

Handout 4-Gluten Free Basic ingredients

Butter. I was already using **Earth Balance** as a butter substitute for sandwiches. It was created by Smart Balance together with Brandeis University in Mass. I preferred the flavor and ease of spreading from fridge. With our son also lactose intolerant I then switched to Earth Balance for his baking and also many times for the rest of us since it's cholesterol free. Labels say gluten free, lactose free, vegan, non gmo. I buy the tub for sandwiches and the sticks for baking. I have only seen the sticks in one variety so far and they are 4 sticks for one pound. Tubs are now 15 oz so you need a scales to measure unless you use cup measures. I buy the original tub which also contains soy and flax. They do make a soy free tub which I use for my soy free cousin. There is a loss of flavor, and the texture is different to butter baked recipes, but it is still a very good substitute. I do use **regular salted butter**, stick with one brand so you get used to amount of salt to add in addition. Unsalted butter goes rancid more rapidly.

Coconut Oil

The last few years have seen a surge in coconut oil. Outside of really hot weather or house, coconut oil remains solid at room temperature so you have to weigh it. I buy an 80 oz tub of Carrington Farms coconut oil at Costco, melt and decant into large 13 cups, 104 oz rigid 'Glad' container with lid. It's far easier to cut out pieces to weigh. Grocery stores, sold in about 1 lb jar/tub. I now use this instead of Earth Balance for baking. I think it doesn't have same greasy flavor of Earth Balance, I don't notice a coconut flavor for baking, but it is a very neutral flavor compared to butter baking. Pan frying with coconut oil, I notice coconut flavor. Virgin, organic, cold pressed. Jewish bakers tend to use Fleischmann's and I find that even greasier. I don't know kosher regulations on use of coconut oil.

[Carrington Farms http://amzn.to/2C98lx3](http://amzn.to/2C98lx3)

Asian sourced flours

I buy my potato starch, tapioca starch, sweet rice flour or glutinous (sticky) rice flour, white rice flour at an Asian market locally that is scrupulously clean. Books recommend buying Asian flours as they are often more finely ground than American rice flours/alternate flours and normally significantly cheaper. However I am careful which flours I buy. I won't buy a flour like millet flour or chickpea flour frequently sold in an Indian grocer because I think it is more likely to have been ground on same lines as wheat flour. Erawan is the brand of rice flour, glutinous rice flour and tapioca starch I buy. Red, blue and green on white plastic bags, with three elephants picture. <http://amzn.to/2CzA9q6> Erawan rice flour and their other flours

Potato Starch. I was very confused at the beginning of gluten free baking by potato starch, potato flour and then potato starch flour. So which ones which? The easiest way for me to remember is that potato starch is squeaky like corn starch, is the starch found in bottom of bowl when you have shredded raw potatoes, and is used in many gf blends by the cup. In Asian markets it is very reasonably priced but Bob's Red Mill and Manischewitz are more expensive. Also instant thickener for soups.

<http://amzn.to/2ijcpPt>

Potato Flour is not potato starch. Potato flour is cooked potatoes, dried and ground and is used by spoonfuls not cupfuls. Bette Hagman only uses 1 teaspoon to a cup of her Featherlight gf blend. She also recommends potato buds to use instead of potato flour. I buy plain dried mashed potato (Idahoan brand is labeled gf), run it through the food processor to a powder and it becomes the same as the potato flour on sale for a higher price. I also discovered it is great when used instead of regular flour to

just 'flour' a piece of chicken etc for pan frying.

Tapioca Starch aka tapioca flour, cassava flour or manioc in the US. Note that Chebe brand of imported South American tapioca bread packet mixes quote both tapioca starch and tapioca flour on the list of ingredients. Tapioca flour from Goya is gritty like cornmeal. Tapioca starch should be squeaky like cornstarch. I tried sieving a bag of a Goya mix to figure out proportions of different starch/flour but everything went through the sieve except for the dried herbs. Erawan tapioca flour
<http://amzn.to/2EW8jta>

