



NUTRITION

Kirov Academy of Ballet DC

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Gastro-Intestinal (GI) Health

According to Gerard Mullen, MD, "You aren't what you eat. You are what you absorb." The interface between the outside world and the world within your body is your gut. We can increase or reduce our bodies inflammatory response by what we choose to eat daily. It is this inflammatory response or lack there of that sets the stage for either poor GI health resulting in chronic illness or a lifetime of wellness.

A Healthy GI Tract Requires

- Eating whole foods with fiber rich vegetables as the base
- Eating whole grains
- limiting gluten and dairy
- Eating wild caught cold water fish and there Omega 3 Essential Fatty Acids
- Nutritional Supplementation with enzymes, probiotics, vitamins, minerals, herbs, spices and nutraceuticals that are antimicrobials and anti-inflammatories
- Detoxing and or Elimination Dieting
- Life Style adjustments to manage stress, increase relaxation and exercise

Did You Know

Numerous digestive illnesses can be helped or healed with nutritional therapies. Ailments such as gastroesophageal reflux disease (GERD), irritable bowel syndrome (IBS) and other illness that we may not have even realized are triggered, caused or affected by a poorly functioning GI tract.

These ailments include but are not limited to asthma, allergies, skin problems, myalgias, headaches, joint and muscle pain, menstrual pain and irregularities and more. Mental illnesses like depression have been linked to gut dysfunction. It is now believed that many chronic conditions may be related to undiagnosed digestive disease such as celiac .

Consider This

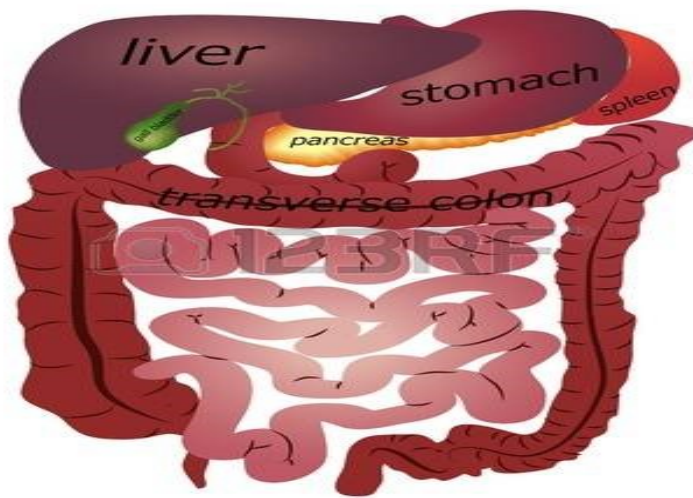
Food vs Ingestible

A **Food** is whole, real and evolved over time. It can slow and even reverse the progress of a many chronic diseases.

An **Ingestible** is a synthesized product that you can ingest and which may give you some nutritive value but can not be called "food" in any formal sense.

- Gerard Mullin, MD





Prebiotics VS Probitoics

Prebiotics—also called soluble fiber. Prebiotics stimulate the growth of or modify the metabolic activity of your intestinal flora. These flora produce increased amounts of short-chain fatty acids that reduce inflammation and repair colonic cells. Prebiotics feed your flora.

- Oat bran, germinated barley foodstuff containing hemicellulose, inulin-derived fructooligosaccharides, larch arabinogalactan

Probiotics—probiotics are live strains of gut flora that can be obtained from supplements. These are the “good” bacteria that you need in your gut. When consumed in adequate amounts.

Promote intestinal healing, re-balance your immune system, reduce inflammation, prevent and treat GI infections, maintain remission in ulcerative colitis, reduces inflammation, oxidative stress, insulin resistance and to improve metabolism

Aim for 10-25 billion CFU once daily in capsule or powder form.

Consume Fermented foods.



Lets look Inside

According to Mullin and Swift’s book, The Inside Tract, Seventy Percent of our protective immune system cells and antibodies live in our gastrointestinal (GI) tract.

Trillions of bacteria live inside your gut. There are about 500 different species of bacteria living in the GI tract. The average healthy adult carries 5 to 8 pounds of these healthy bacteria inside them at all times. These bacteria or microbes are referred to as “microflora”. Our microflora is like an organ within an organ.

