *He Tao Ren* [*Hu Tao Ren*] (Semen Juglandis)
 - *Song Zi Ren* (Semen Pini)
 - *Li Zhi He* (Semen Litchi)
- Chinese herbs contain tree nuts with low risk of allergy include:
 - *Tao Ren* (Semen Persicae)
 - *Yu Li Ren* (Semen Pruni)
 - *Bai Zi Ren* (Semen Platycladi)
 - *Ku Xing Ren* (Semen Armeniacae Amarum)
 - *Shen Qu* (Massa Fermentata), which contains *Ku Xing Ren* (Semen Armeniacae Amarum)
 - *Jian Shen Qu* (Massa Fermentata Praeparata), which contains *Ku Xing Ren* (Semen Armeniacae Amarum)
 - *Ban Xia Qu* (Rhizoma Pinelliae Massa Fermentata), which contains *Ku Xing Ren* (Semen Armeniacae Amarum)

SOYBEANS

- Soy is a common ingredient in infant formulas and many other processed foods. Allergy to soy is most common in infants and children under 3 years of age. Fortunately, most children outgrow soy allergy by age 10.
- Chinese herbs that contain soybeans include:
 - *Dan Dou Chi* (Semen Sojae Praeparatum)
- Chinese herbs that may be processed with black soybean:
 - *Zhi He Shou Wu* (Radix Polygoni Multiflori Praeparata), if processed with black soybean
- Chinese herbs that may be processed with soya-bean oil include:
 - *E Jiao* (Colla Corii Asini), if soya-bean oil is used to thicken glue
 - *Lu Jiao Jiao* (Colla Cornus Cervi), if soya-bean oil is used to thicken glue
 - *Gui Ban Jiao* (Colla Plastrum Testudinis), if soya-bean oil is used to thicken glue

WHEAT

- Wheat allergies develop when develop when the body's immune system becomes sensitized and overreacts to wheat protein. Allergic reactions affect many parts of the body, including skin (i.e., rash or eczema), nose (i.e., stuffy nose, runny nose), lung (i.e., asthma), and others.
- Chinese herbs that are derived from wheat include:



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- *Xiao Mai* (Fructus Triticum)
- *Fu Xiao Mai* (Fructus Triticum Levis)
- Chinese herbs that contain wheat include:
 - *Shen Qu* (Massa Fermentata), which contains wheat
 - *Jian Shen Qu* (Massa Fermentata Praeparata), which contains wheat
 - *Ban Xia Qu* (Rhizoma Pinelliae Massa Fermentata), which contains wheat
- Chinese herbs that may be made from wheat include:
 - *Yi Tang* (Maltosum), generally made from rice or glutinous rice (other sources could be from barley, wheat, millet or corn)
- Chinese herbs that may be dry-fried with wheat bran:
 - *Cang Zhu* (Rhizoma Atractylodis)
 - *Qing Pi* (Pericarpium Citri Reticulatae Viride)
 - *Zhi Shi* (Fructus Aurantii Immaturus)
 - *Zhi Qiao* (Fructus Aurantii)
 - *E Jiao* (Colla Corii Asini)
 - *Jiang Can* (Bombyx Batryticatus)
 - *Shan Yao* (Rhizoma Dioscoreae)

GLUTEN:

- Gluten is a protein found in wheat, barley and rye. Hypersensitivity to gluten may cause general signs and symptoms (i.e., diarrhea, constipation, abdominal pain or fatigue) and specific illness (i.e., celiac disease in which small intestine lining is damaged).
- Some Chinese herbs are derived from wheat, barley and rye, and may contain gluten.
 - *Xiao Mai* (Fructus Triticum) – wheat
 - *Fu Xiao Mai* (Fructus Triticum Levis) - floating wheat
 - *Mai Ya* (Fructus Hordei Germinatus) - barley sprout
 - *Yi Tang* (Maltosum) - barley sugar
 - *Shen Qu* (Massa Fermentata), which contains wheat
 - *Jian Shen Qu* (Massa Fermentata Praeparata), which contains wheat
 - *Ban Xia Qu* (Rhizoma Pinelliae Massa Fermentata), which contains wheat

SULFITE

- Sulfites are preservatives and antioxidants. They are commonly used in food products to prevent food from turning color and bacteria from spoiling foods. Sulfite is commonly found in foods such as dried fruits (excluding dark raisins and prunes), bottled lemon juice (non-frozen), bottled lime juice (non-frozen), sauerkraut (and its juice), grape juices (white, white sparkling, pink sparkling, red sparkling), pickled cocktail onions, and wine. Sulfite allergy occurs in approximately 1% of population.
- There are certain Chinese herbs that may be treated with sulfite. For patients with sulfite allergy, inquiry should be made to ensure these herbs are free from sulfite, or pass the safety limit [10 ppm according to the FDA].
 - *Bai Guo* (Semen Ginkgo)
 - *Bai He* (Bulbus Lilii)
 - *Ge Gen* (Radix Puerariae Lobatae)
 - *Gou Qi Zi* (Fructus Lycii)
 - *Ren Shen* (Radix et Rhizoma Ginseng)
 - *Shan Yao* (Rhizoma Dioscoreae)
 - *Yu Zhu* (Rhizoma Polygonati Odorati)

LATEX

- Natural rubber latex is derived from the sap of *Hevea brasiliensis*, a rubber tree found in Africa and Southeast Asia. Allergic reactions to products made with latex develop in persons who become allergic (or sensitized) to proteins contained in natural rubber latex. Products that contain natural rubber latex include: disposable gloves,



dental dams, airway and intravenous tubing, syringes, stethoscopes, catheters, dressings and bandages. Latex also is found in many consumer products. These include condoms, handbags, balloons, athletic shoes, tires, tools, underwear leg and waistbands, rubber toys, baby bottles, nipples and pacifiers.

- *Du Zhong* (Cortex Eucommiae) and *Du Zhong Ye* (Folium Eucommiae) are derived from the bark of *Eucommia ulmoides*, commonly known as hardy rubber tree that originated in central China. The bark and leaf of eucommia contain only a small amount of latex, approximately 4% by weight. Though natural rubber latex is a well-known contact allergen, it is unclear whether patients with topical latex allergy would respond adversely to oral ingestion of *Du Zhong* (Cortex Eucommiae) or *Du Zhong Ye* (Folium Eucommiae). Therefore, until more information is available, practitioners should use these two herbs with caution if the patients have known latex allergy.

About the Author

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