

FOCUS ON: GLUTEN-FREE

DAVID PERLMUTTER, MD



TABLE OF CONTENTS

From The Desk of Dr. Perlmutter	3
Articles	
Gluten Sensitivity – Challenged by a New Study?	4
Yes, Gluten Sensitivity Is Very Real	6
Gluten And The Microbiome	7
Top Researchers Reveal How Gluten Threatens Health	8
Gluten Sensitivity Doesn't Only Involve the Gut	10
Is Gluten-Free Toxic?	11
Gluten's Mysterious Hiding Places	12
Epilepsy & Gluten Sensitivity	13
Could Going Gluten-Free Give You Heart Disease?	14
But... It's Gluten Free?	17
Understanding Gluten Sensitivity	18
On Consuming Non-Gluten Grains	20
Recipes	21
Gluten-Free FAQ	41
Science and Studies	45
About The Grain Brain Whole Life Plan	48

FROM THE DESK OF DR. PERLMUTTER

A Note Before Reading

With *Grain Brain*, we started a discussion on the importance of living a gluten-free lifestyle. In the years since, the gluten-free movement has gone from existing on the fringes of the medical research space to a much talked about and studied area of nutrition.

Now many may say “why does that even matter, I don’t have celiac disease?” What we’ve seen is that a sensitivity to gluten can represent itself in diseases far beyond celiac, and in parts of the body outside the gut. Gluten sensitivity is now linked to myriad ailments we never would have expected, including Alzheimer’s disease, ADHD and depression. These diseases, and those like them, may all find their root with the inflammation caused by gluten in the body.

So in the pages that follow, I intend to share with you some of the leading science on the subject of gluten, and tips for living a gluten-free lifestyle. You’ll find the latest research, and some of my favorite recipes for gluten-free foods. If you’d like more, [you can find them here on my website](#).

In good health,



David Perlmutter, MD



Gluten Sensitivity – Challenged by a New Study?

The prevalence of gluten sensitivity has been the subject of lively debate over the past several years, with some researchers indicating that as many as 30% of us have a bona fide reaction to gluten and even more recent science indicating that in fact, all humans have some degree of gluten sensitivity. But that was until a recent massive [Australian study](#) was published in the journal *Gastroenterology*.

This new research has captivated the press as it has been manipulated to send a message that gluten sensitivity doesn't actually exist, and that the reactions people may have to consuming gluten-containing products may well have to do with other components of the foods called FODMAPS – a group of poorly absorbed carbohydrates.

I recently had the opportunity to appear on a National Public Radio interview in which several “gluten experts” were also interviewed. Sure enough, this study, calling into question the whole notion of gluten sensitivity, was debated. In fact, one of the authors of this highly comprehensive study was also a guest on the program.

He began by revealing to the radio audience that his earlier research had clearly recognized gluten exposure as a risk for illness in some humans. But he went on to say that now, his newer research showed contradictory results. “Unless a person has celiac disease, there is no reason to avoid

consuming gluten. After all, it was wheat cultivation that allowed the development of our modern culture,” he explained.

Fortunately, prior to the program I had the opportunity to review his study. And what I found, was that this “gamechanging research” actually involved only 37 subjects! Moreover, it only looked at one complaint – gastrointestinal distress.

We recognize, based upon research involving much larger groups of individuals and looking at issues well beyond the gut, that gluten sensitivity is certainly a real entity. For example, the work of British researcher Dr. Marios Hadjivassiliou has demonstrated that gluten sensitivity issues may lead to neurological symptoms, even



without bowel complaints. And this has now been confirmed by other well-respected researchers. As Dr. Hadjivassiliou stated when discussing these neurological issues:

Whilst the debate continues, we owe it to our patients to screen them effectively for gluten sensitivity with the simple widely available antigliadin antibody test so that we do not in the meantime deprive them of a harmless but potentially effective

treatment in the form of a gluten-free diet.

Even more compelling is the fact that the very researcher who denied the existence of gluten sensitivity has just recently [published a report that begins by stating:](#)

Human and animal studies strongly suggest

that dietary gluten could play a causal role in the etiopathogenesis of type 1 diabetes (T1D). However, the mechanisms have not been elucidated. ... Our novel study thus suggests that dietary gluten could modulate the incidence of T1D by changing the gut microbiome.

I found this puzzling and certainly contradictory. So I decided to inspect the new report even further. I just couldn't understand why well-respected researchers who had published solid science demonstrating that gluten could be related to diabetes, would suddenly do an about face and write a report giving the impression that unless a person has celiac disease, they should go ahead and not worry about eating gluten containing foods.

It was then that I discovered that the funding for this research was provided by a company called George Weston Foods. [I encourage you to look at their web site.](#) There you will find that George Weston Foods is one of Australia's and New Zealand's largest purveyors of breads, pastas, cakes, and a host of other gluten containing foods.

One can only imagine the funding that went in to the PR campaign surrounding this report. Think of it. When was the last time a tiny obscure study involving a mere 37 participants received such attention?



Yes, Gluten Sensitivity Is Very Real

Hardly a day goes by that I don't see an article indicating that the notion of going gluten-free is entirely overblown. Typically, the conclusions often sounds something like, "While only about 1.6% of Americans, those with confirmed celiac disease, need to be on a gluten-free diet, there is absolutely no reason for anyone else to adopt this diet."

Statements like these are generally made to convince people who may be considering eliminating gluten, or who may already be on a gluten-free diet, to go back to eating gluten-containing foods. Clearly, for those of us who have done the research to understand how gluten can affect certain people, pushing back against this type of sentiment has always been a challenge.

Generally our response has always been supported by well-respected, peer-reviewed, scientific literature. As such, it was really very heartening to see [this wonderful scientific review in the Journal of the American Medical Association](#).

The authors clearly support the notion that non-celiac gluten sensitivity is in

fact very real indeed, and, according to the authors, very common.

Further, the researchers call attention to the fact that individuals with non-celiac gluten sensitivity may not only have gastrointestinal issues but other issues as well, including arthritis, depression, cloudiness of consciousness, headache, irritability, muscle pain, neuropathy, anxiety, anemia, and coordination difficulties.

And again, this report is put out by the American Medical Association and was written by researchers affiliated with some of the most well respected institutions in the world including Harvard Medical School and the European Biomedical Research Institute.



No doubt, we will continue to see nonscientific publications from naysayers as it relates to the notion of gluten sensitivity apart from celiac disease. I think it is very important in debates centered on these very important topics that we do our very best to support our positions with well-respected research.



Gluten And The Microbiome

In humans, the relationship between type 1 diabetes and celiac disease is clear: having celiac disease dramatically increases risk for becoming a type 1 diabetic. But even beyond those with celiac disease, it has now been shown that early introduction of gluten-containing cereals in infancy is directly related to increased risk for type 1 diabetes.

The why and how of this relationship are still not perfectly clear. However, new research is focused on the role of dietary gluten in challenging the microbiome – the 100 trillion bacteria living within each of us – and how this paves the way for increased inflammation and autoimmunity, fundamental mechanisms in type 1 diabetes.

Interesting [new research](#) has shown how a gluten-free diet dramatically protects laboratory mice from becoming diabetic. Further, this same report reveals that the mechanism by which diabetes is instigated in mice consuming gluten has to do with changes in the bacteria residing in their intestines.

I appreciate that this report is advanced, but I want to share it as it is intriguing not only from the perspective of

further implicating gluten as an instigator of autoimmunity, but also because it provides insight as to the role of the microbiome as a mediator of this process.

What this means is that, moving forward, we will be exploring what it means to adopt lifestyle changes to preserve a healthy population of intestinal bacteria. I believe this will, perhaps, offer the most powerful leverage point to reign in inflammation and autoimmunity. And how interesting it will be as we explore how gluten factors in to this equation.

Top Researchers Reveal How Gluten Threatens Health

Not too long ago, Columbia University announced a “breakthrough” in our understanding of how gluten relates to health issues. Their findings, [published in the journal *Gut*](#), revealed that the complaints gluten-sensitive people (those with non-celiac gluten sensitivity) experience are a consequence of a disruption of the gut lining – what has come to be called “leaky gut.”

