



HUMAN COMPOSTING FOR BEGINNERS

THE STORY OF YOUR BOWEL BACTERIA

This essay is an overview of the role of intestinal bacteria in maintaining health and the relevance of fermented foods, in particular, fermented milk

For several years I have tried to interest my patients in the value of fermented foods for health and well-being. Yogurts, kefirs, sauerkrauts, miso, and other fermented foods have resolved many people's gastro-intestinal problems that had been unresolved with contemporary medical care—meaning drugs and more drugs. This essay is an attempt to make you aware of good microbes and their tremendous importance to your overall health and longevity. Make sure you read it all the way through, especially the

tedious parts and try to keep the snoring at a minimum. Then, read the best book on nutrition and fermented-food recipes, *Nourishing Traditions* by Sally Fallon. It is a mammoth work concerning traditional diets, and how we have been led far astray by silly people to become one of the sickest countries in the world. So, read on. We will start from the beginning.

When you put food into your mouth, your salivary glands secrete saliva. Sometimes merely *seeing and smelling* a well-cooked meal is enough to start the flow of your digestive juices. One teaspoon of your saliva contains fifty thousand to five billion microorganisms (little bug things), which secrete enzymes and acids. These substances begin your digestive process by breaking food down into smaller particles. These “good bugs” also help with your salivary enzyme phosphatase, thus increasing the acidity of your mouth, and helping to kill “bad bugs” such as herpes viruses and *Candida* fungi. If your good bugs’ acidic secretions are adequate, many potentially dangerous bugs are stopped cold in your mouth. If your good bugs are not up to snuff, the bad bugs continue their travels and adventures “downstairs.”

Your salivated and hopefully, chewed food next proceeds to your stomach where hydrochloric acid continues to break the food down, while also discouraging and killing bad bugs. Your stomach’s juices contain 5,000 microorganisms per teaspoon. Their secretions discourage bad bugs, and neutralize substances harmful to your body. Many stomach ulcers are caused by a loss of your good bacteria, whose absence then allows certain bacteria, like *Helicobacter Pylori*, to bore holes in your stomach wall and to initiate early “leaky gut syndromes.” They would have been less able to harm you if your “protective mucous wall” of good soldier bacteria had been in place.

The ever-smaller food particles then move to your duodenum, which is the first 10-12” of your small intestine. Here they encounter digestive juices from your pancreas, liver, and gall bladder. These juices contain digestive enzymes and bile that further break down food particles into yet smaller bits. “The cannon balls continue to be broken down into BBs.” Your healthy duodenum contains 50,000 microbes per teaspoon, mainly *Lactobacillus Acidophilus*, and good *streptococci* bacteria. These microbes secrete, among other things, lactic acid, hydrogen peroxide, and acetic acid. Acidic secretions, while making food much more digestible, also create a very inhospitable environment for the bad microbes who need a more alkaline setting to live.

The smaller food then passes to the lower portion of your small intestine, the ileum, where more highly concentrated enzymes and microbes—now an amazing one-

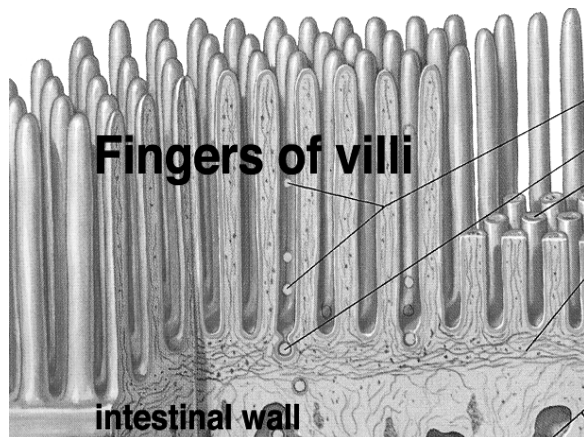


Fig. 13

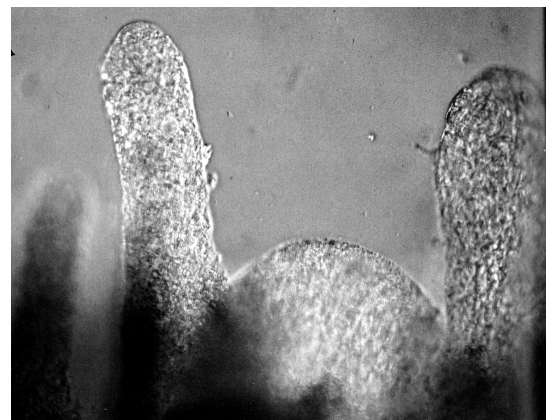


Fig. 14

half million to 500 million microbes per teaspoon—achieve further food breakdown, again increasing your body’s ability to digest and assimilate nutrients. At this point most minerals and vitamins are passed through your intestinal walls via the tiny fingers of villi (Fig. 13 and Fig. 14), into your bloodstream, having been made much more digestible and functional by the gut bacteria’s acidic secretions and your amazing microvilli.

