Leaky Gut Syndrome: A Modern Epidemic with an Ancient Solution?

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One hundred million Americans suffer from chronic pain, which equates to approximately half of the adult population. These are frightening statistics, but what’s even more frightening is that the majority of these same people are suffering from chronic diseases caused by leaky gut syndrome. Taking pain medication, whether over-the-counter NSAIDs or prescription drugs, has unwittingly condemned them to an existence with leaky gut and all of its ramifications. Compounding the problem is the prolific and unnecessary use of antibiotics, which led to the creation of “superbugs,” antibiotic-resistant pathogens populating the gastrointestinal tracts of the naïve. This deadly combination of pain medications and antibiotic abuse has created a public health crisis, the likes of which physicians are certainly ill prepared to treat and definitely unable to diagnose responsibly.

That’s the bad news about leaky gut syndrome. The good news is that we do have a solution, one that has been around long before penicillin was discovered by Sir Alexander Fleming in 1928 and before Felix Hoffmann first synthesized aspirin for Bayer in 1897. In fact, we have not scientist nor medical doctor nor herbalist but Mother Nature to thank for this amazing gift. This magical, first food of life for humans and all mammals, except humans, can exist at all. This astute conclusion is something my mentor, medical anthropologist Dr. Robert Heinerman taught me. Rather than looking at colostrum as just a substance with a lot of wonderful chemicals in it, Dr. Heinerman gave me a way to view colostrum through the eyes of a sociologist and an anthropologist with all the history of mankind and the origins of the very first mammals.

What is Leaky Gut Syndrome?
The term leaky gut syndrome, or leaky gut identifies an increasingly pervasive health disorder in which the lining of the small intestine is more permeable than it should be and becomes subject to inflammation by various irritants. The abnormally large spaces allow entry of toxic material into the bloodstream that would, in healthier circumstances, be repelled and eliminated. The gut becomes “leaky” in the sense that bacteria, viruses, fungi, parasites and their toxins, and undigested foods such as proteins, nerve and connective tissue, fat and waste normally not absorbed into the bloodstream in the healthy state, pass through a damaged, hyperpermeable, porous or leaky gut. When these foreign substances enter the bloodstream, the immune system goes into reaction mode and begins creating antibodies against its own tissues. Chronic overstimulation of the immune system leads to chronic inflammation and disease.

All newborn mammals have holes in the stomach and small intestines, by design, so that colostrum can freely enter the bloodstream. Every antibody produced against every pathogen the mother has encountered in her lifetime, and her own mother’s lifetime, is transferred to her offspring. Humans receive some passive immunity in the womb, yet the transfer continues with early and extended breast-feeding. Colostrum also contains the epithelial and epidermal growth factors that...
close the holes within two days after birth, such that the infant no longer has a leaky gut. Without a doubt, this underscores the importance of breastfeeding; and for me, it was the foundation of my hypothesis that if colostrum can heal leaky gut in a 2-day old infant, surely it can do the same for an 80-year-old.

To further test my hypothesis, I instituted animal trials with pigs. In a double-blind study, we proved that bovine colostrum not only prevented GI damage caused by excess stomach acids but also healed existing damage. Additionally, the colostrum-fed pigs had a 20% increase in the surface area of the small intestine as measured by villus height. This correlated to an improvement in the nutritional absorption of beneficial and critical nutrition. Not only did the pigs grow faster and healthier, they had more lean muscle mass, less fat and there was no need for farmers to use antibiotics. This study was a model for ulcers in humans, and the remarkable results led to the undertaking of human trials. My goal was to pioneer colostrum back into human consumption, and so I needed to introduce colostrum into the research arena with the top GI specialists taking the lead. My call was answered, and Dr. Raymond Playford at the Imperial College School of Medicine in London led his team, first with animal models of NSAID-induced gut damage, and later with humans. They found that taking colostrum reduced the acute NSAID-induced increase in small-intestinal permeability. This research began in the late 1990s, and interest was high due to increasing use of NSAIDs among arthritis and chronic pain sufferers. Over the next two decades, our research evolved into other areas related to intestinal permeability, most notably utilizing the proline-rich polypeptides (PRPs) derived from bovine colostrum to eliminate HIV-associated diarrhea caused by opportunistic infections for which antibiotics had no effect. PRPs are the most powerful modulators of immune response and regulate the cytokine response that causes inflammation in the body.

