## Gluten-Free Diet

PATIENT HANDOUT

Your practitioner may have recommended a gluten-free diet to identify if gluten is contributing to your digestive symptoms or other health conditions, or you may have been diagnosed with coeliac disease or gluten intolerance.

Depending on what your current symptoms are and the underlying health factors that are causing these symptoms, certain types or amounts of gluten may be reintroduced to your diet after a period of time. Your practitioner can assess your tolerance and the suitability of certain foods for reintroduction, and will provide further guidance around this.

## What is gluten?

Gluten is a protein found in certain types of grains including wheat, spelt, rye, and barley, ${ }^{1,2}$ and is responsible for the elasticity and stretch of dough that gives bread its texture. ${ }^{2}$ It is also found in many processed foods, particularly condiments and sauces (see below for a list of gluten containing foods to avoid).

## Coeliac disease and gluten sensitivity - what's the difference?

COELIAC DISEASE (CD) is considered an autoimmune disease - a condition where the immune system reacts abnormally to gluten, identifying it as a 'threat'. In response, the immune system 'attacks' the gluten, which causes inflammation and damage to the intestinal wall, resulting in digestive symptoms. Ongoing inflammation and damage to the intestinal wall reduces the body's ability to absorb nutrients, as such, nutritional deficiencies can occur, leading to symptoms such as fatigue.

CD is estimated to affect 1 in 70 Australians, however, having a family member with CD increases your risk of developing the condition. ${ }^{4}$ As an autoimmune condition, CD is managed by strict adherence to lifelong avoidance of all gluten. By
avoiding gluten, the immune system no longer causes damage to the intestinal wall, allowing it to heal, resulting in significant symptom reduction (if not complete symptom reduction) and improved nutrient absorption. ${ }^{4}$

## NON-COELIAC GLUTEN SENSITIVITY (NCGS) is a

condition where there is some degree of gluten intolerance without the abnormal immune reaction that occurs with $C D$. The initial treatment approach is similar, with the removal of gluten resulting in the improvement of symptoms. ${ }^{5}$ After a period of avoidance, however, small amounts of glutencontaining foods may be reintroduced and potentially tolerated. Your practitioner will provide guidance around dietary interventions regarding CD and NCGS.

## A Note on Oats

While oats do not contain gluten as such, they do contain a protein that is similar to gluten, known as avenin. This protein can cause a similar symptom response to gluten sensitivity, in some individuals. ${ }^{6}$ Additionally, oats are often processed in the same facilities or on the same equipment as gluten-containing grains, which may result in cross contamination. Some people with CD or NCGS may be able to tolerate 'uncontaminated oats',
d however, they may still induce a potentially harmful response due to the avenin content.
Therefore, Coeliac Australia does not recommend oats as part of a gluten free diet. Please discuss their suitability and inclusion in your diet with your healthcare practitioner.


What is cross contamination?

Cross contamination occurs when a gluten-free (GF) food item becomes contaminated by a gluten containing food item. For people with CD even $1 / 100$ ih of a slice of bread can trigger the immune system, resuling in symptoms. ${ }^{5}$ If you have CD, ensure all of your food preparation, storage and cooking is kept separate from gluten sources to avoid cross contamination. This is particularly important when someone else is preparing your food, i.e. when eating ou or eating on the go.

## Tips to avoid cross contamination

## At home or travelling

(1) Wash your hands after handling gluten containing foods
(() Use separate containers for GF foods (label them accordingly)
(®) Use separate appliances for GF foods e.g. toasters, sandwich press, bread maker (label them GF)
( Use separate spreads for GF foods, e.g. butter or jam (label them GF)
() Consider a separate colander to drain GF pasta
(®) Prepare GF foods first or designate a separate area as GF only

## Restaurants and dining out

Call restaurants to ask about GF options
© Alert staff and ask for GF options
() Cuisines that are mostly GF include Thai, Mexican, Vietnamese, and Indian. However, always double check, especially i you have CD
(Check salad dressings and sauces to make sure they are GF (e.g. soy sauce/tamari)
( Avoid foods that have been fried in the same oils as batters that contain wheat or gluten
() Avoid foods prepared on the same board as gluten containing foods

4 Proceed with caution: Food that may contain hidden gluten oods listed as 'wheat-free' may include other gluten containing ingredients.
Products labelled '(may) contain traces of wheat/gluten' should be avoided by people with CD.

What you can and can't eat?

## Gluten-free buckwheat bread



## INGREDIENTS

- 1 and $1 / 2$ cups buckwheat flour
- 1 and $1 / 2$ cups brown rice flour
- 1 teaspoon aluminum free bicarb soda
- $3 / 4$ teaspoon fine sea salt
- 2 and $1 / 2$ cups of water (plus $1 / 2$ cup extra if needed when mixing)
- 1 tablespoon apple cider vinegar
- 1/3 cup psyllium husk


## METHOD

- Preheat oven to $160^{\circ} \mathrm{C}$ and grease a $9 \times 5$-inch loaf baking pan.
- In a bowl, whisk water, vinegar and psyllium husks together and let stand until the mixture thickens (about 5 minutes).
- In a larger bowl, mix the buckwheat flour, brown rice flour, bicarb soda, and salt.
- Add the water/psyllium mixture to the flour mixture and combine dough (with clean hands kneed the dough together and shape to fit the loaf pan - the dough will be too thick to mix with a spoon or paddle).
- Bake in a preheated oven for 90 minutes or until the surface is golden brown, crusty, and makes a hollow sound when tapped.
- Allow to cool for 15 minutes before removing bread from pan.


## Can I drink alcohol?

Pure, distilled alcohol is considered GF, even if it is made from wheat, barley or rye.? This includes, gin, vodka, tequila, whisky, rum, cognac, brandy, absinthe, scotch, vermouth, and liqueur (provided no grains are added after distillation, for example Ouzo).

Most wine is naturally GF, including red, white varieties and sparkling, champagne and prosecco.

Alcoholic ginger beers and ciders (pear/apple) are naturally GF.?

Beer, however, is different. Most beer is produced on barley and fermented and therefore DOES contain gluten.? There are some varieties of beer that are $G F$, but this must be stated on the label.

Generally, drinking in moderation is advised as alcohol can irritate the intestinal wall, which may worsen your symptoms.


Adapted from: Power Hungry. Gluten-Free Buckwheat Sandwich Bread (vegan, no yeast). Texas, USA; 202 [cited 2021 Sept 10]. Available from: https://www.powerhungry.com/2021/01/gluten-free-buckwheat-
sandwich-bread-vegan-no-yeast/

References available on our website via: hittps://bit.ly/GFDietHO or scan QR code


