Secretory IgA (SIgA)

Mucosal Immunity • Gut Health • Barrier Defense • Immune Regulation

Secretory IgA (SIgA) is the most abundant immunoglobulin in the human body — yet it is rarely discussed in conventional medicine. It is produced by the gut-associated lymphoid tissue (GALT) and secreted across every mucosal surface: the GI tract, respiratory tract, urinary tract, reproductive tract, tears, and saliva. SIgA is your body's front-line defense — the immune layer that stands between the outside world and your internal tissues. When SIgA is depleted, pathogens gain access, inflammation rises, and chronic illness follows.

What SIgA Does

SIgA performs six critical functions that no other part of the immune system can fully replace:

Function	How It Protects You
Immune Exclusion	Prevents pathogens from binding to and penetrating mucosal surfaces — traps them in mucus and neutralizes toxins before they can cause damage
Microbiome Regulation	Maintains balance between beneficial and harmful microbes; actively encourages colonization of protective species (Lactobacillus, Bifidobacteria)
Anti-Inflammatory	Downregulates pro-inflammatory cytokines (TNF-α, IL-6, IFN-γ) while supporting anti-inflammatory IL-10 and TGF-β
Oral Tolerance	Tags food antigens as safe, preventing immune reactivity — the foundation of food allergy prevention
Barrier Maintenance	Maintains epithelial integrity and prevents leaky gut by protecting tight junction proteins
Pathogen Protection	Blocks Candida, C. difficile, H. pylori, Salmonella, Streptococcus pneumoniae, HIV, EBV, and even ricin

Testing SIgA

SIgA is measured in stool or saliva — not blood. This distinction is critical: serum IgA (blood) measures systemic immunoglobulin levels, while SIgA measures mucosal immune function specifically. They do not correlate. A normal blood IgA says nothing about mucosal immune strength.

- Measured in stool (most common) or saliva — not blood
- Do not confuse with serum IgA, IgE, or IgG blood tests — different molecules, different meaning
- Often tested alongside gut inflammation markers (PNM Elastase, calprotectin) and leaky gut panels (zonulin, occludin)
- Available through GI-MAP, Vibrant Gut Zoomer, and Doctors Data GI 360
- SIgA is one of the first markers to assess in any patient with chronic infections, unresolved allergies, or gut dysfunction

Optimizing SIgA Levels

TO INCREASE SIgA (if low)

Lifestyle & Foundational Support

- Reduce stress — chronic cortisol directly suppresses SIgA production
- Meditation, breathwork, yoga, and exercise all measurably raise SIgA
- Balance blood sugar — avoid refined carbohydrates and sugar spikes
- Support adrenal health — adrenal fatigue is a primary driver of low SIgA
- Prioritize sleep — SIgA production peaks during deep sleep

What SIgA Levels Mean

LOW SIgA — Mucosal Immune Deficiency

Conditions Linked to Low SIgA

- Chronic infections — Candida, viral illness, recurrent bacterial overgrowth
- Allergies and food intolerances — immune system cannot properly tag foods as safe
- GI conditions — Celiac disease, IBD, IBS, Crohn's, ulcerative colitis
- Autism Spectrum Disorder
- Depression, chronic stress, adrenal fatigue
- Cancer and cirrhosis

Symptoms & Consequences of Low SIgA

- Leaky gut and increased intestinal permeability
- Food allergies and multiple sensitivities
- Persistent or recurrent infections that don't fully resolve
- Fatigue driven by chronic adrenal and immune stress
- Poor response to probiotics or supplements (gut can't absorb or utilize them)
- Autoimmune reactivity — the unguarded mucosal surface allows immune triggers in

HIGH SIgA — Active Immune Activation

Conditions Linked to High SIgA

- Acute infections — active immune response to pathogen presence
- Gut inflammation — mucosal immune system on high alert
- Autoimmune activity — rheumatoid arthritis, psoriasis
- Viral infections — Epstein-Barr virus (EBV), active viral burden
- Renal and pancreatic conditions

Targeted Supplements & Nutrients

- Probiotics — Lactobacillus and Bifidobacterium strains directly stimulate SIgA production
- Beta-glucans — immune-activating polysaccharides that upregulate GALT activity
- Digestive enzymes — improve mucosal function and reduce immune burden
- Vitamin C — essential cofactor for immunoglobulin synthesis
- Zinc — critical for mucosal immune cell proliferation and SIgA secretion
- Glutamine and glycine — primary fuel for enterocytes and mucosal repair
- Phosphatidylcholine — maintains gut membrane integrity and mucus layer
- Essential fatty acids (omega-3) — reduce mucosal inflammation
- Glutathione — antioxidant protection for GALT immune cells
- Colostrum / serum bovine immunoglobulins (SBI) — provide passive SIgA support

Deep cases may require layered treatment to resolve Candida, hidden infectior SIgA can normalize.

TO LOWER SIgA (if high)

- Identify and resolve the underlying infection or source of inflammation
- Use immune modulators — probiotics, aloe vera, anti-inflammatory botanicals
- Reduce oxidative stress — zinc, selenium, antioxidants
- Support tissue repair and restore proper stomach acid levels
- Correct body pH — alkalizing minerals if the environment is chronically acidic

SIgA is your body's true barrier defense. If a patient struggles with chronic infections, unresolved allergies, or gut dysfunction, SIgA is one of the first markers to assess — it gives insight into mucosal immune strength that no blood test can provide.