**The Scourge of Pain Medications and Antibiotics**

We know that prescription pain medications, not just the OTC variety, cause bleeding and holes in the stomach and in the intestinal lining. We know that the risk of death in people taking NSAIDs for more than two months is 1 in 1,200. We also know that abdominal pain is the most common GI symptom that prompts a clinic visit, and in an effort to relieve that pain, physicians prescribe steroids which further exacerbate the destruction of GI tissue. We know that 100 million people are taking pain medications for extended periods, whether they obtain them through legal or illegal means. That’s half of all adults in the US, and so I’m confident we can say that a minimum of 100 million people have leaky gut syndrome. There’s no consumer warning label on OTC pain relievers that says “Extended use causes leaky gut syndrome.” Medical schools aren’t teaching physicians about the GI dangers of chronic use of pain medications, so when doctors write a prescription for pain meds, they’re unaware that they’re writing a prescription for leaky gut syndrome. Sadly, it’s a case of a little knowledge being a lot dangerous.

Pain medication is the most utilized drug category in the US and also the most abused, followed closely by GI drugs. It’s not surprising at all, since the two are interconnected in a vicious cycle of leaky gut syndrome. The first creates the problem, and the second masks and exacerbates the problem. So, what really needs to be done to stop this epidemic is for physicians and medical practitioners to offset the effects of the flawed rational and flawed treatment of the past. The Hippocratic oath first says, “Do no harm.” How can prescribing drugs that create more harm to the gastrointestinal tract possibly provide no harm?

We also know that nearly 80% of all pathogens enter the body through or attached to mucosal surfaces, the largest of which is the gastrointestinal tract. We know that people are bringing infections into hospitals, and others with compromised immune systems are taking them home. We know that many patients are discharged from the hospital sicker than when they entered and often dying later. Approximately 125,000 Americans die annually from hospital-acquired, gut-based infections, of which *Clostridium difficile* (C. diff), and methicillin resistant *Staphylococcus aureus* (MRSA) are the most prevalent and most difficult to treat. I’ve calculated the 125,000 figure based on toxicologist John T. James’ estimate that 440,000 people die annually from hospital infections and medical mistakes, and by taking the couple of states that actually report hospital-acquired infections (HAIs) and extrapolating across the US. Interestingly, *Consumer Reports* has been a champion of requiring states and the federal government to make reporting of HAIs a requirement. We’re slowly moving in that direction, but reporting is not readily available to consumers.

Consumers and some physicians are ignorant to the damage that antibiotics cause in the gastrointestinal tract. Prescribing antibiotics for gut-based pathogens creates more problems than it solves; it destroys both good and bad bacteria and leaves the strong and drug-resistant bacteria behind to colonize and exacerbate leaky gut syndrome. The bacterial toxins seep through the permeable gut lining and get into the bloodstream, so what was once a gut infection now becomes a systemic infection, often with deadly consequences. Leaky gut can also create chronic diarrhea, which reduces a patient’s ability to fight infections and depletes the body of essential nutrients and fluids. Similar to what we observe in HIV/AIDS patients, chronic diarrhea leads to a wasting process because the body’s immune system is essentially overrun and unable to do its normal job.

Further complicating the problem is the pervasive use of antibiotics in livestock production, for which there is no justifiable use in healthy animals. The antibiotics enter the food in the
Leaky gut syndrome is directly associated with many autoimmune diseases including allergies, alopecia areata, Alzheimer's disease, autism, chronic fatigue syndrome, Crohn's disease, depression, diabetes, fibromyalgia, food allergies and sensitivities, heart disease, HIV/AIDS, irritable bowel syndrome, inflammatory bowel disease, multiple sclerosis, polymyalgia rheumatica, Raynaud's disease, rheumatoid arthritis, scleroderma, Sjögren's syndrome, ulcerative colitis, and vasculitis. The connection between leaky gut syndrome and these autoimmune conditions is the antibodies created by the body in response to the toxic substances and undigested fats and proteins that leak into the bloodstream and attach themselves to various tissues throughout the body, trigger an allergic response, and create inflammation. As toxicity increases, autoantibodies are created, and the destruction and inflammation becomes chronic. There is a tipping point at which the body cannot recover from chronic inflammation and pathological diagnosis follows. The specific type of autoimmune disease that develops depends on the predominant location of the inflammation. When inflammation occurs in a joint, rheumatoid arthritis can develop; in the brain, chronic fatigue syndrome (myalgic encephalomyelitis) may be the result; in the blood vessels, vasculitis may be the resulting condition; within the gums, periodontal disease can result; or in the lungs, asthma may be triggered. If the antibodies attack the lining of the gut itself, the result may be irritable bowel syndrome, ulcerative colitis, or Crohn's disease. If the bacteria that cause gingivitis enter the bloodstream and attack the arterial walls, causing inflammation and cholesterol deposition, heart disease and stroke may ensue.

