THE 15 WORST COMMON TOXINS

FOR YOUR GUT & MICROBIOME HEALTH

(And the 10 Best Steps to Bypass the Toxins and Boost Your Gut Health)

BRIAN VASZILY | Founder of The Art of Anti-Aging
Host of *The Live Long & THRIVE Summit*

THE 15 WORST COMMON TOXINS

FOR YOUR GUT AND MICROBIOME HEALTH

(And the 10 Best Steps to Bypass the Toxins and Boost Your Gut Health)

www.theartofantiaging.com

Publisher: The Art of Anti-Aging, LLC

THE LIVE LONG & THRIVE SUMMIT

THE PROVEN BEST HEALTHY AGING & LONGEVITY STEPS OF ALL

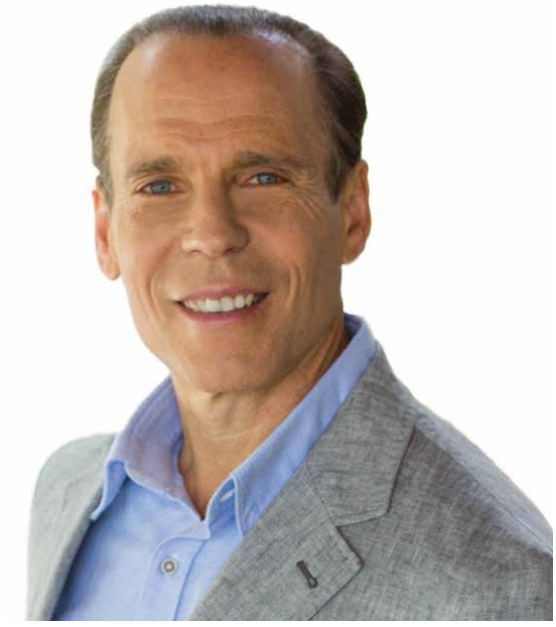
22 Top Experts Reveal the Simple and Most Effective Secrets to Look & Feel Younger Now, Avoid Disease, and Live Long

In *The Live Long & THRIVE Summit*, you are about to discover the proven most effective yet largely *unknown* natural steps you must take to look and feel your best, avoid and overcome disease, and live long and thrive.

Each of the 22 interviews truly holds the potential to change your life, so you don't want to miss a moment of this once-in-a-lifetime online event!

And to start things off, in this important new report, you're about to discover the 15 most dangerous toxins lurking in everyday life that are wreaking havoc on your gut health, and 10 crucial strategies to shield your microbiome from these hidden dangers.

Please DO share this free report guide with loved ones!



"What steps should you take that will make the most powerful difference in how long and well you live?

Proven steps that -- with so much misleading health nonsense 'crowding the airwaves' out there -- most people are largely unaware of?

That's exactly what you're going to gain clarity on in The Live Long & THRIVE Summit. My good friend and natural health veteran, Brian Vaszily, is an outstanding host, what you'll learn is essential as it gets, so be sure to listen closely to this important online event!"

Dr. Joel Fuhrman

World-Renowned M.D., 7-Time NY Times Bestselling Author

How Do YOU Really Feel About the Following?

Hello, Brian Vaszily here, founder of The Art of Anti-Aging, where over 1,000,000 people in their "middle years" and "golden years" have signed up for our healthy aging insider insights. I'm also your host for The Live Long & THRIVE Summit: The Proven Best Healthy Aging & Longevity Steps of All, and a health researcher and bestselling author who others have called a "leading voice" in the natural health world for nearly 25 years.

Brian Vaszily, Founder

And before diving into this special report, please see how you feel about the following:

Here at The Art of Anti-Aging, **the "anti" means we're against all the destructive lies about getting older** out there that equate hitting your 30s, 40s, 50s, 60s and beyond, with becoming increasingly undesirable, incapable, doomed to suffering and disease, and "over the hill."

We're ***against*** **all the toxic "solutions" and toxic thinking** so often pushed on people by the Big Cosmetic, Big Food, and Big Pharmaceutical industries, who so often play upon those destructive aging lies and manipulate people through fear.

Instead, we are certain that when you take the right steps, your "middle years" and "golden years" will truly be your best years.

And **we are 100% committed to providing you with the <u>proven</u> most effective health and wellness steps** to achieve that… to look and feel your best, avoid and overcome disease, live a long life, and thrive while doing it.

If our mission sounds worthwhile to you, welcome to our positive and supportive community. ☺

CLARITY on What Will Make the Biggest Impact on YOUR Health and Life

There's an overwhelming amount of health info out there in online events, blogs, articles, and more. And it all presents **two very big problems** that frustrate and even mislead many people.

One, so much of it is not evidence-based from sources you can trust.

Two, it causes serious confusion, because people are unclear on what steps to invest their precious time and energy in that will actually make the fastest and most powerful difference in their health and life.

That's why *The Live Long & THRIVE Summit* truly may be THE most life-changing and possibly even life-saving event you ever experience.

You see, in *The Live Long & THRIVE Summit*, I'm getting straight to the heart of the matter for you. That's because I'm gathering 21 of today's most renowned healthy aging and longevity doctors and researchers, each from different areas of expertise. And I'm challenging them each to reveal their answers to this one MISSION-CRITICAL question for you:

"From your specific area of expertise, what are 3 to 5 things that almost no one knows about – but that everyone needs and deserves to know – because of how powerfully it can help them look and feel their best, avoid and possibly even overcome disease, and live long doing it?"

Yes, that means you're getting TOTAL CLARITY on only the most important and effective secrets that will make the most difference in your health and life.

True, you don't yet know from which of the 22 top doctors and researchers the insights will come that lead to the biggest breakthroughs for you in particular. However, considering these world-renowned experts are each revealing only their proven most powerful secrets of all, you can be **certain** those life-changing insights WILL come.

That is why you truly do not want to miss a moment of this unique summit. If you miss even a single expert, after all, you may well miss that one crucial gem that makes ALL the difference for you. Therefore…

Head here now to sign up for the FREE online *Live Long & THRIVE Summit: The Proven Best Healthy Aging & Longevity Steps of All* if you aren't signed up already and…

Head here to get the COMPLETE recordings and written transcripts of the entire summit if you don't feel you'll be able to hear all 7 days of this essential event when it airs live, and to experience it all on your own schedule when and where YOU choose.

With that noted, the summit actually starts NOW, with this useful new report….

Table of Contents

Table of Contents

THE 15 WORST COMMON TOXINS FOR YOUR GUT & MICROBIOME HEALTH

(And the 10 Best Steps to Bypass the Toxins and Boost Your Gut Health)

Having a healthy gut is key for all aspects of good digestion: breaking down food, extracting and absorbing nutrients, staying "regular," and so on.

However, the benefits don't stop there.

Your gut is also critically connected to many more systems in your body and has a huge impact on your health as a whole.

For example, research has discovered a gut-brain axis linking the entire gut microbiome to mood, cognitive function, and mental health as well as a gut-skin axis, a direct link to the immune system, and much more. [1,2,3]

In short, if your gut isn't functioning well, the rest of your body probably won't be, either.

Now, when it comes to supporting a thriving microbiome and overall gut health, protection is key.

You are exposed to anywhere from hundreds to thousands of toxins every day, some of which are particularly detrimental to your gut. Becoming aware of these toxins and avoiding or reducing your exposure to them is one of the best steps you can take for a healthier microbiome.