As the authors concluded:

These findings reveal a state of systemic immune activation in conjunction with a compromised intestinal epithelium affecting a subset of individuals who experience sensitivity to wheat in the absence of celiac disease.

Co-author of the study, Dr. Umberto Volta, professor of internal medicine at the University of Bologna, summarized as follows

These results shift the paradigm in our recognition and understanding of non-celiac wheat sensitivity and will likely have important implications for diagnosis

and treatment... Considering the large number of people affected by the condition and its significant negative health impact on patients, this is an important area of research that deserves much more attention and funding.

I am pleased to see reports like this making their way into the conversation. But to be fair, the idea that a breakdown of the intestinal lining plays a pivotal role in the various complaints of those suffering from non-celiac gluten sensitivity isn’t a new discovery. In fact, this exact mechanism is the central theme of [Grain Brain!](#)

What is newsworthy [is the recent finding that the breakdown in the gut lining as a response to gluten exposure is](#), according to Harvard researchers, an event that occurs in all humans. That means that there is immune activation occurring in all of us when we consume gluten, whether we think we are having issues, or not.

When we understand the powerful relationship between this mechanism of immune activation and diseases like diabetes, Alzheimer’s, coronary artery disease, and even obesity, it makes opting for a gluten-free diet the clear choice if you want to do everything you can to protect your health.

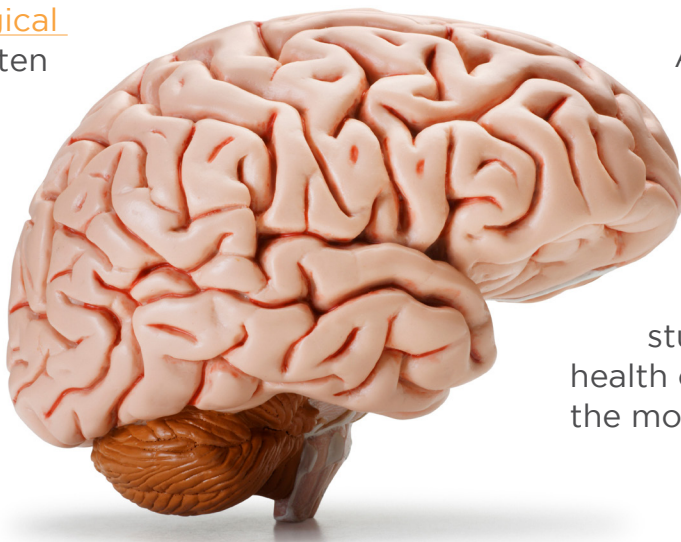


Gluten Sensitivity Doesn't Only Involve the Gut

Australian researchers published a [report in the journal *Gastroenterology*](#) that purported to argue against the clinical entity known as non-celiac gluten sensitivity. In their research, the claim was made that because there were no biomarkers for gluten sensitivity correlated with introduction of gluten into the diet and no clear cut correlation of gluten exposure to gastrointestinal symptoms in their small study, the existence of gluten sensitivity as a clinical entity should be doubted.

The researchers evaluated the clinical parameter of “gastrointestinal distress,” in a mere 37 subjects. What’s troubling about this report is that it completely misses the point. As I have stated on multiple occasions, gluten sensitivity is frequently an extra-intestinal disease that may have no impact on the gut whatsoever.

As Dr. Marios Hadjivassiliou pointed out 12 years ago in his landmark publication, [Gluten sensitivity as a neurological illness](#), gluten sensitivity may relate to a number of



neurological conditions in the absence of gastrointestinal involvement. As this same author has stated more recently in a report appearing in [Practical Neurology](#):

Neurological manifestations of gluten sensitivity are a scientific fact, not a theological issue. Whilst the debate continues, we owe it to our patients to screen them effectively for gluten sensitivity with the simple widely available antigliadin antibody test so that we do not in the meantime deprive them of a harmless but potentially effective treatment in the form of a gluten-free diet.

As a practicing physician who has witnessed first hand the life changing effects of a gluten-free diet in individuals who have suffered from any number of physical ailments for literally decades, media attention to this study serves only to compromise the health of those who need this information the most.

Is Gluten-Free Toxic?

Often, I'm asked about studies and publication that purport that going off gluten-containing foods will increase a person's risk of arsenic and mercury toxicity.

One such report, appearing in [Science Daily](#), caused quite a stir amongst the gluten-free community. I mean after all, who wants to be poisoned, and from the sound of things, going off gluten might be doing just that!

Well, let's take a step back and first focus on the report's title: "Gluten-free diet may increase risk of arsenic, mercury exposure." It's the last word that should tell you something. After all, how could avoiding something increase your exposure to toxic chemicals?

Indeed, the study did find higher levels of these toxins in gluten-free individuals, but it was because they ate more of other potentially contaminated foods in place of gluten-containing grains. Rice, for example, is a popular choice for people giving up gluten, and the data clearly shows a powerful risk for arsenic exposure in folks who eat a lot of rice.

In addition, we do know that fiber does help the body rid itself of toxins. And going off gluten might lead to a reduction in fiber consumption.

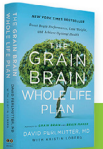
So the take-home message here is that you're not going to increase your risk for arsenic or mercury toxicity by eliminating something (gluten-free foods in this case). But you may well increase this risk by consuming foods higher in toxins, or by limiting your fiber consumption.

SUCCESS STORIES

I committed to my new gluten-free, low-carb lifestyle 7 months ago, and have since lost 23 lbs., mostly in the first 3 months. Most noticeable to me is the reduction in body aches. I'm running twice the miles I used to because my body does not hurt like it did before. I simply feel better!

— Jim W.

davidperlmutter MD



2 TO AVOID:

FRUCTOSE & GLUTEN

davidperlmutter MD

#BRAINMAKER

PRODUCTS YOU WOULDN'T EXPECT TO CONTAIN GLUTEN

- Soy Sauce
- Cold Cuts
- Processed Cheese
- Non-Dairy Creamer
- Ketchup

davidperlmutter MD

#BRAINMAKER



Gluten's Mysterious Hiding Places

When I was in practice, we would often see patients who we've identified as being very sensitive to gluten, and who are on a plan to eliminate it from their diet, yet they are still having experiencing health complications with their skin, joints, gastrointestinal tract, etc. In this case, there are two things to consider.

First, we do know that gluten sensitive people are oftentimes sensitive to other foods. But beyond that the bigger problem is that many foods that don't necessarily look like they contain gluten may *actually contain gluten*. We know that gluten

is found in wheat of course, but did you know it is also in barley and in rye and very frequently in oats (because oats are oftentimes milled in factory that does wheat as well). Certain flavor enhancers like MSG can contain gluten, as can various other types of food additives. So oftentimes reading the label may not be revealing in terms of products that contain gluten!



[Click here to watch full video](#)



Epilepsy & Gluten Sensitivity

Epilepsy affects 3 million Americans and generally we don't know the cause. Certainly in some cases, the cause is readily identifiable, but most cases of epilepsy are what we call idiopathic, meaning we don't understand the cause. Now the go-to treatment for epilepsy is obviously using a class of medications we call anti-convulsives. But let's have a look at another perspective of what we should be thinking about in terms of this devastating condition.

There was a study published in the journal *Neurology* that describes the case of an individual 30-year old man who had a headache history for two years and suffered from refractory seizures (meaning that despite receiving seizure medications his seizures continued). In addition he had issues with chronic constipation, a rash on his elbows and his knees, and the researchers found that his antigliadin levels, antibodies against gliadin, which is something found in gluten in wheat and barley and rye, were elevated. This means he was reacting to gluten-containing foods.

So, the researchers put him on a gluten-free diet. When they did that his seizures completely went away, and his bloodwork actually normalized as well. Very interesting that giving a gentleman with a seizure disorder a gluten-free diet could make his seizures go away.

And here's another case of a 23 year old woman who had refractory seizures for 11 years. They put her on a gluten-free diet and her epilepsy went away.

