





SPECIAL SERIES 21st CENTURY NUTRITION G.E.M.s*		
3 Scientific Breakthroughs TO Build Your Body-Mind Health		
*1. Genetics	2. Epigenetics	3. Microbiome

Special Series: 21st Century Nutrition G.E.M.s: 3 Scientific Breakthroughs to Build Your Body-Mind Health EPISODE 7 May 21, 2024 #3 Meta-Discoveries: Food, Microbiome & Health

Want Gut Health? Discover the Healing Power of Food

For decades, excitement and interest in the gut microbiome has grown from the understanding that the trillions of organisms in the gut have the power to transform both your physical and mental health. Here, discover the role that food plays in shaping the microbiome and in turn, wellness or illness.



Food, Microbiome, Health

SPECIAL SERIES: 21st CENTURY NUTRITION G.E.M.s

In this episode 3 of 3 in my 3-part Special Series:

21st Century Nutrition G.E.M.s: 3 Scientific Breakthroughs to Build Your Body-Mind Health,

I'll be discussing the third of three breakthrough findings that are so huge, they actually create a re-visioning of the power of food to prevent health problems for which you're at risk; and also to turn around—and reverse—many chronic body-mind conditions, from overweight and obesity to heart disease, diabetes, depression, and more.

All three meta discoveries are intimately interconnected, but I'm telling you about each independently, so you'll realize the powerful role each plays in health and healing, and what you can eat, every day, to reset your genes and gut for weight loss, health and healing.

Today I'm discussing the third of three meta discoveries—about how the food you eat interacts with and impacts your gut microbiome, and in turn, your weight, health, and physical and mental well-being. In other words, we'll be discussing how you can benefit from state-of-the-art, 21st century meta-discoveries. One meal at a time.

TRANSCRIPT

Hello! Welcome to The Healing Secrets of Food Revealed. TODAY'S TOPIC: **Want Gut Health? Discover the Healing Power of a Healthy Gut.** Food, your gut, and health is #3 in my special 3-Part series: **21**st **Century Nutrition G.E.M.s: 3 Scientific Breakthroughs to Build Your Body-Mind Health**. I'm Deborah Kesten—nutrition researcher and host of The Healing Secrets of Food Revealed, and I'm on a mission: To give you the science-backed, weight-loss wisdom you need to eat less and weigh less. Without dieting.

In each episode, I'll translate cutting-edge weight-loss research into actions you can take that can make a real difference in your weight and well-being.

LET'S GET STARTED!

Meet Meta-Discovery #3: The healing power of food and a healthy gut.

In the first two episodes in my Special 3-Part Series: 21st Century Nutrition G.E.M.s: 3 Scientific Breakthroughs to Build Your Body-Mind Health, I discussed 21st century discoveries about the power of food to switch off genes you may have that could lead to health problems. So that the health condition doesn't manifest.

In this episode, number 3 of 3 about 21st Century Nutrition G.E.M.s, I'm unveiling 21st century research about another life-changing, groundbreaking, national research project that has given us pioneering, quantumleap, newly discovered insights into what may be the *underlying causes* of many chronic physical and mental conditions with which millions of us struggle. These can range from overweight, obesity, heart disease, diabetes, and some cancers, to a plethora of negative emotions, such as anxiety, depression, and food cravings. (A brief aside... Based on my research on my science-backed Whole Person Integrative Eating program, I'm defining 'food cravings' as a negative feeling.)

Ancient Food Wisdom Meets Modern Microbiome Science

To give you context about the 21st century, pioneering discovery about how a healthy gut leads to weight loss and physical and mental well-being—a brief digression...

In Episode 1 of The Healing Secrets of Food Revealed, I told you about how I discovered Whole Person Integrative Eating—and the power of food to nourish 'all of you': physically, and also emotionally, spiritually, and socially. In this first episode, I mentioned that prior to the evolution of nutritional science in the early 1900s, ancient food wisdom from the world's major religions, cultural traditions (such as Yogic nutrition, called *Anna* yoga), and Eastern healing systems—traditional Chinese medicine (TCM), India's Ayurvedic medicine, and Tibetan medicine—provided optimal-eating guidelines to humankind for millennia.

