



I-ACT

International Association for Colon Hydrotherapy

Quarterly
Winter 2018-19

SOME OF MY BEST FRIENDS ARE GERMS

HOME REMEDY: HOW TO RELIEVE A COLD

WHAT ARE YOUR FARTS TRYING TO TELL YOU?

UNLOCKING THE SECRETS OF THE MICROBIOME

WHAT DOES I-ACT DO FOR YOU?

DOROTHY HAWKS MEMORIAL

NOMINATIONS FOR ELECTIONS INFORMATION

2019 CONVENTION ANNOUNCEMENT



P.O. Box 461285
San Antonio, TX 78246-1285
Phone: 210-366-2888

Fax: 210-366-2999
homeoffice@i-act.org
www.i-act.org

Colon irrigation devices are prescription devices by federal law. A practitioner licensed by state law to use such prescription devices must authorize the purchase of the colon irrigation device, must use or supervise its use, and must order each colon irrigation for a patient.”

Disclaimer:

I-ACT neither endorses, approves, nor supports any products advertised in this Quarterly Newsletter. These advertisements are provided to the membership by each advertiser. Additionally, the readers should assure themselves that the material presented herein is current and applicable at the time it is read. The authors cannot warrant that the material will continue to be accurate. Readers should verify statements before relying on them. No statement herein shall be considered a legal opinion nor a substitute for the advice of an attorney. For the most recent and complete interpretation of laws, please consult an attorney.

CONTENTS

I-ACT Policy Statement 2
I-ACT's President Letter 3
NBCHT President Letter 4
Home Remedy: How to Relieve a Cold 5
Some Of My Best Friends Are Germs 6 - 17
What Are Your Farts Trying to Tell You 18 - 19 & 25
2019 Convention Announcement 20-21
Unlocking the Secrets of the Microbiome 22 - 24
Become a Mentor 24
For Sale 26
Dorothy Hawks Memorial 27
Attention IL Members !!! Letter from Dorothy Chandler 28
Election Nomination Information 29
What Does I-ACT Do For You 30
Manufacturers Ads 31 - 36
Professional Liability Insurance 37
New Member List 39

I-ACT Policy Statements:

I-ACT requires the use of currently registered FDA equipment and only disposable speculums, rectal tubes, or rectal nozzles. However, should the Therapist use reusable speculums, these speculums should, at a minimum, be autoclaved for sanitation and cleanliness (30 minutes). Additionally, the autoclave unit must be tested and inspected by competent authority at least four times per year- maintain documentation. (Under NO conditions should a disposable speculum or rectal tube be reused). Individuals that use reusable speculums and/or are not using FDA registered devices will be removed from I-ACT membership on 12/31/2018.

I-ACT recognizes the FDA classifies equipment used to instill water into the colon through a nozzle inserted into the rectum to evacuate the contents of the colon into three distinct classes; Class I (Enema Kits), Class II and Class III are (Colon Irrigation Systems). Follow the guidelines of your manufacturer, as approved by the FDA for the type of equipment (devices) you are using. Make no claims as to the use of your device other than those approved by the FDA.

The main differences between Class I and Class II devices:

The code of federal regulations CFR 876.5210 & 876.5220 describe the differences between the Class I and the Class II devices. From that regulation, a Class I device is an enema system and does not include "colonic irrigation devices". A "colon irrigation device" is a Class II device, which in part is described as: "The system is designed to allow evacuation of the contents of the colon during the administration of the colonic irrigation.

The Class I Device:

- The Class I device is defined as an enema system and may not have temperature control, temperature gauges or water purification as part of the device. Class I enema systems must be self-administered.
Manufacturers of Class I devices are not required to have third party oversight as they need not comply with the good manufacturing practices and record keeping that are required of Class II manufacturers. Class I devices are not as heavily regulated and controlled by the FDA as Class II devices are.
Owners of Class I devices may not market their service using the terms "colonics or colonic irrigation" in describing the scope of their practice of evacuating the contents of the lower bowel.

The Class II Device:

- The Class II Device is a "colonic irrigation device".
Manufacturers of Class II devices are required to have third party oversight and must comply with the good manufacturing practices and record keeping that are required by the FDA. Class II devices are heavily regulated and controlled by the FDA.
The FDA requires Class II devices to be sold and used on or at the order of a physician or health care practitioner. This may be different in each state.

Although I-ACT is not aware of any laws that preclude you from assisting an individual with an enema, I-ACT does want you to consider upgrading your equipment to the equipment that provides the greatest safeguards to the public. In this profession, that would be equipment marketed as Class II devices.

Remember that I-ACT strongly recommends that all I-ACT members use FDA registered Class II devices or devices equivalent to Class II devices regulated by the appropriate agency in your country. Only individuals using FDA registered equipment will be placed on the I-ACT Web Site. As of 12/31/2018, only individuals that use FDA registered devices may be I-ACT members. Purchase equipment at your own risk. Ensure you are in compliance with your local, state, federal and country guidelines. Ensure that equipment you purchase is cleared for use in your country.

I-ACT recognizes there are two distinct types of colon irrigation systems; open and closed systems. However, it is I-ACT policy that the colon hydrotherapist / technician is always in attendance / or is immediately available to the client throughout the session. The degree of assistance is to be in compliance with the instructions of the manufacturer of the equipment as registered with the FDA, and/or as directed by a physician.

The policy on insertion is to require the client to insert the rectal tube or speculum; or, follow the instruction of the referring physician; the guidelines of the manufacturer as approved by the FDA; or the directives from the authority of your city, county, state, or country ordinances.

I-ACT recommends that you do not put the initials (CT) for colon hydrotherapist after your name, write it out in full. According to most state laws, putting initials after your name is not allowed unless you are licensed or have a degree from an accredited professional school.

Advertising copy which states or implies that colon hydrotherapy can treat any disease, promise cure for any disease, or that makes unsubstantiated medical claims SHALL NOT be used.





Dear Members,

It is amazing how fast time flies. It seems like 2018 flew by and here we are getting ready for 2019.

This will mark the 30th year of I-ACT. That is right. It has been 30 years since we were formed. That seems

like such a long time, but it has passed so quickly. We recently lost one of our founding members, Dorothy Hawks. Dorothy was one of the original members of ACTA (the American Colon Therapy Association) founded in 1989. The name was changed in 1992, from ACTA to I-ACT.

We plan on honoring all our founders, past presidents and members at our 30th Annual Convention. Make plans to attend this gala event and hear about our beginnings, learn about your heritage and understand your responsibilities as a member of the greatest Colon Hydrotherapy Association in the world.

Speaking of our 2019 Convention, the theme is “The Healing Power of Water”. This convention is about connection, learning, inspiration and fun! The 30th year is recognized by the pearl which is about wisdom (that deeper part inside ourselves) and continuing to build our international relationships.

We have some great speakers signed up to educate us at this convention. Over the years, you have enjoyed and you have wanted to hear again from such greats as Brenda Watson, Anne Louise Gittleman, and Gloria Gilbere. New speakers this year include Carolyn Gross, Frances Flannery and Jon Butts. These speakers will both educate and entertain us. Don't miss out.

In addition, we have some educational workshops and some fun and entertaining events planned. Meet the Exhibitors and our International members on Wednesday evening at our Meet and Greet. We will have our President's Award Banquet & Celebration on Friday evening, dress up and have a great time. Look on page 20 of this quarterly for our Medieval Times excursion. It will be a lot of fun and very entertaining.

Also, in this quarterly is the registration form for the 2019 Convention. Register early, save some money, and make sure that you reserve your room at the Embassy Suites.

As I-ACT continues to grow, we have started a Mentorship Program. This program is set up for everyone and that has a desire to help others or for anyone that may need assistance. A great opportunity for each of us to learn from the other.

2019 will be a great year for I-ACT and our profession. As an odd year, we also will have our biannual election for our Board of Directors.

If you would like to donate some of your time, then please review the guidelines for our election process on page 35. Our Association is only as strong as the individuals we have on the Board. Our current Board is doing a fantastic job; however, if you believe you have something to offer, please send in your nomination letter. This is the time to act.

As we start into 2019, we have introduced our new I-ACT Web site. This web site is designed to bring a brand new, cutting edge, look to I-ACT. as we move into the future. We know there is still a lot of work to do to get it the way we want, if you see anything that needs to be changed, please let us know.

We hope you enjoy this effort.

The Board and I look forward to working for you and with you to make I-ACT even stronger. We are all part of the I-ACT circle of unity, love and support.

I look forward to seeing you all at the convention.

Wishing you all a Great 2019.

In Peace and Unity,

Beverley Blass

I-ACT President

National Board for Colon HydroTherapy NBCHT



11103 San Pedro Ave., Suite 117, San Antonio, TX 78216
Office: 210-308-8288 • Fax: 210-366-2999
www.nbcht.org



From The Desk Of: Bekki Medsker, ND, D.Ch.
NBCHT President

To: All Members of NBCHT

As we prepare for 2019, your NBCHT Board wishes you and yours a profitable and health-filled New Year.

This is a time to reflect and prepare for this New Year. When reading the I-ACT President's letter, you see that I-ACT has been around for 30 years. Congratulations to I-ACT and to all of the members that helped to make this such a fantastic organization.

One of the reasons it has been able to last this long is because I-ACT has established strong and important standards and procedures that a practicing colon hydrotherapist should embody. As our profession has attempted to get legislation in some states, the legislative bodies want to know there is an examination that they can depend on.

That is the function that the NBCHT serves for our profession. The NBCHT exam is used by the only state in the US that licenses colon hydrotherapists, and that state is Florida. The NBCHT exam is also recognized in CT and CO. The NBCHT has a policy to make this exam available to any state that is seeking legislation to help speed up the process and support the effort. In addition, the National Board exam is "legally defensible in the event of a judicial action against a colon hydrotherapist". This is a very important point that cannot be over emphasized.

You probably are asking yourself, "What you can I do to help I-ACT and the NBCHT get another 30 years?" The answer is simple. Get your training to the Intermediate level and then take the NBCHT Credentialing Exam for colon hydrotherapy. We need your help to assist us in getting another 30 years. Will you do your part?

If you are already a NBCHT member, then you know that there are new CEU requirements are in place for the NBCHT.

- Each NBCHT Member is to get 12 CE's per year.
- Upon renewing your NBCHT Certificate, the member is to declare that they have 12 CEUs. The NBCHT will do random audits to check for proof.
- If the I-ACT convention is used for CEUs, the member must attend 12 hours of lectures at the convention.
- CEUs for medical professionals may be accepted. These types of CEUs should reflect education to such things as HIV, Hepatitis C, OSHA standards.
- Additionally, Massage, Nutritional Consulting, Reflexology, and systems training (on colon hydrotherapy devices), may also be accepted just to name a few.
- Some of these CEUs can be easily obtained on line for very reasonable rates making it within reach for everyone's budget.

If you have any questions about your CE requirements for this year, please contact the NBCHT Office. (210-308-8288).

Thank you for doing your part to help us grow our Association and our Profession.

Sincerely,

Thank you for doing your part to help us grow our Association and our Profession.

Sincerely,

*Bekki Medsker
Bekki Medsker, ND, D.Ch
NBCHT President*



Home Remedies: How to Relieve a Cold

What can we do to help our bodies through the process **remedies** for your body and mind.

Natural Remedies to Provide Cold Relief

- Rose hip tea is full of vitamin C and can help prevent colds in advance.
- Lemons, oranges, and apple cider are all considered to be cold remedies.
- For chills, take fresh ginger root.
- Historically, the layers of the onion were believed to draw contagious diseases from the patient; onions were often hung in sickrooms. Today, we know that onions have antibacterial qualities.
- Cut up fresh garlic cloves and add them to chicken soup or other foods, or swallow small chunks of raw garlic like pills. Try [Granny's Best Chicken Soup](#).
- Eat loads of hot and spicy foods like chili to clear the sinuses.
- Like garlic and onion, horseradish generates lots of heat to help offset colds. According to one farmer we know, a daily horseradish sandwich is the best cold remedy out there!
- Prunes are rich in fiber, vitamins A and B, iron, calcium, and phosphorus. And they've been cured themselves!
- To treat sore lips, go to bed with honey on them.
- Troubled by cracked lips? Massage them with a dab of earwax (preferably your own!).

