



## Your body is crying out for...dirt

by Dr Joseph Mercola © 2012–2021

The idea of eating dirt isn't new. It's been around a long time, dating back more than 2,500 years. Hunters and gatherers couldn't avoid it, and regardless of culture, there's evidence people have included traces of dirt in their diets throughout the ages.

Think about when you were growing up. It is likely many of you, much like myself, grew up in homes where having a vegetable or flower garden was commonplace. In fact, you probably helped out by pulling weeds and planting seeds with your bare hands. Even if you didn't have a family garden, as a kid you probably played outdoors for hours each day and got more than a little dirty. Back then, people didn't worry so much about dirt—it was part of

life. You got dirty and then, you cleaned up. It wasn't until years later that Westerners became obsessed with cleanliness. We stopped touching dirt and we made sure we didn't eat it.

Today, it's no longer "normal" to get your hands dirty. Designer garden tools and thick, plush gloves just about guarantee that you won't soil your hands. And it's not only adults... These days, children spend far more time in front of computers than they do digging in the ground. If you do happen to get dirty—or end up with dirt-covered food—there's no shortage of fancy vegetable scrubbers, antibacterial soaps and sanitising hand gels to remove grime and bacteria.

While all this may sound like a good thing for your health, this obsession with sanitation and cleanliness has forced us to take a step backwards with our gut health.

## Modern-Day Hunters and Gatherers Reveal Surprising Truths About Microbiome Health

Your microbiome is your unique collection of intestinal bacteria—the trillions of gut bacteria that influence your immune health, mood, behaviour, digestion, metabolism and weight. Since there's little doubt that modern-day living affects your gut health, how would your microbiome differ if you lived completely isolated from modern medicine, food and culture?

To answer that question, a group of researchers and a Venezuelan government medical team set out by helicopter to a remote Yanomami tribe living on the border between Venezuela and Brazil. Members of this tribe have lived as hunter-gatherers for more than 11,000 years in this region of the Amazon rain forest. This outside visit marked their first contact with modern society.



Yanomami mother and baby (Photo: Sam Valadi, flickr.com)

After taking samples from 12 of the villagers' faecal matter, the research team used DNA analysis to determine which species of bacteria thrived in the hunter-gatherers' guts. Their first surprise was the astonishing number of different species present in the Yanomami's microbiome. The tribe had about 50 per cent more ecological diversity in their gut than the average American. Obviously, there were multiple factors at play in this remote region:

- The population's high-fibre indigenous diet differed greatly from the standard American diet;
- They had never been exposed to antibiotics;
- They had far lower exposure to electrical fields and EMFs; and
- The sanitation and hygiene practices that are so prevalent in the Western world were absent here.

While sanitation and hygiene were indeed important variables, other factors played a role as well, especially diet. There are many little-known factors affecting your microbiome on a daily basis that can alter its pH, impact your absorption of nutrients, inflammatory response, immune function, digestion and your gut's ability to fight invaders.

## The Nine Factors That Harm Your Gut Health

The health of your microbiome depends on having the proper balance between beneficial bacteria and potentially pathogenic bacteria, as well as the health and integrity of your gut lining.

When your microbiome falls out of balance or loses its diversity, or when your gut lining becomes compromised, many processes in your body can be impacted. Here are nine of the biggest factors:

### 1) Antibiotics

Most antibiotics can alter your gut microbial balance. Whether you're taking antibiotics right now, just finished a course last week or took them years ago, the well-being of your microbiome may be compromised. Included are the antibiotics hidden in food, especially factory-farmed meats and conventional dairy products.

### 2) Heartburn pills

### 3) Fluoridated and chlorinated water

### 4) Processed and refined sugars

### 5) Processed and refined foods

### 6) Bioengineered foods and agricultural chemicals

### 7) NSAIDs (non-steroidal anti-inflammatory drugs)

### 8) Stress

### 9) Air Pollution

## Dishwasher Use Linked to Allergies

Researchers from Sweden's University of Gothenburg added another piece of research in favour of the hygiene hypothesis in 2015, concerning a device that's found in about 75 per cent of US homes—the dishwasher.

If you have a dishwasher in your home, you probably consider yourself lucky. But there may be reason to wash your dishes by hand instead. Because they use very hot water (water typically too hot for human touch), dishwashers kill far more germs, and leave your dishes cleaner than ordinary hand washing.

But this purported benefit might also be their downfall. In a study of more than 1,000 Swedish children, those with increased microbial exposure were less likely to develop allergies... and this included potential exposure through hand-washed dishes.

In households where dishes were always washed by hand, rates of allergies in the children were half those from households that used dishwashers. The children using hand-washed dishes were less likely to develop eczema, asthma, and hay fever.

According to the researchers:

"We speculate that a less-efficient dishwashing method may induce tolerance via increased microbial exposure."

## Eat More Dirt

Writing in the *New York Times*, Jeff Leach uses the example of the simple farmer's market as an analogy of what's missing from so many of our lives. In a word: dirt. The heads of lettuce and bunches of carrots of yesteryear were awash in various microorganisms, and no one even considered that to be a problem.

