

Reactions to Wheat

Advice provided by allergyuk.org



Wheat is an ingredient in a wide range of foods. Reactions to wheat can vary and may be due to:

- Immediate allergy
- Delayed allergy
- Autoimmune response to gluten proteins causing Coeliac Disease
- Fermentation in the gut due to fructans (carbohydrates) in wheat
- Gluten sensitivity

Some people also react to other grains such as rye and barley which contain similar proteins to wheat. Your doctor or dietitian will be able to advise whether you also need to avoid these grains. They can also advise whether you need to avoid oats.

Immediate IgE mediated allergy

This type of reaction is caused by the body producing IgE antibodies to one or more proteins found in the wheat grain. Allergic reactions to wheat and other cereals are most common in children, however adults can also develop wheat allergy. Symptoms of IgE mediated wheat allergy occur within minutes or up to 2 hours after ingestion and include rhinitis, asthma, hives (urticaria), swelling (angio-oedema) or anaphylaxis. There may also be vomiting, diarrhoea, abdominal pain and a flare up of eczema.

Wheat dependant exercise induced Anaphylaxis

Some people only experience reactions to wheat when they have exercised after eating it. These reactions

can be severe. This is known as 'wheat dependant exercise induced anaphylaxis'. Inhaling wheat flour can also cause asthma-type symptoms; this is often referred to as 'Bakers asthma'.

Diagnosis is made by using a combination of case history and skin prick tests and/or specific IgE blood tests. Further specialist allergy tests may be necessary. These tests should be interpreted by a health professional with the relevant experience.

Delayed allergy to wheat

This type of reaction does not involve IgE antibodies and occurs several hours to days after eating wheat. e.g. diarrhoea or worsening of eczema.

Unfortunately tests are unhelpful for this type of reaction so diagnosis is made using a combination of symptoms history and a trial of exclusion and reintroduction. As wheat is a major part of the diet, this should only be undertaken with the supervision of an experienced Dietitian.

Coeliac Disease

This is an autoimmune reaction to gluten proteins found in wheat and also in rye and barley. The reaction causes damage to the lining of the small bowel which decreases the ability of the gut to absorb nutrients and can lead to nutritional deficiencies. Symptoms include bloating, diarrhoea, nausea, wind, constipation, tiredness, sudden or unexpected weight loss, hair loss, joint or bone pain, pins and needles, infertility or repeat miscarriages and anaemia. Some patients suffering with



For more help, contact the Allergy UK helpline:

9am to 5pm,
Monday to Friday

01322 619 898

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Key facts

Allergy tests should be interpreted by a health professional with the relevant experience

Allergic reactions to wheat and other cereals are most common in children, however adults can also develop an allergy to wheat

Delayed allergy to wheat can occur hours to days after eating wheat





coeliac disease will also suffer with a skin condition called, 'dermatitis herpetiformis'.

Diagnosis is made using a coeliac blood test and/or a coeliac biopsy of the gut lining. A biopsy of the skin is taken to diagnose dermatitis herpetiformis. Gluten must be a regular daily part of the diet for at least 6 weeks before these tests are carried out, otherwise they will not be accurate. For more information on the diagnosis and management of Coeliac Disease, see www.coeliac.org.uk, Tel: 0333 332 2033.

Intolerance due to gut fermentation

Many people will experience IBS-type symptoms such as bloating, wind, gurgling and abdominal pain after eating wheat and this can be due to the fermentable carbohydrate known as 'fructans' which are found in wheat, barley and rye. The immune system is not involved and instead the symptoms are caused by bacteria in the large intestine fermenting the poorly absorbed fructans. Patients who suffer with IBS or gut fermentation should be referred to a specialist dietitian who can guide them through the 'Low FODMAP' Diet which removes all fermentable foods from the diet including the fructans.

Gluten sensitivity

This is a comparatively newly recognised condition, although there is still a lot of controversy as to whether or not it exists and whether it is caused by gluten or another protein found in wheat. It is unclear if it is an intolerance or whether the immune system is involved and it is also unclear if it is life long or whether it is a temporary condition. Patients commonly report a mixture of symptoms in response to eating wheat, including abdominal pain, altered bowel habit, bloating, nausea and reflux. However, the condition is also associated with symptoms outside the gut such as foggy mind, joint pains, fatigue, depression, headaches, anxiety and a general lack of well being. Presently there are no tests and diagnosis is made by excluding coeliac disease and wheat allergy and using wheat elimination to see if symptoms resolve followed by wheat reintroduction to determine if symptoms reappear. Patients should be referred to a specialist dietitian who can guide them through the appropriate dietary regimen.