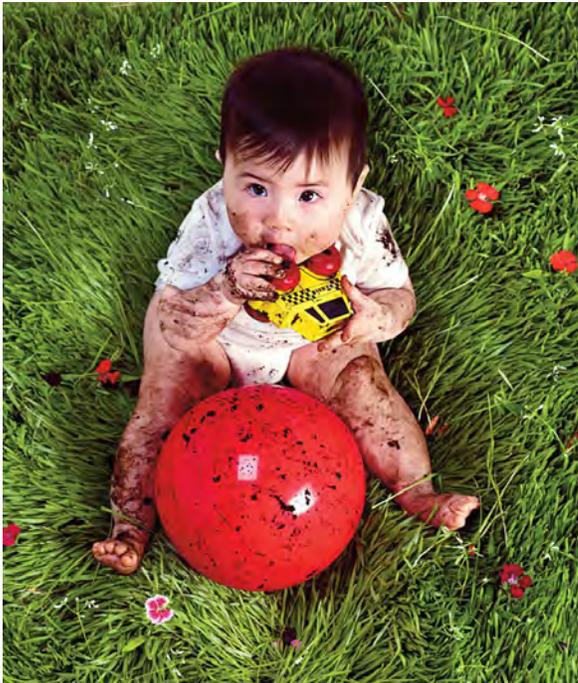
For a **chest cold** or **bronchitis**, try this remedy, submitted by one of our readers.

Boil a whole onion, and afterward, drink the water. You can add a little butter and salt if the taste is unbearable!

Some of My Best Friends Are Germs

By Michael Pollan

Originally published May 15, 2013, *New York Times Magazine*



I can tell you the exact date that I began to think of myself in the first-person plural — as a superorganism, that is, rather than a plain old individual human being. It happened on March 7. That’s when I opened my e-mail to find a huge, processor-choking file of charts and raw data from a laboratory located at the BioFrontiers Institute at the University of Colorado, Boulder. As part of a new citizen-science initiative called the American Gut project, the lab sequenced my microbiome — that is, the genes not of “me,” exactly, but of the several hundred microbial species with whom I share this body. These bacteria, which number around 100 trillion, are living (and dying) right now on the surface of my skin, on my tongue and deep in the coils of my intestines, where the largest contingent of them will be found, a pound or two of microbes together forming a vast, largely uncharted interior wilderness that scientists are just beginning to map.

I clicked open a file called Taxa Tables, and a colorful bar chart popped up on my screen. Each bar represented a sample taken (with a swab) from my skin, mouth and feces. For purposes of comparison, these were juxtaposed with bars representing the microbiomes of about 100 “average” Americans previously sequenced.

Here were the names of the hundreds of bacterial species that call me home. In sheer numbers, these microbes and their genes dwarf us. It turns out that we are only 10 percent human: for every human cell that is intrinsic to our body, there are about 10 resident microbes — including commensals (generally harmless freeloaders) and mutualists (favor traders) and, in only a tiny number of cases, pathogens. To the extent that we are bearers of genetic information, more than 99 percent of it is microbial. And it appears increasingly likely that this “second genome,” as it is sometimes called, exerts an influence on our health as great and possibly even greater than the genes we inherit from our parents. But while your inherited genes are more or less fixed, it may be possible to reshape, even cultivate, your second genome.

Justin Sonnenburg, a microbiologist at Stanford, suggests that we would do well to begin regarding the human body as “an elaborate vessel optimized for the growth and spread of our microbial inhabitants.” This humbling new way of thinking about the self has large implications for human and microbial health, which turn out to be inextricably linked. Disorders in our internal ecosystem — a loss of diversity, say, or a proliferation of the “wrong” kind of microbes — may predispose us to obesity and a whole range of chronic diseases, as well as some infections. “Fecal transplants,” which involve installing a healthy person’s microbiota into a sick person’s gut, have been shown to effectively treat an antibiotic-resistant intestinal pathogen named *C. difficile*, which kills 14,000 Americans each year. (Researchers use the word “microbiota” to refer to all the microbes in a community and “microbiome” to refer to their collective



genes.) We've known for a few years that obese mice transplanted with the intestinal community of lean mice lose weight and vice versa. (We don't know why.) A similar experiment was performed recently on humans by researchers in the Netherlands: when the contents of a lean donor's microbiota were transferred to the guts of male patients with metabolic syndrome, the researchers found striking improvements in the recipients' sensitivity to insulin, an important marker for metabolic health. Somehow, the gut microbes were influencing the patients' metabolisms.

Our resident microbes also appear to play a critical role in training and modulating our immune system, helping it to accurately distinguish between friend and foe and not go nuts on, well, nuts and all sorts of other potential allergens. Some researchers believe that the alarming increase in autoimmune diseases in the West may owe to a disruption in the ancient relationship between our bodies and their "old friends" — the microbial symbionts with whom we coevolved.

These claims sound extravagant, and in fact many microbiome researchers are careful not to make the mistake that scientists working on the human genome did a decade or so ago, when they promised they were on the trail of cures to many diseases. We're still waiting. Yet whether any cures emerge from the exploration of the second genome, the implications of what has already been learned — for our sense of self, for our definition of health and for our attitude toward bacteria in general — are difficult to overstate. Human health should now "be thought of as a collective property of the human-associated microbiota," as one group of researchers recently concluded in a landmark review article on microbial ecology — that is, as a function of the community, not the individual.

Such a paradigm shift comes not a moment too soon, because as a civilization, we've just spent the better part of a century doing our unwitting best to wreck the human-associated microbiota with a multifronted war on bacteria and a diet notably detrimental to its well-being. Researchers now speak of an impoverished "Westernized microbiome" and ask whether the time has come to embark on a project of "restoration ecology" — not in the rain forest or on the prairie but right here at home, in the human gut.

In March I traveled to Boulder to see the Illumina HiSeq 2000 sequencing machine that had shed its powerful light on my own microbiome and to meet the scientists and computer programmers who were making sense of my data. The lab is headed by Rob Knight, a rangy, crew-cut 36-year-old biologist who first came to the United States from his native New Zealand to study invasive species, a serious problem in his home country. Knight earned his Ph.D. in ecology and evolutionary biology from Princeton when he was 24 and then drifted from the study of visible species and communities to invisible ones. Along the way he discovered he had a knack for computational biology. Knight is regarded as a brilliant analyst of sequencing data, skilled at finding patterns in the flood of information produced by the machines that "batch sequence" all the DNA in a sample and then tease out the unique genetic signatures of each microbe. This talent explains why so many of the scientists exploring the microbiome today send their samples to be sequenced and analyzed by his lab; it is also why you will find Knight's name on most of the important papers in the field.

Over the course of two days in Boulder, I enjoyed several meals with Knight and his colleagues, postdocs and graduate students, though I must say I was a little taken aback by the table talk. I don't think I've ever heard so much discussion of human feces at dinner, but then one thing these scientists are up to is a radical reevaluation of the contents of the human colon. I learned about Knight's 16-month-old daughter, who has had most of the diapers to which she has contributed sampled and sequenced. Knight said at dinner that he sampled himself every day; his wife, Amanda Birmingham, who joined us one night, told me that she was

happy to be down to once a week. “Of course I keep a couple of swabs in my bag at all times,” she said, rolling her eyes, “because you never know.”

A result of the family’s extensive self-study has been a series of papers examining family microbial dynamics. The data helped demonstrate that the microbial communities of couples sharing a house are similar, suggesting the importance of the environment in shaping an individual’s microbiome. Knight also found that the presence of a family dog tended to blend everyone’s skin communities, probably via licking and petting. One paper, titled “Moving Pictures of the Human Microbiome,” tracked the day-to-day shifts in the microbial composition of each body site. Knight produced animations showing how each community — gut, skin and mouth — hosted a fundamentally different cast of microbial characters that varied within a fairly narrow range over time.

Knight’s daily sampling of his daughter’s diapers (along with those of a colleague’s child) also traced the remarkable process by which a baby’s gut community, which in utero is sterile and more or less a blank slate, is colonized. This process begins shortly after birth, when a distinctive infant community of microbes assembles in the gut. Then, with the introduction of solid food and then weaning, the types of microbes gradually shift until, by age 3, the baby’s gut comes to resemble an adult community much like that of its parents.

The study of babies and their specialized diet has yielded key insights into how the colonization of the gut unfolds and why it matters so much to our health. One of the earliest clues to the complexity of the microbiome came from an unexpected corner: the effort to solve a mystery about milk. For years, nutrition scientists were confounded by the presence in human breast milk of certain complex carbohydrates, called oligosaccharides, which the human infant lacks the enzymes necessary to digest. Evolutionary theory argues that every component of mother’s milk should have some value to the developing baby or natural selection would have long ago discarded it as a waste of the mother’s precious resources.

It turns out the oligosaccharides are there to nourish not the baby but one particular gut bacterium called *Bifidobacterium infantis*, which is uniquely well-suited to break down and make use of the specific oligosaccharides present in mother’s milk. When all goes well, the bifidobacteria proliferate and dominate, helping to keep the infant healthy by crowding out less savory microbial characters before they can become established and, perhaps most important, by nurturing the integrity of the epithelium — the lining of the intestines, which plays a critical role in protecting us from infection and inflammation.

“Mother’s milk, being the only mammalian food shaped by natural selection, is the Rosetta stone for all food,” says Bruce German, a food scientist at the University of California, Davis, who researches milk. “And what it’s telling us is that when natural selection creates a food, it is concerned not just with feeding the child but the child’s gut bugs too.”

Where do these all-important bifidobacteria come from and what does it mean if, like me, you were never breast-fed? Mother’s milk is not, as once was thought, sterile: it is both a “prebiotic” — a food for microbes — and a “probiotic,” a population of beneficial microbes introduced into the body. Some of them may find their way from the mother’s colon to her milk ducts and from there into the baby’s gut with its first feeding. Because designers of infant formula did not, at least until recently, take account of these findings, including neither prebiotic oligosaccharides or probiotic bacteria in their formula, the guts of bottle-fed babies are not optimally colonized.



Most of the microbes that make up a baby's gut community are acquired during birth — a microbially rich and messy process that exposes the baby to a whole suite of maternal microbes. Babies born by Caesarean, however, a comparatively sterile procedure, do not acquire their mother's vaginal and intestinal microbes at birth. Their initial gut communities more closely resemble that of their mother's (and father's) skin, which is less than ideal and may account for higher rates of allergy, asthma and autoimmune problems in C-section babies: not having been seeded with the optimal assortment of microbes at birth, their immune systems may fail to develop properly.

At dinner, Knight told me that he was sufficiently concerned about such an eventuality that, when his daughter was born by emergency C-section, he and his wife took matters into their own hands: using a sterile cotton swab, they inoculated the newborn infant's skin with the mother's vaginal secretions to insure a proper colonization. A formal trial of such a procedure is under way in Puerto Rico.

While I was in Boulder, I sat down with Catherine A. Lozupone, a microbiologist who had just left Knight's lab to set up her own at the University of Colorado, Denver, and who spent some time looking at my microbiome and comparing it with others, including her own. Lozupone was the lead author on an important 2012 paper in *Nature*, "Diversity, Stability and Resilience of the Human Gut Microbiota," which sought to approach the gut community as an ecologist might, trying to determine the "normal" state of the ecosystem and then examining the various factors that disturb it over time. How does diet affect it? Antibiotics? Pathogens? What about cultural traditions? So far, the best way to begin answering such questions may be by comparing the gut communities of various far-flung populations, and researchers have been busy collecting samples around the world and shipping them to sequencing centers for analysis. The American Gut project, which hopes to eventually sequence the communities of tens of thousands of Americans, represents the most ambitious such effort to date; it will help researchers uncover patterns of correlation between people's lifestyle, diet, health status and the makeup of their microbial community.

It is still early days in this research, as Lozupone (and everyone else I interviewed) underscored; scientists can't even yet say with confidence exactly what a "healthy" microbiome should look like. But some broad, intriguing patterns are emerging. More diversity is probably better than less, because a diverse ecosystem is generally more resilient — and diversity in the Western gut is significantly lower than in other, less-industrialized populations. The gut microbiota of people in the West looks very different from that of a variety of other geographically dispersed peoples. So, for example, the gut community of rural people in West Africa more closely resembles that of Amerindians in Venezuela than it does an American's or a European's.

