



# **SUPER**ORGANISM

The Latest Research On How To “Hack” Your Immune Response,  
Activate “Lean” Genes And Turn On Your Happy Hormones

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# Introduction

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**I remember the day vividly.**

I say day, it was actually the middle of the night, and I was making yet another trip to the bathroom.

My life had been like this for eight days straight.

I'd lost 20 pounds, but this wasn't the kind of 20 pounds most people would brag about to their friends. I'd contracted some unknown pathogen that had wreaked havoc on my digestive system for over a week.

During this time, my life had consisted of trying to take sips of water and then hurriedly rushing to the bathroom. I couldn't eat, drink and had barely slept. I felt like I was going to die.

I'd never been so scared before in my life, nor have I since, and had it not been for a close friend who's a doctor, who issued me with a course of antibiotics and some IVs, I'm sure the outcome could have been a lot worse.

It was during my recovery that I began to dig into the research. I vowed to do whatever I could to ensure this would never happen again.

The pain and fear I felt was so all-consuming and debilitating that not only do I want to avoid feeling it in the future, I don't want anyone else to have to go through this either. That's the reason I'm writing this report.

In a way I was lucky—this was the first time in my life that I had been through such an experience, but I realize for many, this is a common occurrence, as they battle against seemingly unbeatable issues with their digestive system, causing them sleepless nights, days off work, and embarrassing social situations.

This report is not just dedicated to helping any sufferers with chronic digestive issues though, but also to those who experience conditions now regarded as commonplace, such as asthma, allergies, anxiety, food sensitivities, fatigue, cancer, depression, diabetes and even dementia.

It's also aimed at those struggling with their weight. If you're finding that you simply can't drop pounds and get slimmer, no matter what you do, I urge you to keep reading.

While they may seem unrelated, most modern day illnesses (along with an inability to lose weight) all have one thing in common—your gut.

**If you're reading this report, I know a few things about you:**

- 1) You're an action taker;
- 2) You're more committed to your health and your physique than 99% of the population;
- 3) You want to live a life free from pain, discomfort and chronic illness;
- 4) You want to be as fit and healthy as you possibly can, and are looking for an extra edge to help you achieve this.

I'm sure you've tried supplements in the past. Maybe you've experimented with digestive enzymes, certain vitamins and minerals, and even a cornerstone of this report—probiotics.

Put simply: most probiotics are junk. They do not work.

You'll learn more about this later, but they use what I call a 'shit at the wall' approach, where they simply use as many different strains of probiotic as

possible. This is a disorganized, confused method, which not only makes the probiotics ineffective but potentially dangerous.

Bad strains are mixed with good, dead probiotics are thrown into the mix, and the whole environment in your gut descends into chaos as your body tries to battle against even more stress, making your conditions worse and even causing new problems.

Trying to find out what truly works when it comes to gut health to eliminate the conditions that affect you every single day and overcome seemingly impossible weight loss is tortuous.

Supplement companies and health 'experts' make spurious claims which seem logical but are often based on bad science. Navigating through the minefield of scientific evidence, however, is one of my specialties, and ever since my life-altering experience, I've turned my focus towards the gut. I want to share my latest findings and...

I want to make you a promise.

By reading this report, you'll discover:

- Exactly how human digestion works, and why the gut is so important;
- The critical role the bacteria inside you plays in preventing pain and disease;
- How to manipulate your gut and turn your body into a fat-burning furnace to lose body fat you've been struggling with for years;
- The truth about probiotics and food allergies;

- AND MOST IMPORTANTLY—The 3-Step System that allows you to “re-engineer” your immune response, activate “lean” genes and turn on your happy hormones.

It’s time to redefine your ideas about the human body, the gut and probiotics, and uncover the cutting edge science to help you attain lifelong health, happiness and weight loss.

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# The Not-So-Secret Russian Discovery

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I want to talk to you for a moment about a man born in a small Russian village back in 1845. His name was Élie Metchnikoff.

During his childhood in what is now the Ukraine the young Metchnikoff was highly inquisitive. By the age of 8, he was already making notes on wildlife, had a passion for science and even gave mini lectures on flora and fauna to his elder brothers.

His interest in science and biology continued through his teens and twenties, as he attended various universities, and was somewhat of a prodigy, finishing a 4-year degree in just 24 months. Through his early adult life, he worked as a researcher and professor, specializing in human biology, but it wasn't until he was in his 30s that Metchnikoff made his first amazing discovery.

In 1875, Metchnikoff married a woman named Olga. Sadly, Olga became ill shortly after, contracting typhoid fever. Though she didn't die, Metchnikoff, who suffered from depression and had severe financial problems, tried to kill himself.

He decided though, that it needed to be a selfless act, and wanted to use his suicide attempt as a way of furthering scientific discovery. So rather than more traditional methods, Metchnikoff gave himself relapsing fever, in an effort to discover whether the disease could be carried by blood. While drastic, the disease didn't kill him, and Metchnikoff was given another chance at life.

## ***Starfish Larvae and Tangerine Trees***

During a research project at Messina University where he was observing starfish larvae, Metchnikoff hypothesized that small cells (known as mobile cells) helped to act as defenses to the organisms. To test this theory, he pinned small thorns from a tangerine tree to the larvae.

