



Cross Contamination

Not only do we have to be concerned about gluten ingredients that make up our food – we also have to be concerned about any gluten that may come into contact with our gluten free food.

Often times those that are new to the diet [or our friends and loved ones that don't yet understand the diet], don't fully understand the lengths we have to go thru to make sure our food isn't contaminated. Yes, eye rolls and sighs are often the reactions we get. They think we're being over cautious, anal retentive, drama queens...running around like Lucy van Pelt in [A Charlie Brown Christmas](#) "Ugh! I've been kissed by a dog! I have dog germs! Get hot water! Get some disinfectant! Get some Iodine!"

Gluten is gluten – it doesn't matter how we ingest it. We need to be mindful of it.

GF or NGF [Non-Gluten-Free] Household – That is the question

Choosing what type of house to have depends on many factors. Economic, young children, percentage of members that require GF – just to name a few. I'm not going to defend or promote one way or the other. Every one must make the choice that fits them best. There's no question that having a totally GF house would make things a lot easier on those that need to be GF. You have to weigh the practicalities of each side very carefully. How did everyone else arrive at their choices? For us it's an economic choice. There's no need for Peg to be consuming 3.50 per pound pasta. If we had kids, we might have chosen differently.

Obviously those people that have a GF household are going to have an easier time of this. I'd venture to guess that, most people have a mixed house. How many here today have a 100% GF household? I suspect that most celiac homes are mixed [meaning those that must be GF are, those that aren't GF have gluten foods in the house]. [I took a poll](#) on one of the discussion boards I administrate. 77% (24) live in mixed houses.

I will say this – if you are having trouble getting your numbers down on your [annual follow up blood work](#) or still don't feel well – you'd need to examine what's going on. How is gluten getting in? Are your food choices correct? Are you eating processed/packaged foods? Are you dining out? Could it be cross contamination at home? Did you check your meds/supplements? A number of things must be considered.

Those of us with a mixed house have our work cut out for us. We must always be on guard and always observant. Some people see this as a negative, because they don't have a safe harbor from the rest of the gluten polluted world – that is completely understandable and desirable in certain circumstances. In my case, I don't view it as a hardship, I view it as one of those "facts of life". I feel it prepares me to deal with the rest of the world that doesn't cater to me and my needs. Once you figure out a system, sharing a kitchen/pantry is do able – it just takes some planning – just like everything else with the GF lifestyle. "He who fails to plan, plans to fail".

A very key element in having a mixed kitchen or 100% GF house – is having **total** buy-in of rule following from the others that live in the house. You're really at their mercy in this. Sometimes this is not always easy – particularly with uncooperative spouses/significant others, kids [young ones] or yes, slob. I've always said, it's a good thing that I'm the one that's GF, and not Peg. Yeah, truth be told, I can be teeny-tiny bit of a slob. In my defense, [I think Peg will back me up] when it comes to keeping the kitchen clean of food droppings, I think I do a pretty good job. I do my best to follow all the cross contamination rules just as she does. The kids – well – kids will be kids. As good as they can be, there's going to be some mistakes made. The older kids, it might be easier to teach them what they need to do to keep things safe for their GF family member.



Regardless if you're a mixed house or a 100% GF house, it's always a good idea to give the kitchen/pantry a thorough cleaning when first starting out. Pull everything out of the fridge, cupboards, cabinets and drawers. Wash things down with warm soapy water – changing the water frequently. Gluten is not a living thing, so you can't kill it – bleach does nothing. Heck as long as you're at it, pull out the stove and fridge too - they can get pretty funky! For those with a mixed house – you'll have to do this regularly if you don't already do it.

Organization

As long as you have all the stuff pulled out of the cupboards and shelves, you will want to look at reorganizing them. You'll want to have designated shelves, drawers and cupboards strictly for GF foods and for NGF foods. It's best to keep the NGF items away from the GF items. It can also help to get some sealable containers so that you can place the GF food inside them – that way you won't have to worry if something gets spilled or dropped on it. If you happen to have NGF flours – putting them in their own sealable container is also advisable. If you share pantry space, put GF items ABOVE gluten items. Since gluten rolls downhill, we don't have to worry about “stuff” falling into it our GF foods. Also, make sure you clearly label GF and or NGF containers as such.