It is important that you seek advice from your GP initially if you suspect you are reacting to wheat and before making changes to your diet. Onward referral can then be made to a healthcare professional with the relevant expertise for further testing and/or dietary advice as appropriate.

Foods which are likely to contain wheat

Food labelling legislation states, wheat (and also rye, barley and oats along with other allergens) must be labelled on any packaged and manufactured foods. Foods sold loose (e.g. from a bakery, delicatessen butcher or café) and foods packed for direct sale (e.g. sandwich bars, market stall, some catering products) must also be clearly labelled.

Below is a list of foods likely to contain wheat along with suitable alternatives. This is not an exhaustive list but will provide you with some ideas.

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| Foods which contain/may contain wheat | Foods to check with your dietitian whether to exclude | Wheat free alternatives |
|---|--|---|
| Breads: Wheat Breads, pitta, chapattis, croissants, crumpets, muffins, naans, tortillas, breadsticks, bagel, wrap etc | Rye bread, rye crispbreads, oat-cakes | Wheat and gluten free breads, crackers and crispbreads made with rice, corn, buckwheat, tapioca, quinoa |
| Cereals: Wheat based cereals, cereal bars | Oat cereals, porridge, granola, Ready Break, barley malt | Rice, corn, buckwheat cereals |
| Pasta, pizza, noodles, potato: Fresh or dried pasta, minestrone, tinned spaghetti, pizzas, dough balls, noodles, some frozen chips, waffles | | Pasta made from rice, corn, buckwheat, jacket/boiled/mashed potato |
| Grains, flours, flakes: Bulgar wheat, couscous, durum wheat, freekeh, einkorn, emmer, farola, kamut, malted wheat, semolina, spelt, triticale, whole wheat, wheat bran, wheat germ | Rye, oat, barley flour | Amaranth, beans, buckwheat (also call sarasin/sarasin flour), carob, chestnut, coconut, fava/broad bean, flaxseed, fufu flour, gram/chickpea/garbanzo, hemp, lentil/urid/urd/urad, maize/corn. corn meal, polenta, millet, mustard, nut, plantain, potato, quinoa, rice sago, sesame, sorghum, soya, sweet potato, tapioca, teff, yam |
| Meat/fish/pulses/egg/nuts: Breaded or battered fish/meats, sausages, burgers, scotch egg, quicked | Roasted/flavoured nuts | All plain fresh/frozen meats/fish without coatings or wheat free alternatives, gluten free sausages, plain egg, tinned pulses, tofu, hummus, nut butters |
| Cakes/desserts: Semolina, crumbles, pastries, cheesecake, sponges, eclairs, steamed puddings, trigles, biscuits, cakes, scones, pancakes, doughnuts, muffins, ice cream wafers/cones | | Rice, sago, tapioca puddings, jellies, sorbets, custard, meringues, flourless sponges, gluten free cakes and biscuits |

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| Milk/dairy products: Yoghurts with added cereals/muesli | Oat cream | All animals milk, cheeses, yoghurts, cream |
| Fruits and vegetables: Vegetable products e.g. some pates and spreads, vegetables coated in breadcrumbs or batter/in sauces, soups, some pre-packed vegetables, pie fillings, fruit crumbles | | All plain fruit vegetables: fresh, frozen, dried, tinned. Vegetable crisps |
| Misc: Baking powder Wheat Protein isolates Flavour crisps, snacks | | Wheat free baking powder, cream of tartar, bicarbonate of soda, xanthan gum, jams, marmalades, honey, syrup, sugar |
| Drinks: Beer, ale, stout, lager malted milk drinks | Drinks containing barley e.g. squashes | Squashes, juices, wine, cider, spirits |
| Condiments and sauces: Gravy, sauces, soya sauce, stock cubes, ready meal/casserole mixes, mustard, stuffing, some spice mixes | | Pure spices, salt, pepper, French mustard, sauces made with corn or other flours, Tamari soya sauce, wheat/gluten free gravy |

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