



new

Supplemental advice to reduce the risk of a further progression in Hashimoto's



TPO Support

Myo-inositol & Selenium protect Thyroid cells from oxidative destruction and reduce the risk of a further progression to hypothyroidism. The use of supplemental iodine in Hashimoto's needs to be reconsidered and individually evaluated.



indication	Supplemental advice in Hashimoto's to reduce the risk of a further progression	
dosage	1 cap in the morning and 1 cap in the evening	
packaging	120 vegecaps per container	
composition (amount per 2 vegecaps)	Myo-inositol Iron (as Iron bisglycinate) Zinc (as Zinc gluconate) Selenium (as Selenomethionine)	600 mg 30 mg 22,5 mg 84 µg

Treatment of Hashimoto's

Hashimoto's is not a Thyroid disease but a manifestation of a multi-systemic immune related disorder. Antibodies direct a chronic inflammatory destructive response against the thyroid gland. When thyroid follicular cells are destroyed, the ability to produce thyroid hormones is reduced. Treatment requires more than just replacing hormones.

Dietary advice

- Iodine restriction in individual consideration
- Elimination of gluten & milk
- Dietary management to address blood sugar fluctuations
- Lack of stomach acid increases immune reactivity

Intestinal support

Increased intestinal permeability results in more microbial translocation (LPS) & inflammation

› **more about gut protocol on page 3-5**

Immune support

Regulatory T Cells promote self-tolerance

› **more info on page 6-8**

Lifestyle advice

- Stress management
- Sleep improvement
- Exercise

Ferrari, S. M., et al. "Myo-inositol and selenium reduce the risk of developing overt hypothyroidism in patients with autoimmune thyroiditis." *Eur Rev Med Pharmacol Sci* 21.2 Suppl (2017): 36-42.

Benvenega, S., et al. "Favorable effects of myo-inositol, selenomethionine or their combination on the hydrogen peroxide-induced oxidative stress of peripheral mononuclear cells from patients with Hashimoto's thyroiditis: preliminary in vitro studies." *Eur Rev Med Pharmacol Sci* 21.Suppl 2 (2017): 89-101.

Song, Yue, et al. "Roles of hydrogen peroxide in thyroid physiology and disease." *The Journal of Clinical Endocrinology & Metabolism* 92.10 (2007): 3764-3773

Ferrari, Silvia Martina, et al. "The protective effect of myo-inositol on human thyrocytes." *Reviews in Endocrine and Metabolic Disorders* 19.4 (2018): 355-362

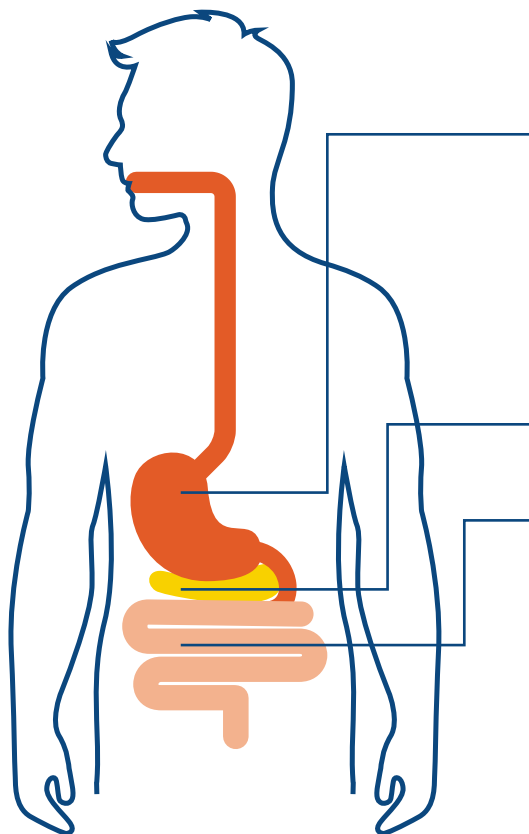
Zaletel, Katja, and Simona Gabersček. "Hashimoto's thyroiditis: from genes to the disease." *Current genomics* 12.8 (2011): 576-588.

