

### Local signs of the gastrointestinal system

Upper GI		Possible therapeutics
Belching or gas one hour after eating	Hypochlorhydria possible and/or pancreatic insufficiency probable	Betaine HCl, pepsin, pancreatin
Heartburn or acid reflux	Functional dyspepsia (timing)	Pancreatic Enzymes
Bloating shortly after eating	Hypochlorhydria probable and/or pancreatic insufficiency possible	Bromelain, cellulose, lipase, amylase
Bad breath	Bowel toxemia; ask about constipation, correlate with hypochlorhydria/ pancreatic insufficiency , small intestine bacterial overgrowth	Beet juice, taurine, vitamin C, pancreolipase
Loss of taste for meat	Poor protein digestion	Water soluble fiber
Strong smelling sweat	Bowel toxemia and/ or liver or kidney dysfunction	Probiotics
Trouble taking supplements	Hypochlorhydria	Concentrated Alfalfa
Sense of fullness after meals	Hypochlorhydria and/ or pancreatic insufficiency	
Wants to skip breakfast	Hypochlorhydria and/ or pancreatic insufficiency	
Feels better if you don't eat	Hypochlorhydria and/ or pancreatic insufficiency	
Sleepy after meals	Blood sugar dysregulation; Hypochlorhydria and/ or pancreatic insufficiency	
Weak fingernails	Protein and mineral insufficiency; fatty acid insufficiency; hormone imbalance	
Stomach pain	Rule out pathology; Hypochlorhydria and/ or pancreatic insufficiency; bowel toxemia; food sensitivities; zinc insufficiency; stress	
Chronic diarrhea	Parasites, dysbiosis, malabsorption, medications	
Diarrhea after meals	Food intolerance; biliary insufficiency; IBS; malabsorption	
Black or tarry stool	Bleeding	
Undigested food in stool	Hypochlorhydria and/ or pancreatic insufficiency	

### Blood chemistry related to the Upper GI

Low Alkaline phosphatase may indicate zinc deficiency; assess intake and stress before assessing heavy metal toxicity, malabsorption, or hyper-utilization.

Elevated ALT/AST (>30) with sweat odor may suggest investigating liver/kidney causes instead of GI  
CBC with special attention to markers of anemia (MCV over 90)

If H. pylori infection is suspected:

- Increased or decreased globulin (>2.8 or <2.4)
- Increased or decreased protein (<6.9 or >7.4)
- Increased or decreased BUN (<10 or >16)
- Decreased serum phosphorus (<3.0)

- Increased WBC (>7.5)
- Increased Neutrophils (>60)
- Decreased Lymphocytes (<24)
- Normal or increased monocytes (N or >7)

If pancreatic insufficiency is suspected:

- Decreased BUN (<10)
- Elevated GGT (>30)
- Decreased WBC
- Decreased Elastase 1 (stool)

Small Intestine		Possible therapeutics
Food sensitivities/intolerances	Dysbiosis/ intestinal hyperpermeability; liver congestion	L-glutamine
Abdominal bloating 1-2 hours after eating	Pancreatic insufficiency/ hypochlorhydria	Probiotics
Specific foods make you tired/bloated	Pancreatic insufficiency/ hypochlorhydria	N-acetyl glucosamine
Pulse speeds after eating	Dysbiosis/ intestinal hyperpermeability; liver congestion	Wormwood and antimicrobial herbs
Airborne allergies	Dysbiosis/ intestinal hyperpermeability; liver congestion	Betaine HCl, pepsin, pancreatin
Experience hives	Dysbiosis/ intestinal hyperpermeability; liver congestion	Water soluble fiber
Sinus congestion	Dysbiosis; Hypochlorhydria	Immune support formulas
Crave breads or noodles	Dysbiosis/ intestinal hyperpermeability; liver congestion	
Alternating constipation or diarrhea	Candida overgrowth; leaky gut; stress; adrenal overload	
Crohn's disease	Insufficient IgA response	
Food addictions	Dysbiosis/ intestinal hyperpermeability; liver congestion	
Asthma	Dysbiosis; Hypochlorhydria	
Bizarre, vivid dreams	Dysbiosis/ intestinal hyperpermeability; liver congestion; kidney insufficiency	
Feeling spacey or unreal	Food allergies; low adrenal function; low thyroid function; hypoglycemia; dysbiosis; candida overgrowth; liver congestion	

#### Blood chemistry related to small intestine

Elevated ALT/ AST may suggest liver congestion

Low alkaline phosphatase suggests zinc insufficiency

Low BUN (>10) may suggest intestinal hyperpermeability

Large Intestine		Possible therapeutics
Anus itches	Intestinal parasites; Hypochlorhydria; bile salt need; vitamin A insufficiency; zinc insufficiency	L-glutamine
Coated tongue	Toxic bowel; increased intestinal hyperpermeability; pancreatic insufficiency	Probiotics and prebiotics (arabinogalactans)
Feel worse in moldy or musty place	Dysbiosis with yeast overgrowth; molybdenum need	Water and salt
Antibiotic use	Dysbiosis with yeast overgrowth	Concentrated Alfalfa
Fungus or yeast infections	Dysbiosis with yeast overgrowth	Betaine HCl, pepsin, pancreatin
Ring worm, jock itch, athlete's foot	Dysbiosis with yeast overgrowth	Water soluble fiber
Sugar, starch, or alcohol increases yeast symptoms	Dysbiosis with yeast overgrowth	Bromelain, cellulose, lipase, amylase
Stool hard or difficult to pass	Fiber insufficiency; poor hydration; pancreatic insufficiency; hypochlorhydria	
History of parasites	Intestinal parasites; Hypochlorhydria; pancreatic insufficiency	
Less than one bowel movement per day	Fiber insufficiency; poor hydration; pancreatic insufficiency	
Stools have corners or edges are flat or ribbon shaped	Fiber insufficiency; poor hydration; pancreatic insufficiency	
Stools are not well formed	Intestinal parasites; dysbiosis; malabsorption	
Irritable bowel or mucous colitis	Hypochlorhydria and/ or pancreatic insufficiency	
Blood in stool	Bleeding	
Mucus in stool	Hypochlorhydria and/ or pancreatic insufficiency; local inflammation	
Excessive foul smelling gas	Dysbiosis/ intestinal hyperpermeability; liver congestion; Pancreatic insufficiency/ hypochlorhydria	
Bad breath/ body odors	Dysbiosis/ intestinal hyperpermeability; liver congestion; Pancreatic insufficiency/ hypochlorhydria	
Iliotibial pain	Fiber insufficiency; poor hydration; pancreatic insufficiency; bacteria or yeast overgrowth; poor IgA response	
Cramping in lower abdominal region	Fiber insufficiency; poor hydration; pancreatic insufficiency; bacteria or yeast overgrowth; poor IgA response	
Dark circles under eyes	Dysbiosis/ intestinal hyperpermeability; liver congestion; Pancreatic insufficiency/ hypochlorhydria	

Blood chemistry related to large intestine

CBC with attention to eosinophils and basophils

Low alkaline phosphatase for low zinc status

Elevated ALT/AST for liver congestion