

# Guide to Complex Intolerances Gluten, Wheat, Rye, Barley & Oats

## Gluten Intolerance

Gluten is a protein found in foods processed from wheat and related grains. Gluten gives elasticity to dough helping it rise and keep its shape and often gives the final product a chewy texture.

| Gluten is found in wheat, spelt, kamut, rye and barley

| Oats contain a similar substance to gluten which is not always tolerated by those with gluten intolerance. Gluten-free oats are available

| Gluten intolerance is different from coeliac disease

## Wheat Intolerance

Wheat is used to bulk up and thicken processed foods. Often found in foods such as meat products, sauces and processed foods, it is important that you check labels carefully for ingredients.



**Suitable wheat alternatives which may be bought as flour, grain, seeds, meal or flakes include:**

| Rice

| Millet

| Oats

| Amaranth

| Buckwheat

| Soya bean

| Corn (maize)

| Quinoa

| Chickpea



## Other gluten-free products that can be used in baking include:

- | Agar-agar; a thickening and binding agent made from seaweed
- | Guar gum; a polysaccharide thickening agent made from the seeds of the Guar plant which are taken out of their pods and ground into flour
- | Carob flour; the ground kernels of the carob fruit which can be used as a thickening agent
- | Potato flour; this has a high starch concentration and can be used to thicken soups and sauces, and to make dumplings

Gluten-free and wheat-free foods are readily available in supermarkets and online.

## Removing wheat: Keeping a balanced diet

Grains provide carbohydrates, B vitamins, calcium and other vitamins. Whole grains are a good source of fibre and are therefore valuable components of a healthy diet. You should try using the alternatives mentioned above. It is possible to have a healthy diet without wheat or gluten but fibre and vitamins should be replaced by eating more fruit and vegetables. A vitamin B supplement could also be recommended.

# Gluten: Rye, Barley and Oats

## Understanding the relationship

**Wheat  
Grain**

**Rye  
Grain**

**Barley  
Grain**

**Oat  
Grain**

Gluten/  
Gliadin  
Protein

Gluten/  
Gliadin  
Protein

Gluten/  
Gliadin  
Protein

Avenin  
Protein

Wheat  
Proteins

Rye  
Proteins

Barley  
Proteins

Oat  
Proteins

YorkTest test for individual food proteins. If your results show gluten this is a reaction to the gluten protein - so you need to remove all products containing gluten for example, you may not have a reaction to the rye, wheat or barley proteins but react to gluten; foods containing these have to be removed as the grain itself contains both the gluten and the grain proteins. Good quality oats are fine as they contain the oat protein and avenin protein only, but please check labelling as some oats can be contaminated, i.e. grown or processed near wheat.