Today much of our food is pasteurised, irradiated, sterilised and made so that bacteria—even the good kind—can no longer survive. When there are outbreaks of food poisoning, the blame often falls on federal agencies to make the food supply cleaner, but what is overlooked is why our own immune systems failed to protect us from what should be normal bacterial exposures.

Leach writes:

"...by asking why an individual's natural defenses failed, we insert personal responsibility into our national food safety strategy and draw attention to the much larger public health crisis, of which illness from food-borne pathogens is but a symptom of our minimally challenged and thus overreactive immune system."

Ironically, the very advances that represent all that is modern in the world—hand sanitisers, treated water, refrigeration—have created their very own set of diseases. Leach continues:

"Increasing evidence suggests that the alarming rise in allergic and autoimmune disorders during the past few decades is at least partly attributable to our lack of exposure to microorganisms that once covered our food and us. As nature's blanket, the potentially pathogenic and benign microorganisms associated with the dirt that once covered every aspect of our preindustrial day guaranteed a time-honored co-evolutionary process that established normal background levels and kept our bodies from overreacting to foreign bodies."

In a world of hand sanitiser and wet wipes (not to mention double-tall-skinny-soy-vanilla lattes), we can scarcely imagine the preindustrial lifestyle that resulted in the daily intake of trillions of helpful organisms.

For nearly all of human history, this began with maternal transmission of beneficial microbes during passage through the birth canal—mother to child. However, the alarming increase in the rate of Caesarean section births means a potential loss of microbiota from one generation to the next.



And for most of us in the industrialised world, the microbial cleansing continues throughout life.

Nature's dirt floor has been replaced by tile; our once soiled and sooted bodies and clothes are cleaned almost daily; our muddy water is filtered and treated; our rotting and fermenting food has been chilled; and the cowshed has been neatly tucked out of sight. While these improvements in hygiene and sanitation deserve applause, they have inadvertently given rise to a set of truly human-made diseases.

## The Rise of Sterile Environment Diseases

The hygiene hypothesis—the theory that early exposure to dirt and germs programs your immune system to properly identify and countermand threats—has been gaining slow but steady support over the past decade. According to this theory, if you're healthy, exposure to bacteria and viruses can serve as "natural vaccines" that strengthen your immune system and provide long-lasting immunity against disease.

You're not meant to exist in a bubble, isolated from life. You're designed to spend time outside, play in the dirt, be active—and to get dirty and encounter and develop lasting immunity against potentially infectious agents.

This would seem like common sense, but in today's world of obsessive sterilisation and savvy marketing, many have been brainwashed into treating dirt as enemy number one, to be eliminated at any cost. There's an antibacterial solution for every area of your life and if you're not wiping down your counters and cleaning your hands with antibacterial soap, you're taking antibiotics, which are grossly overused.

Your diet, too, is probably largely devoid of the natural bacteria that makes food—and you—healthy, as most of what is consumed is highly processed, refined and pasteurised. This over-zealous avoidance of bacteria and viruses comes at a steep price: the rise of numerous related diseases, including asthma and allergies, eczema, immune system diseases (autoimmune disorders, etc.),

heart disease and depression.

Neuroscientist Charles Raison explains:

"Since ancient times, benign microorganisms, sometimes referred to as 'old friends', have taught your immune system how to tolerate other harmless microorganisms, and in the process, reduce inflammatory responses that have been linked to the development of most modern illnesses, from cancer to depression."

Quite simply, if you're too clean, you deprive yourself of the exposure to bacteria that your body needs in order to program itself to keep inflammation at bay, as well as to respond properly when a threat does occur. The answer is not to eat dirty food... but food that has been grown in healthy soil and contains beneficial bacteria is incredibly important.

### Why Fermented Foods are So Important

Establishment of normal gut flora in the first 20 days or so of life plays a crucial role in appropriate maturation of your baby's immune system. Babies who develop abnormal gut flora are left with compromised immune systems, and then they are typically vaccinated, which can be a recipe for disaster. Vaccinations were originally developed for children with perfectly healthy immune systems, but according to Dr Natasha Campbell-McBride, children with unbalanced gut flora are not fit to be vaccinated according to the standard vaccination protocol.

The end result is increasing numbers of children with autism, learning disabilities, neurological disorders, psychiatric disorders, immune disorders, and digestive problems, all because of a lack of exposure to the proper bacteria in early life.

Many women of reproductive age are deficient in beneficial bacteria—a deficiency that transfers to their babies and may set the stage for any number of problems. The solution is simple: nourish your gut flora with a probiotic-rich diet. Some examples of naturally fermented foods that are outstanding sources of beneficial bacteria include:

- Various fermented vegetables, including cabbage, turnips, eggplant, cucumbers, onions, squash and carrots;
- Lassi (an Indian yoghurt drink, traditionally enjoyed before dinner);
- Yogurt made from organic raw milk;
- Fermented milk such as kefir (a quart of unpasteurised kefir has far more active bacteria than you can possibly purchase in any probiotics supplement, and it's simple to make at home); and
- Natto (fermented soy).