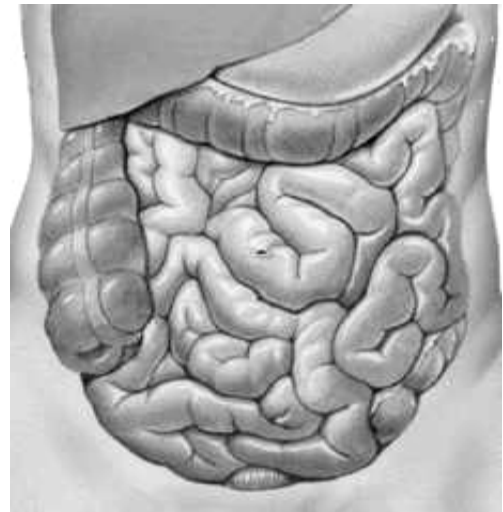
Intestinal “villi” are like the fibers of a shag rug, and each contains a tiny capillary that connects it to larger blood vessels in order to carry nutrients to the liver. (Read more about these “villi” in my essay on Microvilli, page 46.)

Next, the now very small, mainly liquid remains of the food in your small intestine pass through a check valve into your “large” intestine, also known as your “colon.” Your colon is “bug city” and contains up to five-thousand billion microbes per teaspoon, which are necessary to break down the food’s final nutrients to be digested and assimilated.

The most important bacteria in your colon are called “*Bifidus*.” These “last stop” good bacteria help eliminate harmful microbes, and neutralize poisons that are then excreted in your bowel movement.

When you think of the mucus coating of your gastrointestinal system from your mouth to your anus, simply think of it as a coating of microbes, which can be looked at as a “wall” of protective soldiers. ***Remember that 85%+ of your immune system and your resistance to most all disease is the microbes in the mucous coating of your gastrointestinal system.*** Their job is to keep bad bugs and poisons out of your bloodstream while maximizing your assimilation of nutrients. When this defensive wall has been penetrated by “bad bugs”, undigested food particles and disease-causing microbes can sneak through your bowel wall into your bloodstream and on to your liver to create “leaky gut” and trouble. Your intestinal microbe soldiers are the greatly unappreciated heroes of, and key to, your body’s health and resistance to disease. They are the first line of defense against “leaky gut” syndrome.¹

Regarding your real “homeland security,” you have 20 times more microbes than you have cells in your entire human body... 200 trillion microbes in your G.I. system compared to a mere 75 trillion body cells. Each of us is host to over 1000 different



Human Intestines

¹ It is pathetic that the medical profession takes almost no notice of intestinal microbes, and seemingly ignores their strategic importance in order to sell petroleum-based drugs. Organized medicine has no interest in remedies that cannot be patented and monopolized. John Rockefeller, the oil baron bootlegger, was very thorough when he instigated medical school “evaluation” back in 1910 via the Flexner Commission. His successful goal was to eliminate non-petroleum-based health care education. Thus, most “natural” schools were not accredited and faded away, leaving only “standard oil based” medical schools. The effects have been lasting, as most current medicine is petroleum-based. If the medical profession could patent and monopolize good sunshine, good air, good water, good food and love, it would then prescribe it. Until then, you must use your own brains, because most doctors cannot tell you where good health comes from. They simply have not been taught and that’s a fact!

microbe species which create a “lush rain forest” in our gut. One-third plus of your bowel movement is microbes, dead or alive. (In cows it is over 50%!) The average weight of the human liver is 3-4 pounds, and the average weight of your intestinal microbes is 3-4 pounds! So, what are other important functions these microbes perform besides breaking food down, killing bad bugs, neutralizing poisons, and keeping you fat and sassy, much less alive? The “colonizing” bacteria, the ones who create “settlements” on your bowel walls, are mainly the *Lactobacillus Acidophilus* in your small intestine, and the *bifida bacteria* of your large intestine. They actually fasten themselves to the walls of your intestines and hold on with a little foot. They are sometimes called the “sticker” bacteria.

Imagine your intestinal walls as gigantic parking lots filled with billions and trillions of parking spaces. What the good bacteria do is aggressively take up all the parking spaces they can, and reproduce like crazy every 20 minutes to fill up the parking lot with their own kind. When bad-guy bacteria, viruses, and fungi come along, and find “good-cops” in all the parking spaces, they keep moving on down and out. It is like the situation found in old western movies where the sheriff tells the bad guy, “There ain’t room in this town for the both of us.”

The good-cop bacteria of your bowel secrete lactic acid, acetic acid, formic acid, and hydrogen peroxide, among other things. This increase in acidity speeds up your digestion of food, particularly protein. Allowing more nutrients to be assimilated. The bad bacteria need more alkalinity to survive. Thus, when bad strains of *E-coli*, *shigella*, *salmonella*, *candida*, *streptococcus*, etc. come along, they tend to keep on trucking away down your bowel to be pooped out. This “keeping a clean battlefield” aspect of good bacteria is very important to your health.

On the other hand, medical drugs tend to litter the “battlefield” with dead enemy bugs thus creating toxicity, and necessitating the sacrifice of your valuable immune cells to clean up the carcasses and prepare them for burial. You keep more energy if the bad bugs leave the battlefield all by themselves. (To learn more about this, read up on the Herxheimer reaction.)

