

# Allergy to – Lupin

## What is Lupin?

Certain types of lupin have a long history of being cultivated for their edible seeds, which can be eaten whole or used to make flour. In Portugal raw lupin seeds have been eaten as a side dish for decades. The inclusion of lupin in food products is authorised throughout the EU.



## How common is Lupin allergy?

Although allergic reactions to lupin are not thought to be common in the UK, a number of studies have demonstrated a link between lupin and peanut allergy, and both foods are legumes. A 2008 study (Shaw et al 2008) showed that a small but significant number of children with peanut allergy are allergic to lupin. Medical opinion suggests that, the chances of children with peanut allergy also reacting to lupin are about 1 in 20.

There have been a few cases reported where people have reacted to lupin but are not peanut allergic.

In 2009 an international research team confirmed the link with peanut and pointed out that there is very little awareness of lupin and the implications of its presence in food. (Peeters et al 2009) The team made a similar investigation with regard to pea and soy and found that allergies to these two foods are also common in people with peanut allergy.

## Reactions to Lupin

The Anaphylaxis Campaign's files include a number of foods known to have caused allergic reactions due to its lupin content. These foods include pastry (imported from France) in a chicken and ham pie, an apple flan and onion rings.

There have been further reports of reactions in the UK and on the Continent. The Anaphylaxis Campaign would suggest that it might be prudent for people with peanut allergy to be wary of lupin flour unless they have been tested and are confident that they are not allergic to it. Read labels scrupulously, as you would for any allergen that causes you problems.

## Where is Lupin found?

Although lupin flour is present in very few products manufactured in the UK, it is present in many European bakery and pasta products, some of which are imported to the UK.

Uses for lupin flour include:

- **pastry cases**
- **pies**
- **waffles**
- **pancakes**
- **crepes**
- **products containing crumb**
- **pizzas**
- **coated and deep fried vegetables (such as onion rings and mushrooms).**

Some food companies have regarded lupin as an attractive, high-protein alternative to soya flour because it avoids the difficult debate associated with GM soya.

Food producers say it can replace eggs and butter to enhance colour, allows bakers to use less oil, has various nutritional properties and has a long shelf life in baked goods. Some companies have prohibited the use of lupin as an ingredient in food products.

Because lupin flour is used more widely in mainland Europe, people who are allergic to peanuts, and certainly those who know they are allergic to lupin, should be especially careful when staying in other European countries or eating pastries, etc. brought back from there.

### **Pre-packaged foods**

All pre-packaged food sold within the EU must declare major allergens including the presence of Lupin, even if they appear in minute quantities.

### **References**

Peeters, K.A.B.M., Koppelman, S.J., Penninks, A.H., Lebens, A., Bruijnzeel-Koomen, C.A.F.M., Hefle, S.L., Taylor, S.L., van Hoffen, E. and Knulst, A.C. (2009) Clinical relevance of sensitization to lupin in peanut-sensitized adults. *Allergy* 64, (4), 549–555.

Shaw, J., Roberts, G., Grimshaw, K., White, S., Hourihane, J. (2008) Lupin allergy in peanut allergic children and teenagers. *Allergy*, 63, (3), 370–373.

This Factsheet has been **Peer Reviewed by Dr. Graham Roberts**, Reader & Consultant Paediatrician in Allergy and Respiratory Medicine, Southampton University Hospital NHS Trust **and Carina Venter**, Senior Allergy Dietitian, The David Hide Asthma and Allergy Research Centre NIHR Post Doctorate Research Fellow, University of Portsmouth.

**Disclaimer** - The information provided in this leaflet is given in good faith. Every effort has been taken to ensure accuracy. All patients are different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.



**About The Anaphylaxis Campaign – “*helping people with severe allergies live their lives*”**

The Anaphylaxis Campaign is the only UK charity to exclusively meet the needs of the growing numbers of people at risk from severe allergic reactions (anaphylaxis) by providing information and support relating to foods and other triggers such as latex, drugs and insect stings. Our focus is on medical facts, food labelling, risk reduction and allergen management. The Campaign offers tailored services for individual, clinical professional and corporate members. Visit our website [www.anaphylaxis.org.uk](http://www.anaphylaxis.org.uk).