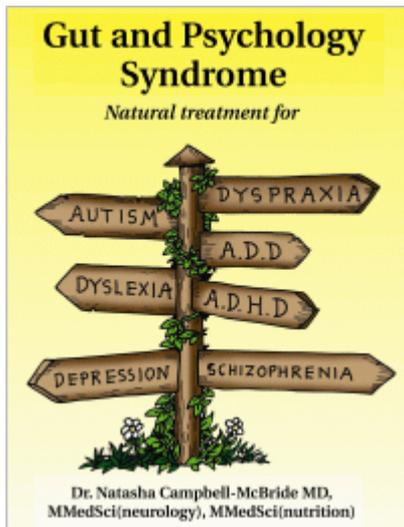


Why GAPS?

Because we **can heal**. Because medications squelch symptoms which are warning signs that something isn't working right. Because we don't have to live with IBS, colitis and Crohns, ulcers and digestive problems, joint pain and skin problems, depression and anxiety, constipation and diarrhea. We can heal and seal our guts, rebalance our [microbiome](#), and live the healthy, pain free lives we were designed to live.

Is it easy? Well, it takes planning, preparation and commitment. Is it worth it? To answer that, you must ask yourself what price you would pay to have your body feel good. The testimonials around the world of people who have successfully healed from all the issues mentioned above tell me that it IS worth it. The fact that I personally no longer have any joint pain, which my family saw as hereditary, makes it worth it for me.

So, what is GAPS? The letters stand for [Gut and Psychology Syndrome](#). The acronym and diet were created by Dr. [Natasha Campbell-McBride](#) in 2004. Dr. Natasha has helped patients around the world heal from psychological issues such as autism, ADHD, depression and anxiety, as well as from physiological (body related) problems like autoimmune conditions, chronic fatigue syndrome and fibromyalgia, arthritis, headaches, PMS and all digestive disorders. Therefore, GAPS also stands for Gut and Physiology Syndrome.



The body gets nutrition to build and rebuild itself through the digestive system. Unfortunately, in the world today and especially in the United States, the standard American diet (SAD) not only cannot sustain the body, but it leads to the deterioration of it. Our lifeless processed food does not give our body what it needs to build new tissue. One of the first places to be damaged is our intestines which become permeable or otherwise known as “leaky gut”. In addition, our overabundance of sugar caramelizes in our blood vessels wreaking havoc on our brains, eyes and nerves (and elsewhere).

When we have a leaky gut, things that aren’t supposed to get into our blood stream do and these can cause issues all over the body. A major contributing factor to this is an unhealthy microbiome. I strongly encourage you to read [this article](#) to understand why our microbiomes are imperative to our health.

What do we do in GAPS? We heal and seal that leaky gut with a healthy diet including lots of meat stock, grass fed/wild meat and animal fats and probiotic rich fermented foods. As we’re healing and sealing, we’re working toward reducing the toxic load on the body. This second part is so important because, unfortunately, we live with an overabundance of chemicals that our bodies can no longer handle.

What is the end result of GAPS? A digestive system that takes

in what it needs to build healthy tissue while preventing the bad stuff from leaking through and causing dis-ease. We fix what's broken and the body works like it's supposed to.

Real food ~ it's the new medicine.

Kvass - Super Easy Wellness Tonic

Beet kvass is an amazing liquid for digestion (and so much more). And beet kvass can literally be made in less than 10 minutes, minus the time it sits on your counter fermenting. From [Nourishing Traditions](#) we learn: "One 4-ounce glass, morning and night, is an excellent blood tonic, promotes regularity, aids digestion, alkalizes the blood, cleanses the liver and is a good treatment for kidney stones and other ailments." And unlike medicine from the store – absolutely no harmful side effects.



An Internet search of the benefits of beets will keep you reading for days. [A search in PubMed](#) points out the benefits of lowering blood pressure (among other things) as well as

[increasing exercise performance.](#)

So we have this wondrous root vegetable which we then take and lacto-ferment. The [Weston A Price Foundation](#) is a wonderful [source for information on lacto-fermented foods](#) like beet kvass.