To that end, you're about to learn the 15 worst – and, unfortunately, very common! – toxins for your gut and the best steps you can take to bypass them and their harmful effects.

15 Common Toxins That Damage Your Gut & Microbiome

Antibiotics / Triclosan

Antibiotics are perhaps the most well-known group of medications with gut-disrupting effects. They work by killing bacteria and/or preventing bacteria from multiplying, which helps treat infections caused by bacterial pathogens.

Unfortunately, antibiotics can affect and kill both bad and good bacteria, including the beneficial bacteria in your gut.

In fact, research has shown that just a single antibiotic treatment can cause harmful changes to the gut microbiome, and a course of antibiotics can lead to long-term alterations. This comes about mainly due to a decrease of beneficial bacteria and an increase of harmful bacteria like Clostridium. [4]

While antibiotics are necessary in certain cases, there is widespread agreement that they are also overused and overprescribed. Be sure to check with your healthcare provider to see if taking one in any given situation is truly essential.

You'll also want to beware of a chemical with similar gut-harming properties known as triclosan.

Triclosan is not an antibiotic you would take by mouth when sick but rather a chemical with antibacterial properties. It was once widely used in antibacterial hand soaps in the U.S. until these products were banned due to ineffectiveness and health concerns. Rather oddly, it is still commonly added to MANY other everyday products.

Studies have indicated there may be many potential downsides of triclosan for gut health, including intestinal inflammation, colon damage, and an altered microbiome. [5]

Though no longer in antibacterial hand soaps, triclosan is still commonly added to toothpaste and is, sadly, "readily absorbed in the gastrointestinal tract." [6]

Triclosan can also be found in:

- *Mouthwashes*
- *Cleansers*
- *Deodorants or body sprays*
- *Aftershave*
- *Cosmetics*
- *Lotions and creams, such as many anti-aging creams*
- *Textiles*
- *Toys*

Heavy Metals

Heavy metals can generally be defined as metals that have a relatively high density or atomic weight.

A few heavy metals – iron, cobalt, zinc – are essential for human health, but others can have very toxic effects in the human body, even at low amounts. This second group is commonly what is meant when "heavy metals" are referred to and, as a whole, can significantly affect gut health.

Four specific heavy metals have especially proven to be toxic to the gut. [7]

Arsenic – Arsenic can negatively alter the composition and diversity of gut bacteria, which may lead to other types of gut disruption. These effects can be seen with chronic low-dose exposure to arsenic, something that is not uncommon.

People are most often exposed to arsenic as a contaminant in drinking water and food, particularly rice, fish, and other types of seafood.

Cadmium – Cadmium has been shown to impair gut barrier function, leading to an increase of proinflammatory molecules and systemic inflammation. It can also alter gut microbial communities, much like arsenic.

Cigarette smoke is a common source of cadmium, but it can also accumulate in crops grown in soils with high cadmium levels.

Lead – Lead is a heavy metal that has many toxic effects, including an ability to harm the composition, diversity, and metabolic activity of gut microbiota. It may also increase permeability of the intestinal barrier.

Lead can leach into drinking water from pipes and may be present in the paint of homes built before 1978. It can also be a contaminant in cosmetics, toys, jewelry, supplements, and even imported spices.

Mercury – Like other heavy metals, mercury can disrupt the gut microbiome and may contribute to intestinal disorders. People are most commonly exposed to it via seafood because it accumulates in fish like king mackerel, shark, swordfish, and tuna.

Artificial Colors and Sweeteners

Artificial colors and flavorings (including sweeteners) have become commonplace in a variety of foods, but their health effects are questionable at best.

Alarmingly, some preliminary research shows that a commonly used red food dye – known as Allura Red, FD&C Red 40, or Food Red 17 – may contribute to inflammatory bowel disease, Crohn's disease, and other gastrointestinal disorders. [8]

Another study also found that nanoparticles commonly used in food dyes like Red 40, Yellow 5, and Yellow 6 may "negatively affect intestinal functionality" and cause harmful changes to gut bacteria. [9]

This is especially big news, since one or more of the above three dyes are present in an estimated 90% of all artificially colored products in the U.S.!

Food dyes aren't the only problem ingredient for your gut, though.

Sucralose (brand name Splenda), an artificial sweetener, has been linked to adverse gut effects, including a decrease in beneficial gut bacteria and heightened liver enzymes – something that can interfere with the absorption of nutrients and drugs. [10]

Aspartame has shown the potential to increase the number of "bad" bacteria in the gut, and three artificial sweeteners (including sucralose and aspartame) were found in lab studies to increase the ability of pathogenic bacteria – like E. coli – to form a biofilm and invade intestinal epithelial cells. [11,12]

All in all, your gut is better off without artificial additives!

Emulsifiers

Emulsifiers are common food additives used to stabilize processed foods and help ingredients that don't usually mix – like oil and water – to stay combined in the product, resulting in a more appealing texture.

Unfortunately, research has revealed that emulsifiers might make food more appealing but aren't necessarily harmless when it comes to human health.

A few have specifically been found to be disruptive to the gut microbiome in a way that promotes gut inflammation and could contribute to inflammatory bowel diseases. [13]

Polysorbate 80 is one of the gut-disrupting emulsifiers in question and is thought to "feed" pathogenic microbes in the gut, stimulating intestinal inflammation. Carboxymethylcellulose (also known as cellulose gum or CMC) is another emulsifier that acts in a similar way to polysorbate 80 but more quickly. [14]

Carrageenan is yet another common additive with emulsifying properties and the potential to negatively impact gut health.

Lab studies have shown that it can alter the density and composition of gut microbiota and stimulate pro-inflammatory molecules. Increasing evidence also suggests that carrageenan is especially damaging for those who already have a gastrointestinal issue (like colitis or Crohn's), and eliminating it from the diet may help irritable bowel disease (IBD). [13,15]

Phthalates

Phthalates are a group of chemicals widely used as plasticizers in a number of products, including cosmetics, personal care products, vinyl flooring, clothing, toys, medical equipment, and plastic packaging. They also leach easily into food and water, which are common routes of human exposure.

Over the past few decades, phthalates have come under heavy scrutiny due to their hormone-disrupting effects, but they also have a lesser-known ability to harm the gut.

Research has shown that phthalates – particularly ones like dibutyl phthalate (DBP) and di-(2-ethylhexyl) phthalate (DEHP) – may throw off the balance of good/bad bacteria in the gut microbiome and alter levels of gut microbial metabolites, something that could result in cholesterol imbalance. [16]

Other studies have determined that phthalates can be particularly detrimental to the microbiome of children/infants and may interfere with the synthesis of butyrate, which is an essential metabolite for intestinal health. [17]

BPA / BPS / BPF

Bisphenols are commonly used plastic chemicals that, like phthalates, possess documented hormone-disrupting effects. They are often present in food packaging, especially any type of plastic packaging or containers, and the lining of metal cans.

The most familiar (and well-studied) example is bisphenol A (BPA), but it's now in the process of being replaced with alternative chemicals like bisphenol S (BPS) and bisphenol F (BPF).

As you may have guessed, bisphenols aren't just disruptive to hormones.

They have also shown the potential in both lab and animal studies to increase "bad" bacteria in the gut and induce oxidative stress, which often leads to inflammation. There's also evidence that BPA may be connected to weight gain that comes about specifically due to changes in the gut microbiome. [17]

Much less research has been focused on BPA substitutes, but the studies that have been conducted so far already show that supposedly "safer" chemicals like BPS and BPF have hormone-disrupting properties that are on par with BPA and disrupt the gut in a similar way. [17,18]

Animal Protein

Protein in general is by no means bad for your gut. In fact, it's an essential macronutrient needed for building and repairing muscles, maintaining bone health, making hormones, and much more.