When he returned to the lab the next morning, he found that the thorns were surrounded by the mobile cells. Metchnikoff already knew a little of inflammation and the release of white blood cells as part of the body's reaction to intruders and disease, but this new discovery got him thinking as to whether our own cells might actually pick up and digest any bacteria that entered the body. Metchnikoff wrote,

*"It struck me that similar cells might serve in the defense of the organisms against intruders."*

Metchnikoff went on to study with Louis Pasteur in Paris, and as part of an experiment to test his theories on bacteria and disease, he drank a solution that caused cholera. He theorized that, *"The proper alteration of the intestinal flora could help battle diseases that have plagued humans for centuries."*

He reasoned that if swallowing "bad" bacteria could make you sick, then swallowing "good" bacteria could make you healthier.

Approaching the 20<sup>th</sup> century, Metchnikoff's theories on good bacteria started to be held in high regard, and doctors even began prescribing sour milk to treat intestinal conditions. Metchnikoff died in 1916, but not before he'd won the Nobel prize for Physiology or Medicine in 1908, been given distinctions by numerous universities and organizations, and furthered his research, which still plays such a prominent role in our health and medicine today.

Everything written in this report can be traced back to Élie Metchnikoff and the work he did almost 150 years ago.

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# The Bacteria Filled Tube

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You are a bacteria-filled tube.

We all are.

The human body is essentially a highly elaborate tube that starts with the mouth and ends at the anus. The digestive tract, or gut, is the inside of the tube.

Food goes in one end of the tube, gets digested as it passes through and is then excreted as waste at the other end. Before you get depressed about how “unsophisticated” our digestive system sounds, remember that the two-opening tube was a major advance over earlier one-opening tubes.

Imagine that your body is an intricate factory. Organs like your kidney, liver and lungs are the machinery that keep vital processes such as filtration, circulation, and waste extraction going on day in, day out, without you even thinking about it.

The trouble is that this machinery can’t simply operate itself. Like any factory, it needs workers to keep the whole apparatus running smoothly. So who takes charge of this?

Your microbes.

Microbes are microscopic bacterial organisms—independent living creatures—that rely on us for their survival. In return, it’s their job to ensure that we’re healthy.

Right now, your body is colonized by roughly one hundred trillion microbes, which outnumber our own cells by around ten to one. (Luckily, our own cells are much larger, so those microbes don’t outweigh us ten to one, otherwise we’d be one massive ball of walking bacteria!).

These microbes thrive in your mouth, nose, ears, intestines and on every inch of your skin. If you could isolate them all, they would fill up a half-gallon container. Scientists have so far identified some 10,000 species of microbes, and because each microbe contains its own DNA, that translates to more than eight million genes. In other words, for every human gene in your body, there are at least 360 microbial ones (1).

What's so shocking however (and what most people don't know) is that these bacterial genes can tell our own cells exactly what to do. **We are essentially a superorganism:** *a collective of species, living cohesively alongside each other to survive.*

This collective, known as the microbiome, is as unique to each and every one of us that we're just as identifiable by it as we are our fingerprints.

Nearly every single aspect of your health and well-being is related to your microbiome.

Right about now you're probably thinking that this is interesting, but wondering what it has to do with you and why you need to know it.

Let me just say that if you've suffered from any kind of condition such as ADHD, asthma, allergies and food sensitivities, chronic fatigue, mood disorders, depression, anxiety, diabetes, cancer and even dementia ...

This information is crucial.

Not just that, but your microbiome holds an unexpected piece to the weight loss puzzle. Even if you think you've been cursed with the worst genetics in the world and a slow metabolism, make sure to read every word of this report because I have good news for you.

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**“Death Begins in  
the Colon”**

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Metchnikoff himself said, *“Death begins in the colon,”* and this is where things get interesting.

When we eat food, it travels most of the length of our digestive tract before encountering the majority of our microbes.

It begins its journey in the mouth and esophagus before making its way to the stomach where it lands in a bath of acid and enzymes tasked with starting the process of digestion and nutrient extraction. After about three hours of mechanical churning in this harsh, acidic environment, the partially digested food is slowly emptied into the small intestine.

This is where the digestive system truly begins to resemble a tube. This flexible passageway is approximately twenty-two feet long, an inch in diameter and piled like a plate of spaghetti in the middle of our body. The interior of the small intestine is covered with finger-like projections called villi that absorb nutrients into our bloodstream.

The food traveling through the small intestine is soaked in enzymes secreted by the pancreas and liver to help break it down and digest it. The microbe count here is relatively sparse with only about 50 million bacteria per teaspoon of contents.

The next (and final) stop in this fifty-hour journey is the large intestine, or colon, where food moves through at a snail’s pace. The large intestine is not as long as the small intestine—less than five feet on average—but its name comes from its width, which is around four inches in diameter.

The large intestine contains about 10,000 times more bacteria per teaspoon than the small intestine.

