

The Leaky Gut

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Many people suffer from numerous and persistent digestive symptoms. Gas, bloating, sleepiness after eating, loose stools and food intolerance are common complaints heard daily by physicians across the country. If no medical condition can be found, the fallback diagnosis is generally irritable bowel syndrome. In other words, you have symptoms, but there is no known disease. There may, however, be functional explanation for these problems, a condition loosely referred to as a "leaky gut".

The lining of the digestive system is a selective screen. It allows necessary fuel and nutrients to slip through, or be actively carried across, the intestinal membranes to the blood. Well-functioning membranes absorb critical nutrients then filter and excrete undigested food chunks, debris and germs.

What happens when the tissues lining the digestive tract are operating poorly? They "leak." Microscopic junctures between the cells are too large to prevent undigested food pieces and potentially dangerous chemicals from reaching the blood.

The several pounds of food that the average person consumes each day contain an endless array of toxic substances, organisms and heavy metals. Pathological bacteria or fungi that tend to grow in excess along the surfaces of a leaky gut can change these toxins into even more dangerous compounds.

Fungal/bacterial derivatives, heavy metals and partially digested food can greatly impair a child's behavior and development. Adults may be spacey and cranky. Additionally, inefficient digestion of necessary nutrients can starve the neurological and immune systems. In severe cases the immune system may malfunction, contributing to the development of auto-immune disease.

To repairing the leaky gut, consider this five-step process:

Step 1: Eliminate Allergens

When the gut cannot tolerate certain foods, the result can be irritation and inflammation. Casein (milk-based) and gluten (wheat-based) proteins are two of the most difficult proteins to digest and, therefore, the most allergenic substances in most diets. Milk protein intolerance is the primary reason for gastrointestinal bleeding in infants, although few older children and adults have this problem. Soy, eggs and corn are the next most common allergens.

The gut cannot repair itself if a person continually consumes foods that cause reactions. For those who react negatively to almost everything eaten, the best course is to eliminate only the most problematic items so that the diet contains sufficient nutrients.

Step 2: Add Nutrients for Gut Lining Repair

Normal gut repair is "nutrient intensive," as the outer lining is totally replaced every 72 hours. The high activity level causes constant cell loss and replacement. With insufficient nutrients, cell turnover is slower and inefficient.

When the gut leaks, unwanted substances are absorbed while some good nutrients are lost (or eaten by fungi and bacteria). Just as home maintenance requires lots of money, gut repair requires the availability of a broad range of nutrients.

Vitamin A, zinc, essential fats and protein, all critical for cell integrity, are some of the many nutrients that children can take as supplements. These nutrients are important in many ways. Developmental pediatrician and researcher Dr. Mary Megson, has suggested that poor absorption of just one nutrient, fat soluble vitamin A, makes some children especially susceptible to adverse reactions from MMR (Mumps/Measles/Rubella) vaccines.

Step 3: Replace Good Bacteria

Antibiotics contribute to gut leaking by killing the beneficial bacteria that are the first-line defense against invading organisms. Good bacteria further aid in gut repair by converting certain fibers in the diet into small fatty acids. These short chain fats work as a biological "mortar" to strengthen weak cell membranes. Most health food stores carry several brands of "probiotics" or "good for life" bacteria. Common strains include *L. acidophilus* and *L. bifidus*. Purchase them from the refrigerated section in powder or in pull-apart capsules. (Excessive use can cause gas and, occasionally, irritability from the die off of fungus.)

Step 4: Kill bad bacteria and/or Fungus

Fungus and "bad" bacteria thrive in an unhealthy gut environment. Once they are living happily, they are not easily removed. A healthier diet, supplements, and good bacteria may help, but eradicating excessive pathological organisms may be necessary.

A wide variety of botanical and prescription items are available for this purpose.

To determine the need for this more intensive intervention, consider:

Dr. William Shaw's urinary organic acid test to measure fungal or bacterial by-products, available from Great Plains laboratory (1-888-347-2781), or

A comprehensive digestive stool analysis (CDSA) with parasitology test, through Doctor's Data Laboratory (1-800-323-2784).

Your physician can request these tests and help with treatment options.

Step 5: Improve Digestive Function

Digestive enzymes and/or stomach acid may be necessary to break down food into smaller pieces so it is less allergenic. There are vegetarian based enzymes (weaker) and animal based enzymes (stronger). Some enzymes specifically address the breakdown of gluten and casein in youngsters with developmental issues. Kirkman Laboratories (1-800-245-8282) carries a number of these products as does Houstonni Nutraceuticals (1-866-757-8627). All digestive aids can cause irritation, so use with caution.

The gut and the brain are connected. Therefore, repairing a leaky gut can reduce chemical and microbial assault to the brain. The better food is broken down and absorbed, the fewer problems for the body.