

Helpful Resources for Going Gluten-Free

Gluten-free eating can be a real challenge, especially as you are first getting used to it. There are a number of reasons why a gluten-free diet can benefit your health. This compilation of resources will help you know which foods are gluten-free, which ones to avoid, and many ways to substitute gluten-free flours for wheat flour in your recipes.

THE YES FOODS: Gluten-Free Foods Allowed

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|---------------------------------|----------------------------------|--|---------------------------------|
| • Amaranth | • <u>Gums:</u> | -Peanuts | • Rice flour |
| • Arrowroot flour | -Acacia (Gum Arabic) | -Peas | • Rice flour (glutinous, sweet) |
| • Baking soda | -Carob bean gum | -Soya | • Rice polishings |
| • Bean flour | -Carrageenan | • Maltodextrin | • Rice starch |
| • Buckwheat | -Cellulose | • Maltol (sweetener not related to malt) | • Sorghum |
| • Cassava (Manioc flour) | -Guaica | • Maltose | • Soya flour |
| • Chick pea flour | -Guar | • Mannitol | • Soya starch |
| • Corn flour | -Karaya | • Millet | • Spices |
| • Cornmeal | -Locust bean | • Molasses | • Sweet potato |
| • Cornstarch (Masa harina) | -Tragacanth | • Mustard flour (ground mustard) | • Tapioca flour |
| • Cream of tartar | -Xanthum | • Oats* (pure uncontaminated) | • Tapioca starch |
| • Dal or Dahl (curried lentils) | • Kudzu | • Poi | • Teff |
| • Flax | • Lecithin | • Potato flour | • Tofu |
| • Gelatin | • Legumes: Seeds of plants e.g.: | • Potato starch | • White vinegar |
| • Green pea flour | -Channa or Chickpeas | • Quinoa | • Xanthum gum |
| | -Gram | • Rice bran | • Yam |
| | -Lentils | | • Yeast |

* Up to ¼ cup dry rolled oats, uncontaminated by gluten, daily for children, or ½ to ¾ cup for adults, is considered safe in celiac disease¹.

THE MAYBE FOODS: Foods to Question (Possible Hidden Sources of Gluten)

Category	Food Product	Notes
Milk Products	Milk drinks	Chocolate milk and other flavoured drinks may contain wheat starch or barley malt
	Flavoured or frozen yogurt	May be thickened/stabilized with wheat. Flavourings and seasonings may contain wheat.
	Cheese spreads or sauces	May be thickened/stabilized with a gluten source. May contain granola or cookie crumbs.
	Sour cream	Some low-fat/fat-free may contain modified food starch.
Grains	Buckwheat flour	Pure buckwheat flour is gluten-free. Sometimes buckwheat flour may be mixed with wheat flour.
	Buckwheat pasta	Some "soba" pastas contain pure buckwheat flour which is gluten-free but others may also contain wheat flour.
	Corn cereals	May contain oat syrup or barley malt extract.
	Rice cereals	May contain barley malt extract
	Rice cakes, corn cakes, rice crackers	Multigrain often contains barley and/or oats. Some contain soy sauce (may be made from wheat).
	Oats**	Only use pure uncontaminated oats.
Meats/Alternatives	Baked beans	Some are thickened with wheat flour.
	Imitation crab	May contain fillers made from wheat starch.
	Dry roasted nuts	May contain wheat.
	Processed meat products	May contain fillers made from wheat. May contain HPP or HVP made from wheat.
	Imitation meats	Often contain wheat or oats.
Fruits/Vegetables	Dried fruits	Dates and other dried fruits may be dusted with wheat flour to prevent sticking.

	Fruits/veggies with sauces Fruit pie fillings	Some may be thickened with flour.
	French fries	May contain wheat as an ingredient. Also may have been cooked in oil also used for battered products.
Soups	Canned soups, dried soup mixes, soup bases and bouillon cubes	May contain noodles or barley. Cream soups are often thickened with flour. May contain HPP or HVP (from wheat). Seasonings may contain wheat flour, wheat starch or hydrolyzed wheat protein.
Fats	Salad dressings	Seasonings may contain wheat flour or wheat starch.
Desserts	Milk puddings/mixes	Starch source may be from wheat.
Miscellaneous	Beverages	Some instant coffee substitutes and other drinks may have grain additives. Non-dairy substitutes (i.e. rice and soy drinks) may contain barley, barley malt extract or oats.
	Lemon curd	Usually thickened with flour.
	Potato, tortilla chips, soy nuts	Some potato chips contain wheat. Seasoning mixtures may contain wheat flour, wheat starch or hydrolyzed wheat protein.
	Baking powder	Contains starch, which may be from wheat.
	Seasonings, seasoning mixes	May contain wheat flour, wheat starch or hydrolyzed wheat protein.
	Worcestershire sauce	May contain malt vinegar, which is not gluten-free.