These bacteria (known as gut microbiota, or gut flora) have several important jobs. You might be aware of some of the basic functions such as digesting the remnants of food, protecting the gut lining and synthesizing enzymes. But did you know that your gut bacteria aids with metabolizing drugs, maintaining your body's pH levels, modulating genes, suppressing certain cancer-causing compounds and training your immune system to distinguish between friend and foe?

You can see clearly, the microscopic size of these microbes doesn't do justice to their huge importance in your overall health and wellbeing.

## ***Have you ever wondered why some people never get sick?***

Even when there are colds, coughs and illnesses going round, we all know someone who never catches them.

Likewise, plenty of diseases such as heart disease, depression, or dementia seem to run in families. It's natural to assume that this is down to genetics, but it could have much more to do with the type of bacteria you inherit as well as your lifestyle and your upbringing.

Under normal circumstances, the microbes that inhabit the colon should be functioning perfectly and doing their job without any external influence. The growth and composition of the microbes that inhabit the colon exist in a relatively stable state throughout our adult life with the exception of disease states and changes in diet <sup>(2)</sup>.

Unfortunately, due to years of poor dietary habits or an unhealthy lifestyle, many of us have a compromised microbiota. Some may even have the

appearance of specific bacteria such as *Helicobacter pylori* and *Clostridium difficile* which are harmful to health (3). These negative habitats in our gut can be formed as early as birth.

In recent years, scientists have been delving into how the state of the human microbiome from birth and infancy can have huge effects on long-term health. Children who grow up in countries where life expectancy is lower, pollution is greater, diets are high in processed foods, and where there’s a heavy reliance on antibiotics stand a much greater chance of developing conditions such as ADHD, asthma, autism, food sensitivities, and cognitive disorders. The state of our microbiome can even influence our mood and our view on the world.

You might not feel like you’re clinically depressed, or be experiencing chronic pain and intense, unrelenting discomfort that requires pharmaceuticals or intensive therapy, but a dysfunctional microbiome could be to blame for digestive issues, an inability to concentrate, headaches and migraines, nervousness in social situations and a general negative outlook on life.

And that’s just the start of it. If you currently experience

- Memory problems and poor concentration,
- Constipation or diarrhea,
- Celiac disease, IBS or Chrohn’s,
- Insomnia,
- Joint pain,
- High blood pressure.
- Acne and eczema,

- Extreme menopausal or menstrual symptoms,
- Arthritis, or
- Metabolic conditions, obesity and an inability to lose weight

Then the current state of your microbiome could be to blame.

Maybe you're reading this thinking *“I tried dieting to lose weight and it never worked.”*

Or perhaps you've suffered from any other conditions listed and after several unsuccessful trips to your physician you gave up and resigned yourself to a life of pain and discomfort.

But there are steps to fix your gut bacteria, eradicate sickness and massively increase your chances of weight loss success.

Whether you inherited poor gut bacteria from an early age or an unhealthy lifestyle has led you to the stage you're at now, the promising news is that you don't have to resign yourself to a sick gut and poor bacterial balance forever.

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# The Genetic Switchboard Within

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There's nothing we can do to change our human genome, but when it comes to our microbiome, the hand we've been dealt is definitely not the hand we have to play for the rest of our life. Remember what I said about how our bacteria outnumber our own cells and how this acts like the workers in a factory to oversee our internal 'machines'?

Well, despite the fact that our microbiome is like a genetic switchboard, turning "on" or "off" various human genes, here's where we can step in to take power back.

Unlike your hair color, your eye color, or the shape of your nose, you can influence the organisms that control your immune system. While one could argue that our gut microbiome is given to us at birth, that doesn't explain why identical twins often have vastly different immune systems and internal environments.

Aside from the small number of genes which give us our own individualities and characteristics, our genomes are relatively similar. This isn't the case with the microbiome. In fact, cutting edge research is showing just how vital our individual microbiome is. In the development of the human race, we've evolved to have a unique symbiotic relationship with these bacteria who see us as hosts, and over time our relationship has changed drastically.

Although several factors dictate the health of our microbiome, one thing is certain—our own actions and life choices influence our gut biome in a massive way.

It's not outlandish or over-exaggerated to say that many of the conditions that we suffer from today are manageable and even reversible if we begin to address the imbalance within our gut. You've read how these hundred trillion bacteria play such a prominent role in the human condition, and modern day

science is catching up with the anecdotal evidence we've seen for decades, as well as Metchnikoff's research from over a century ago.

Doctors who have experimented with altering the gut microbiome have reported seeing patients go from harboring thoughts of suicide to feeling vibrant and full of life. Conditions such as arthritis have been drastically improved, and the number of patients who've seen small, but life-altering improvements is quite remarkable.

We're talking being able to wake up pain-free every morning, virtually eliminating digestive discomfort and feeling full of energy with a newfound ability to concentrate effortlessly.

As you'll soon realize, bacteria can have a positive or an extremely negative effect. This is all to do with specific strains of bacteria.

For instance, we know that the bacteria *helicobacter pylori* is responsible for creating ulcers, but it can also wreak havoc with your immune system to essentially flip your body's stress response switch, causing the release of stress hormones and can create massive inflammation.