One of the main differences between good milk-based bacteria and the “health-food” store’s commercial bacteria in “probiotics” you buy in powders, liquids, and pills is that although there may be billions more per unit in store bacteria, they are usually lazy wimps and dead, (dead bacteria are included in the count) which makes about as much sense as including all the bodies in the graveyard in the next Nevada City census. Many times these poor bugs are cultured in garbanzo and soybean medium rather than in a nourishing whole milk. Remember, Christ needed only twelve people to make a significant dent in the culture, and Fidel Castro took over Cuba with only a few hundred dedicated people. The bacteria in milk cultures are more like Green Beret soldiers. So, don’t be fooled by the advertising of “extra” bacteria. They are more akin to undisciplined, poorly fed and dead soldiers than to robust Green Berets. Stick with bugs from an organic milk/lacto-fermented product if possible.

Here are a few amazing things that your friendly bacteria do for you that are just now beginning to be understood:

1. Good bacteria recycle your used bile. Bile, made in your liver, is needed to break down fats in your body. The more bile you have available, the more fat can be broken down. People with poor bowel bacteria have increased fat levels, because they have less bile available.
2. *Lactobacillus Acidophilus* bacteria actually digest cholesterol carried by the bile to break it down. Cholesterol levels go down five to ten percent after seven days of building back normal bowel bacteria.
3. Estrogen is recycled by proper bowel bacteria for re-use. Women with poor bowel bacteria lose up to 60 times more estrogen in their bowel movements than women with healthy bowel bacteria. This contributes to their early osteoporosis (bone demineralization) and increased fractures.
4. Your healthy bowel bacteria manufacture the “natural” antibiotics—acidophlin, lactobacillin, bulgaricon, and bifidin. These powerful killers not only discourage bad bacteria from having babies, but also discourage viruses and fungi. Regular medical antibiotics work only on certain bacteria. They are powerless, and thus harmful on the host, regarding fungal and viral infections, though doctors continue to incessantly prescribe them incorrectly. Vaginal herpes, yeast infections, herpes simplex (mouth), polio, and AIDS viruses cannot survive the presence of these good-bug acid secretions, nor can any fungus. Best of all, they do not obliterate your natural/normal bowel bacteria as medical antibiotics do, as they are part of your natural flora. They belong to the real you.
5. “The Green Beret soldier” white blood cells of your immune system—the macrophages—increase their activity 400% when in the presence of *Lactobacillus Acidophilus*. Among many things, macrophages create sodium hypochlorate, basically household bleach! This enhanced killing ability increases your resistance to invasive diseases like cancer, whose cells love a weakened immune system.
6. Newborn babies with the proper bowel bacteria, “*bifidobacterium infantis*,” absorb and retain more nitrogen. This translates into higher protein production, which you see as better weight gain for your baby. The bowel’s Vitamin B assimilation is increased for a healthier baby’s nervous system. Babies without proper bowel bacteria, besides typically being under healthy weight, have significantly more gastrointestinal irritation, especially if they are on a toxic soy formula instead of real mother’s milk or goat milk. (Remember, goat milk contains ten times more lactic acid than mother’s milk, and is thus quite effective at breaking down lactose for the finicky babies, thus escaping “milk intolerance”.)
7. Mothers lacking proper bowel bacteria more often have premature births, and their babies are more likely to have low birth weight.

8. Good intestinal bacteria break down “procarcinogen” enzymes, which are cancer-causing agents secreted by harmful microbes into harmless substances. This is extremely important unless you prefer early cancer cells getting “a leg up”.
9. Good intestinal bacteria break down nitrites. Nitrites are presently found in many commercially-processed meats such as hot dogs and sausages and bacon. Thus, in the presence of healthy bowel bacteria, nitrites cannot form nitrosamines, which are extremely carcinogenic, and related particularly to bowel cancers.
10. Good intestinal bacteria manufacture tremendous amounts of B vitamins, which are crucial to the normal functioning of your nervous system, as well as all your body repairs. Many neurological disturbances and diseases are created by a lack of B vitamins, due to poor bowel bacteria. Fat is burned slower when B vitamins are low. B vitamin assimilation is doubled with the help of proper bowel bacteria. Thus, when alcohol, coffee, and antibiotics inhibit and kill your normal bacteria, you can become Vitamin B deficient. Taking “synthetic” Vitamin B is not the answer.
11. Lactobacilli help create and release the amino acid tryptophan, which your body converts into serotonin, a natural relaxant that makes you feel happy. The “crazy drug,” Prozac, which this “say no to drugs” nation seems to be hooked on, works by slowing down the breakdown of serotonin. Thus, serotonin stays longer in your body to reduce more stress. Consequently, the nice glass of warm goat’s milk, or yogurt, containing the proper bacteria that you drink before bedtime, actually does help you sleep better, because it enhances serotonin. The great goat book, *Heidi*, was quite accurate in its accounts of sick people being healed by goat milk products and fresh mountain air.
12. Normal intestinal bacteria help increase your assimilation of “trace elements” needed for your proper utilization of minerals and vitamins, which would otherwise be excreted and lost in your bowel movement. Simply popping vitamin and mineral pills is, for the most part, a waste of money, and frequently a health hazard. Vitamins and minerals are very difficult to assimilate in any form if there is a deficiency of proper bowel bacteria to process them. *Remember, it is not what you eat that is important; it is what you are able to actually assimilate.* Vitamin pills are, in effect, drugs. Taking large doses of synthetic substances does not convey health. Health is a by-product of “assimilating” nutrients from properly grown food through the intervention of healthy bowel bacteria. (In the U.S. in 2003, \$5 billion was spent on vitamin supplements. I could take Diane on a one-month vacation with that money.)