However, some studies have shown that diets high in animal protein specifically can be harmful for gut health and may even raise the risk of developing inflammatory bowel disease (IBD). [19]

As an example of this, one study compared the gut bacteria of children (Italian) who ate a diet higher in animal protein to the gut bacteria of children (from Burkina Faso) who consumed more plant-based protein and fiber.

Researchers found that the higher animal protein group had more gut bacteria associated with inflammation and disease, while the more plant-based group had higher amounts of gut bacteria associated with lower inflammation levels. [19]

And while this is a caution against overdoing animal protein/meat as a whole in your diet, other research does suggest that red meat may be the worst for gut health, since it appears to raise levels of a gut bacteria byproduct that's linked to an increased risk of heart attack and stroke. [19]

Refined Sugar / Grains

Many people already know that too much sugar is bad for their health but, unfortunately, that hasn't decreased its popularity very much. In fact, the average American consumes an estimated 15 teaspoons of sugar each day, which is well above the max recommended amount (9 teaspoons for men and 6 for women).

This is bad news because excessive amounts of sugar are linked to many chronic health issues and can significantly impact the gut.

As a prime example, some research indicates that a high-sugar diet can increase the abundance of gut bacteria with pro-inflammatory effects and decrease the number of gut bacteria with anti-inflammatory effects. [20]

These harmful gut changes could end up leading to higher amounts of bacteria that degrade the protective mucus lining in the gut and a greater risk of gut diseases, like colitis. [21]

There's also evidence that refined grains – grains with the nutrient- and fiber-rich bran and germ removed – could disrupt the gut microbiome in a similar way to sugar.

Whole grains contain a rich amount of fiber that feeds the good bacteria in your intestines as it passes through. Refined grains, on the other hand, lack this fiber, provide no nutrition to beneficial microbes, and can cause rapid spikes in blood sugar because they are so quickly digested. [22]

Overall, studies have found that when refined grains are replaced with whole grains in the diet, positive changes occur in the gut microbiome and "regularity" improves as well. [23]

Pesticides

Pesticide use is incredibly common in modern agriculture to manage insects, weeds, fungi, etc. that might damage crops. But though conventional pesticides are marketed as being "safe" for humans when used correctly, research increasingly shows that this is not the case.

When it comes specifically to digestive health, a number of pesticides have been shown to affect the gut microbiome and even impair its normal function.

Glyphosate – a popular herbicide and the 'active' ingredient in Roundup – has been linked to a reduction in the number of "good" bacteria in the gut, an increase in pathogenic bacteria, and damage to villi, which are tiny projections in the small intestine that aid nutrient absorption. [24]

Two other highly toxic pesticides (which are banned in certain countries) known as Paraquat and Chlorpyrifos may also cause harm to the gut microbiome, even through "low-level chronic dietary exposure." [24,25]

2,4-dichlorophenoxyacetic acid (2,4-D), another popular herbicide, has shown gut-disruptive properties, too, as have many other pesticides, including insecticides and fungicides. [24]

When it comes to pesticide exposure, keep in mind that residue may be present not only in conventionally grown food but also in supplements, personal care products, and anything else that includes natural ingredients.

And importantly, be sure not to spray any pesticides (particularly Roundup) yourself at home!

Common Medications

Antibiotics aren't the only medications that affect gut health. A wide range of other commonly used drugs can disrupt the gut microbiome and possibly increase the risk of digestive disorders.

If you are taking any medications, it's a good idea to research each one specifically for possible gut effects, but here are several worth highlighting that have been shown to negatively alter the microbiome: [26]

- ***Laxatives –*** *Even short-term use may affect the gut microbiome.*
- ***Proton Pump Inhibitors (PPIs) –*** *Used for dyspepsia and acid reflux but can (ironically) harm gut health over time and increase the abundance of upper gastrointestinal tract bacteria.*
- ***Metformin –*** *May lead to higher levels of Escherichia coli (E. coli), a potentially harmful bacteria that can cause diarrhea.*
- ***Oral Steroids –*** *Linked to higher levels of methanogenic bacteria, which may contribute to obesity.*
- ***Selective Serotonin Reuptake Inhibitors (SSRIs) –*** *A class of antidepressants that could increase the potentially harmful bacteria species Eubacterium ramulus in people with IBS.*
- ***Hormonal Birth Control –*** *May cause constipation or diarrhea and linked to a "minor decrease" in gut microbiota diversity.* [27]
- ***GLP-1 Agonists –*** *Used for type 2 diabetes and off-label for weight loss (brand names include Wegovy, Ozempic, Trulicity) but may increase the risk of pancreatitis, bowel obstruction, and stomach paralysis (gastroparesis).* [28]

Fried Foods

You probably know that fried food isn't the healthiest choice, but you might not realize just how hard it can be on your digestive health.

To start with, fried foods are simply difficult for your body to digest. They are usually high on saturated and trans fats from the cooking process, which your digestive tract has to work hard to break down. (That's not even counting the breading fried foods are usually coated with.)

In addition, studies have found that regular fried food consumption may decrease the diversity of the gut microbiome as well as impair blood sugar balance and increase inflammation. [29]

This is likely the case with any type of fried food, but it does appear as though fried meat is one of the worst options for your gut. Not only can it disrupt gut microbiota, one study also found that eating it four times a week increased levels of intestinal endotoxins! [30]

Supplements

With all the emerging research on natural plant compounds, nutrients, foods, etc. that can boost multiple aspects of human health, many people turn to supplements as an attainable way to receive these benefits.

This is not a "bad" thing by any means, however, there is a HUGE problem in the supplement industry: A lack of regulations and measures that protect consumers.

The unfortunate truth is that many supplements on the market are laced with any number of the gut-harming toxins already listed in this report, including: [31]

- *Heavy metals*
- *Pesticides*
- *Plastic chemicals*
- *Other substances not listed on the label*

There's currently no standard required procedure for testing supplements for the above contaminants before they reach the consumer (you), although some companies choose to do testing voluntarily.

There are even cases where fake supplements are sold that don't contain any of the herbs/nutrients/active ingredients listed on the label. [32]

All of this is bad news for your gut, but the problems don't end there.

In addition to contaminants and "extra" ingredients, supplements are also a hiding place for a number of additives that can disrupt gut health. Some examples are:

- *Artificial dyes*
- *Refined sugar*
- *Artificial sweeteners*
- *Emulsifiers*

Now, before you give up on supplements for good, there are ways to find truly clean and high-quality supplements without any of the above problems. The first step is to always check the label for any doubtful ingredients, and you'll find other key tips further down in this report!

Polyethylene Glycols / Propylene Glycol

Polyethylene glycols (PEGs) and propylene glycol are all synthetic chemicals derived from petroleum. They are extremely common ingredients in food products, personal care products, supplements, medications, and more.

PEGs are a category of compounds containing polyethylene and glycol. You might see them on a label as simply "PEG" or listed by the specific compound, like "PEG-100" or "PEG-3350."

There's no question that PEG has an impact on the digestive system because one of its most common uses is as a laxative (specifically the compound PEG3350). You'll also frequently find it in products like makeup, shampoo, and creams as well as pharmaceutical products.