Every group of people Dr. Price studied consumed some fermented food in their diet. Through the ages they had paid attention to what happened to their foods when trying to store them. They learned to harness the power of nature to preserve food naturally and in the process that food became more nutrient dense with enzymes and healthy bacteria.

Before the days of refrigeration and canning, food was preserved through a process called lacto-fermentation. Lactic acid is nature's best preservative – it inhibits putrefying bacteria. Starches and sugars in vegetables and fruits are converted into lactic acid by lactic-acid producing bacteria that are present on the surface of all plants and animals.

These **bacteria** synthesize nutrients that are essential to us, enable us to digest nutrients that we otherwise would not be able to digest, make nutrients bio-available to us, and work with our immune systems to protect us.

The nutritive elements in our food do us no good if our bodies cannot assimilate them. Food preparation and processing should make our foods easier to digest. Unfortunately, most food processing techniques, such as canning, preserving in sugar and chemicals, pasteurizing and irradiation, all make food much more difficult to digest. When we consistently eat foods that are difficult to digest, we compromise our vitality because the body is forced to use a great deal of energy breaking the food down. People who do take the care needed to prepare food in such a way to make it easier to digest report increased energy since the body does not have to work so hard at digestion. **Fermenting makes enzymes** – enzymes break down

our food.

More and more we see probiotics (good bacteria) and enzymes in stores and on commercials. When we ferment, we get these substances naturally.

What do you need to make kvass?

2 large or 3 medium peeled raw organic beets – chopped in chunks about 1/2 to 1" (if you cut them smaller, you'll have too much liquid)

1 tablespoon of sea salt

1/4 cup [whey](#) – must not be powdered

A 2 quart canning jar

Clean filtered water

Here is all you do: Put the beets, whey and salt in the jar and fill it to about an inch from the top with filtered water. Stir well and cover with a cloth and rubber band (to keep out fruit flies). That was easy. Now leave the jar at room temperature for 48-96 hours then put it in the frig. You're done.

I have found that I personally like to do about 3 days when my house is around 70 degrees. In Nourishing Traditions, Sally says that once you've consumed most of your first batch, you can refill the container with filtered water, set it back on the counter for 2 days and have another slightly less strong batch. After that, your beets are pretty well spent, so just throw them in the compost pile and start over again.

Over the years, I've learned to add water to the jar each time (or every other time) to refill it, put it back in the frig and just keep doing that until it tastes weaker than you like. I've found I get a lot more use out of my beets when I do that.

I like to keep at least 2 batches "brewing" in the frig. Just like kombucha, the kvass continues to ferment at cool temperatures, but much more slowly than on the counter. I

think it tastes best when it's been in the refrigerator for 3+ weeks.

To me, beet kvass is the simplest way to add the benefits of lacto-fermentation to our daily routine. Sauerkraut is also incredibly easy, it just takes a bit more time to prepare the cabbage.

Hopefully this will motivate you to give kvass a try. One more way for you to have **real food** for **real health** so you can be **real happy**. Remember that **real food** is the new medicine (actually, it's always been).

[How Vaccines Make Humans GMOs](#)

This is a copy of my letter to the [Weston A Price Foundation](#) which was published in their Fall 2015 Wise Traditions Journal. A main focus of the Foundation is the promotion of therapies that do not cause harm. The fall issue of 2015 was devoted solely to information regarding vaccinations because "vaccination as practiced today is a 200 year old mistake." If you haven't yet, I strongly encourage you to research [vaccines](#). I highly recommend the [National Vaccine Information Center](#), the [World Association for Vaccine Education](#) and the [Vaccine World Summit](#). This is the most important decision you will make regarding your child's health. Now...on to my letter.