Cornstarch aka known as cornflour in UK. - everyone knows corn starch and many gf blends include corn starch in the blend. Martha Stewart magazine in a gf article said corn was gf. Corn itself is naturally gluten free but Quaker Oats say they can't call their corn meal, corn starch, corn flour, gluten free due to risk of cross contamination from wheat. A Celiac Nutritionist at Beth Israel said the Quaker Oats corn meal was contaminated to thousands of parts per million of gluten (actually 1200 ppm). FDA and GFCO quote 20 parts per million, (ppm), as the level of gluten that is acceptable and say gluten level can't be measured below 5 ppm. However, GFCO does admit that some people still react to less than 20 ppm and one woman in Italy supposedly reacts to 1 ppm. I know my son is very sensitive. To me that raises the question is corn syrup gf, and that is in many foods. Corn is also included in many butter substitutes. Corn would also include polenta, grits, corn tortillas, corn chips, corn flakes etc. My son can tolerate gf corn tortillas from Trader Joes but not regular corn tortillas. Green Giant told me they couldn't call their corn niblets or creamed corn gf, but someone I e-mail says she can eat Del Monte niblets and creamed corn. But again my son tells me he can eat Green Giant corn and that on line Del Monte states it is not gf. Green Giant label their cans as 'no gluten ingredients'. I give up sometimes. And these statements literally change from week to week. Bob's Red Mill and Arrowhead Mills both carry gf corn meal etc, Argo carries gf corn starch. Better to be safe than sorry. However, unless they state gf corn flour etc, I am still wary of label saying pure. So to confirm, I only buy corn products that say they are gluten free. I also check with people that say they are allergic to corn as to whether they have tested allergic to corn or was the corn cross contaminated by flour. Argo gf cornstarch <http://amzn.to/2EInhUn>

Sweet Rice Flour aka as **glutinous rice flour** meaning sticky as in Asian sticky rice. A well known brand is **Mochiko** sweet rice flour widely used in regular desserts in Hawaii. Mochiko is more expensive than regular glutinous rice flour. I have tried both at the same time and couldn't taste any difference in taste or texture from the more expensive Mochiko brand. Sweet White Rice Flour is made from high-starch, short-grain rice and is used in Oriental cooking to thicken sauces and in desserts. The word is glutinous with an 'i' not an 'e', so it does not contain gluten. Erawan sweet rice flour
<http://amzn.to/2CzAfOu>

Xanthan gum is the glue that takes the place of the gluten in flour and does the same job of holding the flour blends together. Amounts to use vary depending on what you are making and I tend to check Bette Hagman or KAF (and read customer reviews on KAF for more advice) for a similar recipe when I am adapting one of my regular flour recipes. My gf pancakes and waffles recipes are adapted from regular recipes from the old Betty Crocker orange ring binder cook book. I do allow batter to thicken for about 2-3 minutes and then scoop thickened batter into skillet for pancakes or waffle iron for waffles and I do not stir batter down which thins it.

I read that xanthan gum comes from MSG (I haven't checked these facts) and therefore can cause migraines. **Guar Gum** is quoted as an alternative. I have only found it in one shop so far in NH and it does have a laxative effect according to the literature. Do not add more xg than recipe quotes, it can make baked good gummier when first cooked then xg tightens up over a few days. So measure carefully, plus it is too expensive to over measure. XG is used in a lot of regular products in the store, salad dressings to make them thicker and pourable, salsas etc instead of pectin that is used to thicken jams. When you use xg in a gf flour recipe like a wet quick bread, mix will tend to thicken more than you remember from regular flour recipe. This is not noticeable in pastry or cookies etc. I won't buy a gluten free blend that already includes xanthan gum. Many recipes don't need xanthan gum and it is expensive. Some recipes will use both xanthan gum and guar gum and says that's the best, others disagree. Where guar gum is not as easily available both locally and presumably nationally, I stick with xg. Don't wipe up any xg or baking spills with a wet cloth, just brush away with dry cloth. Your hands will feel slimy if you have made pastry etc and rinse hands. BRM xanthan gum <http://amzn.to/2htwW30> \$12.99/8 oz

Gelatin (Gelatine UK) the sand-like powder from Knox Gelatin can be used in place of xg. Recipes vary. Knox gelatin <https://amzn.to/2Hz27c1>