Well the reason we're having this discussion today is because of an article from the journal *Neurology* calling for us to look at treatment of epilepsy in a different way. The study is called "Epilepsy surgery trends in the United States 1990 to 2008," if you want to find it. The study says: Temporal lobectomy (*that means taking out the temporal lobe of the brain*) continues to be heavily underutilized as a treatment for epilepsy. Patients who are medically refractory after failing two anti-epileptic medications, should be referred to a

comprehensive epilepsy center for surgical evaluation.”

So what this study is saying is that if you are refractory, meaning that you’re still having seizures after two medications have been tried, then you should be referred to a center to have the temporal lobe of your brain removed. Now I opened this report showing you cases of patients who had gluten sensitivity and epilepsy showing improvement by simply following a gluten-free lifestyle. Let’s take a look at once last study.

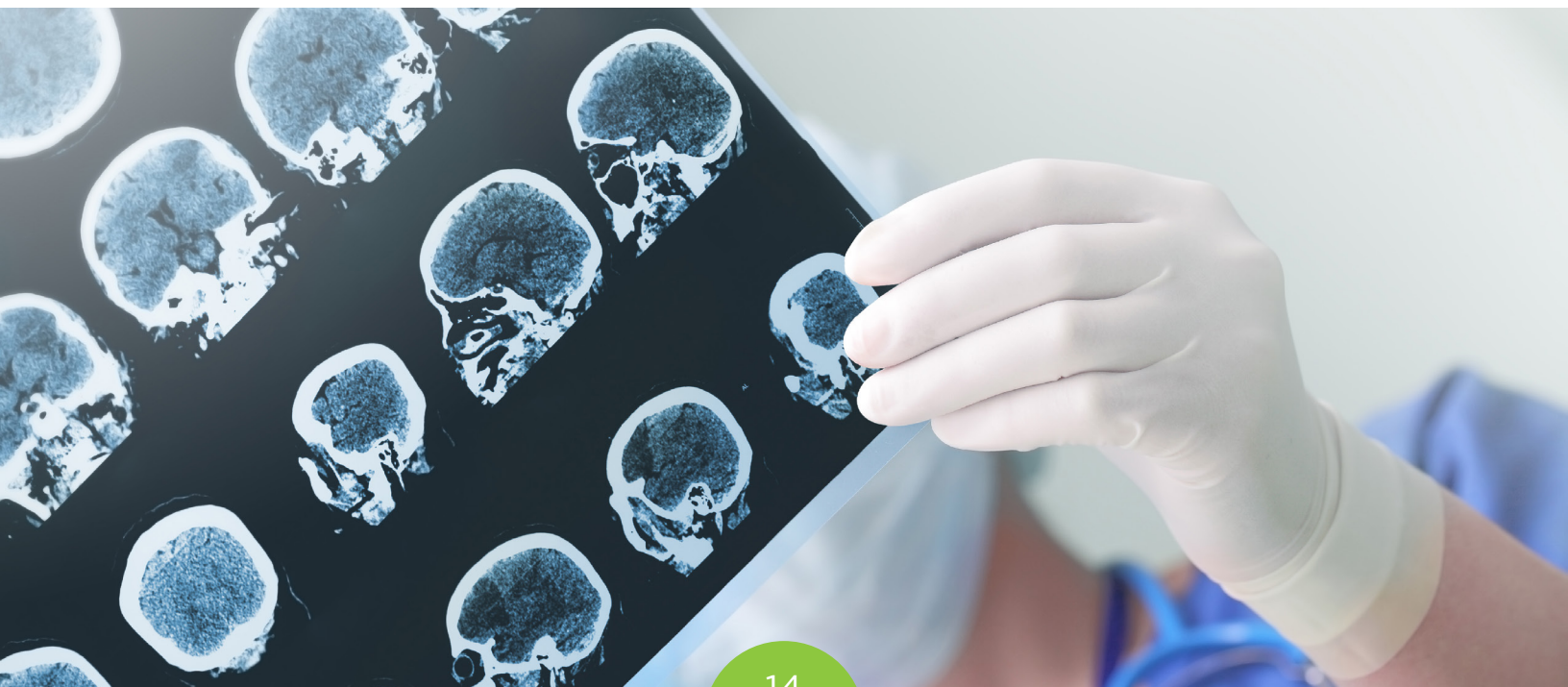
There is a report called “Gluten sensitivity from gut to brain”, written by a British researcher named Dr. Marius Hadjivassiliou published in the journal *Lancet Neurology* and he tells us that: “most patients who present with neurological manifestations of gluten sensitivity may have no gastrointestinal symptoms.”

And what that means is basically that we should always have a high index of suspicion for gluten sensitivity, even if there are no gastrointestinal issues.

My point is this: prior to taking out somebody’s temporal lobe, what would be the harm of placing that epilepsy patient on a gluten-free diet? At the very least, you’ll reduce inflammation, they’ll feel better, and they may even lose a little weight. Further, their headaches may improve, and their cognitive function may very well improve too! As we’ve now learned it may actually help their seizure disorder quiet once and for all.



[Click here
to watch
full video](#)





Could Going Gluten-Free Give You Heart Disease?

I'd like to respond to an article sent my way many times over the past few years. The article, "Long-term gluten consumption in adults without celiac disease and risk for coronary heart disease: prospective cohort study," was published by the *British Medical Journal*. It gained a lot of attention because of the conclusion that the authors reached, which was amplified by the news media. Their finding? That going gluten-free doesn't seem to have any beneficial impact on the heart.

In fact the study, which was a very long-term study, went on for 26 years and looked at women who were involved in the Nurse's Health Study, as well as health professional studies (ongoing studies). They looked at what are called food frequency questionnaires, in other words what were people eating between 1986 and 2010. What they found was that going gluten-free did not offer any specific advantage in terms of the heart. Let me read their

conclusions: "Long-term dietary intake of gluten was not associated with risk of coronary heart disease. However the avoidance of gluten may result in reduced consumption of beneficial whole grains which may affect cardiovascular risk." We're going to talk about that in just a moment.

The promotion of gluten-free diets among people without celiac disease should not be encouraged. You may be surprised to hear this from me, but by and large I pretty much agree with what these authors have concluded in that they found no real relationship between going gluten-free and the risk for developing heart disease.

We all understand there are benefits to going gluten-free, but if you're not gluten-free, you are going to be eating more fiber, and fiber is really important for your body. I believe that dietary fiber in gluten-containing products offsets the damaging effects of the gluten. The reason that I

disagree with how this article is being promoted is that I think that people who do go gluten-free and don't get adequate amounts of fiber are at risk for a variety of problems. In this case, coronary heart disease. To reiterate what the authors stated: "avoidance of gluten may result in reduced consumption of beneficial whole grains."

To be clear, we need dietary fiber to nurture our gut bacteria for a variety of reasons not the least of which is to help reduce inflammation. So the take home message here for me, and hopefully I can transmit that to you, is that we still want to remain gluten-free but by all means we've got to make sure we get adequate amounts of fiber intake so that we can get the best of both worlds. That is, of both being gluten-free and having sufficient fiber in our system. In this case, gluten-free, fiber-containing grains are a good option. Things like non-GMO rice and corn, for example.