Our wonderful friend and guardian, the earthworm, has bowel bacteria that increase minerals in its worm casting (poop) up to 700% known over the amount actually eaten by the worm. Our human bowel bacteria, apparently, have similar abilities. Unfortunately, the medical profession does not study nutrition unless being

paid to test a product that can be patented, monopolized, and sold in a pill, preferably petroleum-based.

So, what are some things that destroy the natural healthy microbe life in our body? First in importance is:

- ANTIBIOTICS—Antibiotics do not kill merely the supposed offending bacteria. They also kill large numbers of your normal, necessary, healthy, personal-bodyguard of your “rain forest” of species of good microbes. This “loss of soldiers” allows more growth of bad bugs in your body, particularly fungi. Using antibiotics is in most cases like dropping an atomic bomb hoping it will only affect the bad microbes, but in general it is like setting a forest fire in a lush rain forest in order to control certain nasty weeds. Remember, when normal intestinal bacteria are killed in your body, billions of “parking spaces” on the walls of your intestines become vacant and available. These spaces are rapidly filled with rowdy, potty-mouthed, randy, aggressive bad bacteria, viruses, and fungi. These bum inhabitants and their trashy bum friends, then allow the passage of poisons, large undigested molecules—as in pasteurized homogenized cow’s milk—and many times, their own poop and bodies, through your intestinal wall into your bloodstream, then on to your liver. This harmful intrusion is allowed because your “guards” are gone. Welcome to “leaky gut” syndromes such as IBS, Crohn’s disease and diverticulitis.

This “hole in the dyke” is the beginning of most infection and disease. If the microbe weakness is in your mouth, fungal and viral infections like herpes and thrush can occur, as their kind of trash friends occupy your parking spaces. In your stomach area, ulcers, gastritis, and heartburn occur. In your small intestine, ileitis and duodenal ulcers. In your large intestine, you can experience colitis, Crohn’s disease, spastic colon, diverticulitis, ulcerative colitis, polyps, irritable bowel syndrome (“IBS”), and then on to bowel cancer.²

The autoimmune response of rheumatoid arthritis is now being associated with poor bowel bacteria. Allergic responses appear when your intestinal bacteria are not adequate, allowing “undigested” molecules through your bowel wall into your bloodstream. This reaction creates the “allergy” to processed cow milk (not raw organic milk) that rarely occurs with good-quality fermented milk products like yogurt and kefir. This is because the milk in yogurt is “predigested” by bugs before passing through your bowel wall into your bloodstream. Heart disease increases when the good bacteria are not available to recycle your bile and break down “bad” processed/hydrogenated oils and the consequent “oxidized” cholesterol, the only “bad” cholesterol, that then trashes your artery walls.

² Dr. Michael Cotton M.D. at Duke studied over 4000 premature babies in 19 treatment centers and found prolonged use of antibiotics dramatically increased the incidence of necrotizing (rotting) enterocolitis (inflamed gut) and death in infants given antibiotics. Antibiotics also prevented the good protective bacteria communities from forming. The greater the diversity of microbes in the gut the lower the probability that bad microbes can invade. When the Department of Agriculture introduced 29 different bacteria into farm-raised chickens and then exposed them to salmonella, the exposed chickens had 99% less salmonella colonization than the unexposed chickens.

Yeast infections, such as Candida, become rampant, because yeast thrives in alkaline areas created by lack of acid secretions from your good bacteria. Constipation occurs because the food cannot be broken down properly, and is thus passed along too slowly. Diarrhea results when the body must quickly eliminate bad microorganisms not killed by good ones. Osteoporosis (demineralization of the bones), leading to fractures and humpback, is increased because estrogen cannot be properly saved and recycled. (Remember, healthy bowel bacteria recycle estrogen to be used again.)

I personally believe that many of the cancers are made possible by the incomplete breakdown of processed, pesticided, hormone-treated foods—particularly of commercially grown animal protein without sufficient essential fatty acids in the bowel—due to insufficient bowel flora to break it down. The United States has one of the highest cancer rates in the world, in part because we go way out of our way to kill all microbes possible, regardless of their essential relevance. People, even in the medical arena, don't want to realize that proper microbes are responsible for optimal human health.