I'm struggling to see how vaccines are that different from food that's altered through genetic modification. The intent may be different, but the final result is quite similar. If a **GMO** is the result of genes from the DNA of one species artificially forced into the genes of an unrelated plant or animal, how far is this from the process of vaccination in humans?

Vaccines contain the DNA of pathogenic viruses grown on cell cultures of humans, chickens, monkeys and cows. This DNA and foreign cells are injected directly into the blood stream of the vaccine recipient, bypassing any innate (God-given) protection the body has. Logic tells me that is very similar to how GMOs are created. And just like in GMO food, the blood has never before been exposed to this DNA in the natural environment.

From what I've seen there are more people aware of the dangers of GMOs in food than the dangers of vaccines. At a recent march against GMOs, I talked to participants who were pro-vaccine and completely unaware that many vaccines are actually genetically modified (for example, since 1991, the Hep B shot, given within 24 hours of birth, is genetically modified {the hep b virus is combined with yeast}).

Scientists at the University of Geneva (1971) discovered that biological substances entering directly into the blood stream can become a part of us and even a part of our genetic

material. "The Geneva scientists are convinced that normal animal and plant cells also shed DNA and that this DNA is also taken up by other cells in the organism. If they are right, the consequences to virtually every aspect of a cell's metabolism would be considerable. The growth and development, diseases, and even the evolution of an organism would be affected."

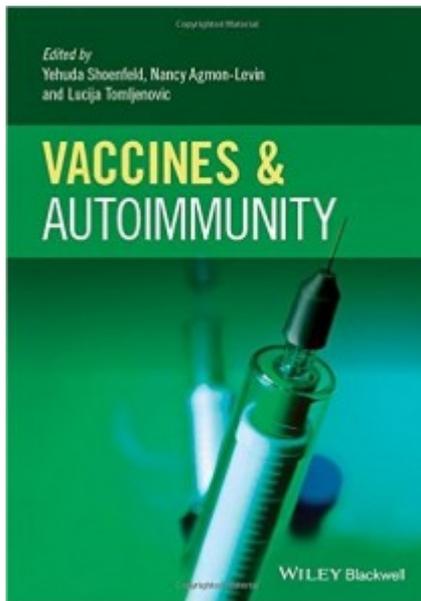
<http://vaccinechoiccanada.com/doctors-speak/vaccines-and-genetic-mutation/>

Reading that Verschaeve, L. , et.al. (*Environmental Research, Genetic Damage Induced by Occupationally low Mercury Exposure*", 12:306) found a "significant correlation between the amount of mercury in the body and the number of DNA aberrations", also supports the idea in my mind that vaccines cause humans to be GMOs as genes are being modified by at least one of the preservatives that have been used in vaccines. The process is a bit different, but the end result is unnatural changes to the genome.

When GMOs were introduced, we were told it would reduce the need for pesticides. In 2009, however, the Organic Center revealed "GE [genetically engineered] crops have increased overall pesticide use by 318.4 million pounds over the first 13 years of commercial use..."

http://www.livinghistoryfarm.org/farminginthe70s/pests_08.html

_ In the same way, vaccines were introduced under the guise of reducing the need for medical care because the recipients wouldn't get the diseases the shots alleged to prevent. As the years go by, we have more and more chronic childhood illness and adult autoimmune disorders requiring more and more treatment. In July of this year, an entire textbook, [Vaccines and Autoimmunity](#), was published on the real links between vaccines and these long term diseases.



I see how passionate the anti GMO activists are at marches and other gatherings. It is my hope that once they see that they, too, have been genetically modified through vaccination, we can all join together to take on this very dangerous myth of vaccine safety.

Plague Tonic in Pictures

Dedicated to the Fall 2014 class of Fermentation 101. Welcome to the world of culture!

It's that time of year again...time to prepare for cold and flu season, especially because flu shots are being given. If you didn't know already, flu vaccines [shed](#). That means if someone in your home or office gets a flu shot, you could get the flu just being around them.