I'm reminding you about this ancient food wisdom now because I want to bring your attention to this key concept: for thousands of years, the core belief of these Eastern medical and nutrition systems has been that health—of both mind and body—begins with a healthy gut. As a matter of fact, more than 2,500 years ago, Greek physician Hippocrates—often called the "father of Western medicine"—said that all disease begins in the gut.

Today, modern nutritional science is verifying that the health of your gut and the foods you eat--or don't eat—have a profound effect on the health—or ill-health—of your gut, and in turn, *all aspects of your health*, including your physical health and your mental well-being and emotions, especially anxiety and depression, the two key negative feelings linked with Emotional Eating.

Meet Your Microbiome

The science that is verifying the profound influence of gut health on your body and mind evolved from the Human Microbiome Project (HMP). Launched in 2007, the 10-year project received \$170 million in funding from the National Institutes of Health Common Fund. Its purpose was twofold: (1) to identify and define the human microbial flora in the gut, (2) then, to illuminate the role of these microbes in health and disease.

What exactly is the microbiome, and why is it pivotal to both your physical and mental health?

Simply put, the *microbiome* is the genetic material of all the trillions of microbes—bacteria, fungi, protozoa, and viruses—that live on and inside the human body. *Micro* in the word *microbiome* means "small"; *biome* means "a habitat of living things."

Our gut microbiome is made up of between ten to one hundred trillion bacteria, fungi, and viruses: it is a complex ecosystem of microorganisms that live in our digestive systems. And these trillions of organisms play a powerful role in up to 90 percent of your physical and mental health.

I'm going to repeat that: The trillions of organisms in your gut play a powerful role in up to 90 percent of your physical and mental health.

Throughout your life, the daily lifestyle you live (such as diet, stress, physical activity, social support, sleep, etc.) influences your microbiome and in turn your health. This is because the foods you eat, your stress levels, toxins in your everyday environment, physical activity (or none), social connection (or loneliness), and the quality of your sleep all work together to create variations and changes in the composition of your gut microbiota. These lifestyle influences all impact your gut microbiome, and they can either keep you emotionally and physically healthy or, conversely, contribute to a plethora of mind-body diseases—from anxiety, depression, obesity, and cancer to arthritis and more. The determinant? The balance of "good" and "bad" microbes in your microbiome.

Here's how it works.

The Good, the Bad, and Your Microbiome

I call this section, "The Good, the Bad, and Your Microbiome." Your gut microbiota influence the way your brain functions by communicating with your nervous system through *neurotransmitters*, naturally occurring chemical messengers that transmit signals throughout your mind-body.

Here's the bad news. Get ready. Poor gut health, meaning too much "bad" bacteria—or, put another way, a decrease in "good" gastrointestinal bacteria—sends messages to your brain that could lead to mood and stress-related disorders, such as anxiety and depression.

In addition to mood disorders, a proliferation of bad bacteria also increases odds of dozens of physical conditions. For instance, it can lead to a weakened immune system—did you know that 70% of your immune system, which fights disease, is in your gut? Too much bad bacteria is also linked with inflammation and increased odds of overweight and obesity, heart disease, diabetes, arthritis and other autoimmune disease, some cancers, cognitive decline (think Alzheimer's), and more.

Are you guys still with me? I know this is hard to hear.

The good news is this: You may recall that I mentioned the second half of the National Institutes of Health study on the microbiome focused on illuminating the role of gut microbes not only on disease, but also on health. Because of this, we now know about the powerful influence that food, especially, has on your microbiome and in turn, on your weight and physical and mental health. And we also know more about the influence that other lifestyle elements—such as stress and sleep and exercise and social support—have on your gut bacteria, and in turn your mental and physical health.

The bottom line: State-of-the-art, 21st century science is now verifying what our ancient ancestors discovered centuries ago: The gut plays a pivotal role in almost all aspects of our physical and mental health.