Also try to designate some counter or prep space strictly for GF items. Try to make a GF zone so that you always know you have a clean space to put things down. This can help a great deal when prepping meals.

Hardware

There are some utensils that you'll want to replace – hands down, no matter what.

Toasters - if you've ever toasted glutened products in it – get yourself a new one and mark it so everyone knows that only GF items are to be put in it.

Toaster Ovens – if you've got one with removable racks, call the manufacturer and see if you can purchase another rack for it. We purchased a Kitchen Aid, as soon as I got home I called them and asked about another rack. The representative seemed somewhat perplexed as to why I wanted another rack. I explained – he sent me another one free of charge! Now that's customer service!

Colanders/Strainers/Flour Sifters – Since pastas/gluten often get stuck in the small little holes and slits, cleaning them fully is a nightmare if not impossible. We have 2 colanders.

Wooden utensils/boards/rolling pins – Porous item can harbor gluten.

Cutting boards [plastic or wood] – due to the deep cuts and grooves, it's best to get a new one.

Cake pans – these pans typically have a lot of very deep cuts/grooves in them. Cookie sheets – you could always use parchment paper with your existing pans when baking GF cookies. I have my own cake pan, muffin tins, pizza pan, mini loaf pans, cookie sheets.

Non-stick pots & pans – if there's any cuts or scratches in the surface, replace it. It's reported that Teflon is a porous surface and thus is not GF friendly. I have relaxed my views on non stick surfaces over time. As long as the coating does not have any cuts/scrapes/grooves – and as long as it's completely clean – I don't worry too much. I sent off an email to Tricia Thompson aka The Gluten Free Dietitian aka the author of The GF Nutrition Guide. Since she's done several scientific studies, I thought she'd be a good one to ask about Teflon. Here's what she said:



“In my opinion, if a teflon pan has scratched and starts to peel it should be thrown away for reasons far more important (probably) than the possibility it harbors gluten. Maybe it's just me but I don't like the idea of eating those little bits of teflon even if they are chemically inert!!”

As for the possibility that nonstick pans absorb gluten, I am not aware of any studies but find this hard to imagine. I am not an expert on Teflon but based on what I've read, Teflon is chemically inert, is not porous, and does not absorb food. “

There's only 1 or 2 pans that we use for gluten stuff – I use them only if I have to [which is rare].

Cast iron skillets – the “seasoning” develops from years of use is definitely something to stay away from. I've heard of some people getting them sandblasted or scrubbing them with steel wool and starting over.

Ceramic bake or cookware – yeah, that old pizza stone ain't gonna cut it. Foil it, or hand it down to the gluten eaters.

Having some type of marking scheme is important. People have to know what's used for GF and fair game for anything else. In our house we use the color **red** as much as possible for GF items. Spatulas, spoons, Tupperware, etc – all have the color red somewhere. We do have a GF wooden spatula – it's Pampered Chef Brand – it's the only one of it's kind. For our toaster oven rack, I've colored all 4 corners red with a Sharpie permanent marker.

We have even trained frequent guests and family members on how our house functions and cross-contamination concerns.

Navigating

Figuring out how to navigate in this gluten filled world takes some doing. It requires a GPS – Gluten Position Service. Figuring out how to do it in your own kitchen is no exception.

Areas of concern

I've already discussed the utensils.

Counters – crumbs from making a NGF sandwich can be scattered and left behind. This is why it helps to have designated areas for GF and NGF. It just makes things a bit easier.

Dishtowels/sponges/dishrags – it helps to use paper towels because they're disposable. If Peg is working with NGF products, she'll clean first with paper towels then use a dishrag. After cleaning up she will switch out the dishrags with fresh ones. An average day in our house does not really generate much gluten usage.