So, there are an awful lot of “bugs” out there and we will be prepared to fight them in a few weeks with our plague tonic. When I’ve felt something coming on, I take a tablespoon 3 times a day, and usually can fight off whatever is trying to take hold. Friends and family who’ve been sick for a while and “just can’t shake” something, try the tonic and experience healing within a couple/few days.

Let’s get started. You’re going to need a glass jar (probably a quart) with a plastic lid (it will eat metal) and some Bragg’s Apple Cidar Vinegar (unless you can get homemade).

You’ll need equal parts of fresh chopped:

Garlic

The hottest peppers you can get your hands on

Onion

And equal parts of grated:

Horseradish root

Ginger root

Turmeric root (this can be hard to find, so if all else fails, use a nice big teaspoon of turmeric powder).



Place all the ingredients in your glass jar so it’s filled to a couple inches below the lid.



Cover with ACV and put on the plastic lid. Shake well & add a bit more vinegar to bring up to about 1/2 inch of the top of the jar.



Label your jar with the date. For those of you who know me well, I always include "Love & Gratitude" on the label based on the work of [Emoto](#). If you have lots of different jars going, you might want to put "Plague Tonic" on the label also.



Every day for the next 2-3 weeks, you're going to shake your jar a couple/three times a day. After that, you can filter it through an unbleached coffee filter (or cheesecloth). The "chunks" can be dried and used later as spice if you like (I crush mine with a mortar and pestle).



At the first sign of cold or flu, take a tablespoon (can be diluted for grown-ups and should be for kids). Two to three times a day will stop most bugs in their tracks.

As always, wishing you REAL food (and tonics), for REAL health (without meds) so you can be REAL happy.

Thanks to Vicki R. and [Granny Good Food](#) for sharing this two years ago. You've helped many more than you know.

Gluten 101



We've been hearing the word gluten for some time now...WHAT is up? For the newbies, I thought I'd write a simple "Cliff Notes" version of the issue.

Humans have been eating bread for millennia, what's the big problem now?

Well, things were fine when nature was overseeing natural hybridization, but in the 1960's, a movement began to [hybridize](#) wheat in the lab to increase yields. No safety tests were done. The 1990's saw even more changes in the grain. At least 5% of the proteins in wheat now were NEVER in the food supply before. We have not evolved to be able to digest them, so they're wreaking havoc on our bodies.

Who is at risk of gluten sensitivity?

Unfortunately, just about everyone in the U.S., unless you've been eating solely ancient grains that the body knows how to process; these include einkorn and emmer. In addition, the grains need to be processed by traditional methods to neutralize anti-nutrients – soaking and fermenting (true sourdough).

Where do we find gluten?

Everything made with wheat, rye, barley, and triticale (cross between rye and wheat). So we're talking pizza, pasta, bread, breadING, baked goods, cereal, etc. Gluten can be found in oats through cross contamination but gluten free oats are available from suppliers who are careful to avoid this.

What digestive problems can be caused by gluten?

Annoying things like constipation, heartburn, gas and bloating and diarrhea. With time, these will lead to more dangerous

concerns like IBS, GERD, food intolerances, pancreatitis and celiac disease.

Are there other concerns besides digestion?

Oh, yes, non-celiac gluten sensitivity (NCGS) can be responsible for or increase the severity of:

Skin problems – rash, acne, dark circles under the eyes, eczema, psoriasis.

Neurological symptoms – brain fog, ADHD, balance problems, headache (including migraine), increase symptoms of autism and schizophrenia.

Emotional problems – irritability, anxiety, dementia and Alzheimers, depression.

Musculoskeletal issues – fibromyalgia, joint pain and arthritis, chronic fatigue and reduced physical endurance.

Weight gain – especially around the middle and well as an increase in appetite.

Other – asthma, increase in blood pressure, just to name a couple.

Can gluten affect children and infants?

Definitely. Gluten has been found to be a major contributing factor in colic, chronic ear infections, poor sleep, digestive issues and skin eruptions like eczema in children.