The same can be said for the *firmicute* group of bacteria that reside in your gut. These are much more adept at extracting calories from food, increasing fat absorption, and can raise your risk of diabetes and heart disease. Their 'opposition' in the gut are the *bacteroidetes*. To maintain a lean, healthy physique it's vital that the ratio of these two microbes are stable, otherwise any attempts you make to lose weight can be utterly futile.

In fact, this topic is worthy of a whole new chapter in itself.

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# The F/B Ratio: The Power of “Fat” vs “Thin” Microbes

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We’re always being told about the importance of calories, and how we simply need to eat less and exercise more to lose weight. So why does this approach fail so often?

The answer could lie in your microbiome.

Fredrik Backhed is a professor of microbiology at Gothenburg University in Sweden, and spends his days examining the effects that the microbiome has on weight loss. In his laboratory, Backhed breeds mice which are born via caesarian section, and housed in sterilized chambers, meaning they’re a blank bacterial canvas on which to experiment.

One of his first studies involved growing these ‘germ-free’ mice into adulthood, where he noticed they seemed particularly slim, and put this down to the fact they had no gut bacteria. The next step was then to dot the fur of these mice with caecum (part of the large intestine) from mice who’d been bred under normal conditions. This meant the formerly germ-free mice now had the same bacteria as regular mice. What Backhed found was quite astonishing—within 2 weeks, the mice had increased their bodyweight 60% while eating less.

Purely by adding bacteria into the guts of the mice, they were extracting more calories from the food they were eating, and thus gaining weight (4).

Further studies by microbiologist Ruth Ley (5) compared obese mice (known as ob/ob) mice which are roughly three times heavier than normal mice with that of their regular counterparts. Despite the fact that these ob/ob mice look completely different from regular mice, they actually have just a single mutation in their DNA which gives them an insatiable appetite. This DNA mutation means the ob/ob mice don’t produce leptin, a hormone involved in regulating hunger, so they eat almost non-stop.

Ley found that both the regular and obese mice had two groups of dominant bacteria—*firmicutes* and *bacteroidetes*, but the obese mice had only half the *bacteroidetes* of the lean mice, and far more *firmicutes*. Ley then examined the gut bacteria of lean and obese humans, and discovered the same difference.

A third scientist—Peter Turnbaugh—created a further experiment to prove the theories (6). Turnbaugh took germ-free mice as Backhed had done, and ob/ob mice as Ley had done. He transferred microbes from the obese mice into half the germ-free mice, while the other half were injected with microbes of normal, lean mice. The germ-free mice that took on the obese mice bacteria got fat, and those colonized with the regular mice bacteria didn't.

What this final experiment showed is not only that gut bacteria are involved in the obesity epidemic, but also that these bacterial effects can be transferred from one individual to another.

Essentially, you think you're doing everything you need to in order to lose weight, but your body's bacteria is working against you, and causing you not only to fail at losing weight, but potentially even meaning you gain weight and get fatter.

To further prove this, in a 2013 experiment, 12 pairs of identical twins were all fed a diet that contained 1,000 more calories per day than they needed. In theory, each participant should have gained 24 pounds. But this didn't happen. The results showed that while every participant did gain weight, there was a wild fluctuation, from as low as 9 pounds and as high as 29 pounds gained (7).

It's obvious that the mechanisms for both calorie absorption and calorie burn can be vastly different, even in identical twins who share the same genetics. A likely explanation for such huge swings is a difference in gut bacteria.

It would be remiss to say that diet doesn't play a factor, and that your bodyweight and body fat are purely down to the bacteria in your gut. What you eat is important, but not just in the sense of calories. The right diet can go some way to altering the environment in your gut, and the relationship and ratio of the firmicutes and bacteroidetes. Diets high in processed carbohydrates will negatively affect your gut bacteria.

Scientists are taking this even further though, and discussing concepts such as 'super-powered yogurt' to address the balance of these 'fat microbes' to 'thin microbes.' Doctors have even looked into the impact of fecal transplants. In a 2015 report [\(8\)](#), researchers used FMT (fecal microbial transplant) to treat a woman suffering from a life-threatening infection. They transferred fecal matter from a healthy individual into her colon, which did cure the infection, but at the same time, caused her to gain 34 pounds in 16 months.

The scientists hypothesized that by transplanting the bacteria, which in one way was designed to treat and cure, they also altered her gut flora, which resulted in a shift of microbes, leading her to gain weight. Don't worry—even if this had worked to help her lose weight, we wouldn't be suggesting you do this. There are far less expensive, invasive and disgusting ways to alter your gut microbiota in favorable ways.

With a growing body of research showing the direct impact that gut microbes have on immunity, mood, and general health, it makes sense that they would also play a huge role when it comes to weight loss.

We've all seen that diets can work, yet at the same time, so many of us try with all our might to lose weight, and even resort to extreme tactics without ever really seeing results. We blame this on not following the 'right plan,' eating certain bad foods, and even our genetics. But what if it went deeper than just genetics and was actually our gut bacteria?

This revelation has been an epiphany for many patients who have struggled their whole life with their weight, when they’ve realized the solution really is as simple as changing the environment of their gut flora. This is something we’ll go into in depth later on in this report.

