



# ASHEVILLE INTEGRATIVE MEDICINE

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## Gut Health

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Digestive disorders are on the increase. About 38 million Americans suffer from a variety of digestive problems such as GERD, irritable bowel syndrome, celiac disease, food allergies, diverticulitis, ulcerative colitis, and Crohn's disease. Approximately 25 million Americans have daily heartburn and it is estimated that 20% of the adult population have irritable bowel syndrome. Celiac disease, once considered rare, is now thought to affect 1 in 133 people, and food allergies have increased alarmingly.

Why is this happening? Several reasons come to mind: stressful lifestyles, environmental pollution, and the American diet are a start. The standard American diet tends to be high in carbs and sugar and low in fiber and healthy fats. Not only can this contribute to digestive problems but also to obesity, diabetes, heart disease and cancer, as we know. Another factor in the increase of digestive disorders is an imbalance of gut microbes. In recent years we have come to appreciate our body's amazing ecosystem, the balance of friendly and potentially harmful microorganisms that live in our gut. This balance can be disturbed by antibiotic therapy, birth control pills, steroids, chemotherapy, heavy metal toxicity and physical and emotional stress. When out of balance, harmful bacteria, yeast or parasites can overgrow. This is called intestinal dysbiosis. Friendly bacteria in our gut are of prime importance in keeping our digestive tract as well as our immune system healthy.

What is not always easily recognized is that poor gut health also greatly contributes to many systemic conditions: such as allergies, asthma, eczema, ADHD, autism, chronic fatigue syndrome, fibromyalgia, arthritis, headaches and insomnia. Focusing on improving digestive function often results in noticeable improvement in these conditions.

In ADHD, for example, food allergies and yeast overgrowth in the intestine can exacerbate or cause hyperactivity and attention deficits. There are many studies that show an improvement in ADHD behaviors when allergies are addressed by elimination diets or desensitization. And according to parent rating surveys collected from thousands of parents by the ARI (Autism Research Institute), a gluten-free casein-free diet resulted in improvements in 66% of autistic children, food allergy treatment caused improvements in 64% of autistic children, and an anti-Candida diet had good results in 55%.

What are some things we need to maintain good digestion, absorption and elimination? Adequate stomach acid is very important to sterilize food, start the breakdown of proteins and act as a signal for the release of bile when the acidic food bolus reaches the small intestine. Chronic use of antacids and an infection called *H.pylori* can cause low stomach acid. If stomach acid is low, proteins are only partially broken down, and food allergies can result. Also, minerals like iron and calcium are poorly absorbed without adequate stomach acid. Low stomach acid is also associated with increased inhalant allergies, asthma and skin conditions like eczema.

Other factors needed for adequate digestion are bile, enzymes, normal peristaltic action (movement of the gut muscles to help the food bolus travel down the gut), a healthy intact gut lining, plenty of friendly bacteria, adequate fluid and fiber in the diet and healthy eating habits. Avoiding or minimizing environmental toxins is also extremely important. Heavy metal toxicity, mercury in particular, affects digestive capacity by poisoning enzymes and chelation therapy to remove heavy metals can have marked benefits for a wide range of conditions, among which are autism and ADHD.

More on beneficial bacteria - a wealth of research has been conducted in the last several years on the use of probiotics or good bacteria for gut health in both children and adults. It seems that without friendly bacteria our immune systems would not develop. We don't often think of our gut when we think of the immune system, yet 80% of our immune tissue actually resides in the gut and is called gut-associated lymphoid tissue or GALT. A newborn baby's gut is sterile. It acquires microorganisms during delivery, and then from the environment, which then colonize the gut. Experiments done on monkeys have proven that without these friendly bacteria the immune system does not mature.

One of the common types of harmful overgrowth in the gut is yeast or Candida overgrowth. Intestinal yeast can cause a variety of gut symptoms such as bloating, indigestion, constipation, diarrhea, and leaky gut. Yeast also produces toxins which can get absorbed and cause systemic symptoms such as sinus congestion, joint pains, headaches, foginess, fatigue, and depression to name a few.

Fortunately, many of these conditions can be improved with treatment. At AIM we pay attention to your gut health. We offer dietary advice, look for and treat nutritional deficiencies, low stomach acid, intestinal dysbiosis including yeast, food allergies and heavy metal toxicity.

Another area of emerging interest is the enteric nervous system or the "brain in the gut". The gut contains 100 million neurons, more than the spinal cord, and makes many messenger chemicals such as neurotransmitters.