And the news gets better: This means that many—maybe most—chronic conditions we associate with getting older, ARE NOT INEVITABLE. I say this because we now know how to create the gut health we need to *prevent* health problems we're at risk for, and we know how to *restore* gut health in order to prevent—and *reverse*—disease through the foods we choose to eat each day, plus other powerful elements of our everyday lifestyle, such as managing stress, restorative sleep, and physical activity.

A Gut-Obesity Story: Can Gut Microorganisms from Fast Food Make You Fat?

I want to tell you about a game-changing study about the power of lots of "good" microbes in your gut to not only ward off overweight and obesity, but to turn around and reverse overweight and obesity. As you'll see, this study has NOTHING to do with last century's—and this century's—'diet think' and calorie-counting. Rather, breakthrough 21st century science has discovered your weight has a lot to do with the quality and balance of your gut microorganisms!

Here's why.

A new gut-obesity story is emerging in the world of microbiome research: decades of studies have revealed a strong association—meaning, some kind of connection—between the gut microbiome and obesity in humans, but a *cause-and-effect*, direct relationship between the quality of the microbes in your gut and obesity has been elusive—until now.

In other words, rapid developments in the field are showing that the gut microbiome responds quickly and precisely to diet, antibiotics, and other external input in ways that impact a variety of conditions, including obesity and weight management. And the key seems to be the roles of specific sets and types of gut microbes. I, personally, use the idea of the "quality of gut microbes" to describe their influence on weight and physical and mental health.

The researchers who discovered the gut-microbes-obesity, cause-and-effect relationship, began by conducting what's called a *transplant experiment*: they transplanted various gut microorganisms harbored in the gastrointestinal tract from both lean and obese mice into *germ-free* mice, meaning mice with organism-free guts. No good or bad gut microbes. None. After only two weeks, the germ-free mice who were given the microbiota from obese mice gained more body fat compared to the mice injected with the gut microbiota from lean mice. Clearly, certain gut bacteria were involved in the development of obesity!

Knowing that many obese people have what obesity researchers call *Western diet-induced obesity* (DIO), the research team now wanted to know if there was a relationship between gut microbiota, and (1) diet—specifically, the fast-food-based standard American diet—(2) and energy balance (high-calorie intake from the Western diet). To find out, they transplanted DIO, *Western diet-induced obesity* gut microbiota due to a fast-food diet into germ-free mice. Again, the Western diet-induced obesity microbes promoted more fat gain than transplants from lean donors.

Gut-Friendly Food + Good Gut Bacteria ='s a Healthy Weight

Because of such state-of-the-art studies on the microbiome, we now know that the *quality* of the food you eat, and your weight, are strongly and deeply interconnected. And we also know that gut microbiota influenced by the quality of the food you eat—is the new unifying factor in the study of obesity. By "quality," I mean, does your most-of-the-time diet consist of mostly fast food and ultra-processed food—I call these "food products" and "chemical cuisine?" Or is gut-friendly fresh, whole, unprocessed food, meaning, nutrient-dense real food, more typical for you?

Think of it this way: The foods you choose to eat, which also feed your gut, is like fertilizing soil for healthy plants. Tending to your "gut garden" by feeding it fresh, whole foods will allow it to thrive with "good" bacteria that may help you attain and maintain a healthy weight.

But fill up on fast food replete with processed fats, sugars (such as high-fructose corn syrup), and a motley crew of chemicals that damage your intestinal lining and feed your gut with lots of "bad" bacteria, and you're setting yourself up not only for weight gain—but ongoing weight gain—plus inflammation, autoimmune conditions, anxiety, depression, emotional-eating episodes. . . and more.

Emotions and the Microbiome

We just discussed some groundbreaking research about both the *quality* and *balance* of microbes in your gut and their profound impact on being overweight or lean. But because we now know our gut is teeming with microorganisms that influence almost *all* aspects of our health—from metabolism and immunity to risk for major chronic diseases—such as overweight and obesity, but also heart disease, diabetes, autoimmune diseases (such as arthritis), some cancers, etc., etc., etc., more and more studies are adding to a deeper understanding of the profound influence of the link between the gut microbiome and health.