"Effect of iodine intake on thyroid diseases in China." *New England Journal of Medicine* 354.26 (2006): 2783-2793.

"Effect of small doses of iodine on thyroid function in patients with Hashimoto's thyroiditis residing in an area of mild iodine deficiency." *European journal of endocrinology* 139.1 (1998): 23-28.

Gaberšček, Simona, and Katja Zaletel. "Epidemiological trends of iodine-related thyroid disorders: an example from Slovenia." *Archives of Industrial Hygiene and Toxicology* 67.2 (2016): 93-98.

Gut protocol



Global intestinal support is a multilevel support

Optimize gastric acid level

- Prevents pathogenic overgrowth
- First line defense
- Essential for activation of the pancreas to release digestive enzymes
- Digestive breakdown of polypeptides into individual amino acids (auto-immune reactivity is reduced if separate amino acids)

Enzyme complex to optimize digestion (including gluten modifying enzymes)

Targeted released Glutamine & cofactors heal the mucosal lining

- Reduce inflammation
- Improve the synthesis of s IgA by the intestinal lymphocytes

Butyrate coated

- Immune tolerance intestinal & systemic
- s IgA barrier
- Mucus barrier
- Epithelial barrier



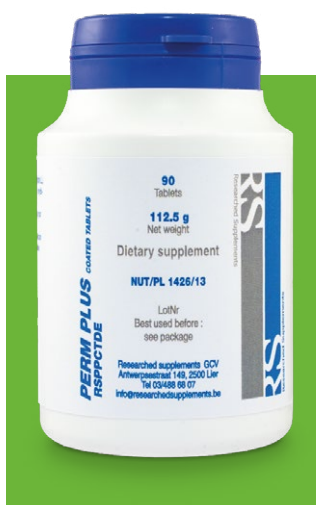
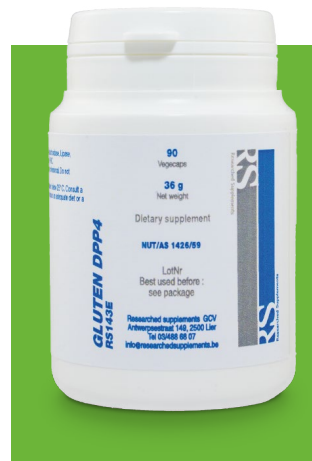


Guttae Pepsini

indication	Stomach acid deficiency Poor digestion Intestinal malabsorption Rebuilds intestinal pH
dosage	3 x 10 - 20 drops per day at the start of each meal, dilute in water and swallow immediately
packaging	30 ml per bottle
composition (amount per 30 drops)	Purified water 5,3 ml Glycerol 10 ml Hydrochloric acid HCl 37% 2,7 ml Pepsine 2 ml

Gluten DPP IV Complex

indication	DPP-IV proteolytic enzyme complex Breaks down proline residues in Gluten and decreases the intestinal immune reaction Intolerance for gluten and/or casein Indigestion, gas, bloating, constipation and diarrhea
dosage	3 x 1 cap per day at the beginning of each meal
packaging	90 vegecaps per container
composition (amount per 3 vegecaps)	Protease IV 60 mg Lactase 60 mg Protease (zuur en neutraal) 70,35 mg Amylase 30 mg Maltodextrine 24,45 mg Gluco-amylase 15 mg Invertase 6 mg Lipase 4,2 mg



