

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
Amaranth	1 ½ cups	20-25 minutes
Brown Rice	3 cups	40 minutes
Buckwheat	2 cups	15-20 minutes
Corn (grits)	3 cups	5-10 minutes
Millet	3 cups	35-45 minutes
Quinoa	2 cups	15-20 minutes
Teff	2 cups	15-20 minutes
White Rice	2 cups	15 minutes
Wild Rice	4 cups	45 minutes

WAYS OF USING GLUTEN-FREE GRAINS

SNACKS	-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
STUFFING	-Use cooked quinoa, millet, or buckwheat -Season to taste
SOUPS	-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

White Rice Flour	-works best in combination with other flours such as potato, buckwheat, or corn flour -can be used in cakes breads and cookies
Brown Rice Flour	-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
Bean Flour	-garbanzo bean and lentil flours for cookies -can be added to other flours - rice
Buckwheat Flour	-it has a strong grainy flavour -good in waffles, pancakes, breads and noodles
Quinoa Flour	-can be used in cookies, pies, cakes, and pasta -works well combined with other flours
Almond Meal Flour	-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
Tapioca Flour	-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
Amaranth Flour	-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%
Potato Flour	-potato flour is made from cooked potatoes -potato flour mixes well with rice flours -potato starch is made from raw potatoes
Sorghum Flour	-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.
Soy Flour	-very nutty flavour -mix it with other flours

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

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