And this includes the rapidly emerging understanding about the gut microbiome and its huge impact on our mental health and emotions. And vice versa: our mental health, thoughts, and emotions also have a huge impact on our gut microbiome, the balance of bacteria, and in turn, mental and physical health. Or illness.

Here's how it works:

Have you ever been so anxious about something, say, a presentation or final exam, that you lost your appetite? Or perhaps anxiety makes you ravenous. If so, you've experienced the "microbiome-gut-brain connection"—the lively, ongoing dialog between the brain and gut called the 'gut-brain axis.' This is about the impact your thoughts and feelings—especially stress—have on your gut and the *microbiome* that is at the center of your gut. And conversely, it's also about what your gut microbiome communicates to your brain.

To give you an example: Research by Dr. Annelise Madison, at the Institute for Behavioral Medicine Research at the Ohio State University College of Medicine, tells us that psychological stress and depression can promote consumption of highly processed foods, which in turn influence which gut bacteria thrive. Dr. Madison also tells us that stress—which I—and many others—define as "a perceived threat"—and depression can reshape the gut bacteria's composition through stress hormones and inflammation. In turn, the gut bacteria release metabolites, toxins, and neurohormones that can alter eating behavior and mood.

I'll repeat that: gut bacteria release metabolites, toxins, and neurohormones that can alter your eating behavior and mood. This means that some of the 35,000 bacterial *species* in our gut may encourage, or increase, the response to stress, and heighten the risk for both overeating and depression.

It's a Two-Way Street

In other words, recent research on the microbiome tells us the gut-mood link is a two-way street: not only do your thoughts and feelings influence the balance of "good" and "bad" gut bacteria, but the balance of microbes in your gut can also modulate your emotions. To me, this is amazing! Twenty-first century science is confirming what Hippocrates—the 'father of medicine—and Eastern healing systems—such as India's Ayurvedic Medicine and traditional Chinese Medicine—discovered centuries ago: Both physical *and* mental well-being are linked with good gut health.

For instance, here are some gut-mood insights we didn't know until this century:

- Certain bacteria in your gut can help against depression and anxiety.
- Gut microbiota, for people with depressive disorders, is different from gut microbes in normal people.
- Some gut bacteria help produce chemicals called *neurotransmitters*, chemical messengers that help regulate our moods.

Then there's this encouraging finding: Lots of "good" gut-friendly bacteria can help to manage gut-brain communication in a positive way, meaning, an adequate balance of good gut bacteria can function as natural antidepressants and anti-anxiety organisms.

Here's the takeaway: When your gut microbiome has a balance (called *homeostasis*) of bacteria, emotions too are likely balanced, making you less prone to depression and making it easier for you to handle stressful situations and negative emotions.

Food for "Good" Gut Bacteria

These groundbreaking findings beg this question: What to eat to up the odds of lots of "good" gut bacteria, and in turn, mental and physical well-being? The nutrient-dense, health-enhancing foods that lead to gut health include fresh, whole *plant-based foods* (such as fruit, veggies, *whole* grains (think quinoa, brown rice, and whole wheat), legumes (meaning beans and peas), and raw—not roasted—nuts and seeds with smaller servings of grass-fed, free-range animal-based foods.

I am saying that plant-based foods, especially, lead to a healthy gut microbiome and lots of "good" bacteria, because these are the foods that are nutrient dense, meaning, along with having lots of complex carbs and healthy fats; plant-based foods are loaded with vitamins, minerals, fiber (so important for creating "good" bacteria), antioxidants, phytochemicals and more. These are the naturally occurring nutrients in plant-based foods that lead to gut-health.

In other words, a mostly plant-based diet, with smaller servings of fresh animal-based foods is likely to have a beneficial effect on your microbiome and in turn your emotions and physical health. While a diet that leads with mostly fresh, whole plant-based foods is not how most Americans eat, it is the foundation of the Mediterranean diet—voted the #1 healthiest diet by *U.S. News & World Report* six years in a row; and which I tell you about in Episode 2 of The Healing Secrets of Food Revealed. The title of Episode 2? "The Integrative Eating *Dietary Lifestyle* for Weight-Loss and Well-Being."