THE NO FOODS: Foods to Avoid The following products contain gluten²:

- Barley
- Bulgur
- Cereal Binding
- Couscous
- Durum*
- Einkorn*
- Emmer*
- Filler
- Farro*
- Graham Flour
- Kamut*
- Malt**
- Malt Extract**
- Malt Flavouring**
- Malt Syrup**
- Oats***
- Oat Bran***
- Oat Syrup***
- Rye
- Semolina
- Spelt (Dinkel)*
- Triticale
- Wheat
- Wheat Bran
- Wheat Germ
- Wheat Starch

* Types of Wheat

** Derived from barley

*** Contamination with gluten

Gluten-Free Substitutions

Substitutions for 1-Tablespoon Wheat Flour:

½ tbsp.	Cornstarch	7 mL
½ tbsp.	Potato starch or flour	7 mL
½ tbsp.	White rice flour	7 mL
½ tbsp.	Arrowroot starch	7 mL

2 tsp.	Quick-cooking tapioca	10 mL
2 tsp.	Tapioca starch	10 mL
2 tsp.	Uncooked rice	30 mL

Substitutions for 1-Cup (240 mL) Wheat Flour:

Certain combinations of flours create better wheat flour substitutions:

- 2 cups brown rice flour, 2 cups sweet rice flour, 2 cups rice polish mixed together
- Store this mixture in an airtight container and use 7/8 cup (215 mL) of the mixture in place of 1-cup (240 mL) wheat flour.

Other Substitutions for 1-Cup (240 mL) Wheat Flour:

1 cup	Amaranth flour	240 mL
5/8 cup	Potato starch	150 mL
7/8 cup	White or brown rice flour	215 mL
1 cup	Corn flour	240 mL
1 cup	Fine cornmeal	240 mL
3/4 cup	Coarse cornmeal	175 mL
5/8 cup 1/3 cup	White or brown rice flour + Potato starch flour	150 mL 75 mL
1 cup 1/4 cup	Soy flour + Potato starch flour	240 mL 50 mL
3/4 cup 1/4 cup	Rice flour + Cornstarch	175 mL 50 mL
7/8 cup	Whole bean flour	215 mL
7/8 cup	Buckwheat flour	215 mL

3/4 cup	Bean flour	175 mL
3/4 cup	Chickpea flour	175 mL
1 cup	Millet flour	240 mL
1/2 cup	Montina Pura Baking Supplement (Indian ricegrass flour)	240 mL
1 + 1/3 cup	Oat flour	320 mL
1 cup	Quinoa flour	240 mL
1 cup	Sorghum flour	240 mL
1 cup	Low-fat soy flour	180 mL
7/8 cup	Teff flour	215 mL
1 cup	GEMS flour***	215 mL

***GEMS flour: see next pg.

GEMS Flour:

This is a combination of flours developed by Wendy Turnbull, author of GEMS of Gluten-Free Baking (2010).

Mix together:

- 2 $\frac{3}{4}$ cups brown rice flour
light colour, mild flavour, versatile
- 2/3 cup sweet white sorghum flour
lessens density of the brown rice flour, giving the loaf its bread-like appearance
- 1/3 cup of one of the following flours: amaranth, buckwheat (light), gluten-free oat, or teff
these add texture, fibre and binding properties
- 3 tbsp. of one of the following flours: chickpea, millet; soy* (low-fat or defatted), quinoa*; white/red/black bean*
these add tenderness and retain moisture
**Stronger-tasting flours*

This GEMS recipe makes enough for two 8x4 inch loaves of bread.

Keep 2-3 cups handy in the cupboard (as all flours to be used for baking should be brought to room temperature) and the rest in the fridge.

Converting a Wheat Flour Recipe to a Gluten-Free Recipe with GEMS Flour:

1. Replace each 1-cup of wheat flour with 1 cup GEMS flour.
2. Add $\frac{1}{4}$ to $\frac{1}{2}$ tsp guar gum per 1 cup flour.
3. Double the amount of baking powder. Increase baking soda by 1/3 the amount called for. Double the amount of yeast.
4. Increase the volume of liquid by 2 tbsp. at a time until the desired consistency is obtained, as guar gum will thicken the batter.

Substitutions within GEMS flour formulation^{3,4,5}:

Sweet white sorghum flour can be replaced with regular sorghum flour.

Light buckwheat flour can be replaced with regular buckwheat flour.

