Lupin Allergy

Lupin is a protein containing food, like peanut and soybean that may trigger an allergic reaction in a small percentage of the population. Some people who are allergic to peanuts may also react to lupin. If you know or think you are allergic to lupin, it is important that you visit your doctor and ask for a referral to a clinical immunology/allergy specialist.

This document provides information to raise awareness of lupin as a food allergen. It is based on information developed by the Department of Agriculture and Food in Western Australia (DAFWA), and the Centre for Food and Genomic Medicine.

What is lupin?
Lupin is a legume related to peanut and soybean. For thousands of years, pearl lupin (Lupinus mutabilis) has been a South American staple and white lupin (Lupinus albus), has been a popular snack food in the Mediterranean region. The new Australian sweet lupin (Lupinus angustifolius) is increasingly being used worldwide as a versatile, nutritional ingredient in food manufacturing.

Lupin is uniquely high in protein (30-40%) and dietary fibre (30%), and low in fat (4-7%). Nutrition scientists and medical scientists are researching the health benefits of lupin, which may play a role in combating obesity and the associated health problems of diabetes and heart disease.

For most people eating lupin is safe but for a small percentage of the population it may trigger an allergic reaction like other high protein foods (e.g. peanut, soybean). Cases of lupin allergy have been reported since 1994 but many people may still be unaware of lupin as an emerging food allergen.

What is food allergy?
Food allergy is an abnormal immune response to naturally occurring food proteins or derivatives. About 5% of children and 2% of adults are estimated to suffer from a food allergy. Food allergies are not the same as food intolerances, which are generally caused by chemical agents (e.g. sulfites), or certain genetic deficiencies (e.g. lactose intolerance). Most food allergies are caused by peanuts, tree nuts, milk, eggs, fish and shellfish, sesame, soy and wheat.

Potential cross reactions
Studies have indicated a link between peanut and lupin allergy, that means people allergic to peanuts may also co-react to legumes, including lupin.

People allergic to peanuts should discuss this with their doctor or clinical immunology/allergy specialist.

What foods contain lupin?
Lupin can be found in a wide range of food products including baked goods (such as bread, pastries, pies), pasta or noodles, sauces, beverages and meat based products (such as burgers and sausages). Foods free of gluten, soy or genetically modified ingredients may contain lupin.

There is now a mandatory requirement of allergen labelling for lupin in Australia and New Zealand. Lupin is sometimes labelled as lupin flour, lupin flakes, lupinus, lupine, lupini or lupine beans.

How common is lupin food allergy?
Less than 1% of the population that have eaten lupin-based foods have been reported to have an immediate allergic reaction.
Managing food allergy

The only way to manage a food allergy is by avoiding the food allergen.

- If you suspect you or someone you care for has a food allergy you should contact a doctor so you can be referred to a clinical immunology/allergy specialist.
- Always disclose your allergy and ask about allergen content when eating away from home.
- Always be vigilant in high risk situations where food may be cross contaminated by other customers (such as buffet meals, bulk bin food displays).

© ASCIA 2019

ASCIA is the peak professional body of clinical immunology/allergy specialists in Australia and New Zealand. ASCIA resources are based on published literature and expert review, however, they are not intended to replace medical advice. The content of ASCIA resources is not influenced by any commercial organisations.

For more information go to www.allergy.org.au
To donate to immunology/allergy research go to www.allergyimmunology.org.au