Conversely, nutrient-*deficient* foods (processed, fried, high sugar, etc.) are likely to create an overabundance of "bad" bacteria that could allow negative emotions an ill-health to bloom.

Speaking of which...

SAD and the Mind-Microbiome Cycle

I just told you about the fresh, whole, plant-based foods that create lots of good bacteria, and in turn, feelgood feelings, weight loss, and enhanced health. Here's the other side of the diet-mind-microbiome story—and the foods that produce an abundance of bad bacteria, and in turn, increased odds of negative emotions, weight gain, and chronic conditions.

To begin, here's a question for you: What do industrial farming, farmed fish, pesticides, herbicides, additives, preservatives, and denatured, processed, junk food—and fast food with low nutrient availability and lots of added sugar, salt, fat, and chemicals have in common? They are all part of Western dietary changes over the last seventy years that threaten the stability of both your microbiome and emotions.

What I mean is this: by contributing to the excess of bad bacteria in your microbiome, today's standard American diet (with the acronym S.A.D., SAD) has a negative impact on your gut health, which in turn can contribute to mood problems like depression and anxiety, weight gain, and many chronic conditions.

But the processed food-bad bacteria-negative emotions story doesn't stop here. Why? Because there's another side to it: Negative emotions, by themselves, can also damage gut microflora and create an excess of "bad" microbes. The end result: the negative emotions-microbiome cycle continues.

In other words, if you turn to fast, sugary, processed food to cope with unpleasant feelings—which I discuss briefly in Episode 4, "Lost...Now Found: The Healing Power of the '4 Facets of Food' "—you're also feeding the bad bacteria in your gut (which loves sugar). And this means you're increasing the odds of igniting more unwelcomed negative emotions. So yes, processed carbs may be calming—after all they produce soothing serotonin—but they can also create imbalances in your gut microbiota that can make you even more prone to anxiety and depression and ensuing Emotional Eating episodes.

The Takeaway

Here's the bottom line: The good news is that the foods you choose—and that are your most-of-the-time way of eating—can give you a lot of control over the health and balance of your microbiome and in turn your weight, your emotions, and overall well-being. And we know this because state-of-the-art, 21st century science, has discovered that the food you choose has a lot to do with the balance of good and bad bacteria in your microbiome, and in turn your weight and physical and mental well-being.

This means you really can reclaim your health destiny through the foods you choose each day. The choice is yours!

QUICK SUMMARY

3-Part Special Series: 21st Century Nutrition G.E.M.s: 3 Scientific Breakthroughs to Build Your Body-Mind Health.

Time for a quick summary:

Because today's episode, "The Healing Power of a Healthy Gut," is number 3 of 3 in my Special Series: 21st Century Nutrition G.E.M.s: 3 Scientific Breakthroughs to Build Your Body-Mind Health, I want to give you a super-brief summary of the 3 episodes about meta, 21st century discoveries, and highlight how what we've discussed can bring big health benefits for you.

Here are the key highlights:

- The three G.E.M.s are: Food and your (1) Genes and health (2) food and Epigenetics and health (3) and today, number 3, food and your Microbiome and health.
- In this 3-part Special Series, I've revealed breakthrough findings that are so huge, they actually create a re-visioning of the power of food to *prevent* health problems for which you're at risk; and also to turn around—and *reverse*—many chronic body-mind conditions, from overweight and obesity to heart disease, diabetes, depression, and more. Really about know how good food is good for you.
- And I want to highlight that all three meta discoveries are intimately interconnected, but I've told you about each independently, so you can realize—and put into action—the powerful role each plays in creating your health destiny!

The bottom line: With paradigm-shifting, 21st century medical discoveries about the influence of food on the human genome, our genes, epigenetics, and the microbiome—and their link to wellness or illness—the scientific community's understanding of the influence of food on health and healing is evolving quickly. But we know enough—NOW, TODAY—for you to benefit from this pioneering food-gene-microbiome wisdom.

Whole Person Integrative Eating 'Thinking Outside the Diet'

I also want to add this: Because millions of us struggle with overeating and overweight, it is my hope you will also benefit from the 21st century research I did with behavioral scientist—and my husband—Larry Scherwitz, PhD, Co-founder of our **Whole Person Integrative Eating**[®] model and program—which I tell you about in Episodes 1-4 of The Healing Secrets of Food Revealed podcast.