Pets & Pet food – this is an easy one to overlook. If you're feeding Rover NGF dog food, you might consider switching to a GF dog food [yes, pets do benefit from GF diets too!], or be very careful to wash your hands after feeding them. I have a friend that saw her testing numbers get worse – she finally pinned it down to bags of bird seed. That brand of bird seed used wheat as an anticaking agent and she kept breathing it in [and swallowing it] when she was feeding the birds.

Kisses from loved ones – while this may sound strange, crumbs and residue can remain on hands/faces/mouths of loved ones for hours.



Microwave – how often do you put something in there and as foods heat up, things splatter around? These guys can be a real harbor for gluten pollution.

Grill grates – it might be time to replace the grates on the old weber. Of course you could try cleaning them, but sometimes that's a nasty job in itself! If cleaning or replacing the grills are not an option – grill your GF items on tinfoil.

Hair/skin care products – if you happen to touch your hair, it's possible for hairspray, etc to get on your hands and thus on your food or into your mouth. Most experts will say that topical contact from gluten will not cause a celiac reaction – it must be ingested in order for it cause problems. However, I know many people that do experience some type of skin reaction when they touch it. Is this a true celiac reaction or some other type of reaction – not really sure. This is a highly debated topic on discussion boards. Bottom line, if you react in any way – make sure the product is GF. Problem solved!

Condiments (spreadable) – jars of peanut butter, mayo, butter, margarine, jelly, etc. These guys are huge cross-contamination magnets! Double dipping is strictly prohibited and a punishable offence! You'll need to train people on the fine art of Gob Dropping or using a couple of spoons/knives to accomplish their task. Of course some of these products can be gotten in squeezable containers – this can help. If you think you can double dip just because you're using GF products – think again... First of all, you won't be able to tell if those crumbs are GF or NGF. Second of all, crumbs of any kind in those places are not good eats! GACK!

Shared bowls/bags of your favorite GF snack food - Think about when someone makes a monster sized NGF Dagwood sandwich, then they dig their gluteny paws into the potato chip bowl/bag. Bags of snacks must be poured out into an individual bowl.

Telephone/Keyboard/Mouse/TV Remote – yup these can get glutened too.

A Day in the Life

Getting the hang of safely surviving in a mixed house will take some time. Let's face it, you've probably lived NGF for a lot longer than GF. Old habits and actions take time retrain and rewire. You will make some mistakes starting out, count on that. I know, people are going to say "*if you had GF house you wouldn't have to worry about mistakes...*". Yeah, well, if you stay in bed, you don't have to worry about getting hit by a car either. This is life, life isn't perfect, so we do the best we can with the situation we have. After awhile you become conditioned – for better or worse. We were making lunch one day, Peg had her NGF bread on her plate already and she asked me to lay some sandwich meat on her bread since her hands were contaminated at that point. I pulled out a few pieces and I was starting and stopping with jerky movements. Peg thought I was messing around and asked what I was doing. I told her I was having trouble putting the meat on her NGF bread. I had become so conditioned to NOT do it, I had trouble doing it even when it was acceptable to do.

Spaghetti - Take cooking spaghetti for example...how do you test it to see if it's done? No, throwing it on the wall to see if it sticks is not an option – at least in our house. Right – you taste it. We'll that's not possible if you're cooking NGF pasta – however, old habits are hard to break! I know I'm not the only one that has put NGF pasta in my mouth to see if it was done then realized in horror what just happened. This was years ago, and I have since retrained myself not to do that. Now if I'm cooking pasta for Peg, I will do it by feel. Pinch it between my fingers – then have Peg taste it. Yes, I wash my hands after testing it.



I can hear you asking – “How do you keep straight which utensil to use?” It’s fairly easy actually. Since I’m left handed, I will put my GF pasta pot [yes I have my own pasta pot] on the left side of the stove. I will put Peg’s NGF pasta pot on the right side of the stove. I keep each utensil on the corresponding side. Also remember that my utensils are colored red – this helps in keeping things straight.

I can hear another question - “How do you stop gluten water from bubbling/splashing over into yours?” I stagger the time that I put in the GF and the NGF pasta. I’ll do mine first so it gets done first and thus drained first [into my GF colander]. If I have both going at the same time, I watch the heat to make sure it’s not splashing over the sides of the pot and I’m careful when I stir.