- **STOMACH ANTACIDS** decrease the acidity of your stomach and bowel, thereby creating a more alkaline environment. This allows large populations of alkaline-loving bugs, which normally would be killed in your stomach, to grow and escape beyond your stomach into your intestines. This alkalinity inhibits the complete breakdown of foods, particularly proteins, which need huge amounts of the concentrated hydrochloric acid in the stomach to break them down properly. Thus, many people who take antacids go on to have more serious bowel problems. Many antacids also contain aluminum for those people who want to poison their brain cells and develop Alzheimer's disease sooner.
- **LAXATIVES:** The overuse of laxatives slows down the normal “peristaltic action” of your bowel, the normal rhythmical contraction that moves your food along so the food cannot rot and cause trouble by poisoning your good microbes. By slowing bowel contractions, laxatives allow food ample time to ferment, putrefy, and create poisons which knockout your normal bacteria. This allows their parking spaces to be taken by disease-causing microbes. This allows the beginning of various bowel diseases, all of which start with simple inflammation of the bowel wall and early “leaky gut.” If this slowdown is allowed to progress, it can end up as bowel cancer. Your body's immune response becomes inadequate or is eliminated.
- **CHEMOTHERAPY** while at times relevant, kills your normal intestinal bacteria, so fungal infections, such as Candida, are pretty much the rule. These infections are treated with more drugs, so the vicious cycle of bacteria abuse continues. If you are doing chemotherapy, please eat lots of good organic whole-milk yogurts, kefir, miso, raw sauerkraut and raw kimchi, between your doses. (No low-fat, sugared, non-organic yogurt, or pasteurized white vinegar sauerkraut please.)
- **BIRTH CONTROL PILLS and SPERMICIDES** create excessive alkalinity, thus allowing fungal infections. Remember, the normal vaginal and fallopian flora is *Lactobacillus Acidophilus*. With the loss of acidity, nutrient assimilation

goes down, particularly in the Vitamin B area. The AIDS virus cannot live in an acid environment, but does nicely in an alkaline one.

- **PRESERVATIVES IN FOODS:** Remember, they don't kill only the bad bacteria in your food; they also kill your good bacteria. Nitrites and nitrates in hotdogs, sausage, and bologna, and sulfites in many wines and restaurant salads, also kill your good bacteria, which must be replaced to keep you healthy.
- **PESTICIDES and HERBICIDES:** Commercially-raised fruits and vegetables, particularly strawberries and grapes, contain very strong pesticides that kill your intestinal bacteria. Many of the imported fruits and vegetables from Mexico and Central America contain pesticides already banned in the U.S. We dump them there because they are banned here. Duh. That tells you how poisoned they really are. Sprayed mangos, pineapples, papayas, and bananas are all culprits. Remember, humans are just like huge insects. Because we have more body mass, we simply take longer to die! Try to buy organically grown foods whenever possible, as there is now strong link between cancer (particularly breast cancer) and pesticides. Consider that the San Francisco Bay Area, particularly Marin County, has the highest incidence of breast cancer in the entire world. Certain experts consider that it's due to pesticide run-off. Others consider it due to having more money for expensive doctors who must find more illness to avoid lawsuits. Just kidding. Maybe.
- **DRUGS:** Many prescription and over-the-counter drugs, including cortisone, kill and maim your normal bacteria. Alcohol, tobacco smoke, and coffee—particularly grown with herbicides—weaken your intestinal bacteria, thus slowing the assimilation of proper nutrients and inhibiting your elimination of poisons. Hence, cancer cells obtain a hospitable home with lots of extra parking spaces for their little scumball friends.

HOW BABIES ACQUIRE IMMUNITY AND FLORA

The mother's pregnant uterus is sterile and no germs are allowed in to visit the growing fetus. The mother's placenta sends the mother's amazing pre-digested nutrients through the umbilical cord through the baby's "almost belly button" directly into its gut. No bacteria or other intestinal flora are necessary or allowed to help the baby digest food and combat foreign invasion. The mama does it all. (This also applies for some babies 40 years old and older!) So, how does your baby get the proper bacteria for its gut, etc.? Well, the mother's prevalent natural vaginal and fallopian tube flora just happens to be *Lactobacillus Acidophilus*. Yay!

As the baby passes through mama's birth canal, all the baby's orifices, including ears and eyes, are exposed and "inoculated" with about 100 species of the mother's excellent bacteria. This is the beginning of the baby's protective bug population, and thus immunity. If the mother is unhealthy and her vaginal and gut bacterial populations are compromised, the baby may suffer from a weak immune system and have digestive problems. Even the mother's pubic hair is loaded with protective microbes to inoculate

the baby, while also protecting the mother from bad bugs. (It is interesting that the mothers who are shaved for birth more frequently have infections than unshaved mothers. However, many doctors don't like to answer common-sense questions regarding their procedures and indoctrination.) A baby born C-section is like a "clean slate" and thus is at higher risk for infection from "bad microbes".

After she gives birth, a healthy mother's high-fat breast milk contains the colostrum and other necessary immune factors and bugs that the baby needs to round out its digestion and immunity. In many "disease-ridden" places in the world, particularly Asia and Africa, the mothers traditionally do not bathe themselves for about a month after giving birth. This allows their babies to be exposed to all kinds of interesting bugs on mama, which allow the babies immune systems to build many different antibodies and become very strong. This empowers them to thrive in amazingly adversarial environments that "civilized" babies would die quickly in. Considering this, you can see why there are also fewer infections in babies born at home rather than in hospitals with their "super germs." (By 6 months old the baby has about 700 species of microbes and at age 3 has hundreds of thousands.)

**So, what helps restore healthy gastrointestinal bacteria,
and what are their favorite foods?**

Simple answer: Foods that do not weaken and kill them.

TO THE RESCUE: RAW GOAT MILK, GOAT YOGURT and BONE/GELATIN BROTH are probably the best all-around foods for restoring and healing your digestive system. Remember, far more people in the world use goat and sheep products than use cow! I consider goat yogurt to be a "miracle cure" for many gastrointestinal problems. This, in part, is due to the wonderfully balanced proteins and essential fatty acids it contains, as well as being an excellent source of healthy bowel bacteria.