These rural populations not only harbor a greater diversity of microbes but also a different cast of lead characters. American and European guts contain relatively high levels of bacteroides and firmicutes and low levels of the prevotella that dominate the guts of rural Africans and Amerindians. (It is not clear whether high or low levels of any of these is good or bad.) Why are the microbes different? It could be the diet, which in both rural populations features a considerable amount of whole grains (which prevotella appear to like), plant fiber and very little meat. (Many firmicutes like amino acids, so they proliferate when the diet contains lots of protein; bacteroides metabolize carbohydrates.) As for the lower biodiversity in the West, this could be a result of our profligate use of antibiotics (in health care as well as the food system), our diet of processed food (which has generally been cleansed of all bacteria, the good and the bad), environmental toxins and generally less "microbial pressure" — i.e., exposure to bacteria — in everyday life. All of this may help explain why, though these rural populations tend to have greater exposures to

infectious diseases and lower life expectancies than those in the West, they also have lower rates of chronic disorders like allergies, asthma, Type 2 diabetes and cardiovascular disease.



“Rural people spend a lot more time outside and have much more contact with plants and with soil,” Lozupone says. Another researcher, who has gathered samples in Malawi, told me, “In some of these cultures, children are raised communally, passed from one set of hands to another, so they’re routinely exposed to a greater diversity of microbes.” The nuclear family may not be conducive to the health of the microbiome.

As it happens, Lozupone and I had something in common, microbially speaking: we share unusually high levels of prevotella for Americans. Our gut communities look more like those of rural Africans or Amerindians than like those of our neighbors. Lozupone suspects that the reasons for this might have to do with a plant-based diet; we each eat lots of whole grains and vegetables and relatively little meat. (Though neither of us is a vegetarian.) Like me, she was proud of her prevotella, regarding it as a sign of a healthy non-Western diet, at least until she began doing research on the microbiota of H.I.V. patients. It seems that they, too, have lots of prevotella. Further confusing the story, a recent study linking certain gut microbes common in meat eaters to high levels of a blood marker for heart disease suggested that prevotella was one such microbe. Early days, indeed.

Two other features of my microbiome attracted the attention of the researchers who examined it. First, the overall biodiversity of my gut community was significantly higher than that of the typical Westerner, which I decided to take as a compliment, though the extravagantly diverse community of microbes on my skin raised some eyebrows. “Where have your hands been, man?” Jeff Leach of the American Gut project asked after looking over my results. My skin harbors bacteria associated with plants, soil and a somewhat alarming variety of animal guts. I put this down to gardening, composting (I keep worms too) and also the fact that I was fermenting kimchi and making raw-milk cheese, “live-culture” foods teeming with microbes.

Compared to a rain forest or a prairie, the interior ecosystem is not well understood, but the core principles of ecology — which along with powerful new sequencing machines have opened this invisible frontier to science — are beginning to yield some preliminary answers and a great many more intriguing hypotheses. Your microbial community seems to stabilize by age 3, by which time most of the various niches in the gut ecosystem are occupied. That doesn’t mean it can’t change after that; it can, but not as readily. A change of diet or a course of antibiotics, for example, may bring shifts in the relative population of the various resident species, helping some kinds of bacteria to thrive and others to languish. Can new species be introduced? Yes, but probably only when a niche is opened after a significant disturbance, like an antibiotic storm. Just like any other mature ecosystem, the one in our gut tends to resist invasion by newcomers.

You acquire most of the initial microbes in your gut community from your parents, but others are picked up from the environment. “The world is covered in a fine patina of feces,” as the Stanford microbiologist Stanley Falkow tells students. The new sequencing tools have confirmed his hunch: Did you know that house dust can contain significant amounts of fecal particles? Or that, whenever a toilet is flushed, some

of its contents are aerosolized? Knight's lab has sequenced the bacteria on toothbrushes. This news came during breakfast, so I didn't ask for details, but got them anyway: "You want to keep your toothbrush a minimum of six feet away from a toilet," one of Knight's colleagues told me.

Some scientists in the field borrow the term "ecosystem services" from ecology to catalog all the things that the microbial community does for us as its host or habitat, and the services rendered are remarkably varied and impressive. "Invasion resistance" is one. Our resident microbes work to keep pathogens from gaining a toehold by occupying potential niches or otherwise rendering the environment inhospitable to foreigners. The robustness of an individual's gut community might explain why some people fall victim to food poisoning while others can blithely eat the same meal with no ill effects.

Our gut bacteria also play a role in the manufacture of substances like neurotransmitters (including serotonin); enzymes and vitamins (notably Bs and K) and other essential nutrients (including important amino acid and short-chain fatty acids); and a suite of other signaling molecules that talk to, and influence, the immune and the metabolic systems. Some of these compounds may play a role in regulating our stress levels and even temperament: when gut microbes from easygoing, adventurous mice are transplanted into the guts of anxious and timid mice, they become more adventurous. The expression "thinking with your gut" may contain a larger kernel of truth than we thought.

The gut microbes are looking after their own interests, chief among them getting enough to eat and regulating the passage of food through their environment. The bacteria themselves appear to help manage these functions by producing signaling chemicals that regulate our appetite, satiety and digestion. Much of what we're learning about the microbiome's role in human metabolism has come from studying "gnotobiotic mice" — mice raised in labs like Jeffrey I. Gordon's at Washington University, in St. Louis, to be microbially sterile, or germ-free. Recently, Gordon's lab transplanted the gut microbes of Malawian children with kwashiorkor — an acute form of malnutrition — into germ-free mice. The lab found those mice with kwashiorkor who were fed the children's typical diet could not readily metabolize nutrients, indicating that it may take more than calories to remedy malnutrition. Repairing a patient's disordered metabolism may require reshaping the community of species in his or her gut.

Keeping the immune system productively engaged with microbes — exposed to lots of them in our bodies, our diet and our environment — is another important ecosystem service and one that might turn out to be critical to our health. "We used to think the immune system had this fairly straightforward job," Michael Fischbach, a biochemist at the University of California, San Francisco, says. "All bacteria were clearly 'nonself' so simply had to be recognized and dealt with. But the job of the immune system now appears to be far more nuanced and complex. It has to learn to consider our mutualists" — e.g., resident bacteria — "as self too. In the future we won't even call it the immune system, but the microbial interaction system." The absence of constructive engagement between microbes and immune system (particularly during certain windows of development) could be behind the increase in autoimmune conditions in the West.

So why haven't we evolved our own systems to perform these most critical functions of life? Why have we outsourced all this work to a bunch of microbes? One theory is that, because microbes evolve so much faster than we do (in some cases a new generation every 20 minutes), they can respond to changes in the environment — to threats as well as opportunities — with much greater speed and agility than "we" can. Exquisitely reactive and adaptive, bacteria can swap genes and pieces of DNA among themselves. This versatility is especially handy when a new toxin or food source appears in the environment. The microbiota can swiftly come up with precisely the right gene needed to fight it — or eat it. In one recent

study, researchers found that a common gut microbe in Japanese people has acquired a gene from a marine bacterium that allows the Japanese to digest seaweed, something the rest of us can't do as well.

This plasticity serves to extend our comparatively rigid genome, giving us access to a tremendous bag of biochemical tricks we did not need to evolve ourselves. “The bacteria in your gut are continually reading the environment and responding,” says Joel Kimmons, a nutrition scientist and epidemiologist at the Centers for Disease Control and Prevention in Atlanta. “They’re a microbial mirror of the changing world. And because they can evolve so quickly, they help our bodies respond to changes in our environment.”

A handful of microbiologists have begun sounding the alarm about our civilization’s unwitting destruction of the human microbiome and its consequences. Important microbial species may have already gone extinct, before we have had a chance to learn who they are or what they do. What we think of as an interior wilderness may in fact be nothing of the kind, having long ago been reshaped by unconscious human actions. Taking the ecological metaphor further, the “Westernized microbiome” most of us now carry around is in fact an artifact of civilization, no more a wilderness today than, say, the New Jersey Meadowlands.

To obtain a clearer sense of what has been lost, María Gloria Dominguez-Bello, a Venezuelan-born microbiologist at New York University, has been traveling to remote corners of the Amazon to collect samples from hunter-gatherers who have had little previous contact with Westerners or Western medicine. “We want to see how the human microbiota looks before antibiotics, before processed food, before modern birth,” she told me. “These samples are really gold.”

Preliminary results indicate that a pristine microbiome — of people who have had little or no contact with Westerners — features much greater biodiversity, including a number of species never before sequenced, and, as mentioned, much higher levels of prevotella than is typically found in the Western gut. Dominguez-Bello says these vibrant, diverse and antibiotic-naïve microbiomes may play a role in Amerindians’ markedly lower rates of allergies, asthma, atopic disease and chronic conditions like Type 2 diabetes and cardiovascular disease.

One bacterium commonly found in the non-Western microbiome but nearly extinct in ours is a corkscrew-shaped inhabitant of the stomach by the name of *Helicobacter pylori*. Dominguez-Bello’s husband, Martin Blaser, a physician and microbiologist at N.Y.U., has been studying *H. pylori* since the mid-1980s and is convinced that it is an endangered species, the extinction of which we may someday rue. According to the “missing microbiota hypothesis,” we depend on microbes like *H. pylori* to regulate various metabolic and immune functions, and their disappearance is disordering those systems. The loss is cumulative: “Each generation is passing on fewer of these microbes,” Blaser told me, with the result that the Western microbiome is being progressively impoverished.

He calls *H. pylori* the “poster child” for the missing microbes and says medicine has actually been trying to exterminate it since 1983, when Australian scientists proposed that the microbe was responsible for peptic ulcers; it has since been implicated in stomach cancer as well. But *H. pylori* is a most complicated character, the entire spectrum of microbial good and evil rolled into one bug. Scientists learned that *H. pylori* also plays a role in regulating acid in the stomach. Presumably it does this to render its preferred habitat inhospitable to competitors, but the effect on its host can be salutary. People without *H. pylori* may not get peptic ulcers, but they frequently do suffer from acid reflux. Untreated, this can lead to Barrett’s esophagus and, eventually, a certain type of esophageal cancer, rates of which have soared in the West as

H. pylori has gone missing.

When after a recent bout of acid reflux, my doctor ordered an endoscopy, I discovered that, like most Americans today, my stomach has no H. pylori. My gastroenterologist was pleased, but after talking to Blaser, the news seemed more equivocal, because H. pylori also does us a lot of good. The microbe engages with the immune system, quieting the inflammatory response in ways that serve its own interests — to be left in peace — as well as our own. This calming effect on the immune system may explain why populations that still harbor H. pylori are less prone to allergy and asthma. Blaser's lab has also found evidence that H. pylori plays an important role in human metabolism by regulating levels of the appetite hormone ghrelin. "When the stomach is empty, it produces a lot of ghrelin, the chemical signal to the brain to eat," Blaser says. "Then, when it has had enough, the stomach shuts down ghrelin production, and the host feels satiated." He says the disappearance of H. pylori may be contributing to obesity by muting these signals.

But what about the diseases H. pylori is blamed for? Blaser says these tend to occur only late in life, and he makes the rather breathtaking suggestion that this microbe's evolutionary role might be to help shuffle us off life's stage once our childbearing years have passed. So important does Blaser regard this strange, paradoxical symbiont that he has proposed not one but two unconventional therapeutic interventions: inoculate children with H. pylori to give them the benefit of its services early in life, and then exterminate it with antibiotics at age 40, when it is liable to begin causing trouble.