The pasta sauce is GF. Peg can add any NGF modifiers to her plate if she chooses.

This is pretty much how all of our meals are...the base of the meal is GF...then Peg can add whatever she wants. Most times it’s nothing NGF. Pastas, breads, pizzas, cereals/breakfast bars and some desserts – are about our only separate food items.

Baking – As I mentioned I have my own GF baking pans/tray/mixing paddles and mixing bowl [the bowl is stainless so it’s not a big deal anyway]. Peg still does some NGF baking [for fun and some profit]. Around the holidays it’s not uncommon for her to bake me some goodies then bake NGF goodies for herself or an order. Always, always always, the GF items are baked first. After she’s done with the GF baking, she’ll do the NGF baking – using the NGF equipment. It’s been reported that flour poofs around and and stays in the air for up to 24 hrs. Peg maintains that if you’re careful, you can keep the flour poofing to a minimum. She also maintains that GF flour poofs worse than NGF flour. Most generally I am not around when Peg has the NGF flour out, but I happened to watch her one time when she was scooping out the flour and mixing it – I did not see clouds of flour anywhere. The mixer is turned on slowly so flour is not spewed out all over. It would be interesting to do this under a black light to see if we could see it.

As an [unscientific] experiment, I placed several pieces of dark blue paper [sorry, no black was handy] around the kitchen before Peg started her non-gluten-free baking. No mixer was used in this experiment – all mixing was done by hand. Two pieces were sitting between 6” and 2 feet from the measuring/mixing/rollout area. The remaining piece was sitting about 2 feet away on the stove. The 2 pieces closest to the measuring/mixing/rollout area had a few small specks of non-gluten-free flour. The paper sitting on the stove, had no visible flour on it. I will say, that I have never seen or felt a coating of dust/flour after GF or NGF baking.

When NGF baking she clears off the counter so if flour does happen to poof around, it won’t settle on anything...other than the counter. When she’s done the counter is thoroughly cleaned and counter items put back after cleaning.

Hosting Family Events

In some cases family events tend to buffet type setups. Should this be the case, arrange all the gluten foods last in the line and away from the GF foods. It also helps explain to guests what foods are what and not mix the utensils. If you have things like BBQ’s [aka Sloppy Joes] or things that guests might have to build themselves – have 2 separate stations/containers for these -this way you can keep yours [the lion’s share] safe. It’s always smart to have smaller portions at the NGF station. Once it contaminated – you’re not going to want it – unless someone else in the house can eat it. Should you run out or low of the fixin’s at the NGF station you can always refill it from the GF container.

Another tip is to be the first thru the line so you know there’s been no cross contamination. There’s gotta be some perks to this GF thing, right?



Outside your Kitchen

Cross-contamination also occurs outside your kitchen too. We've already discussed the cross-contamination issues and dining out. It also applies to our food and how it's processed and packaged at the manufacturer. You've probably all seen the "Processed in the same facility that process wheat, peanuts, cat hair, whale blubber..."

According to Cynthia Kupper, RD [Director of [Gluten Intolerance Group of North America](#)] in her talk at HealthNow's Gluten Sensitivity/Celiac Forum 2010, the "Processed in..." and "Processed on..." statements are voluntary advisory statements designed for those with IgE [anaphylactic reaction] allergies. Many companies use the statements to "cover their backsides" legally. In reality they have no meaning for celiacs. She stated a group of registered dietitians knowledgeable in celiac/gluten-free; determined it would be reckless of them to suggest that the voluntary statements be used solely to determine the gluten-free status. If you have a true IgE reaction, you need to heed the warning. I highly recommend buying and watching [HealthNow's 2010 Gluten Forum DVD](#). Well worth the \$15.00.

Some companies are better than others when it comes to processing our foods. According to a 2005 report from the Inst. of Food Technologists - nearly all companies do follow "good manufacturing practices" [except for the Peanut Corp. of America], which the IFT concluded to be "effective in reducing or eliminating cross contamination". While many processes take multiple steps to protect consumers, some don't take any. ACK!!