Europeans eat raw fermented cabbage and sauerkrauts, and Asians eat kimchi (basically fermented everything). Tibetans eat rancid yak butter to obtain great bacteria, but it is difficult to find in the U.S., particularly if you are at a beer-and-pizza party. Eskimos and various native people eat some of the bowel contents of the animals they kill in order to obtain the incredibly powerful bowel bacteria they need in order to break down the large amount of animal fat and animal protein they eat. Some Alaskan native peoples first ferment the meat they feed to their sled dogs, because it requires less energy to digest (allowing their dogs to run longer). When you see cats and dogs eating other animals' poop, they are giving themselves a healthy dose of good healthy bowel bacteria as someone is feeding them wrong foods.

It is interesting to note that even with an incredibly high cholesterol intake from whale and seal blubber, salmon and other fish oil, the native Eskimos had no heart disease and no bowel cancer. Nowadays, of course, the Eskimos eat industrial "civilized" foods that ruin their bowels. The American Indians first ate the raw liver of the animal they killed, which is where the main nutrients from the animal's intestines went first to be processed. Some Indian tribes had spring ceremonies where animals' intestines were wrapped around a "May Pole" before being eaten for a "spring tonic." Now that the

Eskimos and Indians have left their predominantly “raw” traditional diet to eat cooked, industrial, poisoned, civilized foods, they have the worst health record, particularly with diabetes, of any United States population. If the Indians continue to eat bad food and build gambling casinos, they will ultimately build law schools. This will give them an insight into the white man.

The Hunzakut people (commonly called “Hunzas”) of northern Pakistan, previously considered the healthiest people in the world, are also being made sick, because American-inspired corporate imitation food is now available to them. The Europeans ferment raw cabbage to make sauerkraut, which is loaded with the good microbes that intestines love. Before the Vitamin C craze, sailors who ate sauerkraut did not develop scurvy, as the fermentation process of sauerkraut increases the Vitamin C ten times over that of the starter cabbage thus no limes were necessary. An old cabbage or sauerkraut in the toilet flushed to the septic tank will revitalize the microbes there who are then more able to eat all the “bad” particles, thus cleaning the tank to prevent it from getting clogged up. “Uncivilized” people rarely get degenerative diseases. Since they do not have food scientists paid by criminally corrupt corporations like Monsanto, they do not commonly poison and cook their meats and milks. They do not eat genetically modified, unnaturally-preserved poisoned grains, fruits and nuts, and thus usually have excellent bowel bacteria. As a result, they rarely develop cancer, diabetes, heart or neurological disease.

I suppose the cynic could argue that uncivilized people rarely get degenerative diseases because they are killed off by the civilized people before they get the chance. However, I will not comment on that, as people might think I am opinionated. The United States has the highest rate of cancer and degenerative disease of any country in the world, though we have the most medical doctors and drug stores.³ (We also have the highest percentage of people in jail per capita (and in number!) of any country in the world, about half of whom are there for marijuana-related offenses. We could say that, in a way, jails are related to drug stores).

Anyway, locally, the Briar Patch Food Co-op, Earth Song Foods (now California Organics), Natural Valley Health Foods, and recently, S.P.D. and Trader Joe’s, now carry good goat yogurt, so go buy some. **Eat one to two cups a day or more for one month (preferably two), and you will notice a nice change in your body’s health.** Your body’s own “soil,” the gastrointestinal flora, will become rich and strong, and you will be more able to break down more of the food you put into it. The great majority of my patients who follow this advice improve their health tremendously, while rebuilding their gut flora and disease resistance.

A good organic whole milk cow yogurt is fine, but is slightly inferior to goat yogurt. This is because the nutrients are not as “bio-available” (able to be assimilated in the body), and the protein, particularly of commercially manufactured pasteurized low-fat cow milk, is actually a hazard to the bowel. I get undue credit for “healing” many

³ It is worth noting that the medical profession has the highest suicide rate of any profession. Psychiatrists have the highest level, and anesthesiologists have ten times the suicide level of the general population. Physicians also experience the highest levels of alcoholism and drug usage; one current source states the average medical doctor is dead at about age 57 (which I (continued on next page) would take with a grain of salt, so probably suspect age 60-65). It is a pathetic fact that the lack of “what creates health” curriculum in the petro- chemical drug-oriented Rockefeller-sanctioned medical schools in the U.S. is basically responsible for making the U.S. a nation of drug-dependent sickos . . .

children with asthma, ear, and chronic respiratory problems, simply by telling parents to avoid commercially cooked cow milk products from cows in confinement dairies, except for certain yogurts, and to eat raw whole organic milk products, particularly raw yogurts and kefirs. You will usually experience a nice change in your general health in three to seven days, but continue eating 1-2 cups of yogurt a day for 30 days. This will ensure a healthy “refloristation” of your bowel, you are bringing back the “rain forest”. From then on, whenever you take antibiotics, or eat foods that kill “good bugs,” dose-up again to avoid weakening your digestive and immune systems.