These days Blaser is most concerned about the damage that antibiotics, even in tiny doses, are doing to the microbiome — and particularly to our immune system and weight. "Farmers have been performing a great experiment for more than 60 years," Blaser says, "by giving subtherapeutic doses of antibiotics to their animals to make them gain weight." Scientists aren't sure exactly why this practice works, but the drugs may favor bacteria that are more efficient at harvesting energy from the diet. "Are we doing the same thing to our kids?" he asks. Children in the West receive, on average, between 10 and 20 courses of antibiotics before they turn 18. And those prescribed drugs aren't the only antimicrobials finding their way to the microbiota; scientists have found antibiotic residues in meat, milk and surface water as well. Blaser is also concerned about the use of antimicrobial compounds in our diet and everyday lives — everything from chlorine washes for lettuce to hand sanitizers. "We're using these chemicals precisely because they're antimicrobial," Blaser says. "And of course they do us some good. But we need to ask, what are they doing to our microbiota?" No one is questioning the value of antibiotics to civilization — they have helped us to conquer a great many infectious diseases and increased our life expectancy. But, as in any war, the war on bacteria appears to have had some unintended consequences.

One of the more striking results from the sequencing of my microbiome was the impact of a single course of antibiotics on my gut community. My dentist had put me on a course of Amoxicillin as a precaution before oral surgery. (Without prophylactic antibiotics, of course, surgery would be considerably more dangerous.) Within a week, my impressively non-Western "alpha diversity" — a measure of the microbial diversity in my gut — had plummeted and come to look very much like the American average. My (possibly) healthy levels of prevotella had also disappeared, to be replaced by a spike in bacteroides (much more common in the West) and an alarming bloom of proteobacteria, a phylum that includes a great many weedy and pathogenic characters, including E. coli and salmonella. What had appeared to be a pretty healthy, diversified gut was now raising expressions of concern among the microbiologists who looked at my data.

"Your E. coli bloom is creepy," Ruth Ley, a Cornell University microbiologist who studies the

microbiome's role in obesity, told me. "If we put that sample in germ-free mice, I bet they'd get inflamed." Great. Just when I was beginning to think of myself as a promising donor for a fecal transplant, now I had a gut that would make mice sick. I was relieved to learn that my gut community would eventually bounce back to something resembling its former state. Yet one recent study found that when subjects were given a second course of antibiotics, the recovery of their interior ecosystem was less complete than after the first.



Few of the scientists I interviewed had much doubt that the Western diet was altering our gut microbiome in troubling ways. Some, like Blaser, are concerned about the antimicrobials we're ingesting with our meals; others with the sterility of processed food. Most agreed that the lack of fiber in the Western diet was deleterious to the microbiome, and still others voiced concerns about the additives in processed foods, few of which have ever been studied for their specific effects on the microbiota. According to a recent article in *Nature* by the Stanford microbiologist Justin Sonnenburg, "Consumption of hyperhygienic, mass-produced, highly processed and calorie-dense foods is testing how rapidly the microbiota of individuals in industrialized countries can adapt." As our microbiome evolves to cope with the Western diet, Sonnenburg says he worries that various genes are becoming harder to find as the microbiome's inherent biodiversity declines along with our everyday exposure to bacteria.

Catherine Lozupone in Boulder and Andrew Gewirtz, an immunologist at Georgia State University, directed my attention to the emulsifiers commonly used in many processed foods — ingredients with names like lecithin, Datem, CMC and polysorbate 80. Gewirtz's lab has done studies in mice indicating that some of these detergentlike compounds may damage the mucosa — the protective lining of the gut wall — potentially leading to leakage and inflammation.

A growing number of medical researchers are coming around to the idea that the common denominator of many, if not most, of the chronic diseases from which we suffer today may be inflammation — a heightened and persistent immune response by the body to a real or perceived threat. Various markers for inflammation are common in people with metabolic syndrome, the complex of abnormalities that predisposes people to illnesses like cardiovascular disease, obesity, Type 2 diabetes and perhaps cancer. While health organizations differ on the exact definition of metabolic syndrome, a 2009 report from the Centers for Disease Control and Prevention found that 34 percent of American adults are afflicted with the condition. But is inflammation yet another symptom of metabolic syndrome, or is it perhaps the cause of it? And if it is the cause, what is its origin?

One theory is that the problem begins in the gut, with a disorder of the microbiota, specifically of the all-important epithelium that lines our digestive tract. This internal skin — the surface area of which is large enough to cover a tennis court — mediates our relationship to the world outside our bodies; more than 50 tons of food pass through it in a lifetime. The microbiota play a critical role in maintaining the health of the epithelium: some bacteria, like the bifidobacteria and *Lactobacillus plantarum* (common in fermented vegetables), seem to directly enhance its function. These and other gut bacteria also contribute to its welfare by feeding it. Unlike most tissues, which take their nourishment from the bloodstream, epithelial cells in the colon obtain much of theirs from the short-chain fatty acids that gut bacteria produce as a

byproduct of their fermentation of plant fiber in the large intestine.

But if the epithelial barrier isn't properly nourished, it can become more permeable, allowing it to be breached. Bacteria, endotoxins — which are the toxic byproducts of certain bacteria — and proteins can slip into the blood stream, thereby causing the body's immune system to mount a response. This resulting low-grade inflammation, which affects the entire body, may lead over time to metabolic syndrome and a number of the chronic diseases that have been linked to it.

Evidence in support of this theory is beginning to accumulate, some of the most intriguing coming from the lab of Patrice Cani at the Université Catholique de Louvain in Brussels. When Cani fed a high-fat, “junk food” diet to mice, the community of microbes in their guts changed much as it does in humans on a fast-food diet. But Cani also found the junk-food diet made the animals' gut barriers notably more permeable, allowing endotoxins to leak into the bloodstream. This produced a low-grade inflammation that eventually led to metabolic syndrome. Cani concludes that, at least in mice, “gut bacteria can initiate the inflammatory processes associated with obesity and insulin resistance” by increasing gut permeability.

These and other experiments suggest that inflammation in the gut may be the cause of metabolic syndrome, not its result, and that changes in the microbial community and lining of the gut wall may produce this inflammation. If Cani is correct — and there is now some evidence indicating that the same mechanism is at work in humans — then medical science may be on the trail of a Grand Unified Theory of Chronic Disease, at the very heart of which we will find the gut microbiome.

My first reaction to learning all this was to want to do something about it immediately, something to nurture the health of my microbiome. But most of the scientists I interviewed were reluctant to make practical recommendations; it's too soon, they told me, we don't know enough yet. Some of this hesitance reflects an understandable abundance of caution. The microbiome researchers don't want to make the mistake of overpromising, as the genome researchers did. They are also concerned about feeding a gigantic bloom of prebiotic and probiotic quackery and rightly so: probiotics are already being hyped as the new panacea, even though it isn't at all clear what these supposedly beneficial bacteria do for us or how they do what they do. There is some research suggesting that some probiotics may be effective in a number of ways: modulating the immune system; reducing allergic response; shortening the length and severity of colds in children; relieving diarrhea and irritable bowel symptoms; and improving the function of the epithelium. The problem is that, because the probiotic marketplace is largely unregulated, it's impossible to know what, if anything, you're getting when you buy a “probiotic” product. One study tested 14 commercial probiotics and found that only one contained the exact species stated on the label.

But some of the scientists' reluctance to make recommendations surely flows from the institutional bias of science and medicine: that the future of microbiome management should remain firmly in the hands of science and medicine. Down this path — which holds real promise — lie improved probiotics and prebiotics, fecal transplants (with better names) and related therapies. Jeffrey Gordon, one of those scientists who peers far over the horizon, looks forward to a time when disorders of the microbiome will be treated with “synbiotics” — suites of targeted, next-generation probiotic microbes administered along with the appropriate prebiotic nutrients to nourish them. The fecal transplant will give way to something far more targeted: a purified and cultured assemblage of a dozen or so microbial species that, along with new therapeutic foods, will be introduced to the gut community to repair “lesions” — important missing species or functions. Yet, assuming it all works as advertised, such an approach will also allow Big Pharma and Big Food to stake out and colonize the human microbiome for profit.

When I asked Gordon about do-it-yourself microbiome management, he said he looked forward to a day “when people can cultivate this wonderful garden that is so influential in our health and well-being” — but that day awaits a lot more science. So he declined to offer any gardening tips or dietary advice. “We have to manage expectations,” he said.

Alas, I am impatient. So I gave up asking scientists for recommendations and began asking them instead how, in light of what they’ve learned about the microbiome, they have changed their own diets and lifestyles. Most of them have made changes. They were slower to take, or give their children, antibiotics. (I should emphasize that in no way is this an argument for the rejection of antibiotics when they are medically called for.) Some spoke of relaxing the sanitary regime in their homes, encouraging their children to play outside in the dirt and with animals — deliberately increasing their exposure to the great patina. Many researchers told me they had eliminated or cut back on processed foods, either because of its lack of fiber or out of concern about additives. In general they seemed to place less faith in probiotics (which few of them used) than in prebiotics — foods likely to encourage the growth of “good bacteria” already present. Several, including Justin Sonnenburg, said they had added fermented foods to their diet: yogurt, kimchi, sauerkraut. These foods can contain large numbers of probiotic bacteria, like *L. plantarum* and bifidobacteria, and while most probiotic bacteria don’t appear to take up permanent residence in the gut, there is evidence that they might leave their mark on the community, sometimes by changing the gene expression of the permanent residents — in effect turning on or off metabolic pathways within the cell — and sometimes by stimulating or calming the immune response.

What about increasing our exposure to bacteria? “There’s a case for dirtying up your diet,” Sonnenburg told me. Yet advising people not to thoroughly wash their produce is probably unwise in a world of pesticide residues. “I view it as a cost-benefit analysis,” Sonnenburg wrote in an e-mail. “Increased exposure to environmental microbes likely decreases chance of many Western diseases, but increases pathogen exposure. Certainly the costs go up as scary antibiotic-resistant bacteria become more prevalent.” So wash your hands in situations when pathogens or toxic chemicals are likely present, but maybe not after petting your dog. “In terms of food, I think eating fermented foods is the answer — as opposed to not washing food, unless it is from your garden,” he said.

With his wife, Erica, also a microbiologist, Sonnenburg tends a colony of gnotobiotic mice at Stanford, examining (among other things) the effects of the Western diet on their microbiota. (Removing fiber drives down diversity, but the effect is reversible.) He’s an amateur baker, and when I visited his lab, we talked about the benefits of baking with whole grains.

“Fiber is not a single nutrient,” Sonnenburg said, which is why fiber supplements are no magic bullet. “There are hundreds of different polysaccharides” — complex carbohydrates, including fiber — “in plants, and different microbes like to chomp on different ones.” To boost fiber, the food industry added lots of a polysaccharide called inulin to hundreds of products, but that’s just one kind (often derived from the chicory-plant root) and so may only favor a limited number of microbes. I was hearing instead an argument for a variety of whole grains and a diverse diet of plants and vegetables as well as fruits. “The safest way to increase your microbial biodiversity is to eat a variety of polysaccharides,” he said.

His comment chimed with something a gastroenterologist at the University of Pittsburgh told me. “The big problem with the Western diet,” Stephen O’Keefe said, “is that it doesn’t feed the gut, only the upper G I. All the food has been processed to be readily absorbed, leaving nothing for the lower G I. But it turns out that one of the keys to health is fermentation in the large intestine.” And the key to feeding the fermentation in the large intestine is giving it lots of plants with their various types of fiber, including

resistant starch (found in bananas, oats, beans); soluble fiber (in onions and other root vegetables, nuts); and insoluble fiber (in whole grains, especially bran, and avocados).

With our diet of swiftly absorbed sugars and fats, we're eating for one and depriving the trillions of the food they like best: complex carbohydrates and fermentable plant fibers. The byproduct of fermentation is the short-chain fatty acids that nourish the gut barrier and help prevent inflammation. And there are studies suggesting that simply adding plants to a fast-food diet will mitigate its inflammatory effect.

The outlines of a diet for the new superorganism were coming clear, and it didn't require the ministrations of the food scientists at Nestlé or General Mills to design it. Big Food and Big Pharma probably do have a role to play, as will Jeffrey Gordon's next-generation synbiotics, in repairing the microbiota of people who can't or don't care to simply change their diets. This is going to be big business. Yet the components of a microbiota-friendly diet are already on the supermarket shelves and in farmers' markets.