According to FDA studies from 1999 – 2005 [after the PCA incident, not sure how much we should trust the FDA and it's inspection/investigation abilities]

About 55% of food processors identified and separated ingredients with allergens as raw materials.

About 80% took one or more steps to keep food processing equipment clean and prevent allergens from spreading to otherwise allergen-free foods. This includes: dedicated machinery, cleaning shared machinery between runs. Clean was the most common.

The most common source of cross-contamination comes from the build up of food residue on equipment even after it has been cleaned.

About 25% of the facilities were still likely to have allergen contamination in foods they produce. FDA states this figure should not be used as a gauge of overall cross-contamination in processed foods since these inspections were not chosen at random – they targeted facilities where the possibility of cross-contamination was the greatest.

Some companies when they first switch from an NGF run to a GF run [after the cleanup process was done] will donate a certain percentage of the product from the first run to a non-allergic organization in an effort to reduce the cross-contamination risk.



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Resources and web sites used for this presentation:

What Is Gluten Cross-Contamination? And Why Should You Worry About It?
By [Nancy Lapid](#), About.com

<http://celiacdisease.about.com/od/cookingglutenfree/a/crosscontaminat.htm>

Hold The Gluten 10 - Avoiding Cross Contamination

<http://holdthegluten.net/2008/10/16/avoiding-cross-contamination/>

FDA's Report on Cross Contact – July 2006 [As of 6/12/2011, this link does not work. I could not find the original document]

<http://www.cfsan.fda.gov/~acrobat/alrgrep.pdf>

Gluten Free Living – Spring 2007 Issue

<http://www.glutenfreeliving.com/>

Living GF for Dummies by Danna Korn

<http://www.glutenfreedom.net/books-dvds.asp>

Celiacforums.com – Cross Contamination Thread

<http://forums.glutenfree.com/viewtopic.php?t=494>

GIG's Producing GF Products from a Non-Dedicated Kitchen

<http://gluten.net/pdf/GF%20in%20Nondedicated%20Kit%2002-2011.pdf>

GIG's Quick Start Diet Guide

<http://gluten.net/pdf/Quick%20Start%2002-2011.pdf>

Tricia Thompson's – The Gluten-Free Nutrition Guide

http://glutenfreedietitian.com/gluten_free_books.php



Summary

Choosing a 100% or mixed house based on many factors. It's a personal choice, do what's best for your situation.

Large percentage of homes are mixed.

To be successful, total buy-in from other household member to follow all the GF rules.

Pull out everything and clean thoroughly everywhere with warm soapy water.

Organize kitchen & pantry. Separate GF and NGF as much as possible.

GF items are stored ABOVE NGF items.

Store items in sealable containers. Label them GF or NGF.

Have a GF zone somewhere in your kitchen.

Replace: Toasters, Colanders/strainers/sifters, anything wooden, cutting boards, cake pans, scratched nonstick pans, cast iron skillets, ceramic bakeware.

Labeling and marking of all items are important. Use colors to help remind.

Areas of concern: counter tops, dishtowels/sponges/dishrags, pet food, kisses, Microwave, grill grates, ceramic bake/cookware, skin/haircare products, spreadable condiments, shared bags/bowls of snacks, telephone/keyboard/mouse/remotes.

This article was originally written and presented to the members of my gluten-free support group in March 2009. I decided to correct some typographic errors and add some additional knowledge/information I didn't have when I originally wrote it.

This document draws upon my knowledge and experience I have acquired since going gluten-free in 2003. I have given you, the reader, a glimpse into how I personally carry out a gluten-free diet in a mixed house. I am not suggesting this is the only way or the best way; it's simply my way. Nothing more – nothing less. Please do not take any information found here as medical or professional advice. I'm not a doctor/nutritionist/dietitian, nor do I play one on TV. Before making any changes, discuss them with your healthcare team to make sure they are right for you.

My only intent is help others that may be struggling with the gluten-free lifestyle.