As a secondary consequence, inflammation in the gut damages the body's ability to produce IgA, and without IgA, pathogens can escape into the bloodstream and infect any part of the body. This leads to an increase in infections, an overstimulated immune system, and an abundance of pathogens infecting the liver, thereby creating detoxification failure. Eventually, patients suffer from loss of concentration, impaired mental abilities, decreased energy, skin infections and irritations, such as hives or acne, as the skin organ attempts to detoxify that which the liver is failing to provide.28

Colostrum to the Rescue

The “superbugs” created by decades of antibiotic misuse and over-reliance and addictions to pain medications need not be our undoing.29,30 Mother Nature’s gift of colostrum is just waiting to be rediscovered. Colostrum was designed to prevent infections originating in the bowel, to close the leaky gut, and to prevent opportunistic infections from taking over and causing or exacerbating leaky gut syndrome. For individuals who already have an autoimmune disease, colostrum is absolutely essential to the healing process. Unless a permeable gut is healed, the body cannot begin to repair the damage caused by inflammation. As healing begins, the amount of toxins dumped into the bloodstream will decline, nutritional uptake will improve, the cells will have better access to the fuel they need to for repair and replication, organ function will improve, and energy levels will rise.

And unlike the so-called wonder drugs of the pharmaceutical industry, absolutely no harm comes from colostrum.31 It has no known side effects and has no known interactions with drugs. Colostrum has been proved in both animal and human trials to prevent and heal leaky gut syndrome, and it’s the only substance conclusively proven to provide this kind of result. Food elimination and herbal products can’t do the job because they don’t contain the antibodies, immunoglobulins, and growth factors necessary to heal the gut lining and provide the nutrition and hormones for cell repair, growth and differentiation. Bio-identical epithelial and epidermal growth factors (skin growth...
that nonhyperimmune colostrum was contact with, in addition to all the pas-
sected people whom they come in
grasses that they eat and from the in-
immunity from pathogens in the
son is that cows acquire their
fected with antibiotic-resistant bac-
ing that 2 million Americans become
up in the hospital, then we have cause
tummy bug someone got at the local
could work, from the occasional
any indicator of how well colostrum
nificant measure of health. If this is
their wasting disease and regain a sig-
restored and patients could reverse
spectrum defense is what makes
colostrum so beneficial for human
use.

**High-Efficacy Colostrum Supplements Yield Health Benefits**

In order for colostrum to be effec-
tive, it must contain high levels the ac-
tive components, and it must be able
to reach the cells with no compromise
in bioactivity. A phospholipid coating,
such as liposomal delivery, protects
the colostrum from digestion and en-
sures that it can deliver the nutrients,
growth factors, and antipathogenic ac-
tion of colostrum to the cells. Raw
fresh colostrum has a liposomal sur-
rounding of the active, sensitive mol-
ecules and so, we know that this is
critical for processed supplements.

Only one processing plant in the world
has been designed to process
colostrum in a way that maintains in-
tegrity of the active components and
verifies bioactivity and the presence
of antibodies prior to distribution to con-
sumers. If a colostrum supplement
can’t heal leaky gut syndrome, it’s no
ther than powdered milk.