Baking Powder. I normally buy Rumfords which doesn't contain aluminum and states it is gluten free. But it does contain cornstarch if you are corn intolerant or don't wish to take the chance on the cornstarch. To make your own corn starch free baking powder mix ½ tsp cream of tartar with ¼ tsp baking soda which is the equivalent of 1 tsp baking powder. Most baking powders are called double acting which means they start to thicken the batter on mixing (remember pancake batters) and then have a second rising action when they hit the heat of the oven. This is how grandmothers used to be able to keep pancake or muffin batter in the fridge and make pancakes fresh each day. So recipes using baking powder can 'sit' in the kitchen or the fridge if you are baking several trays of muffins or cookies. Recipes using only baking soda (bicarbonate of soda in UK) need to be baked straight away since baking soda reacts with liquid on mixing to produce the carbon dioxide needed to make a cake etc rise. And I don't know if home made baking powder containing baking soda and cream of tartar has to be used immediately or not. I normally only use cream of tartar with egg whites for meringues. America's Test Kitchen gf cookbook, tells you to leave recipes using baking soda to sit for 1/2 hour before baking. No. Rumbford's gf baking powder <https://amzn.to/2Hdc2Ve>

Bob's Red Mill

www.bobsredmill.com and each month you can download 2 x \$1 dated coupons for BRM products

These are prices quoted on line from BRM April 2018. Market Basket is frequently cheaper and you can buy just one bag. Amazon do carry groceries, but s&h same as BRM unless you have Prime. In New England, Ocean State Job Lots, carry a lot of BRM at discounted prices, just watch the dates. Any of these grains, flours, starches, do taste stale within a short time of best by date. I noticed that lots of BRM now say a date for packing and a best by date - often up to 2 years difference in dates. Dependent on the product. A starch v oil filled grain.

“Which products are gluten free? (Bob's) All of our products marked with our gluten free symbol are produced in a dedicated facility and batch tested for gluten content. For a complete list of our gluten

free products, click here. If an item does not appear on this list, it is not produced in our gluten free facility."

Psyllium fiber powder unsweetened, unflavored
\$11.99 for 16 oz- (CVS own version of metamucil)

<https://amzn.to/2HN8KF9>

Bob's Red Mill Psyllium Fiber Powder is made from the outer husks of the seed of the psyllium plant that have been ground to a super-fine texture. It is an outstanding source of dietary fiber, and provides a remarkable amount of soluble fiber. It does give you gas in quantity. Add Psyllium Fiber Powder to smoothies for an easy fiber boost. It can also be used in gluten free or vegan baked goods as a substitute for xanthan gum or eggs.

BRM recommends 2 tsp of psyllium as sub for 1 tsp xg.

Millet Flour - Millet Flour has a subtle flavor, lots of vitamins and minerals, and adds a lovely creamy color to baked goods. It is available as a grain and can be cooked like rice or to a polenta type consistency. Read Wiki for more details and articles on danger of thyroid problems from heavy use of millet. And yes, this is the bird seed.

\$3.19/23 oz <http://amzn.to/2zK5iJB>

Sorghum Flour, a millet-like grain, is America's third leading cereal crop. It is a powerhouse of nutrition and adds a superb flavor to gluten-free baking. Add 15% to 20% sorghum flour to your flour mixes to make delicious breads, cakes, and cookies. Even though sorghum is described as sweet I (and other celiac friends) find it is still bitter in quantity. One cook book author uses almost 100% sorghum but then adds quantities of sugar even to savory recipes to make sorghum palatable. It is of the same family as sugar cane, rice and corn.

\$3.89/22oz <http://amzn.to/2yJpVlK>

Golden Flaxseed Meal is freshly milled to preserve the natural oils and nutrients. Ground flaxseed has a nutty taste and is a noted health-giving digestive aid. Keep refrigerated for freshness. Buy the flaxseed meal, this means ground to be like a flour. Flax seeds just pass through the body so you don't get the nutritional benefits of them. Flax seed is a diuretic for some people, plus I have girlfriend who is allergic to flax seed as well as having cd.

flax seeds \$2.09 for 13 oz bag

flax seed meal \$3.89/16 oz 2 tbsp 13 g/ 70 calories, total fat 4.5 g/3 g protein

whole seeds 3 tbsp/31 g, 165 calories/ 6 g protein/ 11 g fat

Organic golden flaxseed, also known as linseed, comes from the flax plant, which is cultivated for its seeds as well as its fiber. The seeds, which are a little larger than sesame seeds, contain omega-3 fatty acids, dietary fiber and lignans. Used since ancient times, flax is renowned for myriad health benefits.