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# The Feel-Good Super Highway

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What surprises most people is the impact gut health has on your brain. Let's look at what the cutting edge research is saying about this remarkable discovery.

Not only do our gut microbes help to digest and assimilate nutrients, they also determine the availability of essential building blocks for our feel-good hormone, serotonin.

When we have a specific species of bacteria in our microbiome we'll have increasing levels of tryptophan. This little molecule is converted directly into serotonin, and could be called the happiness-molecule because less tryptophan means less serotonin, and less serotonin means less happiness.

Low blood levels of serotonin have been linked to depression and anxiety, but what's even scarier is that populations with lower serotonin levels have higher rates of suicide.

Bacteria doesn't just play a role in extreme conditions though. It can govern your everyday mood, feelings and outlook on life.

A recent study from the Leiden Institute of Brain and Cognition in the Netherlands examined 40 healthy young adults who had no history of mood disorders. Half the subjects took a probiotic supplement containing eight different types of bacteria, all associated with improving mood and cognitive function. The other half took a placebo, which they believed was also giving them good bacteria.

The subjects taking the probiotic reported better moods overall, and were less sensitive to potential negative situations (9).

A 2013 study used a similar protocol and saw almost identical results—those taking a probiotic had much lower levels of anxiety and depression, as well as lower levels of the stress hormone cortisol (10).

Perhaps the most startling research on the link between the gut and the brain came from a joint research project between the University of Cork in Ireland and McMaster University in Ontario, Canada. Mice were dropped into a tall, cylindrical chamber filled with water and timed how long it took before they reached a state of immobilized despair. A small section of the mice were fed a broth infused with *Lactobacillus rhamnosus*—a bacteria that's found in humans and also used to ferment milk into probiotic yogurt. This type of bacteria is known to release immense quantities of GABA (an inhibitory neurotransmitter) that calms nervous activity. It came as no surprise to the researchers that mice fed this swam for longer and spent less time in the immobilized state.

For years, scientists assumed that the blood brain barrier, which allows nutrients into the brain, but guards from pathogens and inflammation meant that the brain was an almost isolated organ. While theories had existed regarding the possibility that the gut could send messages to the the brain to convey feelings like anxiety or happiness, scientists still weren't sure how this happened.

We've known for some time, that around 50% of the neurochemicals we produce, such as serotonin and dopamine originate in the intestine, and initiate feelings such as satiety and hunger, but only recently have scientists examined it further.

One of the pioneers in this field is Mark Lyte. Over a quarter of a century ago, Lyte initially hypothesized that stress was strongly linked with immunity and disease. In 1990, he conducted a rudimentary experiment where he dropped

an intruder mouse into the cage of an animal that lived alone. This intruder mouse ramped up its immune system, which Lyte suspected was to combat infections, but surprisingly the mouse still got sick. This was the first insight into the idea that stress could trigger illness and poor mental health.

A second experiment saw Lyte inject mice with *Campylobacter jejuni*, a bacterium that can cause food poisoning in humans but doesn't affect mice. These mice seemed healthy enough, but when he ran them through a clear glass maze raised several feet above the lab floor, the bacteria-fed mice seemed far more anxious and nervous and wouldn't venture out onto high ledges. On the other hand, those without the bacteria were happy to go across narrow, elevated planks above steep drops without hesitation.

Weirdly, much of what we're discovering now was first talked about as far back as the 1930s: it was written that, "*It is far from our mind to conceive that all mental conditions have the same etiological factor, but we feel justified in recognizing the existence of cases of mental disorders which have as a basic etiological factor a toxic condition arising in the gastrointestinal tract* (11)." It's only now that we're taking this more seriously.

It's becoming increasingly difficult to class depression as an illness solely of the brain. A 2011 study showed that when otherwise healthy subjects were given a substance that induced inflammation, many developed depression-like symptoms almost immediately (12). Similarly, it's been observed that when patients are given certain treatment for Hepatitis C, which results in a rise in inflammatory cytokines, a quarter of them develop major depression (13).

Perhaps most startling though, is the research that suggests the way modern antidepressants work actually has nothing to do with their serotonin-boosting properties, and everything to do with their ability to decrease inflammation (14).

Unfortunately, this doesn't mean that antidepressants are always effective. While they may be able to lower inflammation to a degree, they aren't getting to one potential cause of the problem: treating the imbalance in the gut.

Oftentimes, treating depression with antidepressants alone is like putting a band aid over a gunshot wound. It's never going to solve the issue. This is not to say that if your doctor suggests antidepressants you should decline, but you may have more options and tools at your disposal. If you've been on and off various types of medication and nothing's ever really worked then maybe it's time to try another approach or add another solution.

Whether we're talking about depression, anxiety, mood swings, periods of helplessness, or even just an inability to concentrate and a lack of motivation and desire, it's becoming more and more obvious that gut health may be playing a part.

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# The Surprising Truth About Food Allergies

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It's not your imagination that food allergies and sensitivities are getting more common. It's estimated that 2 children in every classroom now have food allergies which can be serious, and potentially life-threatening. We've seen that wiping out gut bacteria in mice leads to food allergies and the same may be true of humans.

