

## COELIAC DISEASE

*Coeliac disease is caused by an immune reaction to gluten, a protein found in wheat, barley and rye. The reaction causes inflammation and damage to the lining of the small bowel which impairs its ability to absorb nutrients.*

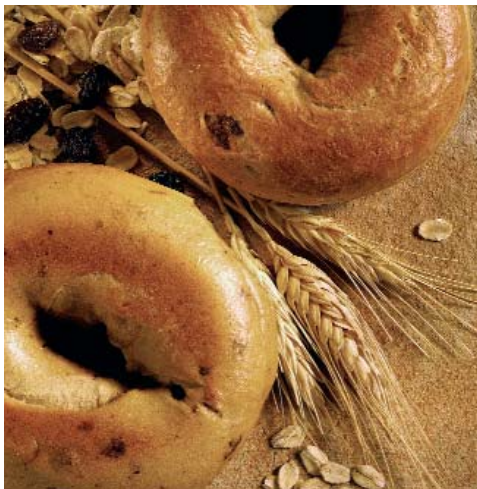
Typical symptoms include mouth ulcers, fatigue, bloating, cramps and diarrhoea, but some people have no symptoms at all, and in others the only clue may be anaemia, osteoporosis or an unusual skin rash (**dermatitis herpetiformis**).

Screening blood tests to detect antibodies to **TISSUE TRANSGLUTAMINASE** are available, but definite diagnosis requires an endoscopy and **SMALL BOWEL BIOPSY**.




For these tests to be reliable you must be having gluten in your diet regularly. Tests can become negative within a few weeks or months with gluten avoidance, so it's important to have them checked before going onto a gluten-free diet if you suspect coeliac disease.

Currently, a life-long gluten-free diet is the only effective treatment. Untreated coeliac disease carries a long-term risk of nutritional deficiency, osteoporosis and/or bowel malignancy.

Coeliac disease should not be confused with wheat allergy (which occurs mainly in infants) or with the bowel irritation that gluten can sometimes cause in people with food chemical intolerances.



- *Coeliac disease runs in families and there is an association with diabetes and thyroid disease.*
- *If you or another family member has coeliac disease, a genetic test (HLA DQ2/DQ8 tissue typing) can be done to determine who else in the family is at risk.*

GLUTEN-FREE		RESIDUAL GLUTEN	GLUTEN-CONTAINING	
1	2	3	4	5
No possible gluten	No detectable gluten*	May contain residual gluten*	Minor sources	Major sources of gluten
Arrowroot Buckwheat Corn / Maize Lupin Maize cornflour Millet Modified maize starch Polenta Psyllium Rice Sago Seeds Sorghum Soy Tapioca Wine vinegar  <div style="border: 1px solid black; padding: 2px; width: fit-content;">             Not derived from gluten-containing grains           </div>	Caramel colour Dextrose Fructose Glucose Glucose powder Glucose syrup Maltitol Maltose  	Beverage whitener Dextrin (postage stamp adhesive) Maltodextrin Pre-gel starch Thickeners (1400-1450) 	Cornflour* Malt Malt extract Malt vinegar Modified starch* Oatmeal Oats Starch* Wheaten cornflour Wheat starch  	Barley Bran Biscuits Coucous* Flour* Noodles* Pasta Rye Semolina Spelt Triticale Wheat Wheatgerm Wheat flour Wheat bran Wheatmeal
<b>NORMAL DIET</b>				

**CODEX ALIMENTARIUS** (<0.3% protein from gluten containing grains)

**GLUTEN-FREE** (<0.0005% gluten)  
 Australian Food Standard

\* If derived from wheat

- 1 NO POSSIBLE GLUTEN** Ingredients in this column are not derived from wheat or other gluten-containing grains, and therefore do not contain any gluten. They can be eaten freely.
- 2 NO DETECTABLE GLUTEN** These ingredients are highly processed and, even if derived from wheat, do not contain any gluten when measured by the most sensitive laboratory methods currently available. They can be included in your diet.
- 3 MAY CONTAIN RESIDUAL GLUTEN** Either the single ingredients in this list or an ingredient in some compound foods (made of more than one ingredient) listed, could sometimes be manufactured from a gluten-containing grain. Avoidance is usually recommended.
- 4 MINOR SOURCES** These ingredients are derived from gluten-containing grains, and contain enough gluten to cause symptoms in some people with coeliac disease. Current research suggest that the villi are not further damaged by eating these very small amounts of gluten and the cancer risk is not enhanced. Although in Australia it is usually recommended that they be avoided, some people with coeliac disease are able to eat them occasionally. Your dietitian can help you determine this.
- 5 MAJOR SOURCES OF GLUTEN** Foods and ingredients in this column contain significant amounts of gluten and should be strictly avoided by all people with coeliac disease.