In these episodes, I introduce you to the '7 pillars' and '4 facets of food'—the foundation of our sciencebacked Whole Person Integrative Eating[®] program—which lead to eating less and weighing less. Without dieting. Because it is scientifically sound, I believe Whole Person Integrative Eating contributes to (1) a revisioning of nutritional health, (2) and the new nutrition "think" that's been emerging in the 21st century that I just told you about in my 3-part special series on meta-discoveries, food, and physical and mental well-being.

YOUR 'IN-ACTION' EXERCISE

A tip, step, or reflection that can contribute to your success.

So you can reap the rewards of what you discover on each episode of The Healing Secrets of Food Revealed, I close each episode with an 'In-Action' Idea for you to try. This may be a Quick-Tip about how to implement the healing secret of food we just discussed; or a Practical Step you can take, such as ordering a size-down of your favorite coffee concoction. Or perhaps I'll suggest a Self-Insight Exercise, an internal-reflection that can lead you closer to achieving your food-related health goals.

I'll offer an In-Action Exercise at the end each episode that can contribute to your transformation from today's, 'new-normal' way of eating—which leads to overeating and overweight—to Whole Person Integrative Eating—which I describe as your scientifically sound, personal guide to eating less and weighing less. Without dieting.

Consider keeping a Healing Secrets of Food Revealed journal to write about your experience with each In-Action Exercise.

TODAY'S 'IN-ACTION' IDEA PRACTICAL STEP

Here's today's In-Action Practical Step.

Perspective:

A consistent theme in all three episodes of my 3-part Special Series on 21st century meta discoveries about food and health—is that it is the nutrients in fresh, whole, plant-based foods that helps to switch off health-harming genes, and fill your gut with good bacteria that can lead to preventing and reversing many body-mind ailments.

On the other side: A diet of mostly fast food and processed food does the opposite: it increases odds of activating health-harming genes, and also ups the balance of bad gut bacteria in your gut that can lead to many chronic conditions.

Practical Step:

Regardless of where you are on the fresh food-processed food spectrum, think of one food in one of the plant-based food groups that you would like to include in your most-of-the-time way of eating. This could be a favorite **fruit**, **vegetable**, *whole* **grain**, **legume** dish, or a sprinkling of **raw nuts** and **seeds**.

To help you get started, here are two ideas:

Idea #1. Whole grains. Try a new whole grain, such as quinoa. Or, if you like bread, does your local market have—or is there a bakery in your neighborhood that makes—*multigrain, or whole grain sourdough bread*?

NOTE. Sourdough bread is naturally low in gluten. Though it makes a healthy choice for most people, if you need to avoid or restrict gluten, because of celiac disease or gluten intolerance, avoid sourdough made with gluten-containing flours.

Idea #2. A favorite salad. Are there some salad greens and veggies that you like? If "yes," think of ways you can use these greens and veggies to make a fresh, veggie-abundant salad. Make a big salad, so you can keep it in your fridge and enjoy it easily over the next few days.

Thank you...

If you would like a summary of today's In-Action Exercise, please visit HealingSecretsPodcast.com. Then look for the yellow light bulb next to the "In-Action" CTA. At HealingSecretsPodcast.com, you can also listen to this episode again, read the transcript, and, please consider joining The Healing Secrets Podcast Community—where I'm looking forward to meeting you.

I want to thank you for joining me today on The Healing Secrets of Food Revealed. With each show, I'll share step-by-step, science-backed insights you need to nourish 'all of you' – body, mind, soul, and social well-being – each time you eat. So you can thrive.

I'm Deborah Kesten, host of The Healing Secrets of Food Revealed.

Until next week, BE NOURISHED.

Disclaimer: This transcript is for informational purposes only. This transcript is not intended to be a substitute for professional health or weight loss advice, diagnosis, or treatment. Always seek the advice of your health professional or another qualified health provider with any questions you may have regarding your condition or well-being.