(Rice recently has been a bit castigated because of its toxicity. That's another

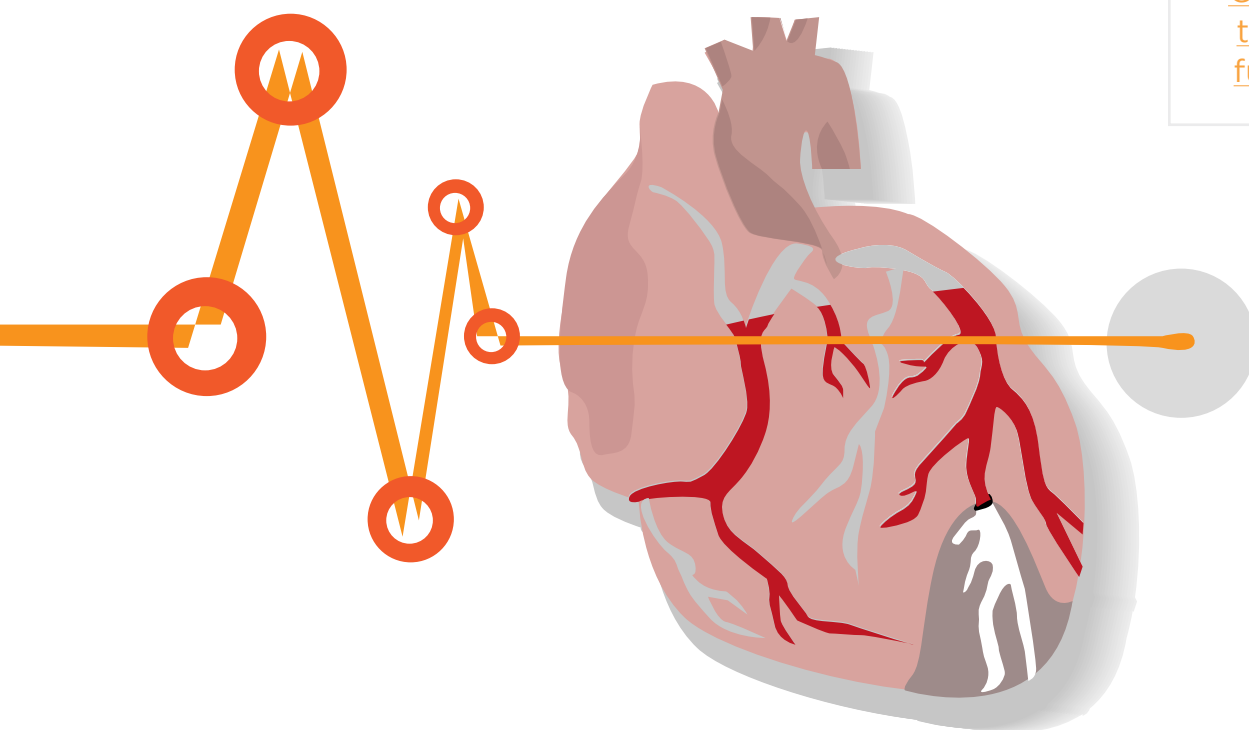
discussion.)

Understand that fiber doesn't necessarily just have to come from grain and I would vote for getting fiber from fiber-rich foods rich in prebiotic fiber, like jicama, garlic, onions, leeks, Jerusalem artichoke, chicory root, and even dandelion greens. Or just get some good prebiotic fiber from the health food store!

So all in all I think that there are some interesting conclusions of this study but I think to say that people should not go gluten-free is not necessarily an appropriate conclusion.



[Click here to watch full video](#)





But... It's Gluten Free?

“But it’s gluten free!”

I mean that is the ticket to buying whatever, right? So often my patients are telling me that they only shop in the gluten-free aisle at the grocery store, so they can;t understand why they aren’t losing weight.

Well the reason is because just because something is gluten-free doesn’t mean it’s good for you! The gluten-free pasta, bread, cakes, cookies, and crackers are powerful sources of carbohydrates! It’s like you’re shooting yourself in the foot.

You can’t be shopping only in the gluten-free aisle of the grocery store. I recently visited a coffee shop and saw something wonderful: gluten-free cookies! Sure, sign me up for that! Then I looked at the label. What did I find?

41gs of carbohydrate per cookies.

Now you know I lobby to have people reduce their daily carbohydrate consumption to between 60 to 80 grams of carbohydrate a day. Eat a couple of these

cookies and you’re busted.

Yeah they’re gluten-free but you’re already setting the stage for elevation of your blood sugar. That leads to shrinkage of your brain’s memory center and compromise of memory, paving the way for dementia. This is really important information. Stay away from the gluten-free aisle in the grocery store and remember to shop the periphery!



[Click here to watch full video](#)



Understanding Gluten Sensitivity

When I was practicing, I treated a patient who had a 40-year history of headaches. I did some blood work and found that she was gluten sensitive. I took her off of gluten and her headaches disappeared.

She then visited with her gastroenterologist, who picked up the phone and called me and to ask why I put her on a gluten-free diet. I began to explain about something called non-celiac gluten sensitivity. At that moment, there was a lot of silence on the other end of the phone! There are still people who don't believe that there really is such a thing as being gluten sensitive if you don't have celiac disease.

Back in 2012 there was an international symposium in England where some of the top gluten researchers on the planet came together to look at this notion of gluten-related disorders. What they identified are three unique conditions: an allergy to wheat, celiac disease, and, yes, gluten

sensitivity. Here's what they came up with.

The symptoms in gluten sensitivity may resemble those associated with celiac disease, but with a prevalence of extra-intestinal symptoms, meaning manifestations outside the gut, like behavioral changes, joint pain, muscle cramps, leg numbness, weight loss, and even chronic fatigue. What they found is that, of the people with this sensitivity, over two-thirds have abdominal pain, and over one-third experience serious brain fog! That means this sensitivity to gluten is manifesting itself in



the brain! This extends to conditions like depression, joint pain, and more.

So the point is that gluten sensitivity is real, and it frequently manifests itself outside of the gut. In neurology, we see a lot of brain-related issues with a connection to gluten and gluten-sensitivity, such as cognitive issues, attention deficit issues, depression, and even nerve issues.

We've really got to understand that our most well-respected researchers are telling us, loud and clear, that gluten sensitivity apart from celiac disease is *very real* and that we should consider going gluten-free when we have patients present with these types of complaints.



[Click here
to watch
full video](#)



Gluten-Free Shopping List

Shredded Coconut
Kale
Almonds
Walnuts
Olive Oil
Coconut Oil
Grass Fed Beef
Free Range Eggs
Avocado
Free Range Turkey
Free Range Chicken
Mixed Greens
Spinach
Broccoli
Wild Salmon
Berries (in moderation)
Onions
Garlic
Bell Pepper
Black Pepper
Goat's Cheese



On Consuming Non-Gluten Grains

So there are a lot of grains out there that are gluten-free. For example, rice. Quinoa is, by definition, not a grain (it's not a seed of grass), but it widely falls into consideration when people talk about grains, and quinoa is gluten-free.

Gluten-free grains, like rice and quinoa, are great because the presence of gluten tends to make the gut leaky, so this avoids that problem. However, you've got to be careful that when you consume these items you're not loading up on the carbohydrates, the other part of the story you need to be aware of.

So if you want to have a small serving of, for example, non-GMO wild rice, that would be certainly appropriate. Now, I do mention non-GMO because I really think that's important. You really want to be certain that even though something is gluten-free that it hasn't been sprayed with, for example, Roundup or glyphosate. This is

very common in the case of another gluten-free grain, corn. More than 70 to 80 percent of the corn available in America today is genetically modified and likely treated with glyphosate.

So the take home message is that as long as you're watching the carb content (and the source) you may have a small serving of rice or choose some quinoa.



[Click here to watch full video](#)

BREAKFAST RECIPE

Strawberry Power Smoothie

INGREDIENTS (SERVES 1)

- 1/4 cup coconut milk (from a can)
- 1/4 cup water (more as needed for desired consistency)
- 1/4 cup frozen strawberries (sliced makes for easier blending)
- 1/4 ripe avocado, peel and pit removed
- 1 Tablespoon raw unsalted sunflower seed kernels or almonds
- 1 Tablespoon hemp hearts (hulled hemp seeds)
- 1 Tablespoon organic no sugar added sunflower seed butter (or almond butter)
- 1/2 -inch piece of ginger root, peeled and chopped
- 1/2 teaspoon ground cinnamon

INSTRUCTIONS

Place ingredients in blender in order given.

Blend until completely smooth, turning off blender and scraping down sides as needed.

Serve immediately.



BREAKFAST RECIPE

Salmon Cakes with Fennel & Parsnips

INGREDIENTS (SERVES 1)

FOR THE VEGETABLES

- 1/2 cup fennel, shaved thin (use a mandolin slicer for thinnest slices)
- 1/4 cup parsnips, shaved
- 1/2 Tablespoon coconut oil

FOR THE SALMON CAKES

- 6 ounce can boneless, skinless wild caught salmon, drained
- 1 egg
- 1 Tablespoon quinoa flakes
- 1 Tablespoon fresh chives, chopped
- 1 teaspoon capers
- 1 teaspoon lemon juice
- 1/2 Tablespoon coconut oil, for frying
- 4 radishes and greens

INSTRUCTIONS

Heat oil in a skillet and sauté fennel and parsnips until tender, about 7 minutes. Remove to serving plate.