Don't let the tiny, unimposing size of the flaxseed fool you. Packed inside every teeny seed is a mountain of nutritional benefit. For instance, flaxseeds are an excellent source of fiber. They are also the most widely available botanical source of omega-3 fatty acids. Most Americans don't consume nearly enough omega-3's, and eating flaxseeds is an easy and tasty way to get these essential fats in your diet! Other health benefits provided by regular consumption of flaxseed are prevention and control of high blood pressure and reduction of cholesterol levels.

These seeds can be eaten whole, or sprouted or ground to make their vital nutrients available to the body. Add flaxseed to bread, muffins, bars, biscuits, crackers, granola, cookies and other recipes for extra nutrition and a nutty flavor. See the back of our package for two terrific recipes using our Flaxseed, Bulgur & Flax Pilaf and Three Seed Bread!

There is no nutritional difference between golden and brown flaxseed.

"I also make up individual servings of "instant hot flax cereals" for traveling by RV, air or on cruises. (To the flax meal, I add protein powder, a sprinkle of salt and cinnamon, then just add hot water and a bit of cream when I'm ready for breakfast.) "

\$2.39/13 oz <https://amzn.to/2vsmxi7>

Chia Seeds

12 oz chia seeds online from BRM \$6.99

<http://amzn.to/2iXzdzS>

Chia Seed was revered as a "super food" by ancient Mayans and Aztecs, who ate the seeds to boost energy and stamina. Also known for their anti-oxidant properties, omega-3 content, and amount of fiber, Chia Seeds are a nutritious addition to the modern day diet! Chia Seeds can also be mixed with water to make a chia gel, which can be used to replace eggs in your baked goods.

2 tbsp/ 26 g/ 6g protein/130 calories/total fat 8g/
contains 4710 mg of Omega-3 fatty acids per serving

Thousands of years ago, chia seed was a staple in the diets of ancient Mayans and Aztecs. The word chia is derived from the Mayan language, meaning "strength," and Aztec warriors relied on chia seeds to boost energy and increase stamina. Today this tiny seed is a favorite of athletes, especially distance runners, who tout it as an endurance enhancing superfood.

Chia seeds contain a wealth of fiber; 5 grams in just one tablespoon. It is the fiber in chia that causes chia seeds to swell when combined with water, creating chia gel. Whether you eat chia gel or just the raw seeds, the hydrophilic action of chia seeds will keep you full longer than many other seeds. Amazingly, chia gel can also be used as a substitute for eggs in many baked goods. Use a proportion of 1 to 6 ratio of Chia Seeds to Water to make chia gel. Use approximately one tablespoon of chia gel to replace one large egg in your baked goods.

"Also really nice as a raw uncooked tapioca pudding made with almond or rice milk, a few dates for sweetness, a splash of vanilla and pinch of nutmeg or cinnamon overnight in a mason jar in the fridge."

Organic Amaranth Flour is gluten free flour originally from South America. Its cultivation, appearance and uses are similar to grains and can be used to replace 25% of the flour in your own recipes. It is 100% stone ground and great for gluten free baking when combined with another non-grain flour or starch. It's especially high in lysine which is lacking in many grains. It has a strong, nutty branlike taste (and smell) so a little goes a long way. It contains more protein than wheat and one-third more fat and should be refrigerated.

I use millet flour in my blend as it is more easily available locally and amaranth is roughly 3x the price. <http://amzn.to/2AO2xot> \$8.19/22 oz

Brown Rice Flour

organic brown rice flour and yes brown rice and arsenic BRM 24 oz \$5.39

I prefer to buy Authentic Foods superfine brown rice flour,

<https://amzn.to/2HLwk1B> \$13.89/3 lbs

It is 100% stone ground at Bob's Red Mill Natural Foods on a very fine setting to prevent the flour from tasting gritty-a common complaint about many brown rice flours. *I still find it to be gritty and not super smooth like Authentic foods.* It is milled from unpolished brown rice and contains the bran so is higher in nutrient value than white rice flour (same as white rice and brown rice). There are oils in the bran so it must be refrigerated as it has a shorter shelf life. (But my pack of Bob's Brown Rice has sell by date often a year away and stores don't keep it refrigerated??).