As a petroleum byproduct – which commonly contain the toxic contaminants ethylene oxide and 1,4-dioxane – PEG has come under scrutiny for possible negative health effects, but there's not a lot of conclusive research on it to date.

However, some early research does show that certain PEGs (including PEG3350 and PEG400) can negatively alter the composition of gut bacteria, which in some cases was long-term or permanent, and disrupt the mucus barrier and immune response. [33,34,35]

Propylene glycol is commonly used in processed foods as an emulsifier, thickener, or stabilizer as well as in personal care products, cosmetics, supplements, and medications.

Some research has shown that it, too, can significantly alter gut microbiota and appears to do so in a "non-reversible manner." [13]

Alcohol

Overdoing it on alcohol isn't good for your body in general and can sneakily sabotage your gut health if you aren't careful.

When your body metabolizes alcohol, ethanol gets broken down into a carcinogenic compound known as acetaldehyde. Though eventually expelled from your body, acetaldehyde can do damage before it leaves and has the most contact with the gastrointestinal tract.

Because of this, heavy drinking greatly raises the risk of gut-related issues like pancreatitis, gastric or colorectal cancer, leaky gut, and dysbiosis (i.e., an

imbalance of gut microflora) and can damage the small and large intestines. [36]

Unfortunately, even moderate amounts of alcohol can also disrupt gut health and decrease levels of beneficial bacteria over time, especially for people who may be more sensitive to it. [37]

Interestingly, while most types of alcohol seem to have similar negative effects on the gut, red wine – in moderation! – has shown potential for increasing the number of good gut bacteria, likely due to its polyphenol content. [38]

Cigarettes / Tobacco

Smoking isn't just damaging to the lungs. It can also be detrimental to your gut and digestive health, even raising the risk of chronic gastrointestinal diseases.

The damage comes from the thousands of chemicals found in tobacco smoke and tobacco products – including nicotine, formaldehyde, lead, arsenic, and benzene – over 70 of which are considered carcinogenic. [39]

This toxic combination of chemicals can harm the intestinal microbiome, causing an imbalance between "good" and "bad" bacteria, and raises the risk of inflammatory bowel diseases, like Crohn's disease, as well as cancer of the digestive tract. [40,41]

Smoking also increases your risk of heartburn because it weakens the sphincter muscle in your esophagus and increases the likelihood of peptic ulcers, liver disease, and gallstones. [41]

Obviously, if you are currently a smoker, quitting would be highly beneficial for your health and may even be enough to help your gut microbiome recover its diversity. But you should also beware of secondhand smoke, which can significantly impact your health as well. [42]

The 10 Best Steps to AVOID Toxins and Protect Your Gut

Limit or Avoid Processed / Refined / Fried Foods

Unfortunately, as you can see from the first half of this report, many of the most popular foods in the standard western diet aren't doing your gut any favors and will likely only continue to cause damage the more you eat them.

While it might not be possible to have a "perfect" diet, it IS critical that you limit or avoid highly processed foods as much as possible.

This single category of foods – sometimes referred to as ultra-processed foods – is often where the most toxic additives hang out (including artificial dyes and sweeteners, emulsifiers, and PEGs) as well as refined sugar and grains.

Plus, ultra-processed foods are typically short on nutrients that can help your gut (more on that later), so they really have nothing positive to offer your digestive system.

You can also take steps like using whole grains rather than refined grains when you cook or bake at home and switching out refined sugar for more nutritious honey or maple syrup (but still cut back on total sugar use).

Reduce or eliminate your intake of fried foods and also consider eating more plant-based protein and less animal protein to keep your gut healthy in the long run.

Consume Probiotic Foods (And Consider a Supplement as Needed)

Probiotics are essentially strains of beneficial bacteria that support gut health.

Whether you need to help your gut recover from previous damage or simply want to maintain a thriving microbiome, probiotics are absolutely a key piece to the puzzle. They do their work by competing with pathogenic bacteria and increasing the populations of helpful microbes to bring the microbiome back into balance. [43]

One of the best ways to get probiotics is by consuming foods that are naturally rich in beneficial microbes. This includes a range of fermented foods like:

- *Sauerkraut*
- *Yogurt*
- *Kombucha*
- *Tempeh*
- *Kimchi*
- *Kefir*
- *Miso*

In certain cases – for example, if you can't consume enough probiotic foods in your diet or after a course of antibiotics – you may also want to consider looking for and taking a quality probiotic supplement.

Supplements contain higher amounts of probiotic strains than you would get from simply eating probiotic-rich foods and, when formulated correctly, ensure the probiotics survive through stomach acid to make it to the intestines.

Just be sure you choose a high-quality probiotic supplement – guidelines on that to follow shortly!

Eat a Range of Prebiotic Foods

Many people are now familiar with the benefits of probiotics for gut health given the large body of research on the subject, but there's another substance that is equally important for your gut: prebiotics.

While probiotics are the different strains of microorganisms that can inhabit the gut, prebiotics are what feeds these beneficial microbes so that they can flourish.

Most prebiotics are specific types of fiber that pass through your system undigested, promoting the growth and activity of gut-healthy bacteria in the intestines. It's key to eat a variety of these prebiotic fibers to ensure that your microbiome as a whole is provided with adequate "food."

As a general rule, most plant-based whole foods – fruits, vegetables, whole grains, etc. – will contain some sort of prebiotic fiber. However, there are several prebiotic foods that outshine the rest for microbe-friendly fiber content:

- *Dandelion greens and root*
- *Chicory root*
- *Jerusalem artichokes*
- *Garlic*
- *Onions*
- *Leeks*
- *Asparagus*
- *Bananas*
- *Oats*
- *Barley*
- *Apples*

Again, the best approach is to eat a variety of prebiotic-rich foods to give your digestive system a good range of fiber.

Tip: If you don't eat a lot of fiber currently, increase your intake slowly to help prevent digestive issues.

Incorporate Gut-Helping Herbs & Spices Into Your Diet

Probiotic and prebiotic foods are top choices for a healthier gut, but there are also a number of herbs and spices with documented benefits for digestive health. Some can help address specific gut complaints (bloating, constipation, etc.) and all support a thriving microbiome.

Consider adding a few (or all) of the following herbs/spices to your diet – perhaps one at a time to see which help the most:

- ***Peppermint –*** *A great option for general indigestion, gas, and bloating and may even aid symptoms of IBS.* [44]
- ***Ginger –*** *Calms nausea and also "heats" up a sluggish digestion.* [45]
- ***Psyllium Husks –*** *Rich in prebiotic fiber that bulks up stools to prevent constipation.*
- ***Turmeric –*** *Fights inflammation, stimulates digestion, and supports the liver in producing bile to aid digestion.* [46]
- ***Marshmallow Root –*** *Makes a thick, gel-like liquid when mixed with water that coats the esophagus and may help calm heartburn, inflammation, and ulcers.* [47]
- ***Chamomile –*** *Helps indigestion, gas, and bloating and has shown antimicrobial activity against the Helicobacter pylori bacteria that can cause stomach infections.* [48]
- ***Fennel Seed –*** *Can be chewed after a meal to enhance digestion and relieve bloating.*
- ***Triphala –*** *A revered Ayurvedic formula containing three herbs (amla, haritake, and bibhitaki) that's used as a digestive tonic and to support regularity.* [49]

Get Enough of Key Vitamins & Minerals

Your body needs an array of vitamins, minerals, and macronutrients (fat, protein, carbs) to function optimally, but there are five specific nutrients you want to be sure to get enough of for optimal gut health.