So, what IS celiac disease, anyway?

Celiac disease is a digestive disease that severely damages the villi in the small intestine. Since it is in the small intestine that we get the nutrients out of our food, the body becomes malnourished because it cannot take in nutrients to rebuild itself. Significant deficiencies in minerals like iron, magnesium and zinc can cause a multitude of problems.

What does gluten do in the body?

VERY simply, it increases a substance called zonulin which makes our intestines become leaky. Then all sorts of things, like proteins, can leak out and go to the part of our body that is vulnerable (joints – arthritis, brain – fog and

dementia, skin – acne).

What is the incidence of gluten sensitivity?

We know that celiac disease is on the rise, effecting about 2% of the population now, but non-celiac gluten sensitivity may affect between 30 and 40% of us, and “according to Dr. Alessio Fasano at Massachusetts General Hospital, virtually all of us are affected to some degree.” More info [here](#) from Dr. Mercola.

Can you have a problem with gluten and have no noticeable digestive issues?

Certainly. Sensitivity to gluten can show up anywhere.

The best way to see if it is affecting you, is to cut gluten out of your diet for a month (6 weeks is even better). I'd be surprised if you didn't feel better.

Until next time...wishing you **real food**, for **real health**, so you can be **real happy**.

Why are we fat?

This post is dedicated to that amazing group from Unity of Muskegon who meet for Let's Talk Wellness and are making positive changes toward better health every day. I am SO proud of you all!

Last year as I ended our second year of monthly meetings at Unity on wellness, I asked what people wanted to discuss in the 2014. The topic of interest most requested was the title of this article. Yes, we already understand that being as active as possible reduces our fat reserves, so I didn't focus on exercise. Everyone knows...get up and move! But if we don't address the misinformation out there, we don't stand a chance

at weight loss and management.

Since I do not teach about short term fixes at the expense of the body's health, we must address lifestyle changes, dispelling the myths we've been told the last 3 decades, to build vital cells, tissues and bodies. The focus must be on sharing the [truth](#) about the need for healthy fats and nutrient dense foods and how the low-fat/high whole grain/"sugarfree" additive recommendations have led us to the obesity fiasco we are in now.

Below is my evidence based summary of why we are larger (and much less healthy) than we should be:

- Eating [BAD fats](#) (polyunsaturated, liquid vegetable oils, margarine, oils from [GMO crops](#) {soy, cottonseed, canola, corn}, fatty meat/poultry from conventionally raised animals {complete with antibiotics, growth hormones, GMO fed, pesticide residue, no to very little sunlight}).



My family's favorite fat

- Not eating enough [good fats](#) (coconut, extra virgin olive oil, grass-fed meat and poultry, wild caught fish, avocado, cod liver oil). Low-fat foods lead to obesity because we substitute with...
- Sugar and empty carb consumption (anything made with a fine powder like flour, like baked goods, candy, chips, pastas). These carbs are digested quickly and stimulate the [hormone insulin](#), which, among other things stores fat in fat cells. [High fructose corn syrup](#). [Diet sodas](#).

- Eating processed and [non-organic foods](#) (and using [chemicals on our bodies](#), in our homes and on our yards). These foods often have [pesticide residues](#) which keep our body from taking in the minerals we need to make our metabolism work correctly. Our bodies need nutrients to function and be the “right” weight for our structure. These empty foods lead to...
- Overeating – which we do WHEN WE ARE NOT EATING NUTRIENT DENSE FOODS! Our body keeps saying, “where are the nutrients?” and then “eat more and you might find some.” We can also get into the habit of over eating because of emotional issues, but again, it is often, if not always, nutrient deprived foods. We seldom eat too much when the food is REAL and nutrient rich.
- An unhealthy [microbiome](#). Our balance of good micro-organisms in our body plays a significant role in our health and weight.
- When we have an underactive thyroid, we have a very difficult time trying to shed pounds. Be aware that water with chlorine and [fluoride](#) is thyroid disruptive. Drinking the cleanest water possible is a must. Also, good quality [coconut oil](#) supports the thyroid and is energy boosting.