Brown rice flour is a nutritious alternative to wheat flour and is naturally gluten-free. It is high in protein, iron, fiber and vitamin B. Brown rice flour is rich in manganese, which helps in the proper development of bones and cartilage. It also helps in better absorption of calcium. One serving of brown rice flour supplies more than 20 percent of the recommended amount of magnesium, phosphorus and copper, as well as 11 percent of potassium and more than 100 percent of manganese. In addition, brown rice flour supplies 20 percent of the recommended amount of iron for men and 9 percent for women.

Brown rice flour contains healthy bran and will add a darker color to your baked goods. It also imparts a richer, nuttier flavor than wheat flour. You can thicken sauces with it and use it for coating fish and other proteins, as well as produce breads, cakes and noodles. Browse our extensive collection of recipes using brown rice flour for everything from brownies to blini.

Oats. Originally Doctors thought oats were not gf and used acronym BROW to remember Barley, Rye, Oats and Wheat. Now they say they are gf but say that some people will still react to even gf oats. You have to buy oat products that say they are gf since oats are very easily xc in growing and transporting. I even talked with the actual Bob of Bobs Red Mill at a Trade show in NYC and questioned about oats and xc. I am one of those that can't have even gf oats, they are an inflammatory and my reaction is arthritis joint pains. Before I would eat oats as oatmeal/porridge for breakfast, oats in baking with oat flour. Bob's Red Mill sell certified gf regular oats, rolled oats and steel cut oats. All basically the same, just different grinds. I used to put my regular rolled oats in food processor and grind as fine as I wanted. This gives finer oats for cooking for oatmeal for kids who don't like to chew, plus oat flour for baking. All for buying just one type of oats. Please do not buy the packets of instant oatmeal. From what I've read they are chemically processed to make them instant and contain far more sugar than we should be feeding our children, plus chemicals on their growing bodies.

\$7.69/32 oz <https://amzn.to/2HeGv1E>

Quinoa -pronounced keen wah has burst onto the scene in recent years. Read about it on Wiki. It is known as the 'Mother of all Grains', naturally gluten free, high in protein, fibre and essential amino acids. When you open a packet of anything quinoa it has a strange smell. That is the naturally occurring insect repellent saponin that is meant to have been rinsed off. I still rinse my quinoa grain. So far the best price is in Costco's 4 lbs for about \$12. But, if diarrhea is your problem, quinoa is high fiber and can have a laxative effect. I use quinoa whole grain and quinoa flakes (like oats) but I don't like quinoa flour. The quinoa flour flavor is far too strong for me. Quinoa is also available in red and black seeds, no nutritional difference but often more expensive. White quinoa is obviously the most common. <https://amzn.to/2HPb6mQ> 4 lb /\$17.99

Chickpea flour/Besan flour/Channa flour/ Ceci flour/ Gram flour/ Garbanzo bean flour. Ubiquitous in Indian cooking, chickpea flour also makes a good substitute for soy flour and thickens soups and sauces. This high-protein flour helps to firm up bread. When the bean flavor is too pronounced, many cooks mix it with flour from other beans, such as fava beans. Original BRM gf flour was chickpea and fava beans, high in protein strength, structure of gf baking, but unfortunate side effects and strong flavor for baked goods. <https://amzn.to/2HKKeEF> \$2.69/16 oz

Buckwheat flour. Does not contain wheat. It is related to rhubarb, very definite flavor, strong flour for use in gf baking. Used for Acadian Ploy pancakes (blend often mixed with wheat, beware). Used enthusiastically in gourmet Japanese cooking, buckwheat flour contains all eight essential amino acids and works well, combined with xanthan gum, in a host of pastry and savory dishes, especially soba noodles. 'Bulgur wheat' is the actual wheat derivative. BRM does not sell gf buckwheat flour. Arrowhead Mills gf buckwheat flour <https://amzn.to/2Hdf23W> \$9.43/22 oz

Cashew flour. Made from raw ground cashews. Used to be available at Trader Joe's.

