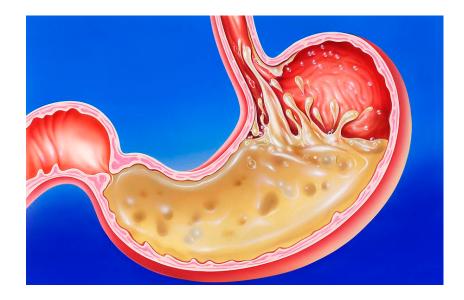
The Dis-ease of Low Stomach Acid

Stomach acid is good for you – but is often impaired!

We need strong stomach acid for optimal digestion.



Causes of insufficient stomach acid:

- Gastric infection of H. Pylori bacteria
- Low thyroid function
- Eating in a stressful state "fight or flight" vs "rest and digest"
- Food allergies or sensitivities
- Eating too quickly or not chewing food thoroughly
- Grazing
- Age
- Medications proton pump inhibitors (e.g. Prilosec), antihistamines (e.g. Zantac), and many more
- Gastric bypass surgery
- Exposure to environmental allergies

In the stomach, we break up proteins to ensure optimal absorption of amino acids in the intestines, and separate minerals to allow for intestinal uptake (e.g. iron, magnesium, zinc..). Plus, strong stomach acid helps to ensure an overall optimal pH in our intestines which (1) ensures optimal release of both pancreatic and gallbladder digestive fluids and (2) allows digestive enzymes to work at their peak effectiveness.

Look for the Cues and Clues of Low Stomach Acid

- Frequent daily belching
- Upper GI bloating, belching, an early sense of fullness/heaviness during or right after meals
- Feeling nauseated after taking supplements with food (except Zinc which may promote nausea on its own)
- Feeling particularly fatigued after meals (especially if meal was otherwise consumed slowly)
- Chronic indigestion or GERD
- Clearly seeing undigested foods in stools
- Irritable bowel syndrome (IBS) or SIBO/IMO or frequent gut infection (e.g. parasites) or microbial imbalance (e.g. Candida overgrowth)
- Insufficient levels of Vitamin B12 despite eating a carnivorous diet
- Rosacea
- Multiple food allergies or sensitivities
- Chronic allergy or hives
- Chronic asthma
- Hair or nails that are thin or break easily
- Osteoporosis or advanced osteopenia
- Multiple mineral and/or protein insufficiencies despite an ample whole foods diet
 This may lead to symptoms such as:
 - Magnesium tightness/tension, headache, anxiety, constipation, GERD, muscle spasm or cramps, heart palpitations, poor sleep, hypertension, asthma, frequent cough, high blood pressure
 - Iron anemia, fatigue, pale, cold, poor extremity circulation, low thyroid, depression, anxiety, lack of motivation
 - Zinc frequent illness, brittle/dry hair, weak/ridged or white spots on nails, sensitivity to bright light, dry skin, poor wound healing, poor sense of smell/taste, metallic taste in mouth, acne, lack of focus
 - Vitamin B12 anemia, numbness/tingling in hands/feet, sluggish energy, exercise intolerance, unsteady gait, idiopathic cough, high blood pressure, burping post-meal, poor memory, varicose veins, hormone imbalances
 - **Copper** fatigue, lightheaded, trouble raising iron stores,



How to support stomach acid?

- Eating Hygiene This is critical!! Please see handout
- You can use **apple cider vinegar (ACV) or lemon juice***. Consider 1 Tablespoon ACV mixed with ½-1 cup of water, sipped on throughout a protein-containing meal, *starting after the first few bites*. Can be increased to 2-3 Tbsp as needed**
- Capsules of Hydrochloric Betaine with Pepsin* allow a more metered experiment Please see handout**
- **Bitter Herbs or Greens** can stimulate greater stomach acid secretion and gastric motility where HCI Betaine with pepsin or other acidic supplementation is not tolerated or appropriate

- Swedish Bitters spray/drops, or bitter greens such as dandelion, kale, arugula, spinach, mustard greens, collard, radicchio, endive, broccoli rabe, watercress

* If gastric pain results right away with initial trial, stop the trial immediately. You can mix $\frac{1}{2}$ tsp baking soda with $\frac{1}{2}$ cup water to neutralize the stomach

** May not be appropriate for any yeast allergy/sensitivity or any esophageal or mouth dis-ease or inflammation (e.g. GERD, gastritis, ulcer, Barrett's esophagus, or those using acid suppressing medication or who have had gastric bypass surgery) Please speak to your Practitioner before beginning any trial