Whether allergies have been diagnosed by tests, or you've ruled out eating certain foods because of negative reactions to them, simply avoiding these foods forever isn't a practical or enjoyable solution. If addressing the bacteria in your gut could make food allergies go away, wouldn't that be a better option?

We know that food intolerances and allergies are largely caused by an overly sensitive immune response.

It's been shown that various factors influence your body's response to the food you eat. Lower rates of allergies are observed in children who have pets (15), live on farms (16), drink raw milk (17), use fewer antibiotics (18), are delivered via non-cesarian birth (19) and are breast-fed rather than bottle-fed (20). Basically—children who have greater exposure to bacteria, even dirt and germs.

Here's what triggers a food allergy:

When you don't have the necessary enzymes, undigested irritants enter the large intestine and feed the bacteria that live there. This cascades into over reactive inflammatory response and leads to the allergic reaction.

This immune response is programmed from the foods we eat...and the undigested particles that make it to the microbiome.

It's through this process of allowing undigested irritants to enter the large intestine to feed the bad bacteria, trigger inflammation and then over-stimulate the immune system that leads to food allergies.

These irritants can be anything from undigested carbohydrates, gluten or casein.

This starts a vicious cycle that leads to systemic inflammation, sick mitochondria, and eventually disease.

But if we diffuse these irritants before they get into large intestine we can reprogram our immune response to be more appropriate.

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# The Truth About Probiotics

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While you've been reading this, I can imagine there have been several occasions where the thought of taking a probiotic has crossed your mind.

The trouble with probiotics however, is they use an extremely generic approach, whereby they include almost every single type of commercially available bacteria you can think of. By now, you'll know that this is not a smart approach, as the conditions we've discussed are not necessarily to do with a lack of bacteria, more so an imbalance between types of bacteria. Therefore, a probiotic may go some way to treating your ailments, but it's equally as likely just to make the problem worse.

Probiotics have been used for centuries. The Romans suggested drinking fermented raw milk to cure gastrointestinal infections, and our man Metchnikoff promoted the use of probiotics after noticing that Bulgarians who consumed lots of fermented products seemed to live longer.

The probiotics we normally ingest, whether that's in supplement form, or by eating certain foods such as sauerkraut, or kimchi, don't hang around for long however, and are only temporary residents in our digestive tract.

One of the challenges in drawing conclusions on the efficacy of probiotics is grouping together individual species or strains. Most of the studies we've referenced throughout this report group probiotics as treatments rather than species or strains leading to a poor understanding of how they actually work.

An important thing to understand is different bacteria can be as different as flies are to humans and snakes are to ants. Even within a specific species several strains can be vastly different from one another. Simply taking probiotics without any targeted strains is unlikely to do anything to remedy an imbalanced microbiota and can even negatively alter specific populations of good bacteria.

In clinical studies various forms of supplemented probiotics have been found to be detrimental to health. For example, *Bacillus subtilis bacteremia* and *cholangitis* are often used in probiotics for their normally beneficial qualities, but in people with lowered immunity, they've been shown to increase the possibility of sepsis (21). If your microbiota is already compromised then using supposedly 'good' bacteria from probiotics can negatively impact many metabolic activities, including complex carbohydrate digestion, lipid metabolism and glucose homeostasis.

This 'shit against the wall' system that you'll find in mass-produced probiotics means you have a haphazard approach to rectifying your microbiome and if you're trying to treat your symptoms and ailments, it's like trying to kill a shark with a mousetrap.

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# The 3<sup>rd</sup> Dimension of Maximum Athletic Performance

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So far we've talked a lot about conditions and illnesses. While you may feel these ring true for you to certain extents, illness isn't your main concern. Perhaps you're more worried about your strength and your physique—you want to build muscle, lose body fat, have a visible six-pack, or supercharge your strength levels and start squatting 5 plates a side for fun.

The shocking truth is that poor gut bacteria could not only be slowing down your progress towards these goals, but completely halting it. While you might turn to supplements such as creatine, post-workout formulas like "Carb Shock" or protein powders to enhance your results, without this piece of the puzzle you'll be missing out on big results in the gym.

The first step is to enhance the nuclear reactor of your body—the gut—so you can digest and assimilate nutrients far better, but more importantly offload some of the stress on the nervous system.

By prioritizing our gut health, we get a downstream effect that's simply profound. Your central nervous system is now offloaded, allowing you to process food easier, recover from workouts faster and feel bulletproof.

But what's most shocking is since your sympathetic and parasympathetic nervous system aren't being over-activated 24/7, your reaction time will go down and power output will go up. Think about that for a minute. By focusing on overall health, you will have faster reflexes, recover quicker and be stronger in the gym.

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# Targeted Digestive Defense

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You're smart enough now to know that mass-produced probiotic supplements that use 'the kitchen sink' approach just won't do if you want optimal results. I won't say they never work, but when they do provide benefit it's suboptimal.

And when they do work, it's luck rather than science.