Gluten-Free Bread Recipes

Basic All-Purpose Bread (Egg and dairy-free!)

Preparation & baking time: 1.5 hours. Yield: One 8- x 4-inch loaf.

Ingredients:

- 2 cups GEMS flour (see above)
- 1 tbsp. ground flax seed
- 1 tbsp. instant yeast
- 1 ½ tsp. guar gum
- Scant 1 tsp. salt
- 1 + 1/3 cups lukewarm water
- 2 tbsp. vegetable oil
- 1 tbsp. honey or granulated sugar

Method:

1. Preheat oven to 375°F. Lightly grease bottom of an 8- x 4-inch loaf pan.
2. In mixing bowl mix GEMS flour, flax, yeast, guar gum and salt.
3. In separate bowl blend water, oil and honey or sugar.
4. Pour liquids into dry ingredients and beat to a creamy, thick consistency with hand mixer.
5. Spoon dough evenly into prepared pan and smooth top with moistened fingers.
6. Let dough rise in a draft-free area to 1/4 inch from top of pan for approx. 20 minutes.
7. Bake in centre of oven for 30 to 35 minutes.
8. Turn bread out of pan and cool on rack.

Buttery Dinner Rolls:

Yield: 8 dinner rolls or 10 cloverleaf buns

Ingredients:

- 1 cup brown rice flour
- ¾ cup GEMS flour
- 1 tbsp. yeast
- 1 ½ tsp. guar gum
- ½ tsp. salt
- 1 ¼ cups lukewarm milk
- 3 tbsp. melted butter
- 2 ½ tbsp. granulated sugar

Method:

1. Preheat oven to 375°F. Lightly grease 8 to 10 muffin cups.
2. In mixing bowl blend brown rice flour, GEMS flour, yeast, guar gum and salt.
3. In separate bowl combine milk, butter and sugar.
4. Pour milk mixture into dry ingredients and blend to a creamy, thick consistency with hand mixer.
5. Drop ¼ cup batter into each muffin cup, or make cloverleaf buns by dropping three 1 ½ Tbsp. dollops of dough into each muffin cup with small spring- loaded scoop.
6. Let rise in a draft-free area for 30 to 35 minutes.
7. Bake for 15 to 18 minutes.
8. Cool buns on rack a few minutes before removing from pan.

Focaccia Bread:

Yield: One 8-inch round loaf.

Ingredients:

- 1 $\frac{3}{4}$ cups GEMS flour (see above)
- 1 tbsp. instant yeast
- 2 tsp. crumbled dried rosemary
- 1 $\frac{1}{2}$ tsp. granulated sugar
- $\frac{3}{4}$ tsp. salt
- $\frac{1}{2}$ tsp. guar gum
- 2 garlic cloves, crushed
- 2 tbsp. olive oil
- 1 $\frac{1}{4}$ cups lukewarm water
- $\frac{1}{4}$ cup coarsely chopped sundried tomatoes olive oil to brush over top cornmeal for sprinkling on bottom of pan

Topping:

Combine 1 tsp. rosemary, 1 tsp. Italian Herb Mix (or 2 tsp. oregano + 1 tsp. each marjoram, thyme and basil), 1 tsp. coarse salt and . tsp. coarsely ground pepper.

Method:

1. Preheat oven to 375°F. Lightly grease an 8-inch round pan. Sprinkle bottom with cornmeal.
2. In mixing bowl blend GEMS flour, yeast, rosemary, sugar, salt and guar gum and set aside.
3. In small skillet sauté garlic in oil until aromatic. Combine with water and pour into flour mixture. Beat to a creamy, thick consistency with hand mixer. Stir in sundried tomatoes.
4. Spoon into prepared pan and level top. Moisten index finger and press dimplelike indentations 2 inches apart into dough. Sprinkle with topping mixture.
5. Let rise in a draft-free area about 30 minutes. Bake 20 to 25 minutes.
6. Remove from oven and brush with olive oil. Turn out of pan and place on rack to cool.

References:

1. Professional Advisory Board of Canadian Celiac Association, Aug 2007;
2. Used with permission from *Gluten-Free Diet, A Comprehensive Resource Guide* by Shelley Case, B.Sc., RD - ISBN 1-894022-79-3;
3. Canadian Celiac Association (2006). Accessed 2008 Oct 3. Available at: <http://www.celiac.ca/EnglishCCA/ccaenglish.html>;
4. Manual of Clinical Dietetics, Sixth Edition - ISBN 0-88091-187-5; 5. GEMS of gluten-free baking (2010). Wendy Turnbull. Whitecap Books.