In a mixing bowl, combine salmon, egg, quinoa flakes, chives, capers and lemon juice. Stir to mix until most of the large chunks of salmon are broken down.

Heat oil in a frying pan over medium heat, form salmon mixture into 2 patties and cook 4 minutes per side.

Place salmon cakes over fennel and parsnips and garnish with radishes. Serve warm.

Serve immediately.



BREAKFAST RECIPE

Avocado Scrambled Eggs with Lemon Broccoli

INGREDIENTS (SERVES 1)

- 2 cups broccoli, chopped
- 1/2 Tablespoon coconut oil
- 1/2 Tablespoon lemon juice
- 2 eggs, beaten
- 1/4 ripe avocado, peeled & pit removed
- 1 Tablespoon nutritional yeast
- Salt and pepper, to taste

INSTRUCTIONS

Heat oil in a skillet over medium heat and cook broccoli until desired tenderness.

Transfer broccoli to serving bowl and toss with lemon juice; set aside.

In a small bowl, beat eggs and add avocado, mashing avocado into eggs with a fork. Stir in nutritional yeast and add salt and pepper as desired.

Cook eggs in same skillet you used for the broccoli, allowing eggs to set, then stirring gently, to scramble them.

When eggs are done, serve over broccoli. Garnish with fresh herbs, as desired.



BREAKFAST RECIPE

7 Layers in 7 Minutes Mexican Breakfast

INGREDIENTS (SERVES 1)

- 1 cup chopped dark leafy greens
- 2 teaspoons coconut oil
- 1/4 cup cooked black beans (from a can, drained of liquid)
- 1/4 teaspoon cumin
- 2 Tablespoons hummus
- 2 Tablespoons crushed tomatoes (from a can) or fresh diced tomato
- 1 Tablespoon diced mild green chilis (from a can or jar)
- 1 large egg
- Sprigs of fresh cilantro, garnish

INSTRUCTIONS

Place greens in shallow serving bowl; set aside.

In a skillet, heat 1 teaspoon of the coconut oil and cook black beans with cumin, mashing beans a bit with a fork. Cook 4 minutes, until warmed, then pour beans over greens.

Top the beans with hummus, crushed tomatoes and chiles; set aside.

Wipe out the skillet where you warmed the beans and place it back over medium heat. Melt the remaining teaspoon of coconut oil and cook the egg 2-3 minutes per side, depending on your desired level of doneness.

Place the egg on the layered dish, garnish with cilantro. Serve immediately.



BREAKFAST RECIPE

Half Moon Breakfast Buddha Bowl

INGREDIENTS (SERVES 1)

- 1 Tablespoon water
- 1/2 Tablespoon coconut oil
- 1/4 teaspoon ground turmeric
- 1 cup zucchini slices (about 1/4 -inch thickness), cut in half
- 1/2 navel orange, quartered
- 4 ounces smoked wild caught salmon
- 2 asparagus spears, optional

INSTRUCTIONS

In a saucepan over medium-high heat, warm water, coconut oil and turmeric until coconut oil melts. Add zucchini and stir-cook until tender, about 5 minutes.

Spoon zucchini into serving bowl, filling one-half of the bowl.

Place orange wedges on other half of bowl and roll slices of smoked salmon into rosettes and place among orange pieces.

Add 2 asparagus spears to center of bowl as a divider, if desired.



LUNCH RECIPE

Chicken Fajita Salad

INGREDIENTS (SERVES 1)

- 4 oz. boneless, skinless chicken breast
- 2 tsp. olive oil
- 1/2 tsp. ground cumin
- 1/4 tsp. ground chili powder
- Salt and pepper
- 1/4 cup sliced red, orange, and/or yellow bell peppers
- 2 cups dark leafy greens
- 1 small tomato (1/4 to 1/2 cup total), cut into wedges
- 1 tbsp salsa
- Lime wedges, garnish

INSTRUCTIONS

Heat a skillet over medium high heat.

Coat chicken breast with oil, cumin, chili powder and salt and pepper.

Place chicken in skillet, cook 4-5 minutes per side, then add peppers. Cook until chicken is cooked through and peppers are tender (approximately 5 additional minutes).

While chicken cooks, arrange greens in a serving bowl, top with tomato wedges. Once chicken is done, cut into strips and place chicken and peppers on top of greens in serving bowl.

Top with salsa and serve with lime wedges for squeezing over the top.



LUNCH RECIPE

Roasted Veggie Salad with Hardboiled Egg

INGREDIENTS (SERVES 1)

- 1 cup eggplant, cubed
- 1/2 cup butternut squash, cubed
- 1/2 Tablespoon olive oil
- 1 cup shredded cabbage
- 1 cup dark leafy greens
- 1 Tablespoon hemp hearts (hulled hemp seeds)
- 2 teaspoons sesame seeds
- 1 hardboiled egg, sliced
- 4 Kalamata olives
- Salt and pepper to taste
- Paprika, optional garnish

INSTRUCTIONS

Preheat oven to 425F and line a baking sheet with foil.

Toss eggplant and butternut squash cubes with oil, place on pan and roast 25 minutes, or until they reach desired tenderness.

While the vegetables roast, place cabbage and greens in a salad bowl, top with hemp hearts and sesame seeds and place sliced egg on top.

When vegetables are done, arrange them along the sides of the salad and add olives, salt, pepper and paprika to taste, as desired.



LUNCH RECIPE

Fish Tacos with Avocado Slaw

INGREDIENTS (SERVES 1)

FOR THE FISH

- 4 ounces cod or similar fish
- 2 teaspoon lime juice
- 1/2 teaspoon ground cumin
- Salt and pepper

FOR THE AVOCADO SLAW

- 1 cup shredded cabbage
- 2 Tablespoons shredded carrot
- 1/4 avocado
- 1 Tablespoon salsa
- Salt and pepper
- 3 large Romaine leaves
- Lime wedges for garnish

INSTRUCTIONS

Preheat oven to 375F and line a baking sheet with foil.

Place fish on foil and coat with lime juice, cumin, salt and pepper; bake 10-12 minutes, until cooked through.

While fish bakes, prepare the slaw by tossing cabbage and carrot together. Add avocado and mash into cabbage. Stir in salsa, salt and pepper as needed. Divide evenly among Romaine leaves.

When fish is cooked, break into bite size pieces and top slaw in Romaine leaves. Serve immediately with lime wedges.



LUNCH RECIPE

Greek Meatball Wraps with Hummus & Roasted Red Pepper

INGREDIENTS (SERVES 1)

FOR THE MEATBALLS

- 4 ounces ground grass-fed lamb
- 1 clove garlic, minced
- 1/2 teaspoon dried crushed oregano leaves

FOR THE WRAPS

- 2 large butter lettuce leaves, washed and dried
- 2 Tablespoons hummus
- 2 Tablespoons roasted red pepper strips

INSTRUCTIONS

Make the meatballs by combining the lamb, garlic and oregano; shape into 8 evenly portioned meatballs. Cook in a skillet over medium heat until browned on all sides and cooked through, about 8 minutes. Set aside to assemble wraps.

Spread 1 Tablespoon hummus onto each lettuce leaf, top with 1 Tablespoon peppers and then top with 4 meatballs. Roll up and enjoy.



LUNCH RECIPE

Crab Cakes with Rice and Balsamic Mushrooms

INGREDIENTS (SERVES 1)

- 1/2 cup sliced mushrooms
- 2 teaspoons balsamic vinegar
- 2 teaspoons olive oil
- 4 ounces crab meat, rinsed and drained
- 1 egg white (discard yolk or reserve for another use)
- 2 Tablespoons mashed avocado
- 1/8 teaspoon each: garlic and onion powder
- 2 teaspoons fresh squeezed lemon juice
- 2 teaspoons coconut oil
- 1/2 cup cooked rice

INSTRUCTIONS

Toss mushrooms in vinegar and oil; sauté lightly in skillet over medium high heat, approximately 5 minutes (alternately, you may skip the sauté and eat the mushrooms raw tossed in vinegar and oil if desired). Transfer mushrooms to serving plate, wipe out skillet and set aside (off the heat) while you prepare the crab cake mixture.

