

Vitalan Stool Diagnostics

Local Body Defense on Gut Mucosa

Gut Associated Lymphoid Tissue

The **GALT** comprises 80% of the total Body Defense, protecting and defending the major contact area of body with environment of ca. 400 sqm.

Morphological Substrate consists of: in Small Intestine ca. 80 Peyer`s Plaques (antigen uptake over M-Cells), the Appendix, in Large Intestine the Lymph Follicles, disseminated intraepithelial Lymphocytes and Mast-Cells.

Here takes place the Specific Defense with antibodies of all classes IgG, IgM, IgE and specially the layer of secretory IgA (protected against enzymatic digestion) and Defensine (antibiotic peptides).

There are several Not Specific Defense Mechanisms like Stomac Acid, Digestive Enzymes, Peristalsis, Anaerobe Milieu, Lyzozyme, Macrophages/Phagozytes, Antibiotics and SCFA`s of Gut Flora.

Function: mucosal "painting" with sIgA 8-10 g/day prevents Adherence of microorganisms (except immunological tolerance of physiological germs), defensine prevents Penetration of germs, all other prevents Multiplication of ingested germs.

Adaptation and Influences

Suppression/Load : food (germs, additives), water (parasites, environmental pollution), stress, bad supply

Activation: training (probiotics, sports, exposition, phytotherapy, vaccination), full supply, stress coping, relief/detox

Pathological Findings

Underfunction: "Defense Deficiency" in ca. 50% of patient specimens,

Lack of sIgA and/or Defensine, possible Compensation by not specific mechanisms, No obligation of infection - No obligation of symptoms - Normal in children

Overreaction: "Protein Loss Enteropathy" in ca. 20% of patient specimens,

Overload of sIgA and/or Defensine up to tenfold

Balance of Specific Gut Defense: information supply by stool diagnostics

sIgA	Defensin	Statement	Immune-Stimulation
normal range	normal range	defense normal	no indication
	Decreased	defense weakened partially	Indication
	Increased	defense overreacting partially	no indication, further diagnostics
decreased	normal range	defense weakened partially	Indication
	Decreased	defense weakened totally	Indication
	Increased	defense compensating	doubtful, further diagnostics
increased	normal range	defense overreacting partially	no indication, further diagnostics
	Decreased	defense compensating	doubtful, further diagnostics
	Increased	defense overreacting totally	no indication, further diagnostics

Therapeutic Approaches

Weakness: Immune Stimulation, e.g. Probiotics, Autovaccine

Overstrength: Relief (e.g. Food Intolerance, -Allergy, Infection),

Inflammation Therapy (e.g. Colostrum, Bland Diet, Glutamine, Antioxidants),

Probiotics are Contra-Indicated

Recommended supplementary diagnostics to clear up possible imflammation:

- clinical: kinesiologie, bioresonance,
- laboratory: stool - histamine, serotonin, hemoglobine, calprotectine, antigliadine,
- tumormarker M2PK, enteropathogenic bacteria+viruses+parasites,
- blood - allergy IgE and IgG.