What to do? The same thing I teach for other physical/emotional issues...

- Eat good fats at every meal
- Eat protein from clean (organic, grass fed, preferably local) sources at every meal – we need protein to make the happy chemicals in our brain
- Eat plenty of colorful, local (for more vitamin content), organic (for more mineral content) vegetables WITH LOTSA BUTTER (or ghee)!
- Take good quality coconut oil – even at every meal.
- Take a high quality probiotic and/or fermented foods and drink.
- Eat organic fruits as desserts (“cave people” ate them in the fall to fatten up for the winter)

- If you feel the need for baked goods, make them out of nut flour (organic preferably).
- Don't starve yourself. This will mess up your hormones. EAT! Just eat the real foods described above.

Until next time...wishing you **real food** for **real health** so you can be **real happy**.

7 Simple Steps to Better Digestion

Specializing in digestive wellness, I have to encourage people to eat the highest quality food they can afford. Yes, I'm aware that grass fed animal products and organic produce cost more. Yes, they are worth it. However, we can only purchase what we can afford. Do the best you can.

My 7 Simple Steps, however, do not cost extra and they can be the difference between getting the most from our food/drink and not taking in the vital nutrients we need to thrive. I could site sources and scientific evidence for each step, but for this article I've chosen to stay simple. Trust me, these are activities that have been proven to be beneficial.

Ask yourself, do I...?

1. Say grace/bless my food/express appreciation for the food I am about to welcome into my body.
2. Eat at a table. Not in the car. Not walking around. Not at my desk.
3. Breathe while I eat. Try to enjoy the flavor of each bite.

4. Chew my food and don't rush my meal. (This mechanical portion of the digestive process sets the stage for the rest of your food to be broken down effectively.)

5. Don't drink a cold liquid with the meal...it puts out the digestive "fire". It's fine to have cold drinks between meals.

6. If I am going to drink with a meal, limit the liquid to about 4 ounces, otherwise I dilute the acid in my stomach which is needed to break down food. (Lemon and water enhances digestion, by the way.)

7. Leave about 5-6 hours between meals if I can. (Snacking stresses the pancreas among other things.)

How many do you do?

Until next week...wishing you **real** food (eaten at a table) for **real** health (that is savored) so you can be **real** happy (and grateful).

Does it bug you that you're eating Roundup? It should.

I watched this video last week and felt so sad knowing many of my loved ones are seeking help for illness from the medical field while they're eating foods that not only can't sustain them, but are literally harming them. In this interview, the actual mechanisms of harm are identified. I just had to share.

Many thanks to [Jeffrey Smith](#) and [Dr. Stephanie Seneff](#) for describing in detail what happens to the body as a result of exposure to Round-up. These destructive actions are contributing to most, if not all, of the diseases of our time.

If you or anyone you know has one of the concerns listed directly below the video, I urge you to take an hour and watch. For those who can't, I've summarized key points below, along with the time reading from the interview so you can go directly to that topic if you like. This **IS** effecting you. It **IS** harming you.

[Jeffrey Smith interviews Dr. Stephanie Seneff about Glyphosate](#) from [Kristin Canty](#) on [Vimeo](#).

Problems influenced by glyphosate – the active ingredient in Roundup: anxiety, aggression, autism, ADHD, Alzheimers, cancer, depression, diabetes, fibromyalgia, gastrointestinal problems, heart disease, infertility, multiple sclerosis, and Parkinsons. If you have any of these issues and your health care professional has not advised you to stop eating conventionally raised food, you have not been given the whole truth. That professional has likely not been made aware of the **danger**, but it is **real**.