In a mixing bowl, combine crab meat, egg white, avocado, garlic and onion powder, and lemon juice, stirring until combined. Do not over-mix.

Return skillet to medium-high heat, add coconut oil to skillet.

Shape crab mixture into 2 equal patties. Place patties in hot skillet and cook 4 minutes per side. Be very careful turning patties so that they hold together.

Serve immediately with rice and mushrooms.



DINNER RECIPE

Salmon Roasted in Almonds and Butter

INGREDIENTS (SERVES 4)

- 1 1/2 pound skin-on salmon filet
- Salt and pepper
- 6 tablespoons butter
- 3/4 cup slivered almonds
- 2 tablespoons chopped chives
- 1 tablespoon lemon juice
- Cracked black pepper for garnish, optional

INSTRUCTIONS

Preheat the oven to 500°F.

Season the salmon with salt and pepper. Set aside.

Place the butter and almonds in a small baking pan in the preheated oven. When the butter has melted, add the salmon, flesh side down. Roast for 5 minutes; then, turn and continue to roast for another 3 minutes or until the salmon is beginning to barely flake. (You can test by sticking the point of a small, sharp knife into the flesh to see if it flakes or easily comes apart.)

Remove from the oven and transfer the salmon to a serving platter. Stir the lemon juice and chives into the “sauce” that is in the pan and immediately pour over the salmon. Sprinkle with cracked black pepper and serve.

If you can, do garnish with the cracked pepper. It offers just a hint of heat to balance the fatty fish and the buttery sauce.



DINNER RECIPE

Spaghetti (Squash) with Meat Sauce

INGREDIENTS (SERVES 1)

- 1/2 Tablespoon olive oil (if using ground turkey)
- 4 ounces ground turkey or beef
- 1/4 cup diced tomatoes (fresh or canned; if using canned tomatoes, include liquid)
- 1/4 cup chicken stock
- 1 teaspoon Italian herbs seasoning
- 1 cup cooked spaghetti squash (either leftover or wrap half of spaghetti squash with seeds removed in plastic wrap and microwave 7 minutes to cook)
- Dried basil, garnish
- Up to 1 ounce fresh mozzarella cheese, optional

INSTRUCTIONS

Warm olive oil in small saucepan and brown ground turkey (no oil if using beef, simply brown beef without oil).

Add tomatoes, stock and herbs, cover and simmer 5 minutes.

Place spaghetti squash on pasta plate or in a shallow bowl, top with cooked sauce and sprinkle with dried basil. Serve with mozzarella cheese if desired.



DINNER RECIPE

Oven Fried Chicken with Cali Mash

INGREDIENTS (SERVES 1)

- 2 chicken drumsticks
- 1 Tablespoon olive oil
- 2 Tablespoons nutritional yeast
- 2 Tablespoons hemp hearts (hulled hemp seeds)
- 1/4 teaspoon each: oregano, onion powder, garlic powder, salt
- 1/4 teaspoon black pepper
- 2 cups cauliflower florets
- 1/2 Tablespoon coconut oil
- 1/4 teaspoon salt

INSTRUCTIONS

Preheat oven to 400F and line a baking pan with foil.

Place chicken on pan and brush with the 1 Tablespoon olive oil; set aside.

In a large plastic zip top bag, combine nutritional yeast, hemp hearts and seasonings. Add chicken coated with oil, zip bag securely and shake to coat chicken completely with seasoning.

Remove chicken from bag, place on pan and cook at 400F 10 minutes. (Discard bag.)

Reduce oven heat to 350F and cook an additional 20 minutes.

While chicken cooks, steam cauliflower until very tender, about 10 minutes. When tender, place cauliflower in food processor (or use immersion blender if you have one) and process with coconut oil and salt until completely smooth.

When chicken is cooked through and crisp on the exterior, remove from oven and serve with cauliflower mash.



DINNER RECIPE

Creamy Mushroom Soup

INGREDIENTS (SERVES 1)

- 1 cup mushrooms, cleaned and chopped
- 1 teaspoon organic, unrefined coconut oil
- 1/8 teaspoon salt
- 1/4 cup pure coconut milk
- 3/4 cup low sodium, all natural chicken or vegetable stock (or you may use water if you prefer)
- Drizzle of olive oil
- Rosemary sprig, for garnish, if desired
- Fresh ground black pepper

INSTRUCTIONS

In a saucepan over medium high heat, cook mushrooms in oil with salt, stirring occasionally, until very tender, about 12 minutes.

Turn off heat, add coconut milk and stock, then use an immersion blender to blend smooth in the saucepan (or transfer mixture to your blender to blend, then return to the saucepan).

Turn on heat to medium and heat until just warmed through (do not boil).

Pour into a serving bowl, drizzle with olive oil, top with rosemary sprig and fresh ground black pepper and serve immediately.



DINNER RECIPE

Greek Lemon Lamb

INGREDIENTS (SERVES 4)

FOR THE MARINADE

- 2 garlic cloves, diced
- 2 tablespoons olive oil
- 1 teaspoon dried oregano
- Leaves from 2 sprigs fresh thyme 1 tablespoon lemon juice
- Salt and pepper to taste

FOR THE LAMB

- 12 lamb chops
- 1 lemon, cut into quarters

INSTRUCTIONS

Whisk all the marinade ingredients together in a bowl.

Combine the lamb chops with the marinade and place in the refrigerator, covered, for 1 hour. Prepare the grill, and grill the chops for 1 to 2 minutes on each side. (Alternatively, you can roast the lamb in a 400-degree oven for about 10 minutes, or to desired doneness.)



SNACK RECIPE

Hummus Avocado Stuffed Cucumber Boats

INGREDIENTS (SERVES 1)

- 3 inch length of whole English cucumber, washed and dried
- 2 Tablespoons hummus (organic, gluten-free, non-GMO chickpea spread)
- 1 Tablespoon mashed avocado
- Strip of tomato or red bell pepper, optional garnish

INSTRUCTIONS

Cut cucumber in half lengthwise, then use a spoon to scrape out seeds; discard seeds. Place cucumber “boats” on a plate, peel side down (scooped side up) and fill each with 1 Tablespoon hummus, then top with the mashed avocado.

Garnish with tomato or red pepper strip

Serve immediately.



SNACK RECIPE

Roasted Chickpeas with Olives and Capers

INGREDIENTS (SERVES 1)

- 1 Tablespoon organic, unrefined coconut oil, melted
- 1 cup cooked chickpeas
- 1/4 cup Kalamata (or other) olives, pitted
- 1/2 teaspoon capers

INSTRUCTIONS

Preheat oven to 450F and line a baking sheet with foil; set aside.

In a medium bowl, toss chickpeas with oil, then pour onto prepared pan. Bake 20 minutes, stirring chickpeas at 10 and 15 minutes.

Transfer chickpeas to a bowl, toss with olives and capers and serve immediately, or cool to room temperature and serve. The chickpeas will crisp a bit more if allowed to cool.



SNACK RECIPE

Cauliflower Bruschetta

INGREDIENTS (SERVES 1)

- 5 or 6 1/2-inch slices of cauliflower (from center of a head of cauliflower)
- 1/4 cup diced tomato
- 1 green onion, chopped
- 1/2 clove garlic, minced
- 1 Tablespoon fresh basil, chopped
- 1/2 Tablespoon extra-virgin olive oil, divided
- Salt & pepper, to taste

INSTRUCTIONS

For this recipe, to get nice slices of cauliflower, it is recommended that you take an entire head of cauliflower and slice it in the center to create thick slabs. Select several of these for your bruschetta and use the remaining cauliflower for another recipe.

Preheat oven to 425F. Line a baking sheet with foil, lightly brush with olive oil.

Place slices of cauliflower on baking sheet. Brush lightly with 2 teaspoons of olive oil (from the 1/2 Tablespoon called for in the recipe; the remaining oil will be drizzled over the bruschetta before serving).

