

## FACTS ABOUT GLUTEN

What do you do if you can't eat gluten?

Here are some helpful tips on substitutions that might work for you.

- Gluten is what scientists call storage protein
- Gluten is what bakers call the dough forming elastic ingredient in wheat
- Prolamins are a class of proteins present in a variety of grains – they're what causes problems for people who can't eat "gluten"
- Wheat-free doesn't mean gluten-free; something can be wheat-free and still have, for instance, malt (derived from barley), so then, it not gluten-free
- Types of prolamins are found in rye, barley, kamut and spelt – so these grains are not gluten-free

## COOKING WITH GLUTEN-FREE GRAINS

GRAIN	WATER	COOKING TIME
<b>Amaranth</b>	1 ½ cups	20-25 minutes
<b>Brown Rice</b>	3 cups	40 minutes
<b>Buckwheat</b>	2 cups	15-20 minutes
<b>Corn (grits)</b>	3 cups	5-10 minutes
<b>Millet</b>	3 cups	35-45 minutes
<b>Quinoa</b>	2 cups	15-20 minutes
<b>Teff</b>	2 cups	15-20 minutes
<b>White Rice</b>	2 cups	15 minutes
<b>Wild Rice</b>	4 cups	45 minutes

## WAYS OF USING GLUTEN-FREE GRAINS

<b>SNACKS</b>	-You can pop amaranth grains on the stove using a little oil in a pan with a cover and pop it like popcorn -You can season it or eat it plain
<b>STUFFING</b>	-Use cooked quinoa, millet, or buckwheat -Season to taste
<b>SOUPS</b>	-Use quinoa, buckwheat or millet -Add them as you are cooking -They absorb the liquid and double in volume -Teff and amaranth can be used to thicken soups if you use them as flour

**OTHER INFORMATION ABOUT GLUTEN-FREE FLOURS**

<b>White Rice Flour</b>	-works best in combination with other flours such as potato, buckwheat, or corn flour -can be used in cakes breads and cookies
<b>Brown Rice Flour</b>	-has a nutty taste -can be used in muffins and cookies -great combined with other flours such as sorghum, millet, garbanzo bean or almond meal -store this in the refrigerator
<b>Bean Flour</b>	-garbanzo bean and lentil flours for cookies -can be added to other flours - rice
<b>Buckwheat Flour</b>	-it has a strong grainy flavour -good in waffles, pancakes, breads and noodles
<b>Quinoa Flour</b>	-can be used in cookies, pies, cakes, and pasta -works well combined with other flours
<b>Almond Meal Flour</b>	-made up of blanched almonds that have been finely ground -adds flavour to muffins, cookies, cakes, pie crusts -can be used for breading -should be stored in the refrigerator
<b>Tapioca Flour</b>	-is also called tapioca starch -tapioca mixed with brown or white rice flour and potato flour is good -do not attempt to make pizza dough out of this combination
<b>Amaranth Flour</b>	-has a strong taste -good for breading, thickening sauces, baking -mix 25% amaranth flour with other flours such as brown rice flour, quinoa flour to make 100%
<b>Potato Flour</b>	-potato flour is made from cooked potatoes -potato flour mixes well with rice flours -potato starch is made from raw potatoes
<b>Sorghum Flour</b>	-with this flour you need to add arrowroot or cornstarch to you recipe -1/2 to 1 teaspoon per cup -also add xanthan gum (1/2 teaspoon per cup) to bind it together -this flour is good for cookies, pie crusts, cakes, etc.
<b>Soy Flour</b>	-very nutty flavour -mix it with other flours

**SUBSTITUTING GLUTEN-FREE FLOURS**  
**One Cup of All Purpose Flour Equals**

<b>Amaranth Flour</b>	1 scant cup
<b>Arrowroot Flour</b>	1 scant cup
<b>Buckwheat Flour</b>	7/8 cup
<b>Corn Flour</b>	1 cup
<b>Cornmeal</b>	¾ cup
<b>Cornstarch</b>	¾ cup
<b>Garbanzo Bean</b>	¾ cup
<b>Garbanzo/Fava Bean</b>	1 cup
<b>Mesquite Flour</b>	1 cup
<b>Millet Flour</b>	1 cup
<b>Montina</b>	1 cup
<b>Potato Flour</b>	½ cup
<b>Potato Starch</b>	¾ cup
<b>Quinoa Flour</b>	1 cup
<b>Rice Flour</b>	1 scant cup
<b>Sorghum</b>	1 scant cup
<b>Soy Flour</b>	¾ cup
<b>Sweet Potato Flour</b>	1 cup
<b>Sweet Rice Flour</b>	7/8 cup
<b>Tapioca Flour or Starch</b>	1 cup
<b>Teff Flour</b>	7/8 cup

**GUAR GUM AND XANTHAN GUM**

- are used to thicken liquids
- you do not have to bake with them
- they are high in fiber
- they are used to substitute gluten in breads and baked goods
- they hold the product together