

Gluten-Free Baking Made Simple

Well....at least easier!

Written by Jen Allbritton, CN and Karen Falbo, CN

Why take gluten out of your baked goods? Gluten is one of the most allergenic substances and is found in many commonly-used flours, especially wheat. This glue-like protein is thought to be at the root of numerous health issues with seemingly unknown causes. In fact, over 150 medical conditions and symptoms have now been linked to gluten sensitivity.¹ It is believed that our bodies were not designed to handle the quantity of gluten that is found in today's foods. In times past, gluten-containing grains were not so prominent. Our system has not been able to adapt to these dietary changes efficiently and without consequence. Although some people can tolerate gluten, they may be in the minority. Ultimately, adding gluten-free baking creations to your list of talents would be a splendid idea. Below is the groundwork information to help make that happen.

Gluten-Free Options

Besides wheat, gluten resides in rye, barley, triticale (a wheat-rye hybrid), spelt, kamut, and oats. There are many gluten-free flour options, including rice (brown or white), amaranth, millet, cornmeal, buckwheat, quinoa, nut meals, arrowroot, flaxseed meal, potato starch, bean, and tapioca. All of these alternative flours can be used to make pancakes, muffins, and more; however, they are heavier than wheat and do not rise as well, and, thus, adjustments usually need to be made. Some of these flours come already ground and ready to use in the bulk flour section of the stores; others must be prepared by the baker. Arrowroot is one that is quite simple and easy to use. This nourishing food is derived from the plant's fleshy root and is simply dried and powdered; no other processing is necessary. It is easily digested and helps maintain acid-alkaline balance in the body. Arrowroot powder replaces cornstarch nicely and makes a superb thickening agent, such as in gravies and sauces. It also works well in baked goods like cookies and pie crusts.²

The book *Special Diet Solutions* by Carol Fenster goes into detail on all the flour alternatives, their uses, their unique baking characteristics, and how much to substitute when a recipe calls for wheat flour. For example, for one cup of wheat flour, Fenster suggests three-fourths cup potato starch, three-fourths cup garbanzo bean flour, or one cup tapioca flour. As a thickener, Fenster also explains how to use gluten-free substitutes. For one tablespoon of wheat flour, the gluten-free enthusiast can use one and a half teaspoons of arrowroot powder, one tablespoon sweet rice flour, or 1 teaspoon xanthan gum. Check out this resource for more details on specific flours that pique your interest. There are other terrific gluten-free cookbooks, such as *The Gluten-Free Gourmet* series by Bette Hagman and *Gluten-Free Baking* by Rebecca Reilly. There are also prepared flour blends on the shelves made to act more like typical wheat flour, such as *Bob's Red Mill All-Purpose Gluten-Free Baking Flour*, and mixes by *Gluten-Free Pantry*, *Pamela's*, and *Authentic Foods*. These do an excellent job of replacing a flour called for in a gluten-containing recipe.

Sally Fallon, author of the cookbook *Nourishing Traditions*, says to add two level teaspoons of baking powder per cup of flour to alternative-grain recipes. Baking powder works to leaven the product. Also, because alternative flours are less water-absorbent, guar gum can be added to thicken the batter. A half teaspoon per cup of flour should do. These more unusual flours will often increase the cooking time.² Bear in mind, gluten-free products tend to be more crumbly than their gluten-containing counterparts.

Practical Ideas from an Expert

Karen Falbo is a Certified Nutritionist, and the Nutritionist Coordinator for Vitamin Cottage. She has been creatively leading a gluten-free lifestyle for years for personal health reasons. Karen has extensive experience with using the less well-known flours; below are some of her top tips and expert advice:

Copyright Vitamin Cottage Natural Grocers

Originally published in the Vitamin Cottage Health Hotline April 2006

- Don't be afraid to experiment. Find a few cookbooks with gluten-free recipes to learn more about how the ingredients are used, and then work toward improving their nutritional quality. For example, many gluten-free recipes call for quickly-digestible ingredients, such as sugar and white rice flour. To reduce the rice flour, cut it back 1/2 cup and add 1/4 cup of flaxseed meal and 1/4 cup of arrowroot powder. Another idea is to soak a whole grain, such as quinoa or buckwheat, overnight. In the morning, grind it in a food processor or blender and use in your recipe. This will likely alter the recipe so that the wet ingredients will need to be adjusted and the leavening increased.
- Making recipe alterations is not difficult once you find what works best for you. My favorite substitution for two cups of flour is 1 1/2 cup brown rice flour, 1/8 cup tapioca flour or arrowroot powder, 1/8 to 1/4 cup flax meal, and 1 tsp of guar gum.
- When working with the grainier flours, such as brown rice, millet, and garbanzo, it is necessary to add something to hold the ingredients together. Flaxseed meal and guar gum will give the batter a more sticky consistency. Tapioca flour, potato starch, and arrowroot powder are light in texture and can be used to prevent the batter from becoming too dense and heavy. I have found that a combination works much better than any of the individual ingredients alone.
- Nut flour, or nut meal, can be used in recipes to replace flour or used in a combination. It is best to freshly grind nuts in a coffee grinder or small food processor. Almonds, pecans and walnuts are some of my favorite options, although almost any nut will work. If used along with other flours, nut meal can comprise up to 25% of the mixture. Great ways to use nut meal are in cakes, pie crusts, cookies, or as a coating for baked meat, chicken, or fish.
- Evaluate your batter consistency when baking: cake batter should be runny, muffins sticky, and cookies doughy. Adjust either the wet or dry ingredients to create the consistency you are looking for.

Try this fabulous gluten-free recipe created by Karen:

Gluten-Free Blueberry Muffins*

1 cup brown rice flour
 1/2 cup potato starch flour
 1/2 cup tapioca flour or arrowroot powder
 2 teaspoons xanthan gum
 2-1/2 teaspoon GF baking powder
 1/8 cup xylitol sweetener
 1/8 cup plus 1-tablespoon Rapidura or turbinado sugar
 3/4 teaspoon sea salt
 1/4 cup applesauce
 2 large eggs, lightly beaten
 1/4 cup melted butter or coconut oil
 3/4 cup coconut milk or other non-dairy milk alternative
 1/2 teaspoon vanilla extract
 1-1/2 cups fresh or frozen blueberries

Line muffin tins with paper. Stir together dry ingredients. Make a well in center of mixture and add applesauce, eggs, melted butter or coconut oil, coconut milk and vanilla. Stir together just until ingredients are moistened. Gently fold in blueberries. Divide mixture into muffin tins and sprinkle with Rapadura sugar. Bake at 400-degrees for 25 minutes. Recipe makes 12 muffins.*

You are now equipped with the foundational tools to go and make great gluten-free baking happen. All that is needed is a little adventurous attitude, and you are on your way to scrumptious gluten-free bakery heaven!

* Ask any Vitamin Cottage employee for this month's grocery handout titled *Creative Gluten-Free Creations* for more delicious recipes.

¹ Braly, James. M.D. and Hoggan, Ron. M.A. *Dangerous Grains*. Avery 2002. p. 6.

² Fallon, Sally. *Nourishing Traditions*. New Trends Publishing. San Diego, CA. 2001. p. 477