Roast cauliflower 10-15 minutes, until browned on both sides. Turn half way through cooking for even browning on each side.

Transfer cauliflower carefully to a serving plate. Set aside to cool slightly.

While the cauliflower cools, in a small bowl, combine tomato, onion, garlic, and basil. Gently stir to combine.

Spoon tomato mixture over cauliflower slices on serving plate, add a dash of salt and pepper, then drizzle the remaining olive oil over the top before serving.



SNACK RECIPE

Hummus Stuffed Deviled Eggs

INGREDIENTS (SERVES 1)

- 2 hardboiled eggs, cooled
- 2 Tablespoons hummus (organic, gluten-free, non-GMO chickpea spread)

INSTRUCTIONS

Peel eggs and cut each in half lengthwise. Remove yolks.

Fill egg whites with hummus.

Top with crumbled egg yolk, if desired.

Serve immediately



SNACK RECIPE

Guacamole Dip

INGREDIENTS (SERVES 4)

- 2 large ripe Haas avocados, pitted
- Juice of 1 lime
- 1 teaspoon salt
- 1/4 teaspoon ground cumin
- 1/4 teaspoon cayenne
- 1/2 small red onion, diced
- 1/2 jalapeño pepper, seeded and minced
- 2 medium ripe tomatoes, diced
- 1 tablespoon chopped fresh cilantro
- 1 garlic clove, minced

INSTRUCTIONS

In a large bowl, mash the avocado flesh with the lime juice. Add the salt, cumin, and cayenne. Fold in the onions, jalapeño, tomatoes, cilantro, and garlic. Let sit at room temperature for 1 hour and serve.



GLUTEN-FREE FAQ

DO YOU BELIEVE IT'S OKAY TO EAT GRAINS AFTER SOAKING THEM?

> This is a common question, and it's one I get quite often, especially as going grain-free and gluten-free becomes a more popular lifestyle choice. My answer is straightforward: yes, you can enjoy grains prepared in this fashion. However, you must be absolutely sure the grains you are consuming are gluten-free and that you are keeping a close eye on total carb consumption in your diet, both of these grains and generally.

Remember, a Grain Brain lifestyle is not just about eliminating gluten from the diet, but reducing your carbohydrate load as much as is possible. In fact, this is critical for your health! If we remove gluten but overconsume carbs, we will be doing no favors to our health or our body!

So again, if you want to consume soaked grains, my answer is this: yes, go ahead and do so at your leisure. But monitor yourself! You must always make sure the grains are gluten-free, and that you're tracking your total carbohydrate consumption. I would suggest keeping a journal of daily carb consumption, or engaging in some sort of practice that presets your carb consumption the day before (like meal planning), or limits carbohydrate consumption to certain scenarios.

IF YOU ARE GOING GLUTEN-FREE, BUT DON'T HAVE CELIAC DISEASE, IS IT NECESSARY TO GET RID OF COOKWARE, CUTTING BOARDS, UTENSILS, ETC. THAT HAVE BEEN USED WITH WHEAT PRODUCTS?

> No. For those without celiac disease, but who are gluten sensitive nevertheless, throwing out your cookware isn't at all necessary.

IS GLUTEN-FREE REALLY THE WAY TO GO, EVEN IF YOU DON'T HAVE CELIAC DISEASE?

> While the statistics about celiac disease may be correct, as many as 30% of the population may be sensitive to gluten, without a specific involvement of the small intestine (celiac disease). This sensitivity can relate to any number of problems

GLUTEN-FREE FAQ

from dementia to ADHD, skin disorders, joint pain, neuropathy, headaches and even depression as we describe in [Grain Brain](#).

CAN COCONUT OIL BE TAKEN IN PILL FORM?

> Generally, yes. You'll just want to be sure the capsule material is gluten free.

ORGANIC STEEL-CUT OATS HAVE BEEN PART OF MY BREAKFAST FOR YEARS. THEY ARE GLUTEN FREE, CAN I CONTINUE THIS?

> Even “organic” oats are often gluten contaminated so best avoided. [Just take a look at this citation:](#)

Research published in the Journal [1](#) and elsewhere [2](#) strongly suggests that persons with celiac disease can consume moderate amounts of uncontaminated oats. Nonetheless, celiac disease organizations in the United States continue to advise against the consumption of oats because of concern that commercial oat products may be contaminated with wheat, barley, or rye during harvesting, transporting, milling, and processing.[2](#) However, little information is available on the contamination of oat products in the United States. Here I report an assessment of selected brands of oats for gluten contamination.

Twelve containers of rolled or steel-cut oats, representing four different lots of each of three brands, were purchased in Massachusetts between October 2003 and March 2004. The three brands were Quaker (Chicago), selected because it is a popular brand of oatmeal in the United States; Country Choice (Eden Prairie, Minn.), because it is certified to be organic; and McCann's (Odlum Group, Naas, Ireland), because it is processed in an oats-only facility. Containers were sent unopened to an independent laboratory (Food Allergy Research and Resource Program, Lincoln, Nebr.) for analysis. Samples of oats were homogenized and analyzed in duplicate, according to instructions from the manufacturer (R-Biopharm, Darmstadt, Germany). The Ridascreen Gliadin sandwich enzyme-linked immunosorbent assay (ELISA), recently validated by the Working Group on Prolamin Analysis and Toxicity, was used for the analysis.[3](#) This ELISA uses R5, a monoclonal antibody, that is equally sensitive to the

GLUTEN-FREE FAQ

prolamins of wheat, barley, and rye and that is insensitive to the prolamins of corn, rice, and oats.⁴ Internal controls for this assay include six gliadin standards of known concentration. The limit of gluten detection is 3 ppm. For this assessment, oat samples were considered gluten-free if they contained 20 ppm or less of gluten, in accordance with the current Codex limit for naturally gluten-free foods.⁵

The results of the analysis are presented in Table 1. On the basis of the mean gluten level in the two extractions, 3 of the 12 oat samples contained gluten levels of less than 20 ppm. The other nine samples had gluten levels that ranged from 23 to 1807 ppm. All three brands of oats had gluten levels above 20 ppm in at least two of the four samples tested. Ranges according to brand were as follows: McCann's, below the limit of detection to 725 ppm; Country Choice, below the limit of detection to 210 ppm; and Quaker, 338 to 1807 ppm.

WHY, IN THE LAST FEW YEARS, HAS THE NUMBER OF PEOPLE WITH GLUTEN ALLERGIES SKYROCKETED?

> There is no doubt that the number of people who are now clearly and significantly sensitive to gluten has increased dramatically in recent years. And there are several reasons why this is happening. First, the ability of the immune system to recognize friend or foe as far as proteins are concerned is fundamentally regulated by the balance of bacteria that reside within our intestines, our microbiome. With the overuse of antibiotics and other challenges including other medications like anti-inflammatories, and even chlorinated water, the regulation of our gut related immune system can be compromised, and this leads to inappropriate and excessive reactions to what might otherwise have represented a nonthreatening protein like gluten. So disturb the balance of bacteria in the gut, and next thing you know, you are at risk for gluten sensitivity. In addition, the hybridization of wheat has favored both genetic changes in the composition of gluten as well as greatly increasing the amount of gluten found in wheat-derived products (as well as barley and rye). These changes further overwhelm the immune system's ability to respond in a normal fashion when exposed to these products.

GLUTEN-FREE FAQ

MY BLOOD TESTING SHOWED I'M NOT SENSITIVE TO GLUTEN. SO CAN I EAT BREAD?

> Bad idea on two counts. First, bread has a very high glycemic index, even whole grain bread. So it presents a big risk as it relates to the damaging effects of sugar. Second, your average lab test for gluten sensitivity is often going to miss the diagnosis.

WHY ALL THE EXCITEMENT ABOUT GLUTEN IF ONLY ABOUT 1.8% OF THE POPULATION HAS CELIAC DISEASE?

> While the statistics about celiac disease may be correct, as many as 30% of the population may be sensitive to gluten, without a specific involvement of the small intestine (celiac disease). And this sensitivity can relate to any number of problems from dementia to ADHD, skin disorders, joint pain, neuropathy, headaches and even depression.