That's why you can take all the probiotics you want and you still won't fix your digestive issues, your concentration struggles, your mood, your depression, your eczema, or whatever it is you're currently suffering from. Most probiotics may be harmless, but some can actually compromise your immune system. By introducing more and more species with an off-the-shelf probiotic, you could be putting your health at risk.

Perhaps the biggest issue of all is that even if you do manage to pick a probiotic that has no harmful strains in it and no strains that could disrupt your current microbiome, most of the time the useful strains are already dead by the time you take them. Probiotics are usually produced in such huge quantities that the one you buy can have been sitting on the shelf for up to 2 years before you take it. By that time, any slight benefit you might have once gained is now impossible.

The bottom line: Dead probiotics don't and can't work.

And that's not all. If you're not getting enough of the proper prebiotic, it's like trying to put out a fire with a garden hose. (We'll discuss prebiotics in just a moment.) All this leads to products that are a complete waste of your time and hard-earned money, and that rob you from all the amazing health benefits that the right probiotic could give you in as little as 30 days.

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# A Revolutionary 3-Step System

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To truly tackle gut dysbiosis at its root you need a targeted approach, and that comes by way of a revolutionary 3-step system.

## **Step 1: Diffuse**

Your large intestine is under siege from an onslaught of irritants. Unless these are diffused, they'll continue to feed the bad bacteria, increase inflammation and make you sick. These irritants enter our body in many different ways, from the food we eat, to the medicines we take, and even from the fact we're stressed and tired.

Before you do anything else, you need to reduce this inflammation to help reshape the landscape of your gut, so it no longer feels under attack and can begin to heal. Generally, we want to limit inflammation in the body because it can cause different proteins to lose function and can damage cell membranes, creating free radicals. Too many free radicals results in an increased risk of illness and disease (22).

By taking this step, you're already ahead of the game, but it's just the first part.

## **Step 2: Re-Colonize**

The next step is to deliver specific bacteria species to recolonize the microbiome. But you can't just send in any species. As we discussed earlier, mass-produced probiotics are often too weak to make it through the stomach and intestine, and so are dead on arrival.

To get around this, you need strains that are strong enough to withstand the harsh environments of your digestive tract, and reach the gut unharmed

so they can begin to re-colonize and provide reinforcement to your existing healthy bacteria. There are many species that have been identified as being potentially helpful, but simply won't colonize during the digestion process. That's why you want specifically targeted bacteria that are proven by human studies like ***Lactobacillus Rhamnosus, Lactobacillus Helveticus and Bifidobacterium Longum.***

### ***Step 3: Shield***

This third step is absolutely critical because without it the bacteria we've delivered to the gut won't be able to survive.

Not only do you need the right type of bacteria to get to the gut, it has to also be capable of creating the changes necessary to bring symbiosis to your microbiome.

Rather than taking an array of non specific probiotics there is a need for a targeted digestive strategy. This includes providing the right probiotics with the right fuel and reducing allergens and irritants that impede digestive functioning.

Through my research, I've discovered the key components for the most potent probiotic.

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# The Formula

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***The Protease Component*** (*Peptidase Complex, Glucoamylase Complex, Protease Complex, Alpha Galactosidase, Pepsin Complex*)

These specific proteases were added to act as enzymes for breaking down irritants to the gastrointestinal tract like gluten. If we want a properly functioning gastrointestinal tract we need to make sure allergens and irritants are removed. These proteases remain stable at a low pH like in the stomach and are able to degrade gluten 60 times faster than other forms.

They have been shown to cleave proline and glutamine rich peptides that play a role in gluten intolerance. The gluten from wheat and rye has been recognized to be the cause of intestinal damage and the toxicity was found to lie in gliadin (23). Removal of the carbohydrate components leaving the protein bonds intact by using these proteases reduces toxicity significantly.

***The Probiotic Component*** (*L. Rhamnosus, L. Helveticus, L. Longum*)

***Lactobacillus Rhamnosus:***

Crucial to this formula is the ability of the probiotics to survive digestion, otherwise all the benefits become useless. These probiotic strains actually remain unaltered in the acidic environment of the stomach enabling it to get where it needs to go; the large intestine.

Once in the large intestine the benefits of *Lactobacillus rhamnosus* specifically becomes far reaching with studies demonstrating significant benefits in mood health and hormone modulation (24, 25). *L. rhamnosus* also has been shown to counteract weight gain, positively affect blood sugar, and reduce gastrointestinal issues (26). Other research has even established a link between this strain and seasonal allergies, particularly with hay fever (27). *L. rhamnosus* offers a robust positive benefit on immune function that many other strains do not offer.

***Lactobacillus Helveticus:***

Unlike *L. rhamnosus*, *L. Helveticus* is able to help prevent gastrointestinal infections, enhance protection against pathogens, modulate immune responses, and positively affect the composition of the intestinal microbiota (28). Interventional studies and clinical trials have also demonstrated a number of health-promoting properties of *L. helveticus*. For instance, several studies suggest that specific enzymatic activities of *L. helveticus* could indirectly benefit metabolism by enhancing the bioavailability of nutrients, removing allergens and other undesired molecules from food, and producing bioactive peptides through the digestion of food proteins. In a recent study *L. helveticus* and *B. longum* taken over a 30 day period were able to decrease anxiety and depression and improve mood in moderately stressed subjects (29).