B vitamins as a whole are incredibly important for metabolism, which involves the conversion of fats and carbohydrates into energy.

To give you just a few examples, vitamin B1 (thiamine) helps convert carbs to energy and supports appetite, while vitamin B3 (niacin) helps break down fats, carbs, and alcohol. Vitamin B6 (pyridoxine) helps your digestive system process protein, and vitamin B12 is involved in the production of red blood cells, which carry oxygen throughout your whole body – gut included. [50]

Vitamin C, though most associated with the immune system, helps with the absorption of iron and also appears to positively affect the gut microbiome by increasing the presence of anti-inflammatory and gut-helping bacteria. [51]

Vitamin D helps your body to absorb calcium and other nutrients and may even have protective effects against colon cancer. [50]

As far as minerals go, magnesium is critical for maintaining gut motility (meaning it helps keep things moving), while zinc is important for the production of digestive enzymes that help break food down.

Of the above, vitamin B12 and vitamin D deficiencies are fairly common, and many people don't consume sufficient amounts of magnesium. You may want to consider your daily intake of all of these vitamins/minerals and make dietary changes or seek out a quality supplement as needed.

Load Up on Antioxidant Foods, Especially Polyphenols

You may have heard about antioxidants because of their outstanding ability to fight free radicals (the unstable molecules that can accelerate aging and contribute to disease), but few people realize just how important they are for gut health.

Most, if not all, antioxidants fight inflammation, which is beneficial for your digestive tract as well as the rest of your body. Many have also been found to possess antimicrobial activity that can help fight the "bad" microbes in your body and gut.

To effectively support your gut, it's ideal to eat a range of antioxidant foods to get as many different types of antioxidants as possible, but there is evidence that polyphenols – a specific group of antioxidants – are especially beneficial for gut health.

In fact, some fascinating research has shown that polyphenols act almost like prebiotics. They are typically not absorbed through much of the digestive tract and make it to the large intestine where they "feed" the beneficial microbes living there. [52]

You can generally get an abundance of polyphenols and other antioxidants simply by "eating the rainbow," but here are a few foods that are exceptionally rich in antioxidants:

- *Acai berries*
- *Blueberries*
- *Cacao / Cocoa powder*
- *Pecans*
- *Strawberries*
- *Raspberries / Black raspberries*
- *Artichokes*
- *Green tea*
- *Goji berries*
- *Cranberries*
- *Red kidney beans / Black beans*
- *Blackberries*
- *Red cabbage*
- *Red kale*
- *Beets*

Also, do NOT forget herbs and spices when it comes to boosting your daily antioxidant intake. Though used in small amounts, herbs/spices are typically sky-high in antioxidants and pack in more of them than most fruits and vegetables.

Some of the top super-antioxidant choices include:

- *Cloves*
- *Oregano*
- *Cinnamon*
- *Rosemary*
- *Peppermint*
- *Thyme*
- *Turmeric*
- *Allspice*
- *Sage*
- *Rosehips*
- *Vanilla Bean*
- *Parsley*
- *Nutmeg*
- *Triphala*

Note: As a huge bonus, many of the top antioxidant herbs and spices also support your digestion in other ways. In fact, you may have recognized several from the earlier section on gut-helping herbs and spices!

Eat USDA Certified Organic as Much as Possible

In the U.S. alone, about 1.2 billion pounds of conventional pesticides are used every year. Not only that, about a quarter (25%!) of pesticide use involves chemical pesticides that are banned in the EU because of toxicity concerns. [53]

Given the fact that many of these pesticides have already shown gut-disrupting effects, you really want to avoid them as much as you can to protect your digestive health.

One of the best ways to do this is by buying USDA Certified Organic food (or the equivalent in other countries), which is grown without the use of conventional chemical pesticides, fertilizers, etc.

(And in case you're wondering, pesticides really do end up on our food with a recent report finding residue from at least one pesticide – and often several – on 75% of the non-organic produce tested.) [54]

Now, obviously it would be ideal if ALL the food you bought was organic, but most people can't fit that in the budget.

To reduce your intake of pesticide residue as much as possible, a good plan of attack is:

A) Focus especially on anything you frequently and directly consume into your body. This includes choosing USDA Certified Organic for foods, cosmetics/personal care products, and supplements that you use daily or close to it, for example.

B) In addition to switching to organic for foods you eat often, buy the USDA Certified Organic version of the "Dirty Dozen" – i.e., the most contaminated produce.

The latest Dirty Dozen list is:

- *Strawberries*
- *Spinach*
- *Kale, collard, and mustard greens*
- *Peaches*
- *Pears*
- *Nectarines*
- *Apples*
- *Grapes*
- *Bell and hot peppers*
- *Cherries*
- *Blueberries*
- *Green beans*

Choose High-Quality, Truly Clean Supplements

As mentioned earlier in this report, supplements are a BIG hiding place for gut toxins like emulsifiers, artificial colors or sweeteners, sugar, PEGs, and contaminants (heavy metals, pesticides, plastic chemicals, etc.).

This means that choosing high-quality supplements free of the "junk" you don't want in your body is just as important as avoiding pesticide residue in food by going organic.

And similarly to food, one of the easiest ways to do this is by looking for USDA Certified Organic supplements.

The official organic seal (not vague "organic" claims!) ensures that a supplement does NOT contain artificial/synthetic ingredients, toxic fillers or binders, GMOs, or any ingredients grown with conventional pesticides or fertilizers.

For non-organic supplements, be sure to read the label carefully to check whether toxic ingredients are hiding out in the formula. Make note of any ingredient you aren't sure about and do some quick research on it before buying.

Also, it's incredibly important that you look for supplements that are third-party tested for quality and purity – something recommended by researchers familiar with the frequent contamination present in the supplement market. [55]

Finally, regarding heavy metals, the amount is key. Trace amounts of heavy metals are found in many foods and ingredients, because small amounts of minerals occur naturally in soils. However, testing for the presence of excessive heavy metals is especially key when it comes to supplements, since excessive amounts of heavy metals are such a big issue in many supplements today.

Steer Clear of Toxic Personal Care & Cosmetics Products

Food and supplements are not the only routes gut-harming toxins can take to get into your body.

Your skin – your largest organ – also absorbs a good amount of what you put on it, and skincare/cosmetics products frequently contain phthalates, PEGs, propylene glycol, and a number of other toxic chemicals.

Again, the best way to avoid ALL toxic chemicals, including pesticides, is to make it a point to look for USDA Certified Organic skincare, makeup, etc. The organic seal on a product means that it:

- *Contains at least 95% true organic ingredients.*
- *Sources the remaining 5% of ingredients from a strict approved safe list.*
- *Is free of synthetic additives, including pesticides, chemical fertilizers, petrochemicals, and dyes.*
- *Was not processed using industrial solvents or irradiation.*
- *Is free of genetically modified organisms (GMOs).*

However, be aware that there are MANY "organic poser" and "greenwashed" products out there.

What this means is that companies will put words like "organic," "wild-crafted," and the mostly meaningless "all-natural" on the label without having any certification to back up their claims. They are simply using these words as a marketing tactic to appeal to consumers seeking clean products, so always look for official certifications – and, of course, read the label!

Also, when you first start switching to organic products for personal care, it's important to again remember that you don't have to do it all at once.

One smart approach is to start with the products that you use routinely, that are applied directly to your skin, and that are in contact with your skin the longest. For example, anti-aging creams, moisturizers, deodorants, and foundation/makeup products may be a top priority because they are usually on your skin for much of the day.