The interview begins by explaining that crops are now “Roundup Ready”, meaning the plants actually drink up the pesticide which leaves more in the food end product. Smith points out that the allowable residues have gone up since the plants were made Roundup Ready. Initially we were told Roundup would make it so less pesticides would have to be used, but the pests became resistant, and now its use has more than doubled. In the first 16 years, 527 million pounds of Roundup has been used. Current studies show, in the Midwest {7:20}, 60% to 100% of ALL samples of air, water and rain contain glyphosate. This is call for alarm. It is even found in the blood of newborn babies.

In a [recent post](#) on my site, I talk about how disease is caused by exposure to toxins and not having enough nutrients to protect ourselves. These are exactly the concerns Dr. Seneff cites {2:45} that Roundup is responsible for. She

relates that glyphosate depletes calcium, magnesium, iron, zinc, cobalt and other minerals causing nutritional deficiencies AND leaves toxins in the body.

Dr. Seneff points out that Monsanto was able to say that the active ingredient in Roundup didn't effect human cells because it works on a metabolic pathway called the shikimate pathway, which humans don't have. However, as I pointed out in [last week's post on the Microbiome](#), we have 10 times more bacterial cells than human cells, and those bacteria ARE negatively effected by glyphosate, causing inflammation and other harmful responses.

What does glyphosate do in the body?

1. Harms our good bacteria and then bad (pathogenic) bacteria can take over (autism {5:00}) and produce toxins (i.e. ammonia and formaldehyde) that can lead to encephalopathy (Alzheimers {20:00}) and DNA damage {13:00} (cancer {34:30}). Dr. Seneff stressed the #1 action to take for Alzheimers is to remove all sources of glyphosate (it is in processed food and used often in lawn/yard care).

2. Blocks the CYP 450 enzyme pathway {17:00} which harms the liver, ezymes that help us detoxify, hormones and our ability to make vitamin D.

3. Destroys amino acids in food as well as interrupting the body's ability to make aromatic essential amino acids {25:03} like tryptophan and tyrosine. We need these aminos to make serotonin (lack = depression, aggression, obesity) and dopamine (Parkinson's {32:00} and fibromyalgia).

4. Contributes to multiple sclerosis {41:00} both by destroying the myelin sheath and by causing leaky gut which leads to the body attacking itself (autoimmune disorders – of which we are seeing a dramatic increase). Leaky gut, or intestinal permeability, also leads to bowel inflammatory disorders {45:30} like Crohn's disease, colitis and IBS.

5. Since minerals like zinc, cobalt and manganese are no longer available in our foods and our body requires these to function, we keep eating more and more in our body's desperate attempt to get what it needs (Obesity {59:00}).

6. Disrupts our cells' ability to store sugar (Diabetes {59:00}).

What about safety studies? {36:20} Monsanto did do short term (90 day) studies for safety. However, when independent studies were done, in the fourth month of research, the female test animals (80%) developed mammary tumors (breast cancer) and the males developed tumors in their kidneys and liver problems. Much more on Monsanto's pseudo-science is available from the [Institute for Responsible Technology](#).

GMO crops in this country include alfalfa, canola, corn, cotton, papaya, soy, sugar beets and squash (zucchini and yellow summer squash). And it's not just GMOs anymore, Folks. Smith points out {60:00} that glyphosate is now being sprayed on non GMO crops such as barley, rice, wheat and rye immediately before harvest.

Bottom line...the mechanisms showing glyphosate/Roundup cause disease are now known and while you and I may not understand them in the detail Dr. Seneff does, we can take action to minimize their damaging effects on us. Eat NO GMOs. Eat organic. Do NOT spray your lawn and yard with Roundup or other toxic chemicals (that get on your shoes, your pets' feet, young children playing outside).

If you haven't already, I urge you to watch the film [Genetic Roulette](#) – The Gamble of Our Lives.

As always, wishing you **REAL** food, for **REAL** health so you can be **REAL** happy.

