

USING THE GI-MAP® FOR INTEGRATIVE DERMATOLOGY



Skin Condition	Associated Gut Symptoms	Associated GI-MAP Findings
Acne vulgaris	<ul style="list-style-type: none"> Constipation Bloating 	<ul style="list-style-type: none"> Detected or high <i>Helicobacter pylori</i> Increase in <i>Bacteroidetes</i> phylum Decrease in <i>Firmicutes</i> phylum Detected or elevated <i>Candida</i> spp./<i>Candida albicans</i> Detected or elevated protozoa Patterns of weak digestion and hypochlorhydria High Steatocrit Low Pancreatic Elastase 1
Atopic Dermatitis/Eczema	<ul style="list-style-type: none"> Irritable bowel syndrome (IBS) symptoms Constipation Dyspepsia 	<ul style="list-style-type: none"> Lower levels of <i>Akkermansia muciniphilia</i> Lower levels of <i>Bifidobacterium</i> spp. Lower levels of <i>Bacteroidetes</i> phylum Low levels of short chain fatty acids and SCFA-producing microbes Elevated <i>Streptococcus</i> spp. Elevated <i>Staphylococcus aureus</i> Detected or elevated <i>Candida</i> spp./<i>Candida albicans</i> Patterns of hypochlorhydria Leaky gut pattern Low Secretory IgA (SIgA)
Psoriasis	<ul style="list-style-type: none"> Inflammatory bowel disease (IBD) <ul style="list-style-type: none"> Crohn's disease Ulcerative colitis (UC) Small intestinal bacterial overgrowth (SIBO) Celiac disease 	<ul style="list-style-type: none"> High <i>Helicobacter pylori</i> Insufficiency dysbiosis - lower levels of: <ul style="list-style-type: none"> <i>Lactobacillus</i> spp. <i>Bifidobacterium</i> spp. <i>Akkermansia muciniphilia</i> <i>Faecalibacterium prausnitzii</i> <i>Bacteroidetes</i> phylum Higher <i>Escherichia</i> spp. Higher <i>Firmicutes</i> phylum Higher <i>Enterococcus faecalis</i> Detected or high <i>Klebsiella pneumoniae</i> High Anti-gliadin IgA Higher levels of Calprotectin (levels correlate with disease severity)
Rosacea	<ul style="list-style-type: none"> Can be associated with SIBO Celiac disease IBD <ul style="list-style-type: none"> Crohn's disease Ulcerative colitis (UC) IBS 	<ul style="list-style-type: none"> Detected or high <i>Helicobacter pylori</i> Inflammatory dysbiosis Higher levels of <i>Citrobacter</i> spp. Higher levels of <i>Fusobacterium</i> spp.
Urticaria	<ul style="list-style-type: none"> Gastroesophageal reflux disease (GERD) Dyspepsia Bloating 	<ul style="list-style-type: none"> Detected or high <i>Helicobacter pylori</i>

Additional Gut-Skin Education



Treating the Root Cause of Acne: The Gut-Skin Connection

A webinar with Dr. Julie Greenberg



A Functional Medicine Approach to Treating Eczema

A webinar with Dr. Julie Greenberg



Addressing the Gut-Skin Axis: A Root Cause Approach to Chronic Skin Conditions

A podcast with Dr. Valerie Gershenhorn

Histamine Production

Histamine intolerance has been associated with a wide variety of skin manifestations including pruritus, flush, urticaria, eczema, and swelling. Excess histamine production through the gut microbiome can be gauged by identifying high levels of histamine-producing species.



Histamine-Producing Bacteria	
Histamine-Producing Bacteria	<i>Lactobacillus</i> spp.
	<i>Morganella</i> spp.
	<i>Pseudomonas</i> spp.
	<i>Pseudomonas aeruginosa</i>
	<i>Citrobacter freundii</i>
	<i>Klebsiella</i> spp.
	<i>Klebsiella pneumoniae</i>
	<i>Proteus</i> spp.
	<i>Proteus mirabilis</i>
	<i>Enterobacter</i> spp.
	<i>Escherichia</i> spp.
<i>Fusobacterium</i> spp.	

Gut Barrier Permeability (“Leaky Gut”) Pattern		
Intestinal Permeability	Any Pathogen	High
	<i>Lactobacillus</i> spp.	Low
	<i>Akkermansia muciniphila</i>	Low; <dl
	<i>Candida albicans</i>	High
	Anti-gliadin IgA	High
Low Butyrate/SCFA Production	Zonulin	High
	<i>Faecalibacterium prausnitzii</i>	Low; <dl
	<i>Roseburia</i> spp.	Low
	<i>Firmicutes</i> phylum	Low
Poor Mucosal Health	<i>Bifidobacterium</i> spp.	Low; <dl
	<i>Escherichia</i> spp.	Low
	<i>Lactobacillus</i> spp.	Low
	<i>Akkermansia muciniphila</i>	Low; <dl
	<i>Bacteroidetes</i> phylum	Low

Leaky Gut – Leaky Skin

Intestinal barrier permeability (aka “leaky gut”) drives systemic and local skin inflammation and can be a root cause of clinical skin conditions. Furthermore, barrier disruption in one mucosal area can translate to other mucosal areas, enforcing the concept that “leaky gut” can drive “leaky skin.”



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Make the Gut-Skin Connection with the GI-MAP!