

RSM Intestinal / ELISA Markers Quick Guide

For clinicians and integrative gastrointestinal providers

Marker	What it is	What it indicates
Inflammation		
Calprotectin  	Protein from neutrophils shed into the intestinal lumen; measured in stool by ELISA.	Elevated levels indicate intestinal inflammation and are strongly associated with inflammatory bowel disease, helping distinguish inflammatory conditions from functional disorders.
Lactoferrin 	Iron-binding protein released by neutrophils; stool marker of intestinal inflammation.	Elevated lactoferrin helps differentiate organic inflammation (e.g., IBD) from functional symptoms (IBS) and can track IBD activity and relapse risk when followed over time.
Lysozyme 	Enzyme secreted at sites of gastrointestinal inflammation; present in neutrophil and macrophage granules.	Elevated fecal lysozyme reflects mucosal inflammation and complements calprotectin and lactoferrin as an additional inflammatory marker. Particularly useful in Crohn disease involving macrophage activation.
Eosinophil-Derived Neurotoxin (EDN)	Granule protein released by activated eosinophils; fecal measurement reflects eosinophil-mediated intestinal inflammation.	Elevated fecal EDN indicates eosinophilic and allergic-type gut inflammation and has been linked to disease activity and relapse risk in IBD and non-IgE-mediated food protein-induced gastrointestinal allergy.
Immune Function		
Secretory IgA (sIgA)  	Mucosal immunoglobulin found in gastrointestinal, respiratory, and urogenital secretions; first-line immune defense at mucosal surfaces.	Low sIgA indicates impaired mucosal immunity and increased susceptibility to gastrointestinal infections; high sIgA suggests active mucosal immune response or antigenic stimulation.
Anti-gliadin IgA  	IgA antibody directed against gliadin, a gluten component in wheat, barley, and rye.	Positive results reflect an immune response to gluten and should prompt evaluation for gluten-related disorders; not specific for celiac disease.
Gut Barrier		
Zonulin  	Protein that modulates tight junctions between enterocytes and regulates intestinal permeability.	Zonulin is a protein involved in regulating intestinal tight junctions. Elevated stool zonulin has been proposed as a marker associated with increased intestinal permeability. Results should be interpreted alongside clinical findings and other diagnostic information.
Digestive Function		
Pancreatic elastase  	Pancreatic enzyme involved in digestion of proteins, fats, and carbohydrates; stool levels reflect exocrine pancreatic output.	Low values suggest exocrine pancreatic insufficiency and impaired digestion; normal levels argue against clinically significant insufficiency. <100 µg/g → severe exocrine pancreatic insufficiency; 100–200 µg/g → moderate; ≥200 µg/g → generally considered normal.

Marker	What it is	What it indicates
Stool fat (steatorrhea marker)  	Qualitative/quantitative assessment of fat in stool as a marker of fat malabsorption.	Increased stool fat suggests malabsorption or maldigestion (e.g., exocrine pancreatic insufficiency, celiac disease, Crohn disease, and other malabsorptive disorders).
Stool carbohydrate marker  	Detection of carbohydrates in stool as a marker of carbohydrate malabsorption.	Presence of stool carbohydrates supports carbohydrate malabsorption. May suggest lactose intolerance, congenital disaccharidase deficiency, pediatric carbohydrate malabsorption, or rapid intestinal transit; interpret with diet and symptoms.
Infectious Assessment		
<i>H. pylori</i> EIA (stool) 	Enzyme immunoassay detecting <i>Helicobacter pylori</i> antigens in stool; noninvasive assessment of gastric colonization.	Positive stool <i>H. pylori</i> antigen supports active infection associated with dyspepsia, peptic ulcer disease, and increased gastric cancer risk. Stool antigen testing is recommended for diagnosis of active infection and for confirmation of eradication after treatment (performed at least 4 weeks after completion of therapy; withhold proton pump inhibitors for an appropriate interval).
Detoxification (Add-on)		
β-Glucuronidase	Microbial enzyme that hydrolyzes glucuronide conjugates in the intestinal lumen; offered as an add-on detoxification assessment.	Elevated activity may be associated with increased deconjugation and enterohepatic recirculation of hormones and xenobiotics; interpret alongside clinical context and other stool findings.



Total GI intestinal / digestive markers (included):

Calprotectin, pancreatic elastase, secretory IgA, anti-gliadin IgA, zonulin, stool fat, stool carbohydrate, *H. pylori* EIA



EGHA intestinal / digestive markers (included):

Calprotectin, pancreatic elastase, secretory IgA, lactoferrin, lysozyme, stool fat, stool carbohydrate



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