My hometown is waking up...to the microbiome

This post is dedicated to the new fermenters along the lakeshore of beautiful West Michigan. Great job to the students from my [White Lake Area Community Education](#) classes, [Nourishing the Lakeshore](#), [Fermenting the Lakeshore](#) held at [Unity of Muskegon](#) and health conscious shoppers at [Sweetwater Local Organic Foods Market](#).



What is the [microbiome](#)? Very simply, it refers to the fact that 99% of the DNA in our bodies is not our own; it belongs to micro-organisms. And if you're eating nutrient dense foods, little to no sugar and fermented foods everyday, you'll have "good" microbes that will treat you, their host, to health and wellness. Fast foods, lots of sugar and processed carbs feed pathogenic "bad" microbes and WILL lead to illness as well as extra pounds.

A little history...In the 1990's, [the Human Genome Project](#), the biggest project ever undertaken in biology, focused on decoding human genetic information ([Holt, 2008](#)). There was hope to find the genetic cause and cure for every disease that affects humanity. What was discovered by 2003 was that every animal species shares the majority of genes, but that the expression of the genes can come in a multitude of ways

depending on something called the epigenome. The epigenome is influenced by what we are exposed to in our lifestyle. While the genome can be likened to the hardware in a computer, the [epigenome](#) is similar to the software, which tells the hardware what to do. But there turned out to be another missing link.

Ultimately, by 2008, the Human [Microbiome](#) Project began where we realized that part of the reason a stalk of corn has more genes (32,000) than a human (25-30,000) is the fact that we are hosts to an estimated 100 trillion bacteria. These bacteria work in concert with our genes to run our bodies.

NPR has an animated yet thorough introduction to this new knowledge. It is about 5 minutes long and I strongly encourage you watch it:

This research is in its very early stages. Yet if we look at the research of civilizations that did not live like we do, [traditional peoples](#) (like those found by [Dr. Weston A Price](#)), we see EVERY one of these healthy groups ate fermented foods. And they ate no processed foods whatsoever. When we learn to ferment and return to traditional eating, we, too, can experience the radiant health that is our birthright.

Today, our microbiomes are compromised all sorts of ways. Besides the losses during infancy addressed in the video above, our balance of good to “pathogenic” bacteria shifts with antibiotic use, toxins in our air, water and food, long term use of prescriptions and birth control pills as well as radiation. Without these beneficial “little critters” as I like to call them, we can’t digest and absorb nutrients to build healthy cells and this leads to nutritional deficiencies.

When we have an abundance of bad bacteria from eating processed food and drinking sodas, the “food” we eat gets broken down into toxic compounds which get absorbed into the bloodstream. From there they go to wherever we have a

vulnerable area like our joints (i.e. arthritis), brain (i.e. fog, ADHD), skin (i.e. eczema, rash, acne) and our vital organs like our heart. These same bad little guys can damage the lining of our intestine and cause it to become inflamed and permeable (leaky gut), which leads to food intolerances and allergies. When this happens, we no longer are getting nutrients to build us up but instead get toxins that make us sick. And because 85% of our immune system is in our gut microbiome, if we don't have good gut flora, our immune system goes haywire. No wonder so many people are unwell and overweight.

When people return to traditional ways, including fermenting, eating organic produce, consuming grass fed and wild animals and cutting out processed "foods", their microbiomes can heal and do the work necessary to help return to wellness. For many, supplementing with probiotics is a sensible choice while they transition to more traditional ways. If this is something you choose to do, please make sure the product you use has integrity.



Lexi Larabee
Photography

Wishing you **real** food for **real** health so you can be **real** happy.

Let's Debate Raw Milk

Do you seek the *real* truth? Not information crafted to sell products to the masses?

You be the judge who won...just watch the debate. Kudos to Harvard for hosting on this controversial (because of the dairy lobby) topic. The first 20 minutes are amazing – in case you don't have time to watch the whole video. Did the attorney say anything that wasn't from the government or based on cases from which he stands to gain financially? I get the impression that the veterinarian was dozing during the Sally's presentation.