Chestnut flour. You can buy it extra fine or stone ground. Chestnut flour, used in traditional Italian and Corsican baking, has a strong chestnut flavor and a dark color. Sift before use. This flour keeps 12 months in the freezer and 3 months in a cool dark place. Expensive online, look for it in Italian grocery stores.

Coconut flour. "High in fiber, protein, and saturated fat, this mildly sweet flour can be used entirely by itself in quickbreads and some dessert dishes. In other baked goods, it works well as 10 to 30% of the flour content. 1/4 cup of coconut flour is approximately equal to 1 cup all-purpose wheat flour." Be warned, coconut flour can NOT be used one for one with other flours. A recipe for 2 eggs cake, would need 8 eggs using coconut flour as a substitute. Paleo people enthusiastically and ignorantly just try to use coconut flour one for one and complain. Apart from Paleo, I can't see that a recipe now needing 8 eggs is healthier and it tastes really eggy. BRM \$4.99/16 oz <https://amzn.to/2Hd4vBS>

Corn flour/ Masa harina/ Maize flour (UK). Corn flour is a powdery yellow, blue, or white flour made by finely grinding whole dried corn kernels. Popular in Southern and Southwestern U.S. cuisine, corn flour is very similar to cornmeal but ground much more finely. Masa harina is corn flour ground from dried hominy. Masa harina is an essential ingredient of corn tortillas and tamales. Must be labeled GF.

Corn starch (Cornflour U.K.). This fine, tasteless white powder is processed from the endosperm of corn kernels. Mix it with water before using so as to avoid lumps. It is a popular thickener in Chinese stir-fries. Must be labeled gluten free. Argo cornstarch <http://amzn.to/2EInhUn>

Teff flour. Teff is an annual grass, and its seeds were found in a five thousand year old pyramid. Teff flour, slightly sweet and nutty, is used to make the staple injera bread in Ethiopian cooking. It can be used as a substitute for sesame seeds or flour in baked goods. It's also a good thickener. I use it in my Irish soda bread recipe. America's test kitchen use it in one of their gf blends. BRM \$7.29/24 oz <http://amzn.to/2yJd1Eg>

Vinegar. A teaspoon of vinegar is often added to gf baking to tenderize. By now you should know that malt vinegar is meant to be forbidden on a gluten free diet. We are told that all other vinegars are

distilled to be gluten free. One summer I was looking at my range of vinegars -white wine, red wine, apple cider, sherry, champagne, balsamic – and noticed some clearly said made from wine, or grapes, or apples or cider. Other bottles only said diluted to % acidity. I started asking some questions and it seems to me that there are vinegars labeled as being a wine vinegar that are actually made from wheat or corn ethanol but labeled a wine vinegar. Now according to the experts, these wheat or corn ethanol vinegars are gluten free. My point is they are lying to us and calling them wine vinegars when they weren't produced from wine or apples. In England, there is something called the Trade Descriptions Act, I am fairly sure they couldn't get away with those lies there. So I will only buy vinegars that quite clearly state what they are made from, normally cost more money, but still affordable.

Milk Substitute. My son is dairy free as well and tends to buy Blue Diamond almond milk that is available in regular ½ gallon and tiny juice box size. I will use almond milk for him, but it doesn't always work successfully as a milk substitute in certain recipes. My American popovers/UK Yorkshire Pudding did not rise with almond milk. I also buy refrigerated So Delicious coconut creamer and use it in place of cream for chocolate or vanilla custards. I find it doesn't have enough taste for me for a panna cotta (gelatin set custard), but my cousin was very happy. Arroy-D make an Asian coconut cream as well as coconut milk which will make a good creamy panna cotta or other creamy dessert. I don't like soy milk and many people are allergic to soy. I tried hemp milk and didn't care for it. You have to find what you like. I will use cans of Chaokoh brand Asian style (not Piña Colada) coconut milk instead of cream in soups etc. Pacific make a wide variety of milk substitutes. Chaokoh coconut milk <http://amzn.to/2Cagmlf>

