

GI-Map Results - Feb 2025

FOR: Natasha Bird

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SUMMARY OF MOST RELEVANT FINDING:

1. Pathogen infection - *Enterohemorrhagic E.Coli* (pg. 1)
2. H.pylori infection - reduces your stomach acid affecting overall digestive capacity & gut health (pg. 2)
3. Opportunistic microbe overgrowths (pg.3)
4. Moderate presence of *Methanobacteriaceae* (pg. 3)
5. Parasitic infections - *Blastocystis*, *Dientamoeba*, *Pentatrichomonas* (pg. 4)
6. Low Elastase - poor pancreatic enzyme production, low stomach acid/H.pylori (pg. 4)
7. Low Secretory IgA - poor gut immune response which also allows microbes to overgrow (pg. 4)

1. PATHOGEN (pg.1)

Enterohemorrhagic E.Coli - sources include fecal contamination of food (undercooked beef, raw milk, water) with symptoms of fever, cramping, fatigue, nausea, diarrhoea of >1 week. Having a low gut immune response (as seen with your low Secretory IgA) will affect its presence. Particular antimicrobial herbs as well as probiotics are helpful.

2. HELICOBACTER PYLORI (pg.2)

H.pylori causes damage to the cells in our stomach which secrete our stomach acid. This causes hypochlorhydria (low stomach acid). As a result there are a multitude of downstream effects such as heartburn/indigestion, compromised digestion, opportunistic overgrowths/dysbiosis, malabsorption and nutrient deficiencies (often minerals and vit B12), compromised gut immunity, autoimmunity, skin conditions, chronic fatigue, mitochondrial dysfunction, neurotransmitter imbalances, and sleep issues. In vulnerable people, H.pylori causes more than 90% of duodenal ulcers, up to 80% of gastric ulcers, and has a causative role in chronic gastritis and stomach cancer. H.pylori has become resistant to antibiotic therapy but antimicrobial herbs still work.

What does stomach acid do?

- Kills microbes that come into our digestive tract - like a guardian of our stomach
- Partially denatures protein in food - begins the process

- Breaks down amino acids into smaller fragments - the building blocks that are essential for hormone and neurotransmitter production, energy, growth (skin, hair etc), repair, healing
- Stimulates/triggers release and flow of pancreatic enzymes and bile > both of these have huge antimicrobial properties which further inhibit bacterial overgrowths

What causes low stomach acid?

The presence of *H.pylori* in the stomach - as it reduces the body's ability to make stomach acid. Being in a sympathetic-dominant state (ie. stress, rushing) this affects the release of stomach acid, as opposed to a parasympathetic state which is known as 'rest and digest'. Also age, medications, PPIs, antacids.

3. OPPORTUNISTIC MICROBES OVERGROWTHS (pg.3)

Bacillus, Enterococcus faecium, Streptococcus, Staphylococcus

An overgrowth of opportunistic bacteria may occur due the following: low stomach acid, reduced digestive function, constipation, when the commensal (good) bacteria are impaired (by poor diet, medications, antibiotics), or alongside parasitic infections, and/or a weakened gut immune system.

Opportunistic microbes/infections create imbalance in the gut microbiota, stress the gut's immunity and can trigger elevated thyroid antibodies.

4. MODERATE PRESENCE OF METHANOBACTERIACEAE (pg. 3)

These are methane-producing microbes than contribute to bloating, irregular bowel habits (IBS-type) or a slow bowel transit time.

5. PARASITIC INFECTIONS (pg. 4)

A parasite is an organism that lives and feeds on a host organism, at the expense of the host.

- *Blastocystis hominis* - from contaminated water/food, or from water/lakes/streams/rivers/pools. Usually acutely will cause diarrhoea, abdominal pain, gas, IBS/constipation and skin issues. Stress significantly increases the severity of Blasto, and often seen with other levels of dysbiosis. Research shows eradication prevents the development of Hashimotos disease.
- *Dientamoeba fragilis* - from contaminated water/food, very common. Can have no symptoms or cause weight loss, nausea, fatigue, fever, diarrhoea.
- *Pentatrichomonas hominis* - from contaminated water/food, considered harmless/a non-pathogen. May contribute to dysbiosis, often no symptoms. Also colonises dogs, cats and other animals. Can be linked to vaginosis.

6. LOW Elastase (pg. 4)

Optimal is 500+. Elastase is one of the several digestive enzymes produced by the pancreas. When low it reflects there is poor pancreatic enzyme production, and often low stomach acid. These digestive enzymes are essential for optimal digestion - and therefore nutrient extraction - from our food.

7. LOW Secretory Ig-A (pg. 4)

Optimal is ~1200. Secretory-IgA is our most abundant immune cells produced by the intestinal mucosa. It's involved in immunological surveillance, and is our first line of defence for antigens and pathogens. It also monitors and balances the microbiome. When low, its suggestive of a gut that's immune compromised. Often seen low with overgrowths or infections involving parasites, pathogenic and/or opportunistic microbes.

Treatment:

Your 'Gut Protocol' will be discussed in your next Follow-Up Consultation (30min. This is a staged approach and addresses different areas of the gut that have been highlighted through your results.

For you, these include:

- Your gut infections/overgrowths
- Your lowered digestion capacity
- Your lowered gut immunity