Lassi for sale, Varanasi, India (Photo: Adam Cohn, flickr.com)

Eating fermented foods like these regularly will help to "reseed" your body's beneficial bacteria, which is under constant assault from antibiotics, chlorinated water, antibacterial soap, the metabolic by-products of stress, and poor diet, especially sugar consumption. Eating sugar actually nourishes the bad or pathogenic bacteria yeast and fungi in your gut. So, tending to the bacteria in your gut is an ongoing process, much like tending to a flower garden.

If you do not consume traditionally fermented foods on a regular basis, a high-quality probiotic supplement is one of the few I do recommend—but one of the major results of eating a healthy diet like the one described in my nutrition plan is that you stimulate your beneficial gut bacteria to flourish naturally.

### More Tips for Living Dirty

It's high time for many to get reacquainted with some old friends, those beneficial bacteria that have been a part of civilisation for eons. This is important not only for you, but also for your children, as the future of your child's immune system is in your hands. You can help your child's immunity build up the natural resistance it needs by:

- Letting your child be a child. Allow your kids to play outside and get dirty.
- Avoiding the use of antibacterial soaps and other antibacterial household products. Simple soap and water is all you need when washing your hands.
- Avoiding unnecessary antibiotics, including not only medically (for instance, taking antibiotics to target a viral infection, for which they are useless) but also in your food, which is a major source of antibiotic exposure.
- Serving locally grown or organic meats that do not contain antibiotics.

One final piece of advice that I'd like to echo comes from Leach, who points out that a simple visit to your local farmer's market may help you get back in touch with

your more down to earth roots:

"As we move deeper into a postmodern era of squeaky-clean food and hand sanitizers at every turn, we should probably hug our local farmers' markets a little tighter. They may represent our only connection with some old friends we cannot afford to ignore."

### About the Author:

Dr Joseph Mercola was trained by the conventional model. In his first years of private practice, he treated many symptoms with prescription drugs and was actually a paid speaker for the drug companies. But as he began to experience the failures of this model in his practice, he embraced natural medicine and has had an opportunity over the last thirty years to apply these time-tested approaches successfully with thousands of patients in his clinic. He founded Mercola.com to share his experiences with others and the site is the most visited natural health site in the world. Mercola has written 15 books, three of which are *New York Times* bestselling books, and has had frequent appearances on national media and major news channels. This article is sourced from

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<https://tinyurl.com/5wf2k52f>. Read more at [www.Mercola.com](http://www.Mercola.com).

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### The Practice of Geophagia

Geophagia, also known as geophagy, is the intentional practice of eating earth or soil-like substances such as clay, chalk, or termite mounds. It is nearly universal around the world in tribal and traditional rural societies. In the ancient world, several writers noted the phenomenon of geophagia. Pliny is said to have noted the ingestion of soil on Lemnos, an island of Greece, and the use of the soils from this island was noted until the 14th century. The textbook of Hippocrates (460–377 BCE) mentions geophagia, and the famous medical textbook titled *De Medicina*, edited by Aulus Cornelius Celsus (14–37 CE) seems to link anaemia to geophagia.

Early explorers in the Americas noted the existence of geophagy amongst Native Americans, including Gabriel Soares de Sousa, who in 1587 reported a tribe in Brazil using it in suicide, and Alexander von Humboldt, who said that a tribe called the Otomacs ate large amounts of soil. In Africa, David Livingstone wrote about slaves eating soil in Zanzibar, and it is also thought that large numbers of slaves brought with them soil-eating practices when they were shipped to the New World as part of the transatlantic slave trade. Slaves who practised geophagia were nicknamed "clay-eaters" because they were known to consume clay, as well as spices, ash, chalk, grass, plaster, paint, and starch.

In Africa, kaolinite, sometimes known as kalaba (in Gabon and Cameroon), calaba, and calabachop (in Equatorial Guinea), is eaten for pleasure or to suppress hunger. Kaolin for human consumption is sold at most markets in Cameroon and is often flavoured with spices such as black pepper and cardamom. Consumption is greatest among women, especially during pregnancy. Another example of geophagia was reported in Mangaung, Free State Province in South Africa, where the practice was geochemically investigated. Calabash chalk is also eaten in west Africa.

In Haiti, poor people are known to eat mud biscuits made from soil, salt, and vegetable shortening. These biscuits hold minimal nutritional value, but manage to keep the poor alive.

Bentonite clay is available worldwide as a digestive aid; kaolin is also widely used as a digestive aid and as the base for some medicines. Attapulgite, another type of clay, is an active ingredient in many anti-diarrhoeal medicines.

(Source: Wikipedia)



German medicinal clay (Luvos Heilerde) consisting of loess, i.e. a mixture of sand, clay, and silt  
(Photo: Morn the Gorn)