Eggs and substitute. Many people are allergic to eggs, or just the yolks or the whites. I have no problems with eggs, but again my cousin is also allergic to eggs (and much more) so I try and do recipes for her that my husband calls everything free – but still tasty. She's my cousin after all. For health I will normally substitute liquid egg substitute Better' n eggs by Papetti Foods that on their web site they clearly state are gluten free. <http://betterneggs.com/faq/> Don't you love it. I prefer this brand because it doesn't have the garlic and onion powders added to other liquid eggs. I really don't care for my pancakes, waffles etc tasting of onion. Their liquid 'eggs' and carton come yellow colored like real eggs and contain added vitamins etc as well as xanthan and guar gum. Their All Whites eggs and carton are white. For people who can tolerate the whites and not the yolks these two are a good option. I have found that cakes made with all whites don't turn out as well as those using the yellow better n eggs which contains the gums and holds together better. It can't be used for meringues, angel food cake etc as won't fully whisk.

I have used the one tablespoon of flax seed **meal** or chia seeds (yes the same as in Chia pets) to 3 tablespoons warm water, left to gel, as an egg substitute. It is best with assertive flavors like chocolate or spices, otherwise the flavor is noticeable. There are people who are allergic to flax seed. Note you need flax seed meal for its nutritional benefits, plain flax seed goes through the body.

The other egg substitute I have used is Annalise Roberts - 1+1/2 tablespoons water, 1+1/2 tablespoons oil and 1+1/2 teaspoons baking powder to replace one egg and in addition to whatever baking powder is in the recipe. My recipe for corn bread toaster muffins gives my egg free alternate. Really tasty but more like a corn bread shortbread to me.

Bob's Red Mill now make a gf egg replacer. Previously it wasn't gf.

Bulk Buying

You might have seen articles telling you to bulk buy to save money. Many markets have bins with loose rice, quinoa, other grains, dried fruit, nuts etc. I had assumed that with the care Whole Foods take, that it would be safe to buy just as much as I wanted from these bins. Scoops attached to bins, no chance of people using multiple different scoops, pull out dispenser. Then I read an article where someone had been in the back room of a store while one of these 25 or 50 lb bins was being filled. They described the amount of dust circulating around while the bins were filled. Since we are told that wheat flour can remain in the air and settle on surfaces for anything from 24-72 hours, this is probably not the best way to buy in bulk.

I have tried various recipes for **gluten free flour blends**. Some are not bad. Others I really object to the recipe using very expensive \$10/pound alternates. I have to wonder if these people are getting a commission on recommending these alternatives. I don't like the recipes that are almost 100% sorghum flour. Most books recommend using sorghum as only 15-20% of the total since although it is called 'sweet' sorghum, it actually is bitter to my taste. Many recipes using heavy percentages of sorghum then add quantities of sugar to disguise the bitterness.

By the way, I don't say that my mix is a one for one alternate with wheat flour and I don't agree with people that say their blend is. With my Culinary Arts training and even in regular wheat flour days, different brands of flour definitely gave different results. So different brands of any of the starches and flours used for gluten free can be of different thickness, texture, grind etc and therefore need more or less liquid or raising agent to produce a satisfactory result. Plus depending on the day, humidity, heat, any under or over measuring, you can have a recipe not work. I have experimented with certain of my gluten free recipes from my original wheat recipe using my blend and two bought blends. They all worked differently. Nothing bad, but definitely different results. I always try and make my gluten free replicate my original wheat as closely as possible. When I make anything for the first time, I then repeat it several more times to make sure it wasn't a fluke and to find out any possible things that can go wrong with a recipe. But as long as it tastes good, you can always improve the visual appearance of most recipes.

I also don't think that virtually any of the gluten free baked goods I've made taste the same as the wheat flour original. *Shauna Aherna (Gluten Free Girl)* says the same. They taste great, regular flour friends (who enjoy real food and are bakers), say they wouldn't know it wasn't made with wheat flour, but to me, they do not taste the same as wheat flour. Plus I would hear about it from my son (my 6 ft 4 in 'baby') if it didn't taste as good as the original wheat flour version's he grew up with. But to anyone who has had no alternative but to buy mass produced, gluten free baked goods, you'll be very happy

Help support my GF research. My 'Delicious Gluten Free Cooking' downloadable e-cookbook has over 200 pages and over 70 Gluten Free Recipes! Click to see an extract! <http://royaltemptations.com/delicious-gluten-free-cookbook.html>