Under normal, healthy conditions, these microflora are friendly. One of there main functions is to help digest and process the foods we eat, as chewing, stomach acid and enzymes alone are not enough to complete the job of digestion.

Feed your friendly microflora

The friendly microflora are constantly being challenged by pathogens or “unfriendly” microorganisms. They are always competing for space in our gut. The microbes that end up winning out are the ones who get fed the best.

Poor quality processed foods feed the pathogen unfriendly microorganisms and Fiber rich whole foods feed the friendly microflora.

Your Gut has a Brain of its Own

The gut has the Enteric Nervous System where half of all the nerve cells in our bodies resides in our gut. There are more nerves in the bowel than in our spines. The gut also has neurotransmitters that allow neurons to communicate with one another. Our guts have the same number of neurotransmitters as our brain.

Our brains and our guts are in constant communication through the vagus nerve. This nerve starts in your brain stem, runs through our necks and chest and ends in the our abdomens. The Vagus nerve only functions properly when we are relaxed.

Essentially, our emotions can affect our digestion and our digestion can positively or negatively affect our emotions and physical well being.

Digestion

Digestion Involves the following organs

Mouth - ingests and grinds foods mixing with salivary enzymes. If chewing is inadequate bloating, gas and indigestion and bad bacterial overgrowth can happen.

Esophagus— lined with mucosa that protect your insides from the acids and enzymes that break down food.

Stomach— stores swallowed food and liquid, mixes food and liquid with digestive juices, empties contents slowly into the small intestine. It takes about 4 hours to complete.

Pancreas, Liver and Gallbladder—Helpers with digestion releasing insulin, releasing bile and storing bile respectively

Small Intestine—breaks food down to be absorbed, differentiates what can be digested or not and sends molecules to their rightful place. Houses most of the immune system, house friendly microflora, absorbs nutrients, fats and proteins.

Larger Intestine—fiber and non-digestible carbohydrates

Colon

Rectum



Nutrients that Nourish the Gut

Increase your intake of the following nutrients and foods .

- choline—egg yolks
- Vitamin A—dark greens, yellow, green, and orange vegetables, fruits and egg yolks
- Glutamine—preferred fuel for the lining of the gut, from proteins and spinach, cabbage, parsley
- Maintain optimal acidic environment in your stomach—
- Balance your fats—maintain a healthy balance of omega 3 and omega 6 fatty acids (cold water fish, sardines, anchovies, salmon, avocados, extra virgin olive oil, olives, nuts and seeds).
- Avoid food allergens and intolerances - consider if foods such as wheat, dairy, corn, or other s may be overacting your gut / immune system.
- Reduce your toxic load - choose organic foods as often as possible
- maintain a healthy weight— certain fat cells in the body send inflammatory messengers that can cause an overactive immune response and inflammation
- Reduce stress—stress increases your inflammatory response and contributes to an immune system out of balance
- Get enough good-quality sleep—sleep is the time when your body rests and repairs itself. Lack of sleep weakens the entire immune system.

What about Gluten

Gluten is a protein found in wheat, rye, barley and a number of other grains (triticale, spelt, kamut). Gluten is found in many processed foods partly because many processed foods contain grains but also because gluten is used as an additive in some processed foods.

Gluten intolerance is one of the most common and most underdiagnosed chronic diseases in Western Countries. Approximately 1 in 133 Americans are affected by celiac disease. It is also considered the most common genetic disease in Europe. Some research suggests that celiac disease is actually much more common than this.

Gluten intolerance

An intolerance to gluten does not normally show up as an acute allergic reaction (IgE mediated response) like with peanut allergy. Intolerance to gluten can be more subtle but if left untreated can be a problem.

It may show up as intermittent diarrhea, abdominal pain, bloating or it may mimic conditions such as Crohn's disease, irritable bowel syndrome or they may show up as symptoms seemingly unrelated to gut function such as irritability, depression, joint pain, skin rashes, or restless leg syndrome.

If left untreated celiac or gluten intolerance can lead to Anemia, Bone Disease, Cancer, Neuropathy and other systemic conditions.

