

Gut Rescue

HIDDEN ATTACKERS



EFFORTLESSLY BANISH BLOATING, CRAVINGS, AND BELLY FAT

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What Messes With Your Microbiome?

True or false: humans are born with a healthy microbiome?

You might be surprised to learn it - but this is actually false.

The truth: Before birth, humans don't have a colonized microbiome.

When you're born, you immediately begin to develop your microbiome - and for many people living in the modern world, this is also when the problems start.

Your birth and early childhood can either build a healthy microbiome or cause serious damage. In this guide, you'll learn how.

Birth, Childhood, & Your Microbiome

You should start developing your microbiome as you pass through the birth canal.

But today, 21% of babies around the world are born via caesarean section - which mean they miss out on the very important microbiome-building journey through the birth canal.

Babies born by c-section still develop a microbiome - they just begin colonization with different bacteria picked up from the first people to hold and care for them.

The problem? The microbes that are present in the birth canal aren't the same ones a c-section baby picks up by being held. Scientists believe this is why babies born via c-section are more likely to develop microbiome related conditions like asthma, allergies, autoimmune disease, and... obesity.

Scientists have found that inoculating babies born via c-section with swabs from the mother's vagina can help make the microbiome of a c-section baby more closely resemble a vaginal-delivery baby - but even with this inoculation, the baby can't completely replicate the process of traveling through the birth canal.

The way a baby is fed is also critical for building the microbiome. A mother's breast milk is rich in oligosaccharides - a prebiotic that provides important food for the bacteria forming the microbiome. Human babies can't digest

oligosaccharides - they're present in breast milk solely to feed the microbiome!

But that's not all breast milk does.

Breast milk also adapts to growing baby's needs. The first milk - also called the colostrum - is very different than the milk produced as baby grows. Compare this to formula, which is a static recipe fed to both newborn babies and toddlers about to wean.

Breast milk also contains bacteria itself: lactic acid bacteria (which are normally found in the gut and vagina) are in human breast milk.

The result? Babies who are breastfed have about 50% more diversity of gut bacteria. This is important because low microbial diversity is linked to obesity.

There are also differences in the breast milk of mothers who had planned c-sections vs. those who delivered vaginally or who had emergency c-sections after going into labor. The chemical and hormonal process of labor seems to change the makeup of breastmilk.

Beyond infancy, your childhood is also an important time for the development of the microbiome. All of these factors impact the

development of the microbiome:

- Childhood stress
- Physical childhood trauma (like repeated head injuries)
- Poor diet in childhood (either from malnutrition or a diet too high in processed foods)
- Childhood antibiotic use

You can't control how you were born, what you were fed in infancy, or your childhood experiences - but because of the impact they may have had on your microbiome, they could still be impacting your weight, health, and happiness.

Antibiotic and Prescription Medication Use

Antibiotics were introduced in the late 1940s.

Americans started getting fat in the 1950s - and by the 1980s a full-blown obesity epidemic was in full swing, and it continues today.

Is this coincidence or could the obesity epidemic actually be related to the introduction and widespread use of antibiotics?

That might sound far fetched until you consider the fact that in the United States, livestock are treated with antibiotics to promote faster growth and weight gain.

Did you catch that? Farmers actually give antibiotics to livestock just to make them fat!

Antibiotics work by killing the bacteria living inside your body. Until the recent understanding that the majority of the bacteria living in the body were actually helpful to human health, killing bacteria seemed like a good thing - and it certainly worked to cure bacterial diseases.

But antibiotics are often prescribed for conditions which they cannot help - like for the majority of colds and flu. **1 in 3 antibiotic prescriptions are unnecessary.**

The overuse of antibiotics in both people and livestock has contributed to the rise of antibiotic-resistant bacteria, like the antibiotic-resistant staph infection Methicillin-resistant Staphylococcus aureus (MRSA).

How do antibiotics damage your microbiome?

Antibiotic drugs cannot be specific about which bacteria they kill, selecting only the bad bacteria and leaving the good bacteria alone. Instead, they are "broad-spectrum" killing the majority of bacteria they come into contact with.

Consider this:

4 out of 5 Americans are prescribed at least one round of antibiotics every year.

This is a good thing because it means that doctors don't have to know exactly which bacteria is causing your illness in order to prescribe an antibiotic that might save your life - but it creates a lot of collateral damage in your microbiome.

Using antibiotics causes an immediate decrease in microbial diversity - both in species and quantities.

How long does it take the microbiome to recover from antibiotic use?

Scientists don't know for sure - but some suspect it can take up to 2 years for the microbiome to completely restore after antibiotic use - and others believe the gut can NEVER be completely restored to its pre-antibiotic state after antibiotic use.

Most children in the U.S. receive their first dose of antibiotic medication by age one, and by the

time they're 18 they have received between 10 and 20 courses of antibiotics.

If it can take up to 2 years to recover microbiome health after using antibiotics, but the majority of people are using antibiotics EVERY year - does your microbiome ever have a chance to heal?

Other prescription medications can have an impact on the microbiome too - most notably hormonal birth control pills.

Inadequate Sleep

A healthy gut microbiome helps you sleep better - but you also need plenty of good sleep to keep your microbiome healthy!

Research has shown that inadequate sleep leads to:



Some people have trouble falling or staying asleep, others have kids or family members that need night time care - but many people get inadequate sleep because they simply stay up too late! With more to do in the day, less and less free time, and endless TV, it's easy to justify staying up too late.

Stress

Just one day of intense stress can have a significant impact on your microbiome.

How often do you have an intensely stressful day?

But it's not just intense stress that can wreck your microbiome - chronic, low-grade, daily stress also has a significant negative impact on your gut.