Viewed from this perspective, the foods in the markets appear in a new light, and I began to see how you might begin to shop and cook with the microbiome in mind, the better to feed the fermentation in our guts. The less a food is processed, the more of it that gets safely through the gastrointestinal tract and into the eager clutches of the microbiota. Al dente pasta, for example, feeds the bugs better than soft pasta does; steel-cut oats better than rolled; raw or lightly cooked vegetables offer the bugs more to chomp on than overcooked, etc. This is at once a very old and a very new way of thinking about food: it suggests that all calories are not created equal and that the structure of a food and how it is prepared may matter as much as its nutrient composition.

It is a striking idea that one of the keys to good health may turn out to involve managing our internal fermentation. Having recently learned to manage several external fermentations — of bread and kimchi and beer — I know a little about the vagaries of that process. You depend on the microbes, and you do your best to align their interests with yours, mainly by feeding them the kinds of things they like to eat — good “substrate.” But absolute control of the process is too much to hope for. It's a lot more like gardening than governing.

The successful gardener has always known you don't need to master the science of the soil, which is yet another hotbed of microbial fermentation, in order to nourish and nurture it. You just need to know what it likes to eat — basically, organic matter — and how, in a general way, to align your interests with the interests of the microbes and the plants. The gardener also discovers that, when pathogens or pests appear, chemical interventions “work,” that is, solve the immediate problem, but at a cost to the long-term health of the soil and the whole garden. The drive for absolute control leads to unanticipated forms of disorder.

This, it seems to me, is pretty much where we stand today with respect to our microbiomes — our teeming, quasi-wilderness. We don't know a lot, but we probably know enough to begin taking better care of it. We have a pretty good idea of what it likes to eat, and what strong chemicals do to it. We know all we need to know, in other words, to begin, with modesty, to tend the unruly garden within.

Michael Pollan is the Knight professor of journalism at the University of California, Berkeley, and the author, most recently, of “Cooked: A Natural History of Transformation.”

Photos Credit Hannah Whitaker for The New York Times. Prop stylist: Emily Mullin

What Your Farts Are Trying To Tell You?



There are some things that remain unchanged from child to adulthood — and giggling when you toot is one of them. Whether you blame it on the dog or your husband, passing gas is a normal bodily function. However, is it possible to fart too often? Are your daily farts trying to tell you something? If you have noticed that you're overly gassy lately, here's what you need to know.

What are farts, anyway?

The average person farts nearly every day, so what is it that we're passing? Also known as "flatulence," a fart is simply an internal build-up of gas. More specifically, farts are made up of nitrogen, carbon dioxide, oxygen, methane and hydrogen. What a lovely little gaseous cocktail, eh?

Although these gases are formed during the process of respiration and digestion, the true cause of excessive gas will depend on personal circumstances. For the most part, farts are silent and odorless. It's estimated that only around one percent of farts produce a foul smell.

No need to be embarrassed. It's quite natural and, in many cases, healthy! In fact, a healthy person may pass gas around 15 to 20 times per day. But is that a "normal" standard?

What causes farting?

Farts are normal

There are a number of reasons why gas gets trapped in the body, including swallowing air, constipation and changes in microflora. When someone begins to experience an excessive buildup of gas, this may mean:



- You're suffering from intolerances or food allergies
- You're experiencing bacterial overgrowth
- You are constipated
- You are experiencing symptoms of IBS, Crohn's, etc.
- Fermentation is occurring within the gut

More often than not, farting is harmless. It is a normal metabolic function. And for those who consume plenty of fiber-rich foods, increased flatulence may indicate a diet that promotes positive health. Take beans, for example, a food that's known to cause gas. This is due to the type of carbohydrates which ferment in the gut.

In that sense, I'm not going to throw out a "magic" number. How many times you fart during the day may vary. Do not focus too much on how often you're farting, but why you are passing more gas than usual. What other symptoms, if any, have you noticed?

2. *Am I an excessive farter?*



If you have noticed that you're overly gassy lately, start to keep track. How many times did you break wind throughout the day? What did you eat? Start to document these key pieces of information.

Although tooting more than 23 to 25 times daily is considered to be more than normal, if you're farting more than that, there's still no need to panic. A good rule of thumb is this: if excessive gas and bloating affect your quality of life, then it's best to get a professional opinion.

In many cases, it's something as simple as lactose intolerance. If you're suffering from excessive gas and bloating, however, you may want to focus on the following possibilities:

1. You're a fast eater

Do your loved ones often tell you to slow down when you're eating? Do you eat quickly when you're on-the-go? Perhaps you chew a lot of gum? Either way, when you eat rapidly, you tend to swallow more air. Once that air (made up of various gases) gets into your body, it has to come out somehow. If you don't burp it up, you may find that it's coming out the other end.

2. Your gut is imbalanced

As mentioned, a small percentage of farts are those stinky bombs that make this act so embarrassing. You would think that rotten farts indicate something is the matter, but this isn't necessarily the case. Generally speaking, stinky gas is generally caused by the breakdown of sulfur.

Since there are many healthy foods that contain sulfur, including broccoli and beans, stinky gas does not automatically indicate poor health. With that being said, if you notice that the stench of your farts is overly awful — and your diet is less than ideal — this could mean you're suffering from an underlying condition.

If you're farting often, you may think that you're unhealthy. But the truth is, passing gas can mean that your gut is being properly fed. The healthy microbes that live in our gut, are known to promote a wide range of health benefits. In order for these microbes to get nutrients, we must eat foods that cause gas.

When there's undigested food in the large intestine, including fiber and other hard-to-digest carbs, these microbes get to work. In turn, more gas is created — as well as short-chain fatty acids, which promote the growth of other

2019 I-ACT International Convention



Medieval Times

DINNER & TOURNAMENT

Kissimmee, FL



Why should you make your reservations early for the 2019 Convention?

We have 150 tickets to Medieval Times for Thursday Evening!!

It's a Dinner and a Show (only \$50.00)!

Have a good time, enjoy the dinner and root for your favorite knight's color.

Vegetarian Meals are optional, just let us know in advance.

Thursday, June 20, 2019

2019 I-ACT Convention Registration Form
(Vendors must use separate Vendor Registration Form)

Please register me for the 2019 I-ACT Convention
June 18 - 23, 2019

••• Embassy Suites by Hilton - Orlando Lake Buena Vista South- 4955 Kyngs Heath Road - Kissimmee, FL 34746
-ph: 407-597-4000 - Group code: (ACT) •••

Mail completed form to: I-ACT • P.O. Box 461285 • San Antonio, TX 78246-1285 (210-366-2888)

•• Please Print Legibly ••

•• Fax to 210-366-2999 or email to homeoffice@i-act.org ••

Name: _____
Please Print - Copy this form if necessary - (only one person per form)

Address: _____

City / State / Zip (Postal Code): _____

Contact Information: _____

(area code) Phone number

E-mail Address

I will be testing for: Instructor Level

Registration Costs (USD)

(Includes meetings, Speaker presentations, and Friday Banquet)
(additional dinner tickets and other event tickets will be available at the Convention for a fee)

	Early Registration Prior to Feb 1	Standard Registration Prior to May 15	Late Registration After May 15
U.S. Member (or spouse)	<input type="checkbox"/> \$275.00	<input type="checkbox"/> \$350.00	<input type="checkbox"/> \$400.00
International Member (or spouse) (out of USA)	<input type="checkbox"/> \$175.00	<input type="checkbox"/> \$250.00	<input type="checkbox"/> \$300.00

Please sign me up for the Medieval Times - Dinner Show (only 150 tickets available register early)

Medieval Times Ticket (for Convention Participants only) \$50

••• Call the I-ACT Office to set up Payment Arrangements •••

Registration Costs NON I-ACT Member (USD)

Non-Member \$400.00 \$475.00 \$550.00

Meal Selection (FRIDAY BANQUET)

(If no selection is circled, the Banquet meal (chicken) will be ordered)

Please select one: Vegan Banquet Chicken Banquet Fish No Meal

Payment Options (Check one)

Check Cash Credit Card (circle one: MC/Visa/Discover/American Express)

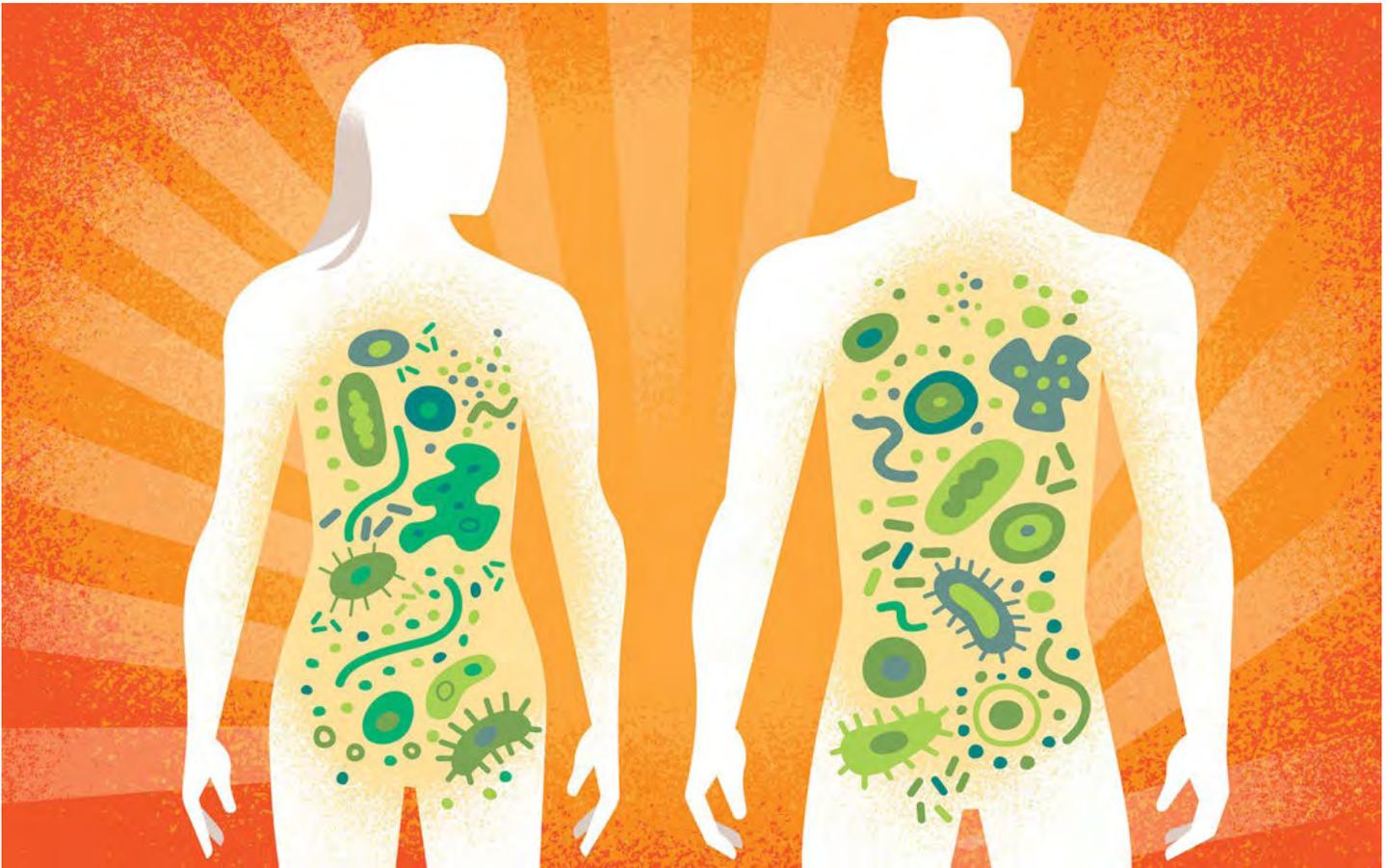
CC Number _____ Expire Date _____ Security code _____ 3 or 4 digits

Signature _____

--- Absolutely NO exhibiting or selling of products without vendor fee. ---

Refund Policy: ALL REQUESTS FOR REFUND MUST BE MADE IN WRITING.
Refunds of Convention Registration Fees may be made until June 7, 2019 (less a \$50.00 processing fee);
after June 7, 2019, NO Request for Refunds will be honored.