Cut Down on Your Use of Plastic

Plastic chemicals have proven to be some of the most toxic for human health and the gut microbiome.

While it might not be possible in today's world to avoid plastic completely, cutting down on your exposure to some of the worst plastic sources can go a long way.

On that note, one of the top things NEVER to do is heat your food in a plastic container. Multiple studies have shown that plastic already leaches harmful toxins into food and drinks, and adding heat to the mix only speeds up the leaching process. [56]

You'll also want to watch out for phthalates in your skincare and cosmetics products (yet another reason to buy them organic), and beware of common BPA-/BPS-containing products, including plastic food containers, canned foods and drinks, and receipts.

In general, try to swap out plastic containers and bottles in your home for alternative materials like stainless steel, ceramic, or glass. Cook with fresh, whole foods when possible to cut back on foods packaged in plastic, canned foods, and takeout food.

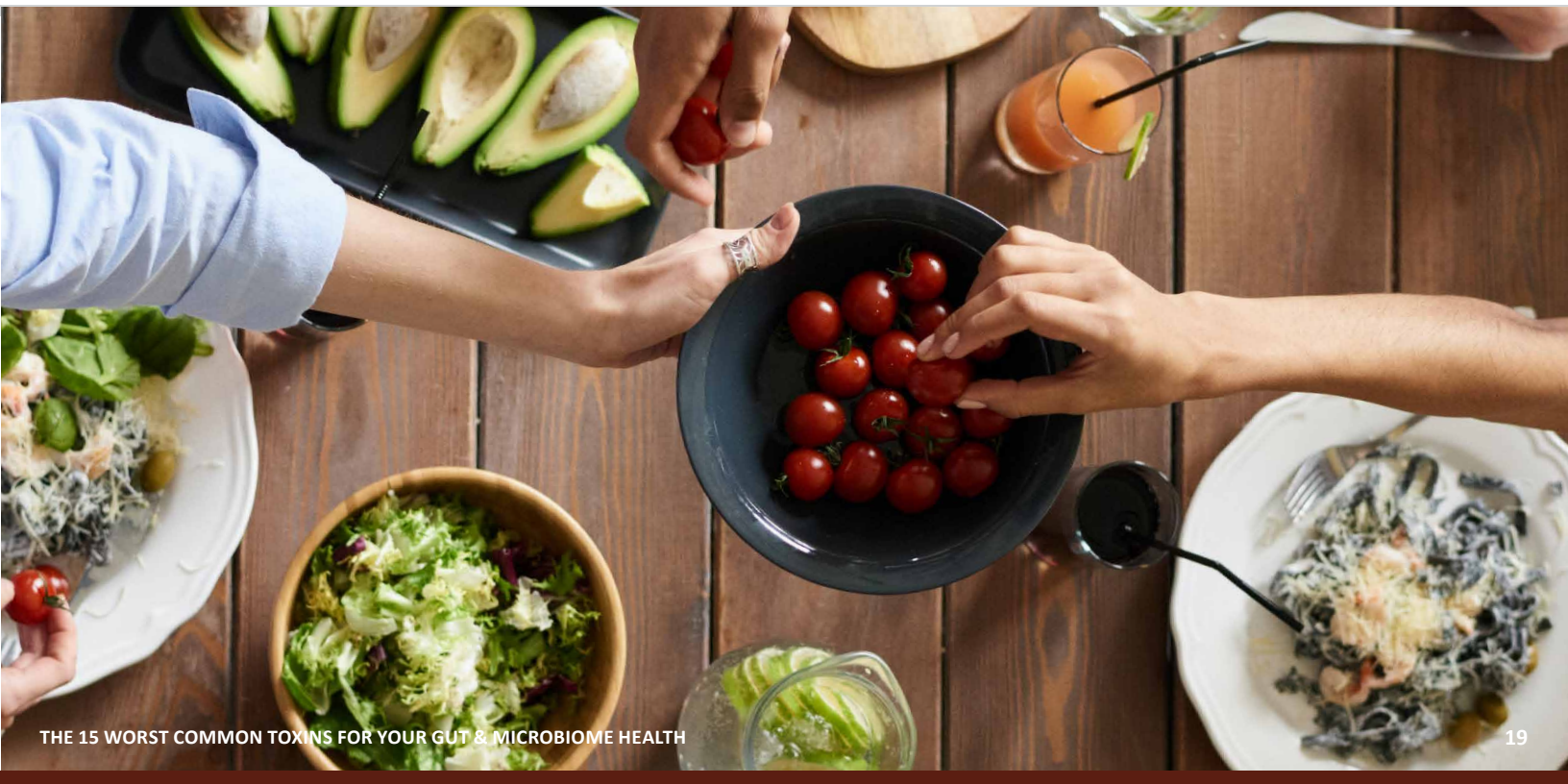
Out With the Bad and In With the Good

Protecting and promoting the health of your digestive system and gut microbiome can essentially be summed up by the saying “out with the bad and in with the good.”

Start by examining the food you eat, the supplements you take, the products you use, and so on for any and all of the gut toxins listed above that are sabotaging your gut health. Then, find ways to reduce or eliminate them from your daily routine and replace them with gut-helping foods, herbs, and spices.

Also, don’t forget the importance of choosing clean supplements and personal care products because these can “feed” your body and gut the right or wrong ingredients – just like food does.

To make things easier on yourself, take small steps in the right direction at first. But remember, the sooner you get started, the better!



Now, Get Ready for THE Most Life-Changing Health Secrets of All...

So again, here at The Art of Anti-Aging, **the "anti" means we're against all the destructive lies about getting older** out there that equate hitting your 30s, 40s, 50s, 60s and beyond with becoming increasingly undesirable, incapable, doomed to suffering and disease, and "over the hill."

We're **against all the toxic "solutions" and toxic thinking** being pushed on people by certain powers-that-be who so often play upon those destructive aging lies and manipulate people through fear and even "convenience."

Instead, we are certain that when you take the right steps, your "middle years" and "golden years" will truly be your best years.

And **we are 100% committed to providing you the proven most effective health and wellness steps** to achieve that... to look your best, feel amazing, avoid and overcome disease, live a long life, and thrive while doing it....

The special report was just a small taste of that (and please DO share this report with family and friends)...

...Whereas the online *Live Long & THRIVE Summit: The Proven Best Healthy Aging & Longevity Steps of All* truly is the PINNACLE of our mission.

Because you're about to get **total clarity on the simple and MOST EFFECTIVE secrets you can put into play in your life starting right now to look your best, feel amazing, avoid and even overcome disease, and live a long life doing it...**

From 21 of the world's most renowned and trusted anti-aging and longevity doctors and researchers.

Head here now to sign up for the FREE online *Live Long & THRIVE Summit: The Proven Best Healthy Aging & Longevity Steps of All* if you aren't signed up already and...

Head here to get the COMPLETE recordings and written transcripts of the entire summit if you don't feel you'll be able to hear all 7 days of this essential event when it airs live, and to experience it all on your own schedule when and where YOU choose.