Everything from waking up to a blaring alarm, to fighting with your kids over wearing socks with their sneakers, to your morning commute, dealing with that coworker you don't get along with, paying the bills on time, making it to the PTA meeting...

Even a happy life can be chronically stressful!

And when you add in the stress of chronic dieting, trying to squeeze in workouts, and general concern and dissatisfaction over your health... it's a lot for your delicate microbiome to bear.

Not only does stress itself negatively impact your microbiome, but it also steers you toward other

behaviors that damage the microbiome:

- Getting inadequate sleep
- Drinking too much coffee
- Drinking too much alcohol
- Relying on sugary foods
- Skipping healthy exercise
- Not making time for relaxation practices

Stress doesn't just cause an unhealthy microbiome either - having an unhealthy microbiome can make you feel the effects of stress more acutely, too. An unhealthy microbiome is related to higher rates of perceived stress, depression, and anxiety.

90% of serotonin - the chemical that makes us feel happy, calm, self-confident, and peaceful - is produced in the gut by the microbiome - along with other important chemicals for mood like dopamine and norepinephrine.

The Polluted Planet

Your microbiome should be bolstered by spending time outdoors and in nature - soil, plants, and animals can increase biodiversity in your own microbiome.

But few people get beneficial contact with nature - instead, the polluted world can actually be harming your microbiome.

Air is polluted by car and factory exhaust, cigarette smoke, and skies over cities are black with smog.

Groundwater is polluted by fertilizer and soil runoff from farms - not to mention contaminated

with prescription drugs like antibiotics and hormonal contraceptives. Soil is contaminated with fertilizers and pesticides. Even food is contaminated with chemicals and antibiotics.

Just living a modern life exposes you to gut-harming toxins our ancestors never had to deal with. This is especially true if you live in a heavily polluted area or major city - but applies to those who are near agricultural run-off, too!

The Standard American Diet

While your childhood, antibiotic use, pollution, sleep habits, and stress can all have huge impacts on your gut, there's one thing damaging your microbiome every single day that dwarfs all the other problems: **your diet.**

You eat every single day - multiple times per day - and every meal you eat is a chance to build up your microbiome or tear it down.

All the food you eat is, in fact, food for the trillions of microorganisms that make up your microbiome. Those microbes control everything from what foods you crave, to how well you digest the food you eat, when you'll get hungry again, and how much nutrition is extracted from the food.

Bacteria's favorite foods are prebiotic fibers found in plant foods. Like the oligosaccharides found in mothers' breast milk, prebiotic fibers are food just for the bacteria in our guts.

The problem?

Most people eat very few of the prebiotic-rich foods that nourish the gut - and instead eat foods that tear their microbiome down.

Think about the foods that make up the Standard American Diet:

- Processed and refined carbs like white bread, donuts, cereal, instant oatmeal, donuts, pastries, and pasta
- Processed meats like bacon and deli meats
- Factory-farmed meats that are high in fat and polluted with antibiotics and hormones
- Restaurant food that is cooked with lots of sugar and refined oils
- Fast food made with trans fats and low-quality ingredients
- Processed dairy from cows treated with hormones and antibiotics
- Sugary drinks like soda and "coffee" drinks
- Processed snacks like cheese crackers, fruit snacks, and granola bars
- GMO grains

A typical day of eating might be:

- A large coffee with "Creamer" made of trans fats and artificial sweeteners
- Instant, sweetened oatmeal
- A flavored non-fat yogurt
- A burger and fries for lunch with a large soda

- Chips or a candy bar from the vending machine
- Canned tomato sauce over refined white pasta for dinner
- A glass or two of wine or a few beers
- A bowl of ice cream or a handful of cookies before bed

Does this kind of eating sound familiar to you?

Not only does this diet starve the microbiome of the food it needs to thrive and survive - but it actively breaks down the good bacteria you do have in your microbiome.

Even “healthy” foods in the Standard American Diet can break down your microbiome - and contribute to widespread inflammation, brain fog, chronic fatigue, weight gain, acne, and other health issues.



Compared to the diet of ancient humans, modern people consume:

- Far less fiber and more refined foods
- Pesticide and fertilizer residue from farms
- Antibiotic and artificial hormone residue in meat
- More refined sugar and fats and fewer whole foods

All of this kills the good bacteria in your microbiome and feeds the bad bacteria!

It All Adds Up...

For most people, no one issue is solely responsible for wrecking their microbiome health. Instead, it's the combination of all the factors that can negatively impact your microbiome that have gotten you where you are today:

- Unhappy with your weight
 - Tired all the time
 - Gassy and bloated
 - Grumpy and short on patience
 - With dull hair, skin, and nails
 - Feeling older than you really are
 - Gaining weight easily
-



But there is hope!

As we know, your microbiome can change dramatically in as little as 24 hours - for the worse or for the better.

In just a few weeks, you can completely change the state of your microbiome and take your gut from sabotaging you to supporting you.

When you heal your microbiome, you can effortlessly lose weight, take control of food cravings, find more energy, feel more joyful, and look better overall.

HERE'S WHAT A HEALTHY MICROBIOME WILL GIVE YOU:

- Effortless weight maintenance (no counting calories or slaving at the gym)
- Feel satisfied after you eat
- Occasionally be able to eat "bad" foods without consequence
- Skin is clear and radiant, hair is shiny, nails are strong
- Belly is flat - no bloating or bathroom problems
- You wake up ready to take on the day - limitless energy
- You sleep soundly - goodbye insomnia
- Your mind is clear - no more brain fog
- Food cravings are a thing of the past
- Eating out and trying new foods is actually fun - you're not worried about gaining weight, how you'll feel tomorrow, or if you'll be bloated...

It's all possible when you heal your microbiome!

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