



Immune Consequences of Leaky Gut

Antibodies, complement and candida

Once tight junctions break down in the gut lining, the immune system is rapidly engaged. This response, which is measurable via markers on the KBMO FIT Test, provides valuable clinical insight into ongoing inflammation, antigen load, and mucosal immune stress.

What happens when the gut barrier fails?

Increased intestinal permeability allows food proteins, toxins, and microbes (including fungi) to pass through the epithelial barrier and interact with the immune cells in the lamina propria. The result is the production of IgG/IgA antibodies, immune complexes (ICs) and complement activation (e.g. IC-C3d)

Immune complexes and complement activation

Once formed, IgG immune complexes (especially those bound to food antigens or microbial proteins) activate the complement system, producing inflammatory byproducts like C3a and C5a (anaphylatoxins) and MAC (membrane attack complex). This immune activity drives symptoms both locally (e.g. gut inflammation) and systemically (e.g. skin issues, brain fog, fatigue), even when exposure appears minor.

Translocation of Candida Albicans across the gut barrier

- Elevated IgG and IgA antibodies against Candida antigens
- Immune complex formation and complement activation
- Persistent low-grade inflammation and symptom flares
- Overgrowth linked to gut microbiota disruption (e.g. after antibiotics or high sugar intake).

Gut barrier markers that reflect barrier breakdown

Gut Barrier Panel						
	IgG1-4+C3d			IgA1-2		
		Cut off			Cut off	
Candida	Negative			Negative		
Zonulin	Negative			Negative		
Occludin	Negative			Negative		
LPS	Positive			Positive		

Clinical tips

- Look for patterns and clusters, not just single high reactions.
- Even low-level reactivity across multiple foods or to microbes can point to cumulative immune burden.
- Positive results guide elimination and gut-repair strategies, not permanent restriction.
- Consider follow-up testing at 9–12 months to assess mucosal recovery.