***Bifidobacterium Longum:***

*B. Longum* has been described as one of the most significant and important types of “good” bacteria that inhabits the human body. *B. longum* is very helpful because it maintains a normal digestive tract, inhibits the growth of harmful bacteria, and also boosts the immune system (30). Other benefits of *B. longum* include bowel regulation, blood lipid support, alleviation of lactose intolerance symptoms, immune stimulation, and cancer prevention.

***The Prebiotic Component: (Galacto-Oligosaccharides, Fructo-Oligosaccharides)***

Prebiotics are defined as non-digestible food ingredients that beneficially affect health by selective stimulation of growth of bacteria in the gastrointestinal tract. Galacto-Oligosaccharides or GOS are actually derived from lactose, and consists of a galactose polymer with a glucose end unit. GOS are naturally present in mother’s milk and help newborn’s develop a

heathy microbiome. Clinical studies show that GOS has several health benefits, including improvement in digestive health, immune support and improved mineral absorption (31).

Fructo-Oligosaccharides are naturally found in chicory, onions, asparagus, tomatoes and other fruits, vegetables and grains. They help produce beneficial nutrients such as short-chain fatty acids; control epithelial cell growth (the cells that line body cavities); increase calcium absorption; prevent overgrowth of infectious organisms; boost intestinal immunity; and prevent inflammation, diarrhea and other intestinal conditions (32).

The primary purpose of adding in these two prebiotics was to increase and support the colonization of the probiotic component. These prebiotics have repeatedly demonstrated the capacity to selectively stimulate the growth of bifidobacteria and lactobacilli leading to a significant change in gut microbiota composition. These two compounds the most extensively tested in human trials that have confirmed their prebiotic effects as evidence by their ability to change the gut flora composition after a short feeding period at reasonably low doses (33).

It is important to emphasize the fact that the prebiotic effect and the dietary fiber effect have two different attributes. Being resistant (partly or totally) to digestion and being fermented (at least the so-called soluble dietary fibers) both may concern gut microbiota composition and activity. What makes them different is the selectivity of the prebiotic effect as described earlier.

Now, you could go and try to assemble these components together yourself, but let me introduce to you ...

## ***Gut Shield***

The world's most powerful targeted digestive defense system, designed to quickly and strategically hack your immune response to override bad genetics, lose stubborn body fat, improve your mood, increase your energy and let you eat your favorite foods pain-free once more.

What would it be worth to you to:

- Prevent even ONE illness in the next year. Ensuring you don't miss work, time with family or continually making progress in the gym;
- Get rid of the "fat" bugs allowing you to activate the "lean" genes and finally make consistent progress towards your fat loss goals;
- No longer experience all the big ups and downs, allowing you to have a clearer, sharper mind and just feel happier;
- Process and absorb food with ease without digestive issues, allergies or stomach discomfort;
- Be shielded from potential invaders such as bad bacteria, harmful viruses or parasites;
- Help control your body's inflammatory pathways that literally effect every cell of your body and increase the risk of virtually every disease;
- Have quicker reaction time, more strength and faster recovery all from having your central nervous system offloaded;
- And much more.

## ***The Two Year Journey To Bring You Gut Shield***

Formulating dietary supplements based on the latest scientific research isn't easy. Often times there is a lag of two to three years before the same ingredients used in studies are available from reputable sources to replicate the results found in the studies.

For me, Gut Shield wasn't possible until we could source every enzyme, specific bacterial strain, and real galactooligosaccharides (not the supposed GOS that 90% of suppliers are trying to pass off that turns out to NOT be GOS).

After my own experience of trying to rebuild my gut health after the worst bacterial infection of my life and then the toll the antibiotics took, I vowed to find a solution to shield myself from ever having to go through that pain again in my life.

I pored over the research uncovering which enzymes, bacteria strains, and prebiotics that would strengthen the immune system, lower inflammation, protect against food sensitivities and activate "lean" genes.

Simply put, supplementing with Gut Shield is even more important to your health than taking a daily multi-vitamin. Research has shown that 170 different diseases and health issues, including obesity is interrelated with gut health.

Gut Shield is your ally in the constant gut battles that you're exposed to every day.

And as you've discovered from reading this report, it's not as simple as just taking a probiotic and that's why I simply had to develop Gut Shield.

Now before I show you how to get your own supply of Gut Shield, at a BIG discount, I want to make sure you're fully aware of the true cost to your health. If you don't act.

When gut imbalances are left unaddressed, it can start with common issues like bloating, indigestion, constipation and even acne. But ultimately leads to extreme daily discomfort, fatigue, weight gain, depression and creates a continual downward health spiral.

Remember, 80% of your immune system is tied to your microbiome. Leaving these imbalances unresolved can lead to a life of frustration, pain and illness.

I'm sure you can relate to the feeling of being sick, feeling run down and having to pass up life's joys because you just don't feel up to it. What is it worth to provide that extra layer of defense?



[Get Your Supply Of Gut Shield Today](#)

(Supplies Extremely Limited)

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