THE LIVE LONG & THRIVE SUMMIT

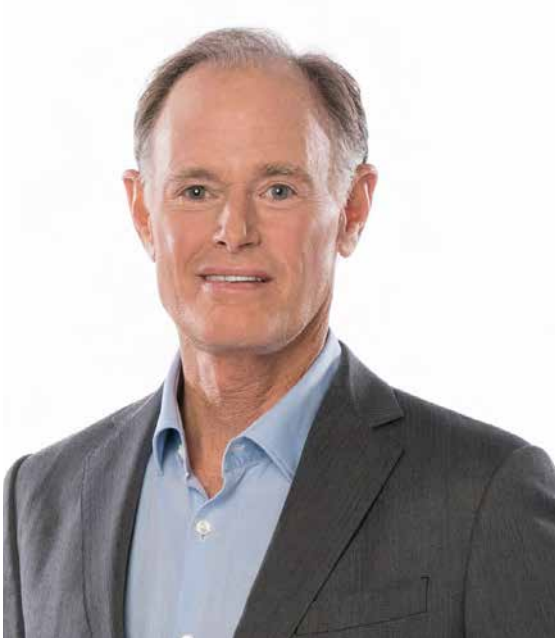
THE PROVEN BEST HEALTHY AGING & LONGEVITY STEPS OF ALL

"Brian Vaszily has long been a highly respected luminary in the natural health world, and now he's launching one of the most necessary and important health events in years – The Live Long & THRIVE Summit. In it, you're going to discover no less than THE evidence-based most effective steps of all to live long and well from 22 of today's leading natural health doctors and researchers, including several true legends. While they're essential, many of these steps are still widely unknown, so be sure to tune in and listen closely, because this one promises to be a true life-changer!"

Sarah Otto

Leading Gut Health Researcher, Host of The Gut Solution

"Highly effective strategies for preventing disease and promoting a long and healthy life should be part of our common knowledge, but unfortunately, that is not the case. In The Live Long & THRIVE Summit, you'll have the opportunity to uncover these crucial insights. The event is hosted by my dear friend and experienced natural health researcher, Brian Vaszily, known for his talent in eliciting the most valuable information from his interviewees and for making the journey enjoyable, actionable, and ultimately transformative!"



Dr. David Perlmutter

World-Renowned Neurologist, 6-Time NY Times Bestselling Author

Sources

1. Appleton, J. (2018). The Gut-Brain Axis: Influence of Microbiota on Mood and Mental Health. Integr Med (Encinitas). Retrieved November 10, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6469458/
2. Pessemier, B., et al. (2021). Gut–Skin Axis: Current Knowledge of the Interrelationship between Microbial Dysbiosis and Skin Conditions. Microorganisms. Retrieved November 10, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7916842/
3. Wiertsema, S., et al. (2021). The Interplay between the Gut Microbiome and the Immune System in the Context of Infectious Diseases throughout Life and the Role of Nutrition in Optimizing Treatment Strategies. Nutrients. Retrieved November 10, 2023, from https://pubmed.ncbi.nlm.nih.gov/33803407/
4. Langdon, A., Crook, N., & Dantas, G. (2016). The effects of antibiotics on the microbiome throughout development and alternative approaches for therapeutic modulation. Genome Med. Retrieved November 10, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4831151/
5. Sanidad, K., Xiao, H., & Zhang, G. (2019). Triclosan, a common antimicrobial ingredient, on gut microbiota and gut health. Gut Microbes. Retrieved November 10, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6546352/
6. UNC Health. (2022, January 10). Study Reveals How Triclosan, Likely Found in Toothpaste, is Triggered to Harm the Gut. Retrieved November 10, 2023, from https://news.unchealthcare.org/2022/01/study-reveals-how-triclosan-likely-found-in-toothpaste-is-triggered-to-harm-the-gut/
7. Assefa, S., & Kohler, G. (2020). Intestinal Microbiome and Metal Toxicity. Curr Opin Toxicol. Retrieved November 10, 2023, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7450720/
8. EurekAlert. (2022). Common food dye can trigger inflammatory bowel diseases, say McMaster researchers. Retrieved November 10, 2023, from https://www.eurekalert.org/news-releases/974922
9. Cheng, J., et al. (2023). Food-Grade Metal Oxide Nanoparticles Exposure Alters Intestinal Microbial Populations, Brush Border Membrane Functionality and Morphology, In Vivo (Gallus gallus). Antioxidants. Retrieved November 10, 2023, from https://www.mdpi.com/2076-3921/12/2/431
10. Abou-Donia, M., et al. (2008). Splenda alters gut microflora and increases intestinal p-glycoprotein and cytochrome p-450 in male rats. J Toxicol Environ Health A. Retrieved November 10, 2023, from https://pubmed.ncbi.nlm.nih.gov/18800291/
11. Palmnäs, M., et al. (2014). Low-Dose Aspartame Consumption Differentially Affects Gut Microbiota-Host Metabolic Interactions in the Diet-Induced Obese Rat. PLoS One. Retrieved November 10, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4197030/
12. Shil, A., & Chichger, H. (2021). Artificial Sweeteners Negatively Regulate Pathogenic Characteristics of Two Model Gut Bacteria, E. coli and E. faecalis. Int J Mol Sci. Retrieved November 10, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8156656/
13. Naimi, S., et al. (2021). Direct impact of commonly used dietary emulsifiers on human gut microbiota. Microbiome. Retrieved November 14, 2023, from https://microbiomejournal.biomedcentral.com/articles/10.1186/s40168-020-00996-6
14. Chassaing, B., et al. (2017). Dietary emulsifiers directly alter human microbiota composition and gene expression ex vivo potentiating intestinal inflammation. Gut. Retrieved November 14, 2023, from https://pubmed.ncbi.nlm.nih.gov/28325746/
15. Borsani, B., et al. (2021). The Role of Carrageenan in Inflammatory Bowel Diseases and Allergic Reactions: Where Do We Stand? Nutrients. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8539934/
16. Goyal, S., & Saravanan, C. (2023). An insight into the critical role of gut microbiota in triggering the phthalate-induced toxicity and its mitigation using probiotics. Science of The Total Environment. Retrieved November 14, 2023, from https://www.sciencedirect.com/science/article/abs/pii/S0048969723055146
17. Chiu, K., et al. (2020). The Impact of Environmental Chemicals on the Gut Microbiome. Toxicol Sci. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7416318/
18. Rochester, J., & Bolden, A. (2015). Bisphenol S and F: A Systematic Review and Comparison of the Hormonal Activity of Bisphenol A Substitutes. Environ Health Perspect. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4492270/
19. Singh, R., et al. (2017). Influence of diet on the gut microbiome and implications for human health. J Transl Med. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5385025/
20. Satokari, R. (2020). High Intake of Sugar and the Balance between Pro- and Anti-Inflammatory Gut Bacteria. Nutrients. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7284805/
21. Khan, S., et al. (2020). Dietary simple sugars alter microbial ecology in the gut and promote colitis in mice. Science Translational Medicine. Retrieved November 14, 2023, from https://www.science.org/doi/10.1126/scitranslmed.aay6218
22. Seal, C., et al. (2021). Health benefits of whole grain: effects

on dietary carbohydrate quality, the gut microbiome, and consequences of processing. Comprehensive Reviews in Food Science and Food Safety. Retrieved November 14, 2023, from https://ift.onlinelibrary.wiley.com/doi/10.1111/1541-4337.12728