The average doctor, while being totally committed to making sick people well, simply cannot teach his patients how to be healthy. If doctors in the United States traveled to healthy societies and observed them, perhaps they would return with clues for a healthy society here. So, if you want to stay healthy, simply remember that you should eat in order to “feed” your friendly bacteria. If the food kills your bacteria, it is killing you. Think about it, and if you like your doctor, try to explain this to him or her. It could save his or her life.

Remember, it is not what you eat, but what you don’t eliminate that makes you sick and prematurely old. The saying, “You are what you eat,” is only partially true. I figure *you are what you don’t poop*. Rumor has it that Elvis Presley’s bowel on autopsy weighed around sixty pounds. Thus, obviously a good portion of Elvis was not needed for his well-being. Because Elvis could not eliminate the “non-Elvis,” it killed him.

GOOD THINGS ABOUT NATURAL YOGURT— PARTICULARLY GOAT-MILK YOGURT

Unlike cow milk, goat milk contains natural fluorine, which acts like fluoride to harden horns and hoofs. This helps keep your bones more mineralized and strong. The nutrients in goat milk yogurt are 90% bio-available compared to fish, which is 76%; beef, which is 74%; and corn, which is 59%. This makes goat milk yogurt a particularly good food for old people and babies who are not breastfed. (True story: the old Nelson Rockefeller grandpa offered big bucks to any doctor who could help move his bowels to avoid dying. So, like the old guy in the final chapter of *The Grapes of Wrath*, he ended up drinking human milk from a nursing mama and pooped up a storm!) Anyway, goat milk contains 10 times the lactic acid found in human milk. Goat milk’s high lactic acid content makes it very easy to digest. Goat milk is thus an excellent substitute, when necessary, for human milk. Run-of-the-mill doctors (who are quite unaware that the majority of the world uses goat and sheep products for their non-breast-feeding mothers) will tell new mothers not to give goat products to their babies, because they are low in folic acid (part of the Vitamin B complex) compared to industrial baby formula. However, the research shows that the wise baby bowel bacteria, the *Bifidus Infantis*, increase folic acid to between ten and 100 times over the amount eaten. This is more than enough. Amazing! But true. Did you know that a baby fed soy formula ingests the equivalent estrogen-enhancement of five birth control pills a day? Due to the excessive amount of estrogen in soy, pediatricians are finding that boys’ genitalia are smaller, and girls enter puberty, and develop breasts and public hair, earlier than normal. Until recent corporate advertising arrived from the U.S., Asians did not feed their babies any soy formulas of any kind. Only mother’s milk and animal milk.

The lacto-fermentation process of making yogurt creates a seven-to-ten percent increase in the quality amount of protein over the milk it was made from (the starter milk). Yogurt develops twice as much Vitamin B as its starter milk, and is much more bio-available. Yogurt provides ten times more Vitamin A than the starter milk. One cup of yogurt contains 425 milligrams of calcium compared with only 302 milligrams in the starter milk. Two cups of yogurt supply your entire supposed daily calcium requirement—and that is before it hits your bowel bacteria, so it is undoubtedly more. Yogurt contains precursors of lactase, the enzyme that breaks down lactose (milk sugar) in your gut. Thus, because the lactose already is broken down, most lactose-intolerant people can eat raw milk and yogurt, and benefit from it. (Remember, when you pasteurize (cook) milk you destroy the lactase needed to break down the lactose).

Proteins, fats, and sugars are “predigested” in yogurt, so old folks and babies can digest nutrients easily in fermented foods such as yogurt. It is excellent for babies after breast-feeding is finished. Most babies take to goat milk and yogurt nicely. Remember, all you pediatricians and “medical” midwives who are afraid of supposed B vitamin deficiencies of animal milk, that yogurt contains 3.9 micrograms per 100 grams of folic acid compared to the starter milk, which contains 0.13 to 0.73 micrograms.

Ninety percent of yogurt is digested in one hour, compared to only thirty percent if you drink an equivalent amount of the starter milk. Yogurt microbes increase your absorption of calcium, zinc, iron, magnesium, copper, and phosphorus. This is due to the increase of lactic acid secretion in your bowel created by the yogurt microbes. Yogurt, by increasing the *Lactobacillus Acidophilus* bacteria in the vagina and their secretions of lactic acid and hydrogen peroxide, cure and prevent yeast infections. With yogurt, the vaginal pH (the acidity/alkalinity ratio) goes to four, which is ten to twenty times more acidic than the more alkaline pH of 5-6. Fungi like candida and vaginal herpes viruses love a pH of 5-6, and simply cannot survive the “yogurt effect.” I recently attended a seminar taught by Natasha McBride M.D., a Russian brain surgeon, who stated that many of the Russian and other traditional women used yogurt and kefir topically on their pubic area after their baths to maintain high resistance to infection. (Check out her book in the references.)

So, bottom line—go buy some goat yogurt and some raw goat milk immediately, and start learning about and paying attention to which foods and other products kill your good bacteria. If the milk or yogurt or kefir is from goats that are stressed and fed poorly, or in with Mr. Billy goat, the milk may have a bit of a goaty taste. Simply add a few drops of vanilla (my wife, Diane, uses maple syrup), and the taste is neutralized. The milk of a happy goat, well-fed on good grain, alfalfa, and grass, has minimal goat taste.