Unlocking the Secrets of the Microbiome



By Jane E. Brody

Originally published Nov. 6, 2017, New York Times

Modern technology is making it possible for medical scientists to analyze inhabitants of our innards that most people probably would rather not know about. But the resulting information could one day save your health or even your life.

I'm referring to the trillions of bacteria, viruses and fungi that inhabit virtually every body part, including those tissues once thought to be sterile. Together, they make up the human microbiome and represent what is perhaps the most promising yet challenging task of modern medicine: Determining the normal microscopic inhabitants of every organ and knowing how to restore the proper balance of organisms when it is disrupted.

Proof of principle, as scientists call it, has already been established for a sometimes devastating intestinal infection by the bacterium *Clostridium difficile*. This infection, popularly called *C. diff*, often occurs when potent antibiotics wipe out the normal bacterial inhabitants of the gut that otherwise keep it in check.

When all else fails to clear up a recurrent *C. diff* infection, treatment with a fecal transplant from a healthy gut presumed to contain bacteria that can suppress *C. diff* activity is often highly effective, with a cure rate in excess of 90 percent.

Under the auspices of the National Institutes of Health, a large team of scientists is now engaged in creating a "normal" microbiological road map for the following tissues: gastrointestinal tract, oral cavity, skin, airways, urogenital tract, blood and eye. The effort, called the Human Microbiome Project, takes advantage of new technology that can rapidly analyze large samples of genetic material, making it possible to identify the organisms present in these tissues.

Depending on the body site, anywhere from 20 percent to 60 percent of the organisms that make up the microbiota cannot be cultured and identified with the older, traditional techniques used by microbiologists.

If the institutes' five-year project succeeds in defining changes in the microbiome that are associated with disease, it has the potential to transform medicine, assuming ways can be found to correct microbial distortions in the affected tissues.

Here are some of the demonstration projects already underway:

Skin: Dr. Martin J. Blaser, microbiologist and director of the human microbiome program at New York University School of Medicine, is directing examination of the organisms on the skin of 75 people with and without psoriasis, checking whether agents used to treat the condition adversely alter the microbiome.

Vagina: Jacques Ravel at the University of Maryland School of Medicine and Larry J. Forney at the University of Idaho are studying 200 women to determine the microbial changes that may result in a common and difficult-to-control infection called bacterial vaginosis, which afflicts more than 20 million American women of childbearing age.

Blood: At Washington University in St. Louis, Dr. Gregory A. Storch, a specialist in pediatric infectious disease, and colleagues are examining the role of viruses and the immune system in the blood and respiratory and gastrointestinal tracts of children who develop serious fevers that result in some 20 million visits a year to hospital emergency rooms.

Gastrointestinal tract: Claire M. Fraser-Liggett, a microbiologist, and Dr. Alan R. Shuldiner, a geneticist, both at the University of Maryland School of Medicine, are exploring how the microbiome affects the body's use of energy and the development of obesity.

Previous studies have already found differences in the gut microbiota of lean and obese adults. There is also evidence that the typical high-calorie American diet rich in sugar, meats and processed foods may adversely affect the balance of microbes in the gut and foster the extraction and absorption of excess calories from food.

A diet more heavily based on plants — that is, fruits and vegetables — may result in a microbiome containing a wider range of healthful organisms. In studies, mice that had a microbiota preconditioned by the typical American diet did not respond as healthfully to a plant-based diet.

Compared to lean mice, obese mice have a 50 percent reduction in organisms called Bacteroidetes and a proportional increase in Firmicutes, and lean mice get fat when given fecal transplants from obese mice. A similar shift has been observed in people, and the distorted ratio of organisms was shown to reverse in people who lose weight following bariatric surgery.

There is also evidence that microbes residing in the gut can affect distant sites through their influence on a person's immune responses. This indirect action has been suggested as a possible mechanism behind rheumatoid arthritis. In mice, certain bacteria in the gut have been shown to foster production of antibodies that attack the joints, resulting in the joint destruction typical of rheumatoid arthritis.

Similarly, studies have suggested a role of the gut microbiota in the risk of developing neuropsychiatric illnesses like schizophrenia, obsessive-compulsive disorder, attention deficit hyperactivity disorder, autism and even chronic fatigue syndrome. Researchers have suggested that in genetically susceptible people, altered microbes in the gut may disrupt the blood-brain barrier, leading to the production of antibodies that adversely affect normal brain development.

Among the challenges in elucidating the microbiome's role in health and disease is determining whether changes found in the microorganisms inhabiting various organs are a cause or an effect. Most of what is already known about the microbiota in people with various health problems is based on observation, making it difficult to say which came first: the disease or the disrupted microbiota.

Animal studies like those mentioned above are a clue but not proof of a similar effect in people. Until therapeutic studies now underway are completed, people with conditions thought to be influenced by the microbiome have no choice currently but to rely on possible treatments suggested by animal research and some preliminary human studies.

For example, people with irritable bowel syndrome, inflammatory bowel disease, allergic disorders and infections with drug-resistant organisms may benefit from taking probiotics, though some probiotics sold in health food and drugstores may be ineffective. It may be necessary to tailor-make the remedy for each condition or even each patient.

Meanwhile, people interested in fostering a health-promoting array of gut microorganisms should consider shifting from a diet heavily based on meats, carbohydrates and processed foods to one that emphasizes plants. As Dr. Jeffrey Gordon, a genomics specialist at Washington University School of Medicine, told The Times last year, "The nutritional value of food is influenced in part by the microbial community that encounters that food."

Correction: November 9, 2017

An earlier version of this article misstated the Food and Drug Administration's position on fecal transplants. The F.D.A. has not approved the treatment; rather, it has declined to enforce rules against using the investigational treatment for patients with C. diff infections resistant to established treatment.



beneficial bacteria. Farting is healthy, just not too much

I think this is important to mention, as it's often recommended that we eat more probiotics. However, fiber is equally critical. Based on a recent study, published in *Cell*, researchers found that microbes need fiber in order to maintain optimal health. When they do not get natural fiber as a food source, they can actually begin to eat the layer of mucus that lines the gut — potentially leading to infection.

So, passing wind while consuming a healthy diet is fairly normal — but excessive gas could also mean you're suffering from SIBO, or small intestinal bacterial overgrowth. Normally, the majority of bacteria is found inside the colon, but in this case, bacteria begins to invade the small intestine.

In turn, individuals experience poor nutrient absorption and symptoms often associated with IBS (irritable bowel syndrome). Along with increased flatulence, you may also experience bloating, fatigue, skin rashes and weight loss. If this is the case, you will need to address your current diet. Implement herbal remedies, including the use of lemon balm and oregano oil.



3. You're sensitive to gluten or dairy

Even if you have been eating dairy your whole life without any noticeable issues, your system can change as you age. Over the course of time, your body may no longer produce enough lactase. The same is true for those who can not properly break down gluten — which is the case among those with celiac disease.

Whenever you believe something in your diet is to blame for any abnormal symptoms, including excessive flatulence, it's best to try an elimination diet. Stop eating all dairy, for instance, and then see how you feel. Continue this process, focusing on FODMAP carbohydrates, including wheat, dairy,

onions, garlic, legumes and stone fruit (cherries and peaches).

Although many FODMAP carbohydrates are healthy, they can be hard to break down. Each individual is different, so it's best to keep a food journal and identify key triggers. Once you better understand the cause, you can create a more effective action plan.

Listen to your body

From hormonal changes to constipation, there are a number of reasons why you may be tootin' more often. As mentioned, unless you fart a lot (30 or more times daily), or you're finding that excessive flatulence is affecting your quality of life, your body is more than likely just doin' its thing.

Like all symptoms, your body is trying to communicate with you. The more in-tune you are, the easier it will be to maintain positive health. So, listen to your body. In this case, your farts will do all the talking.

— ***Krista Hillis***

thealternativedaily.com



FOR SALE

BUSINESSES EQUIPMENT

BUSINESS for SALE!!

Embody Cleansing, Inc

- Client list of 600+ from the South Bay of Los Angeles
- Speciality Health Closed System
- Website contents & photos included
www.embodycleansing.com
- Massage Table & supplies with built in shelf
- Available Dec 6, 2018
- Prefer to sell together, but willing to sell "client list" and equipment separately

Email Dolly at embodycleansing@gmail.com

Used Libbe Colonic device for sale with wooden cabinet. Light almond color. Very good condition. \$7,000. Will split shipping cost. -Andrew Coblentz, Middlebury, IN. 260-350-4857. andrew@abccolonics.com

FOR SALE: Aquanet GRY-500

Made by Prime Pacific health Innovations Corp

\$3500

Purchased new and used lightly for 2 years. Will come with garbage bag full of unused speculum kuts. Located in British Columbia. For more information please contact 250-301-7057

Email cconnellpg@gmail.com

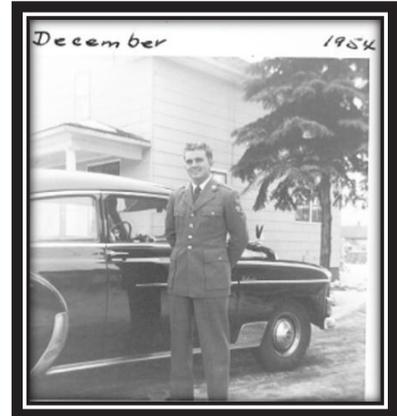
With heartfelt sadness, we share the passing of Dorothy Hawks on December 19th, 2018

Dorothy, along with her husband Bob, were the founders of Specialty Health Products, Inc. and the American Institute of Natural Health, Inc., located in Phoenix Arizona. Bob was the inventor and one man sales force and Dorothy ran the office. Together they created a company that has continually set the standard for Professional Colon Hydro Therapy. Dorothy and Bob worked diligently with the California Colon Therapy Association to create and set a standard for safe and professional colon hydro therapy; not only in California, but across the country and across the globe. Today their hard work and commitment manifested into what is now known as I-ACT.



Dorothy Keel, 1955
A True Southern Bell

Dorothy was born in Oxford Mississippi on December 22, 1935. As a teenager, Dorothy moved to Chicago along with her two older sisters. Chicago was not for her, so she boarded a train and headed to Las Vegas Nevada and lived with her sister Ruby and husband Bill. Dorothy worked in a bank as a teller, when through mutual friends, met a handsome young airman by the name of Bob Hawks. It was love at first sight and the couple were married on September 9, 1955, and had one daughter Deborah Hawks Solomon



Bob Hawks, 1954 (U.S.A.F.)
Thunderbirds Ground Crew

Dorothy was a ahead of her time as was a career woman and a Mother where she worked as a bookkeeper from 1956 to their retirement in 1980. Bob, always the entrepreneur, was best known for being the local State Farm Agent for 21 years. Bob and Dorothy moved to Phoenix Arizona in 1981, but retirement didn't suite either of them. In 1986, they started a new company, Specialty Health Products, in a tiny 800 square foot building. Through Bob's ingenuity and Dorothy's tight management skills, the little company grew to become a very successful business. Bob passed in 1993 and Deborah joined the management team full time. Along with 10 employees, the little family business continued to grow and became a well respected international company.

After 54 years as a bookkeeper, Dorothy said enough was enough and sold the company to Deborah in 2009. Dorothy took great enjoyment in her two cats and her yard in Sun City, packed with a variety of oranges, grapefruit and one crazy lemon tree that produced lemons the size of a football. She loved watching the rabbits and quails scurry through her yard. She became quite astute at chasing away the occasional coyote, protecting her flock.

Dorothy struggled with RA until it was unsafe for her to live alone. In 2016 we found a beautiful group home where she quickly made new friends. Being the youngest member, she soon became known as the 'Cruise Director', always checking on her new family. Dorothy's passing was very sudden and unexpected. She is laid to rest next to her husband, Bob, in Marshfield, WI. The urns of her two cats are riding along on her new voyage.

She is deeply missed by her family and friends.



Dorothy and Bob Hawks

Attention:

Illinois I-ACT Members

If each of you recall, we (I-ACT members) negotiated a verbal agreement with the IDFPR, (Illinois Department Financial Professional Regulation), in 2013 after several members had been issued cease and desist orders. Attorney's for the IDFPR insisted that we not advertise health claims, diseases treated including IBS and Constipation etc.