23. Vanegas, S., et al. (2017). Substituting whole grains for refined grains in a 6-wk randomized trial has a modest effect on gut microbiota and immune and inflammatory markers of healthy adults. Am J Clin Nutr. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5320415/
24. Giambo, F., et al. (2021). Toxicology and Microbiota: How Do Pesticides Influence Gut Microbiota? A Review. Int J Environ Res Public Health. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8196593/
25. Gama, J., Neves, B., & Pereira, A. (2022). Chronic Effects of Dietary Pesticides on the Gut Microbiome and Neurodevelopment. Front Microbiol. Retrieved November 14, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9279132/
26. EurekAlert. (2019). Half of all commonly used drugs profoundly affecting the gut microbiome, warn experts. Retrieved November 14, 2023, from https://www.eurekalert.org/news-releases/735407
27. Mihajlovic, J., et al. (2021). Combined hormonal contraceptives are associated with minor changes in composition and diversity in gut microbiota of healthy women. Environ Microbiol. Retrieved November 14, 2023, from https://pubmed.ncbi.nlm.nih.gov/33876556/
28. Sodhi, M., et al. (2023). Risk of Gastrointestinal Adverse Events Associated With Glucagon-Like Peptide-1 Receptor Agonists for Weight Loss. JAMA. Retrieved November 14, 2023, from https://jamanetwork.com/journals/jama/fullarticle/2810542
29. Qi, L. (2021). Fried Foods, Gut Microbiota, and Glucose Metabolism. Diabetes Care. Retrieved November 16, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8740929/
30. Gao, J., et al. (2021). The Association of Fried Meat Consumption With the Gut Microbiota and Fecal Metabolites and Its Impact on Glucose Homoeostasis, Intestinal Endotoxin Levels, and Systemic Inflammation: A Randomized Controlled-Feeding Trial. Diabetes Care. Retrieved November 16, 2023, from https://pubmed.ncbi.nlm.nih.gov/34253560/
31. Costa, J., et al. (2019). Contaminants: a dark side of food supplements? Free Radic Res. Retrieved November 16, 2023, from https://pubmed.ncbi.nlm.nih.gov/31500469/
32. Veatch-Blohm, M., et al. (2021). Screening for consistency and contamination within and between bottles of 29 herbal supplements. PLOS One. Retrieved November 16, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8610273/
33. Ishibashi, R., et al. (2023). Effect of Oral Administration of Polyethylene Glycol 400 on Gut Microbiota Composition and Diet-Induced Obesity in Mice. Microorganisms. Retrieved November 17, 2023, from https://www.mdpi.com/2076-2607/11/8/1882
34. Salman, S., et al. (2021). Polyethylene Glycol 3350 Changes Stool Consistency and the Microbiome but not Behavior of CD1 Mice. J Pediatr Gastroenterol Nutr. Retrieved November 17, 2023, from https://pubmed.ncbi.nlm.nih.gov/34238825/
35. Weersma, R., Zhernakova, A., & Fu, J. (2020). Interaction between drugs and the gut microbiome. Gut. Retrieved November 17, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7398478/
36. Maccioni, L., et al. (2023). Alcohol-associated bowel disease: new insights into pathogenesis. eGastroenterology. Retrieved November 17, 2023, from https://egastroenterology.bmj.com/content/1/1/e100013
37. Hills, R., et al. (2019). Gut Microbiome: Profound Implications for Diet and Disease. Nutrients. Retrieved November 17, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6682904/
38. Queipo-Ortuño, M., et al. (2012). Influence of red wine polyphenols and ethanol on the gut microbiota ecology and biochemical biomarkers. Am J Clin Nutr. Retrieved November 17, 2023, from https://pubmed.ncbi.nlm.nih.gov/22552027/
39. American Cancer Society. (Revised 2020, October 28). Harmful Chemicals in Tobacco Products. Retrieved November 17, 2023, from https://www.cancer.org/cancer/risk-prevention/tobacco/carcinogens-found-in-tobacco-products.html
40. Gui, X., Yang, Z., & Li, M. (2021). Effect of Cigarette Smoke on Gut Microbiota: State of Knowledge. Sec. Gastrointestinal Sciences. Retrieved November 17, 2023, from https://www.frontiersin.org/articles/10.3389/fphys.2021.673341/full
41. John Hopkins Medicine. Smoking and the Digestive System. Retrieved November 17, 2023, from https://www.hopkinsmedicine.org/health/conditions-and-diseases/smoking-and-the-digestive-system
42. Biedermann, L., et al. (2013). Smoking Cessation Induces Profound Changes in the Composition of the Intestinal Microbiota in Humans. PLOS One. Retrieved November 17, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3597605/
43. Das, T., et al. (2022). Current status of probiotic and related health benefits. Applied Food Research. Retrieved November 17, 2023, from https://www.sciencedirect.com/science/article/pii/S2772502222001457
44. McKay, D.L., & Blumberg, J.B. (2006). A review of the bioactivity and potential health benefits of peppermint tea (Mentha piperita L.). Phytother Res. Retrieved November 17, 2023, from https://pubmed.ncbi.nlm.nih.gov/16767798/

45. Lete, I., & Allue, J. (2016). The Effectiveness of Ginger in the Prevention of Nausea and Vomiting during Pregnancy and Chemotherapy. Integr Med Insights. Retrieved November 17, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4818021/
46. Dulbecco, P., & Savarino, V. (2013). Therapeutic potential of curcumin in digestive diseases. World J Gastroenterol. Retrieved November 17, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3882399/
47. Hage-Sleiman, R., Mroueh, M., & Daher, C.F. (2010). Pharmacological evaluation of aqueous extract of Althaea officinalis flower grown in Lebanon. Pharmaceutical Biology. Retrieved November 17, 2023, from https://www.tandfonline.com/doi/full/10.3109/13880209.2010.516754
48. McKay, D.L., & Blumberg, J.B. (2006). A review of the bioactivity and potential health benefits of chamomile tea (Matricaria recutita L.). Phytother Res. Retrieved November 17, 2023 from, https://pubmed.ncbi.nlm.nih.gov/16628544/
49. Mukherjee, P.K., et al. (2006). Clinical Study of 'Triphala' – A Well Known Phytomedicine from India. Iranian Journal of Pharmacology & Therapeutics. Retrieved November 17, 2023, from https://www.bioline.org.br/pdf?pt06008
50. Iliades, C. (Reviewed 2023, October 23). Digestive Health and 4 Essential Vitamins. Everyday Health. Retrieved November 17, 2023, from https://www.everydayhealth.com/digestive-health/essential-vitamins-for-digestive-health.aspx
51. Otten, A., et al. (2021). Vitamin C Supplementation in Healthy Individuals Leads to Shifts of Bacterial Populations in the Gut—A Pilot Study. Antioxidants (Basel). Retrieved November 17, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8389205/
52. Wang, X., Qi, Y, & Zheng, H. (2022). Dietary Polyphenol, Gut Microbiota, and Health Benefits. Antioxidants (Basel). Retrieved November 17, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9220293/
53. Donley, N. (2019). The USA lags behind other agricultural nations in banning harmful pesticides. Environmental Health. Retrieved November 17, 2023, from https://ehjournal.biomedcentral.com/articles/10.1186/s12940-019-0488-0
54. EWG. (2021). EWG's 2023 Shopper's Guide to Pesticides in Produce. Retrieved November 17, 2023, from https://www.ewg.org/foodnews/summary.php
55. White, C. (2020). Dietary Supplements Pose Real Dangers to Patients. Annals of Pharmacotherapy. Retrieved November 17, 2023, from https://journals.sagepub.com/doi/10.1177/1060028019900504
56. Harvard Medical School. (2019, December 1). Is plastic a threat to your health? Harvard Health Publishing. Retrieved November 17, 2023, from https://www.health.harvard.edu/staying-healthy/is-plastic-a-threat-to-your-health