Eat one to two cups of good yogurt—goat preferred—each day for a month, though organic whole pasture-fed cow yogurt is also excellent. Avoid “junk” yogurt like Yoplait and other mostly dead-bacteria, low-fat, high-fructose corn syrup yuppie yogurts, and you will significantly strengthen your immune system, improve your food assimilation and elimination, and thus improve your general health and vitality. Remember, your gut rules!

If you are a schmuck, and have an uppity attitude toward goat milk and goat yogurt (usually derived from bad toilet training and incompetent feeble thinking), remember that far more people in the world drink goat and sheep milk than cow’s

milk. A great percentage of those people are much healthier and happier than most Americans, particularly in the reproductive and mental health arenas.

GERMAN, SURINAMESE, AND EGYPTIAN MICROBE STORIES

After reading my composting essay a few years ago, a kind lady brought me a bug article that I found quite interesting. It seems that when the German army was in North Africa during World War II, hundreds of its soldiers were dying of dehydration from dysentery. The top German Brass sent down various microbiologists and other specialists to determine the particular microbe and to come up with a cure of some kind so the soldiers could get on with dying in a more honorable fashion. However, all their best medical efforts failed and the soldiers kept dying. Finally, the officers decided to use common sense instead of German logic, and thus, started to observe the local native Arabs. What they learned was this:

When the natives started to show the first signs of diarrhea, they would follow the camels and horses around until an animal dropped its fresh dung. Then—you got it—the natives would immediately eat the dung. The Germans realized that the particular microbes in the dung were deadly to the microbes that caused the soldiers' dysentery. Rather than copy the antics of an inferior race, the Germans simply used large containers to breed the dung bugs, then fed the “natural anti-biotic microbe medicine” to the sick soldiers, who then recovered enough that they could be killed properly by English and American artillery.

In another story, a patient from Suriname (a little country on the east coast of South America, north of Brazil—for you non-stamp collectors) told me that when he was growing up in his little village, if a person started to get sick, people would take a bucket of water and have the donkey drink out of it. Then, after a day or so, they would have the sick person drink the “donkey water.” The microbes in the donkey's powerful saliva that increased in the warm water (bacteria breed about every twenty minutes) helped to kill the bad bugs in the sick person. This little trick sped up the sick person's healing as it sped up the immunity.

When our family was trekking high in the mountains in Nepal, I warned everyone that if we got sick in the middle of nowhere, I would utilize the horse manure of the pack-horses and “medicate” whoever was sick. There is a good chance it would have worked, but luckily everyone was too scared to get sick.

Egyptian medicine, almost three thousand years B.C., used hundreds of urine and manure recipes from different animals: Dogs, peacocks, crocodiles, etc., employing a rationale that we are just now starting to understand. When a person has a disease that involves certain microbes, the microbes that are sick and dead are eliminated in the sick person's feces. In the sick person's feces are found fungi that are relevant to killing the particular bad bacteria or virus. Remember that current antibiotics, like penicillin, are derived from fungus/mold. The fungus sets up a “kill zone” that keeps the bad bacteria a certain distance away. This “stand-off” gives your immune system more time to create and disperse your specific antibody response to the bad bug. Remember, antibiotics don't actually kill bad bugs; they simply slow down the bug's ability to reproduce, which then gives you time to build up your own perfect antibodies. If your immune system is too weak to build them – you are in big trouble. At any rate, the early

Egyptians were on to “primitive antibiotics” thousands of years before Fleming discovered penicillin from molds in 1923.

I write all this odd stuff so you can start to get an overview on the importance of microbes and their importance to humans. For years we have had minimal respect for bugs, and have gone out of our way to kill as many of them as possible. We love the word “sterile.” However, we need to learn, particularly as modern antibiotics become progressively less effective, that good bugs are our friends. Killing our soil, and killing our food and water, is killing us. We have great telescopes to look out into the cosmos and see huge, amazing, and wondrous things. I think we need to quickly look for a while in the other direction—into the microscope, into the micro-cosmos—with the same diligence that we seek out the great cosmos. It is now time for “real doctors” to learn everything possible about the very basis of our continuing existence on earth—healthy microbes.

So here is the drill: Eat 1-2 cups or more (as much as you like) of yogurt and/or kefir from good whole organic grass-fed milk, or organic “raw” (uncooked) sauerkraut or kimchee for 3-5 weeks. This will in most cases get your digestive and immune systems back on the right road to health.⁴

⁴ P.S. Interesting wave of the future. Checkout the September 2010 Journal of Clinical Gastroenterology for a medley of studies on fecal implants. Alexander Khorut M.D. an immunologist and gastroenterologist is showing amazing results (an understatement) with fecal transplants from people with healthy bowels into the bowels of unhealthy people. *Clostridium difficile* is a nasty bacteria associated with ulcerative colitis that can kill you dead. One of Dr. Khorut’s first projects was providing a dying wife with a fecal implant from her healthy husband (I have heard stories of husbands giving their wives a load of S#@! but this takes the cake.) In the future, instead of taking vitamins and pep pills people might simply take their daily poop pills. Apparently, Dr. Khorut, and other doctors using the same procedures cure rates on now dozens of dying patients is close to 100%. In the very near future, we will undoubtedly be hearing about fecal transplants for infants’ gut and other digestive problems, as well as degenerative “immune” conditions. So, next door to the blood bank we may soon see a bank for.....never mind. Think it will rain.