Recently the department has initiated an investigation of IL colon hydrotherapist. The investigator has either called therapists offices or walked in. She's stated that the department's medical coordinators are gathering information on the unlicensed practice of colon hydrotherapy following complaints filed in 2014.

Despite being aware of our verbal agreement they are altering the terms. The member therapist who received such a call has now secured legal representation. There was no citizen complaint made against this therapist.

We are imploring that each of you please be alert and mindful of whom you speak to on the phone, or admit to your offices. Clean up your advertising including groupon's, NO HEALTH CLAIMS, follow the I-ACT and manufacturer guidelines.

Please review the article-What To Do When Investigated by Attorney Glen D. Crick available on the website for download.

Currently, we are contacting the State Senators and State Representatives that assisted us through this process in 2012-2013. We would appreciate if each of you would assist by calling members and non-member therapist in Illinois to notify them of this action by the department.

If you receive a call or a visit remember you don't have to speak with the investigator without legal guidance. Notify the I-ACT office and please send me an email or text.

Thank you,

Dorothy M Chandler
Email: chandler.dorothy@gmail.com
312-863-1036

Nominations For Election - Please Read

Per your I-ACT By-Laws, and since this is an odd year, it is time to solicit nominations for the following Officers and Members of the Board for the I-ACT Board, and the Officers and Members of the National Board for Colon Hydrotherapy.

The Following Positions are open:

I-ACT Board Positions - Officers of the Board

Vice President - Open
Secretary Treasurer - Open

Three (3) At Large Board Members

- Open
- Open
- Open

The Following Positions are open:

You MUST be an NBCHT member to run for the NBCHT.

NBCHT Board Positions (Certification Board)

President Elect - Open
Vice President - Open
Secretary Treasurer - Open

Two (2) At Large Board Members

- Open
- Open

If you are interested in running for one of these positions, or if you would like to nominate someone to run for one of these positions, please follow the guidelines listed below. As a member of either Board, you will be required to travel to Board Meetings (possibly 2-3 times per year). Additionally, there are teleconferences scheduled each month that you are required to participate in. When you are required to travel from your home, your itemized expenses will be compensated and you will receive a small stipend to offset the time you are away from your home. If you do not have the time to fully participate with Board activities, please do not run for office.

Voting will be by Mail Ballot.

Eligibility Requirements for Individuals Nominated to Run for Office:

- Prior to being nominated to a position as a Member of the Board or as an Officers of the corporation, the individual:
 - must be a Full member in good standing of the corporation.
 - must use FDA registered equipment.
 - must be a member of the association for a minimum of two consecutive years.
 - must be certified by I-ACT at the Intermediate Level, or higher. and
 - must be National Board for Colon Hydrotherapy certified.
 - must be at the Instructor level if running for a position as an Officer in the Corporation
- Additionally, the individual must NOT be a manufacturer of equipment and supplies directly related to the practice of colon hydrotherapy or colon irrigation; their immediate family, nor may nomination be an employee of a manufacturer of colon hydrotherapy equipment or supplies
- There Must Not be any other instructors or employees from the same school serving on this Board of Directors (or running in this election) at the same time.
- Finally, there may only be one member of a family on the Board at one time.

Nominations must be received by the CPA in written form, via a certified, return receipt letter.

Send to: Joseph C. Osborne, Certified Public Accountant,
4407 Bee Cave Rd, Suite 412, West Lake Hills, TX 78746, Attn: Nomination Letter

The Nomination letter must identify the position the individual is running for and must be received by the CPA no later than May 28, 2019. By June 4, 2019 the CPA will notify (by postmarked letter) the individuals that their nominations were received and the CPA will also notify the I-ACT Home office of the names of those that were nominated for election and the office they are running for. In concert with the I-ACT Home Office, the Nomination Committee will determine the eligibility of all nominees. Once vetted, the I-ACT Home Office will notify the Board of Directors. Nominations will be completed by the annual meeting of the membership. Nominees will be introduced at the Annual Convention and will be allowed to speak to the membership for 3-5 minutes.

The Vetted Nominee Must submit a letter to the I-ACT office no later than June 21, 2019, on a single page (8in x 10 in - black & white with no photos) for the quarterly with the following information:

- your history as a colon hydrotherapist including length of time as an I-ACT member
- level of I-ACT membership and certification
- length of time in an office or on the board, if applicable
- school, family, and office affiliations
- a statement describing why you want to be elected and the goals you have for being on the board.

You will be given time (3 - 5 minutes) during the annual membership meeting at the convention to speak to the membership.

Thank you for taking the time so that members may get to know your qualifications better.

Sincerely,
I-ACT Charlotte Layne
Nomination Committee ChairPerson

What I-ACT does for you and the value of I-ACT

Submitted by Mark Buse & Roxanne Watson, Leadership/Mentorship Committee

- **Better connection between members**
- **Exchange of valuable knowledge concerning Colon Hydrotherapy**
- **Problem solving relating to our profession**
- **Create new friends**
- **First association of its kind to offer and benefit from mentoring**
- **Being associated within our association**
- **Supporting new colon therapists**
- **Adding credibility to what I-ACT has done for me**
- **Show of force within our organization**
- **Improve communication and personal skills**
- **Develop leadership and management qualities**
- **Reinforce your own study skills and knowledge of your subjects**
- **Increase your confidence and motivation**
- **Gain recognition for your skills and experience**
- **I-ACT mentoring program**
- **Annual I-ACT Convention**
- **Supporting new colon hydrotherapy**
- **Organization benefits**
- **Newsletter Quarterly**
- **Social interaction with others like yourself**
- **Develop a career social network**
- **National directory of Colon Hydrotherapy**
- **Established standard of protocol**
- **Certification for colon hydrotherapy**
- **Pathway to Board Certification**
- **Out reach to other foreign associations**
- **Provide support and guidelines**



www.primepacifichealth.com

1-800-223-9374



Rx^{only}

World's Only DUAL GRAVITY & PRESSURE Colon Hydrotherapy Device

Maximum patient comfort with even the most sensitive clients



"What's most important to me is the effectiveness of the treatments I'm giving and also the response I get from my patients."

-Dr Heather Eade, ND, uses an EC-2000



*patented

World-Leading Colon Hydrotherapy Equipment

APS-100: Ultra-Reliable and Easy to Maintain



Eco-Flex® expandable with pump

regular Pro-Fit® hose

Full line of speculums and kits available now



info@primepacifichealth.com 1-800-223-9374

US and International Class II device clearances



Health Canada



Guaranteed quality direct from the manufacturer.



PRIME PACIFIC HEALTH INNOVATIONS

"If you are purchasing a used device, please ensure that it has been maintained according to manufacturer guidelines and is fully functional prior to purchasing the device."

I-ACT Quarterly Winter 2018-19

BIOME MEDIC

Protect
your gut from
GMOs



A MAJOR BREAKTHROUGH IN GUT HEALTH 

HOW BIOME MEDIC WORKS

Biome Medic is an exclusive and proprietary formula of all-natural ingredients that help protect your gut from GMOs and glyphosate. It could be said that Biome Medic goes beyond non-GMO and is maybe the worlds first "Anti-GMO" product!

BIOME MEDIC IS DESIGNED TO ASSIST WITH THE FOLLOWING:

1. REMOVE the toxic chemical glyphosate from your microbiome
2. SUPPORT the "good" bacteria to boost your immunity
3. REBUILD the gut villi for better nutrient absorption, digestion and weight loss

Biome Medic showed a 74% reduction in Glyphosate and a 75% reduction in C-Reactive Protein in pre-clinical trials.

SAVE \$50 ON YOUR FIRST ORDER!



25% OFF ALL FUTURE ORDERS

Loyal Customer Program

No Autoship Required

No Membership Required

60-Day Guarantee on all orders

MY GIFT CARD CODE IS: iom108

Redeem Card at ishoppurium.com
800.xxx.xxxx purium108@gmail.com

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, mitigate, treat, cure or prevent disease

Colonic Plus

73925 HWY 111, Ste L
Palm Desert, CA 92260

Phone: (760)340-0720

Text: (760)905-7725

Email: Colonicplusinfo@yahoo.com

Website: Colonicplus.us



- ◆ FDA cleared Class II Device
- ◆ Large and Small size speculum
- ◆ **\$2.39** Per kit (No minimum required)
- ◆ Free shipping on first order
- ◆ Refer friend and get **\$50.00** credit on your 2nd order
- ◆ Other lengths & sizes coming soon
- ◆ Rx Required





transcom

Colon hydrotherapy, the therapeutic purpose of water

- Class II Medical Devices
- Fits all closed system equipments
- European smooth waste hose
To avoid confusions Transcom has no connection at all with Smooth-Bor Plastics.
- Lubricant 2.5gr



FDA approved animal testing certified:

- in vitro cytotoxicity. ✓
- delayed hypersensitivity. ✓
- intracutaneous reactivity. ✓

Minimum order 1 box (75 kits)



Large speculum kit

Ref:Z-09

~~Before~~
~~\$3.15~~

Now
\$2.55



Small speculum kit

Ref:Z-10

~~Before~~
~~\$3.15~~

Now
\$2.55



Limiter speculum kit with Soft hose

Ref:Z-16

~~Before~~
~~\$3.15~~

Now
\$2.55



Large speculum kit with Soft hose

Ref:Z-20

~~Before~~
~~\$3.15~~

Now
\$2.55



Speculum only (no hose)

Minimum order 1 box (100 speculums)

~~Before~~
~~\$1.90~~

Now
\$1.55

TO PLACE YOUR ORDER

Directly to the manufacturer:

✉ : ventas@transcomsl.com

or admon@transcomsl.com

☎ : +34 943 224 360



Saint Petersburg convention 2016

INTRODUCING OUR NEW *PETITE* SPECULUM!!

At just 4 3/4" this little baby was designed for your most sensitive clients!



INTRODUCTORY
 SPECIAL
\$3.35/ KIT
 ENDS 10/31/18

Everyday price \$3.45

- Length 4 3/4" – Diameter 7/10"
- Fits ALL Closed System Devices
- Smooth Transition Insertion
- Non-Slip Waste Hose Grip
- Graduated Water Inlet Barb
- Strict Quality Standards
- Made in the USA

CALL TODAY FOR A FREE SAMPLE!

AQUA CLEANSE

- Internal Pre-warming System
- Internal Sanitizing System
- Stainless Steel Internal Fittings
- Stainless Steel Coupler
- Water-Proof 50,000 Hour LED
- Custom Color-Coded Pressure Gauge
- Quiet Digital Timer with Large Screen
- "Plug N Play" Ultra Filter System

3-YEAR FULL WARRANTY



Purchasing our kits supports **7** Manufacturers in the USA

Quality Components Guaranteed

Fast, Friendly, Amazing Customer Service

Same Day Shipping with **NO** Inflated Charges

QMS PRODUCTS ARE FDA REGISTERED - CLASS II – RX REQUIRED

"Colon irrigation devices are prescription devices and only a practitioner licensed by state law to use such devices can purchase such devices in that state."

The Relax® Sauna

The Perfect Complement for your Colon Hydrotherapy practice !



Increase the effectiveness of colon hydrotherapy!

Far Infrared light energy stimulates the release of toxins throughout the body by emulsifying fat and increasing micro-circulation. The Relax Sauna has been shown to be one of the most effective & efficient saunas for detoxing heavy metals & plastics, as it increases core temperature and mobilizes the lymphatic system.

Why do health professionals prefer the Relax Sauna to all other saunas?

- It is used very effectively with your clothes on for 5-10 minute treatments
- Only takes 30 seconds to warm up & have a full sweat in 20 minutes
- The highest quality far infrared ray of any sauna (95-99% far infrared ray)
- FDA approved medical device technology for use in the health care industry

Many colon hydrotherapists use the Relax Sauna in their home & office and sell them to their clients!

THE SKY EYE MEDICAL LAMP

The CATS Meow for Colon Hydrotherapists

The Sky Eye Medical Lamp (approved by the FDA as a medical device) is used in many medical practices and clinics. It is extremely effective in wound healing, and in diminishing Diabetic Ulcers. It is remarkably fast at decreasing inflammation.