HOW DOES A GLUTEN- OR GRAIN-FREE DIET IMPACT ATHLETIC PERFORMANCE?

> Gluten-free diets are clearly more effective from a physical performance perspective for those who have documented sensitivity. Overall however, consider that most gluten products are high carb and should therefore be avoided for long-term health.

IS IT TRUE THAT NOBODY CAN PROPERLY METABOLIZE GLUTEN?

> It is likely that 100% of humans activate zonulin when exposed to gluten, and this increases gut permeability. This is thought to play an important role in autoimmunity.

SCIENCE AND STUDIES

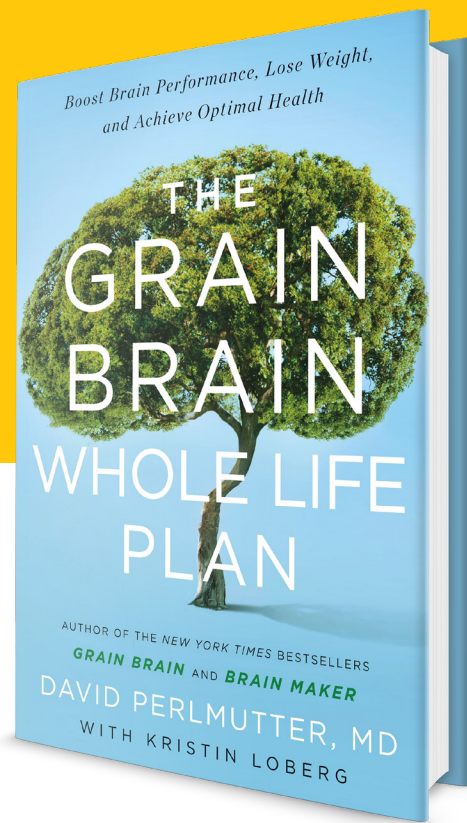
- > A Gluten-Free Diet As An Intervention For Autism And Associated Spectrum Disorders: Preliminary Findings. *Autism*, 1999 [\[LINK\]](#)
- > A Preliminary Investigation of ADHD Symptoms in Persons With Celiac Disease. *Journal of Attention Disorders*, 2006 [\[LINK\]](#)
- > Association of Attention-Deficit/Hyperactivity Disorder and Celiac Disease: A Brief Report. *The Primary Care Companion to CNS Disorders*, 2010 [\[LINK\]](#)
- > Association Between Headache and Sensitivities to Gluten and Dairy. *Integrative Medicine*, 2013 [\[LINK\]](#)
- > Autoantibody Targeting Of Brain And Intestinal Transglutaminase In Gluten Ataxia. *Neurology*, 2006 [\[LINK\]](#)
- > Bread And Other Edible Agents Of Mental Disease. *Frontiers in Human Neuroscience*, 2016 [\[LINK\]](#)
- > Celiac Disease And Nonceliac Gluten Sensitivity: A Review. *Journal of the American Medical Association*, 2017 [\[LINK\]](#)
- > Dietary Interventions in Autism. *Autism Spectrum Disorders - From Genes to Environment*, 2011 [\[LINK\]](#)
- > Differentiation between Celiac Disease, Nonceliac Gluten Sensitivity, and Their Overlapping with Crohn's Disease: A Case Series. *Case Reports in Immunology*, 2013 [\[LINK\]](#)
- > Effect Of Gliadin On Permeability Of Intestinal Biopsy Explants From Celiac Disease Patients And Patients With Non-Celiac Gluten Sensitivity. *Nutrients*, 2015 [\[LINK\]](#)
- > Fluctuation Of Zonulin Levels In Blood VS Stability Of Antibodies. *World of Gastroenterology*, 2017 [\[LINK\]](#)
- > Frontal Cortical Perfusion Abnormalities Related To Gluten Intake And Associated Autoimmune Disease In Adult Coeliac Disease: 99mTc-ECD Brain SPECT Study. *Digestive and Liver Disease*, 2004 [\[LINK\]](#)

SCIENCE

- > Gluten And Non-Gluten Proteins Of Wheat As Target Antigens In Autism, Crohn's And Celiac Disease. *Journal of Cereal Science*, 2017 [\[LINK\]](#)
- > Gluten Contamination of Commercial Oat Products in the United States. *New England Journal of Medicine*, 2004 [\[LINK\]](#)
- > Gluten Psychosis: Confirmation of a New Clinical Entity. *Nutrients*, 2015 [\[LINK\]](#)
- > Gluten Sensitivity: From Gut To Brain. *Lancet Neurology*, 2010 [\[LINK\]](#)
- > Gluten Sensitivity As A Neurological Illness. *Journal of Neurology, Neurosurgery, and Psychiatry*, 2002 [\[LINK\]](#)
- > Host Responses to Intestinal Microbial Antigens in Gluten-Sensitive Mice. *PLOS One*, 2009 [\[LINK\]](#)
- > IgA Antibodies Against Gliadin And Gluten In Multiple Sclerosis. *Acta Neurologica Scandinavica*, 2004 [\[LINK\]](#)
- > Intestinal Cell Damage And Systemic Immune Activation In Individuals Reporting Sensitivity To Wheat In The Absence Of Coeliac Disease. *Gut*, 2016 [\[LINK\]](#)
- > Long Term Gluten Consumption In Adults Without Celiac Disease And Risk Of Coronary Heart Disease: Prospective Cohort Study. *British Medical Journal*, 2017 [\[LINK\]](#)
- > Long-Term Response To Gluten-Free Diet As Evidence For Non-Celiac Wheat Sensitivity In One Third Of Patients With Diarrhea-Dominant And Mixed-Type Irritable Bowel Syndrome. *International Journal of Colorectal Disease*, 2016 [\[LINK\]](#)
- > Neurological Deficits in Patients With Celiac Disease. *Journal of the American Medical Association*, 2002 [\[LINK\]](#)

SCIENCE

- > Recurrent Brief Depression In Celiac Disease. *Journal of Psychosomatic Research*, 2003 [\[LINK\]](#)
- > Schizophrenia, Gluten, And Low-Carbohydrate, Ketogenic Diets: A Case Report And Review Of The Literature. *Nutrition and Metabolism*, 2009 [\[LINK\]](#)
- > Sensory Ganglionopathy Due To Gluten Sensitivity. *Neurology*, 2010 [\[LINK\]](#)
- > Small Amounts of Gluten in Subjects With Suspected Nonceliac Gluten Sensitivity. *Clinical Gastroenterology and Hepatology*, 2015 [\[LINK\]](#)
- > Spectrum of gluten-related disorders: consensus on new nomenclature and classification. *BMC Medicine*, 2012 [\[LINK\]](#)
- > The Dietary Intake of Wheat and other Cereal Grains and Their Role in Inflammation. *Nutrients*, 2013 [\[LINK\]](#)
- > The Gluten Syndrome: A Neurological Disease. *Medical Hypotheses*, 2009 [\[LINK\]](#)
- > The Neurology of Gluten Sensitivity: Science VS Conviction. *Practical Neurology*, 2004 [\[LINK\]](#)
- > Zonulin and Its Regulation of Intestinal Barrier Function: The Biological Door to Inflammation, Autoimmunity, and Cancer. *Physiological Reviews - American Physiological Society*, 2013 [\[LINK\]](#)



About The Grain Brain Whole Life Plan

It's time to turn advice into action. The Grain Brain Whole Life Plan is your practical, comprehensive empowerment guide for achieving optimal health, preserving brain vitality, losing weight and reducing your risk for chronic diseases. Dr. Perlmutter leverages the leading edge of published science on nutrition and wellness, taking the lessons of Grain Brain and Brain Maker to create a powerfully actionable plan for optimizing health and achieving peak mental performance. The Grain Brain Whole Life Plan – live happily ever after.



[Facebook.com/DavidPerlmutterMD](https://www.facebook.com/DavidPerlmutterMD)



[Instagram.com/DavidPerlmutter](https://www.instagram.com/DavidPerlmutter)



[Twitter.com/DavidPerlmutter](https://twitter.com/DavidPerlmutter)



<https://DrPerlmutter.com>



davidperlmutter MD
empowering neurologist