I’ve been working with physicians
for over two decades in leaky gut and
gastrointestinal health with phenome-
nal results. I’ve had some very signifi-
cant reports from patients and
physicians testifying to remission and
restoration of damaged tissue in mul-
tiple sclerosis, fibromyalgia, sclero-
derma, and Alzheimer’s disease. We
believe this to be the result of the heal-
ing of leaky gut syndrome and the
ability of colostrum’s growth factors to
help repair damaged tissue and or-
gans. I recommend physicians put
their chronically ill patients -- anyone
with allergies, food sensitivities, au-
toimmune diseases, immune prob-
lems, cancer, heart disease, and so on
-- on colostrum as a first mode of treat-
ment. I also suggest a gluten-free diet
because gluten coats the villi in the
small intestine, thereby trapping any
pathogens in the infected area of the
bowel. Colostrum can’t destroy the
pathogens if it can’t reach them. The
bowel needs to be reseeded with pro-
biotics, and again colostrum is needed
for the good bacteria to colonize. If
leaky gut was the result of parasites, an
anti-parasitic cleanse is necessary, as
colostrum does not destroy parasites.

Physicians with gluten-sensitive
patients are particularly interested in
colostrum. The Institute for Responsi-
ble Technology just came out with a
report that confirms what I’ve believed
for a long time. GMO foods are linked
to leaky gut syndrome and may also
trigger or exacerbate gluten-related dis-
dorders, including celiac disease.

Of the nine GMO food crops grown
for human consumption containing
high levels of Bt toxin, corn and corn
oil are most widely consumed in the
US and Mexico. The Bt toxin was de-
signed to puncture holes in insects’ dig-
estive tracts, and studies have
demonstrated this in human cells as
well. Bt toxin may be related to leaky
gut syndrome, and as a whole, GM
foods may be contributing to the rise
in gluten sensitivity.

“Colostrum is the ideal solution
for leaky gut syndrome. Its compo-
ments prevent and heal GI damage.
Unless the gut is healed, the body can-
not begin the process of repair” (Don-
ald Henderson, MD, MPH, UCLA
professor of medicine). If you heal
the gut, stop the crossover of toxins,
and detoxify the body, then you’re
going to see a starting point from
which you can begin eliminating mul-
tiple symptoms and narrowing down
a process and a pathway to wellness.
Recommended dosing is 1 teaspoon
colostrum mixed with water on an
empty stomach 30 minutes before
meals and before bedtime. Results are
typically achieved within 30 days, and
regular use is required to maintain
benefits.

Common practice dictates that
practitioners perform allergy/food sen-
sitivity tests and recommend a food
elimination program to heal leaky gut.
Foods are not the cause of leaky gut.
They’re the symptom of leaky gut. That
is the proof that leaky gut exists, and I
believe that every patient who walks
through your door with a chronic dis-
eease complaint has leaky gut syn-
drome. If you haven’t put colostrum
into your practice, or you have put
colostrum in your practice before and you didn’t get results, you really need to take a look at the fact that not all colostrum on the market is equal. Not all colostrum is processed to ensure the bioactivity of the beneficial components. And if they’re not bioactive, they’re not going to provide the kind of results I’m talking about in this article.

Conclusion

Often misunderstood and nearly always undiagnosed, leaky gut syndrome has become an epidemic in modern times, as evidenced by the epidemic of allergies and chronic diseases. The more public attention given to the overuse and abuse of pain medications and antibiotics is sure to drive home the message that physicians need a paradigm shift in treatment of chronically ill patients. When Hippocrates said that all disease begins in the gut, he was far ahead of his time. After 2000 years, we are just beginning to understand and accept this premise in modern medicine. If we understand and appreciate colostrum for the true gift that it is, we can utilize it for the healing and prevention of gastrointestinal distress and therefore, chronic toxicity; and in doing so, we will dramatically increase quality of life and reduce unnecessary death and disability.

Notes


Douglas Wyatt is the founder of Sovereign Laboratories LLC, a Sedona-based company dedicated to developing natural products that provide the public with the best solutions for optimal health. He is honoured to be listed as the leading expert in colostrum and is credited with reintroducing bovine colostrum into human use. Additionally, he serves as the research director of the International Center for Nutritional Research, a not-for-profit institute dedicated to nutritional health, and is one of the leading figures in the natural products industry. Doug is a leader in the research and a proponent of colostrum’s unique and powerful healing compounds that show incredible promise for turning the tide on the prevention and treatment of the world’s increasing chronic disease epidemic. As a publisher, author, writer, scientist, and public speaker, Doug has appeared nationwide on television and radio shows and at health conventions worldwide. He is dedicated to the prevention of chronic disease through natural nutritional intervention and is working with the WHO (World Health Organization) and other internationally recognized research organizations on clinical trials on HIV/AIDS, other infectious diseases, autoimmune diseases, and bowel health issues.