A Colon Hydrotherapist came up to us at a conference, and was glowing about how well the Relax Sky Eye Radiator worked when she gave a colonic. She used the Relax Sky Eye Radiator on the client's abdomen as the client received a colonic. She confided it worked more effectively in getting a better release than even having them get into the Relax Sauna for 5-10 minutes before a Colonic session. (This of course, was also effective.)

We recommend:

- 1) Put your client in the Relax Sauna for 5-10 minutes (with their clothes on) before they have a colon hydrotherapy session.
- 2) After or before the colonic, offer a 20-25 minute profuse detox sweat in the Relax Sauna to your client as an additional service for \$40 - \$60.

Charts, Massage Tools and other Products



RELAXSAUNAS.COM

Phil Wilson 626-200-8454 / moment98@aol.com
Jana Kennedy (CHT) 509-997-5433 janasue2u@gmail.com

LIBBE

25th Anniversary Special LIBBE Purchase Discounts

**LIBBE Training (4-1/2 Day) at any LIBBE Recognized School
and Receive \$2,000.00 Discount off New LIBBE!**

**Attend LIBBE & I-ACT (10 Day) at LIBBE Manufacturer School
and Receive \$3,000.00 Discount off New LIBBE!**

- **Enroll Early - Save on Tuition!** •

<https://colonic.net/training/registration/>

**\$2,000.00 Discount off New LIBBE
Available to All Current LIBBE Users!
All Orders Must be completed by 03/29/19.**

Trade In Old Clunker

UP TO \$ 6,000.00 IN DISCOUNTS!

Trade In Requirements:

- Must be a Registered Colon Hydrotherapy System
- Free 4-1/2 day LIBBE Review in San Antonio, TX.
- Bring clunker with you or destroy & document pictures
- Orders must be completed by/before 03/29/19

TILLER MIND BODY, INC., SAN ANTONIO, TEXAS, 210 308-8888

"U.S. Food & Drug Administration (FDA) Requirements"

FDA (class II) Colon Irrigation Systems, are prescription medical devices and are intended for use for colon cleansing,
When medically indicated, such as before radiologic or endoscopic examinations, as identified in 21 C.F.R. 876.5220
January 2019 • Copyright © • Prices / Discounts may change without notice!

I-ACT Quarterly Winter 2018-19

"Colon irrigation devices are prescription devices and only a practitioner licensed
by state law to use such devices can purchase such devices in that state."

Professional liability insurance.

Allied Professional Insurance will write professional liability insurance for I-ACT members. You must be a current member and keep your membership current to be eligible for the insurance. Contact the I-ACT office (210-366-2888) for the application form, or go to the I-ACT web site - Members Only Section - and download the application from the web site.

Doctors' Insurance Agency also writes professional liability insurance for colon hydrotherapists. Email them at: info@doctorsagency.com. They are located at 6 Hamilton Landing, Suite 170, Novato, CA 94949. Phone 415-506-3030.

Another company, CM&F may write liability insurance for colon hydrotherapists (**they have dropped numerous therapists, but some are getting insurance.** - call 800-221-4904, or go online to cmfgroup.com. It will be listed as "Enterostomal Therapist." They will put a rider in the policy stating colon hydrotherapy if you request; however, it is not required - this depends on the underwriter of the insurance.

In Canada, try Lloyds of London - check with your local Lloyds of London agent. In the UK, try Balens Insurance Brokers at 01684 893006.

In the Netherlands, try: Mark Hypotheken & Pensioenen B.V., Therese van Reeuwijk
Oude Delft 103, NL-2611 BD DELFT • tel. +31 152147543 • fax. +31 152126086 • www.markhypotheken.nl

Check around and choose the best policy for you. As other options become available, we will let you know. If you hear of anything let us know.

Advertisement

"Are YOU a TOXIC WASTE SITE?" BOOKLETS

Twentieth Anniversary Edition
New **COLOR** Pages

By Bill Tiller, ND.

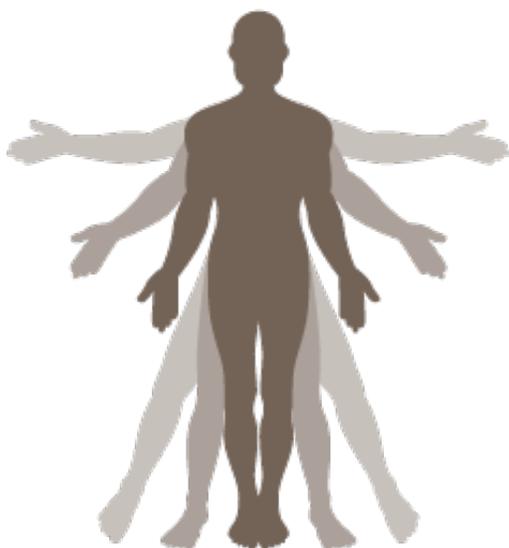
Example of How a Detoxin Solution Softens Feces and Cleans the Colon

Colon Hydrotherapy Questions & Answers
Promotes Your Industry

www.toxicwastesite.net

© 2017 TILLER

Information on Approved A&P Courses



Your students may take an A&P course through their local community college or university. If they have taken an Anatomy & Physiology course for massage, from a state licensed school that provided at least 45 hours of classroom time, that course will also count.

There are two courses that may be used for the A&P pre-requisites.

Your student may take the Delmar course through **CENGAGE** Learning, **ONLY** if you as the instructor or school register with Delmar and set up the program. It goes through you; students **MAY NOT** call Delmar directly, it doesn't work that way.

The Instructor must Contact:

Sandra Tarkleson: Cengage Learning at, 5 Maxwell Dr., Clifton Park, NY 12065 (p) 518-348-2406.

or email: sandra.tarkleson@cengage.com Valid in the USA.

Corexcel: Course Number: CXW0035

Course Fee: \$318.00

Point of Contact: Kysha Mowbray, (888) 658-6641, learn@corexcel.com

Information for Those Seeking a Job

Looking for a Career Opportunity?

Go to the I-ACT web site and then go to the members only section. Inside you will find numerous job opportunities.

If you are looking to be employed, you may email us and we will list your name as someone looking for employment.

If you are seeking someone to employ, send us an email with your information and we will post your opening in our E-Blasts.

Also check our "Help Needed" section, in the Members Only Section of our web site
<http://www.i-act.org/iactmember/membersjobsearch.html>



I-ACT is GREEN!!!

As of the Winter 2013 Quarterly, I-ACT has gone "green." Your quarterly will be emailed to you.

If you would like to have the quarterly sent to you via regular mail, you **MUST** let us know so we can put you on a list. Just send us an email: homeoffice@i-act.org and let us know you want/need your future quarterlies via mail.

By receiving an email version of the Quarterly, you help the Association be cost effective and good stewards of the budget.



I-ACT sends out E-Blasts to notify its members of Regional Meetings and other important issues. If you are not receiving these E-Blasts, please email the I-ACT Office and give your current e-mail address. We will immediately put your email address on our E-Blast list.

Members Only Section of the I-ACT Web Site

If you have not been to our web site, please go to www.i-act.org. Go to the members only section - contact the office for your Members Only password. In that location, you can find the I-ACT Member Logo, and additional member information. In the future, those on our E-Blast list will be sent the current password, so make sure that you are on our E-Blast list to ensure that you receive the password for our I-ACT Member site.

Following is a list of our new members for the period October 1, 2018 through December 31, 2018.
 We are glad to have you as members. Remember, at I-ACT you are important to us!

First Name	Last Name	Home City	Home State	Country
Marea	Celentano	Winter Park	FL	USA
Gorica	Adduci	Manchester	CT	USA
Benzion	Yossef	Brooklyn	NY	USA
Roisy	Yossef	Brooklyn	NY	USA
Angie	Wellborn	Kenai	AK	USA
Yvonne	Warkentin	Hutchinson	KS	USA
Trisha	Goodridge	Lawrenceville	GA	USA
Cassandra	Vinson	Auburn	AL	USA
Kerrilyn	Chew, DOM	Santa Fe	NM	USA
Dominique	McCullough	Clemons	IA	USA
James	Barton	Miami	FL	USA
Dawnette	Been	Paget		Bermuda
Mariam	Papava	Philadelphia	PA	USA
Grace	Suarez	Yaphank	NY	USA
Tina	Mei	Chicago	IL	USA
Elicia	Jacob	Birmingham	AL	USA
Suzanne	Gano	Florence	OR	USA
Yuzuo	Zhang	San Gabriel	CA	USA
Jennifer	Goldstone	La Jolla	CA	USA
Carol	Che	Pasadena	CA	USA
Khadija	Shepard	Boalsburg	PA	USA
Tasha	Hargrove	Charlotte	NC	USA
Olga	Gonzalez	Laredo	TX	USA
Kassandra	Gonzalez	Laredo	TX	USA
Nery	Escobar-Villanueva	Laredo	TX	USA
Elsie	Sooszetojones	Newport Beach	CA	USA
Jennifer	Allen	Phoenix	AZ	USA
Janice	Powell	Richmond	VA	USA
Lori	Maher	Patchogue	NY	USA
Erick	Benitez	East Elmhurst	NY	USA



Welcome New Members

A Holiday Message

from your I-ACT Leadership/Mentorship Committee

In business, particularly in health care, there's nothing more important than building strong relationships with our peers! The holidays are the perfect time for our Leadership/Mentorship Committee to share our gratitude and warm wishes to all of you for supporting and participating in our Mentor/Mentee programs.

When we reflect upon all the rewards of being in the business of healthcare, our thoughts about relationships with great colleagues like you are at the forefront. Thank you for giving us the opportunity to practice our passion of providing a life-enhancing therapy to enhance the lives of those we serve.

The simple deed of asking for or providing professional mentorship can create a loyal friendship for life, which makes mentoring the success it is — personally and professionally.

Your I-ACT Leadership/Mentorship Committee,

Mark Buse & Roxanne Watson

Whether you own a small clinic or run a large integrative healthcare practice, mentoring helps individuals rise a-cut-above the rest because we learn from each other's experiences; what works and what doesn't.

The Leadership/Mentorship team wishes you health, peace, joy and prosperity throughout the coming year and we again thank you for your continued support and partnership. We look forward to creating even more professional opportunities for each of you in the coming year.

As we enter 2019, we find ourselves reflecting on the past year and those who have helped to shape our mentorship program. It's been quite a year for us all! We hope that 2018 has been just as memorable for you, your colleagues and your clients. We look forward to working with you in the years to come.

Holiday Greetings from MARK BUSE...



It's been quite a year and as 2019 is upon us, I'd like to reflect to all of you how the profession of colon hydrotherapy has further enhanced the education, experience and camaraderie of those who choose this profession – fueled by their passion to provide health-enhancing therapies to those they serve. As our profession grows exponentially, so does the need to build professional partnerships both here and abroad; that's exactly what we've done.



Dinner at CHIC conference with colleagues

Now serving my second term on the Board of Directors for the Int'l Association of Colon Hydrotherapy (I-ACT), my platform is, and will continue to be, to develop new programs to enhance the technical and practical education and support by creating more Mentor/Mentee programs so that those with years of clinical experience can guide the next generation of colon hydrotherapists.

These photos are from the annual CHIC conference in York, England where the major Int'l colon hydrotherapy associations met for expanded education and sharing – I-ACT is a participating member.



Vendor area at CHIC conference, Mark conversing with I-ACT Board President, Beverley Blass



Mark & Beverley in
Town-center, York, UK



This newly developed program, as a benefit of I-ACT membership, insures the transfer of Knowledge & Experience to the next generation of colon hydrotherapists and those needing extra guidance. Mentoring is the Secret

Weapon of the Successful. This program emphasizes that a well-chosen experienced mentor can help guide the

therapist on a path of success through experiences that benefit the clients they serve. Mentors are those who have successfully navigated that same journey before

guide other therapists through their experiences of professional challenges and opportunities that may not yet been incorporated into their practice. The goal of the mentor is to improve training and knowledge that will motivate and inspire.



As the New Year begins, I sincerely wish each of you a year of health, happiness and prosperity.

My private practice continues as does my commitment to assisting any colon hydrotherapist that needs mentoring, training or assistance with equipment.

To Your Wellbeing,

Mark Buse