Perm Plus Coated

indication	Rebuilding intestinal permeability and immunity with targeted released molecules
dosage	The first month: 3 x 2 tablets per day Then take 3 x 1 tablet per day 20 min. before food
packaging	90 tablets per container
composition (amount per 3 tablets)	L-Glutamine 975 mg N-Acetyl-D - Glucosamine 375 mg N-Acetylcystein 300 mg Liquorice root powder (Glycyrrhiza Glabra L.) 255 mg Gamma oryzanol 180 mg L-Carnosine 60 mg Zinc (as zinc bisglycinate and zinc methionin) 22,5 mg

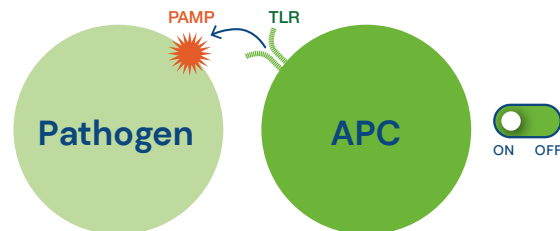


Butyflam Coated

Butyrate is a short-chain fatty acid produced by the intestinal bacteria through fermentation of non-digestible fibers. Butyflam Coated delivers bio-available levels of butyrate in our intestines to guarantee immune tolerance and avoid excessive inflammation or auto-immune reactions.

indication	Neuroinflammation Immune modulating (T reg + IL-10 anti-inflammation) Remodeling intestinal barrier function
dosage	3 x 2 caps per day, 20 minutes before meals
packaging	180 coated caps per container
composition (amount per 6 caps)	Butyrate – 3000 mg

Immune support



Regulatory T Cells (T reg Cells)

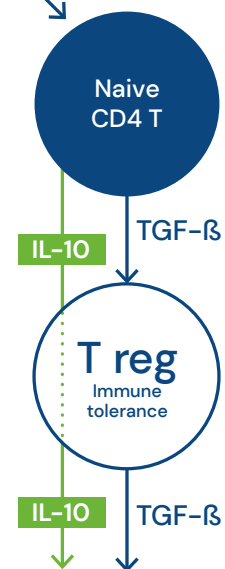
T reg Cells promote self-tolerance

Regulatory T Cells prevent excessive immune response

- Auto-immunity
- Excessive inflammation

We improve tolerance and empower T reg Cells if IL-10 goes up

- **Optimizing Vit D3 – individual**
Polymorphism on VDR is regular in HT = high doses are required!
- **Butyrate coated**
Metabolite produced by fermentation through anaerobic colon bacteria
Supplementation in coated form (Butyflam)
- **Transfer Factors: Multimessenger**
Small proteins with RNA (nucleotide material)
Made by activated T-helper cells or pure amino acid extracts of colostrum
NK Cell Activity ↑ + IL-10 ↑



Mukhtar, Maryam, et al. "Vitamin D receptor gene polymorphism: an important predictor of arthritis development." BioMed research international 2019 (2019).



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Multimessenger™

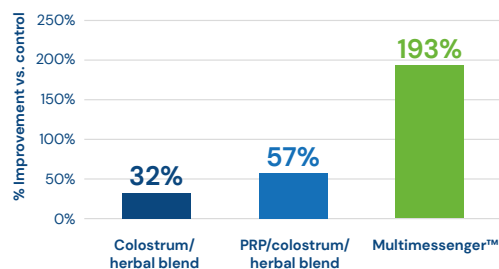


indication	Natural Killer Cell support Supports T reg	
dosage	3 caps per day just before breakfast (acute: 2 x 3) Children aged 6 m – 2 yr: 1 capsule per day Children aged 2 yr – 6 yr: 2 capsules per day +6 years: 3 capsules per day	
packaging	90 caps per container	
composition (amount per 3 caps)	Colostrum (Transfer Factors – pure amino acid sequences)	500 mg
	West american Larch (<i>Larix occidentalis</i>)	333 mg
	Inositol	200 mg
	Beta Glucan	200 mg
	Green tea (<i>Camelia sinensis</i>)	200 mg
	Pomegranate tree (<i>Punica granatum</i>)	200 mg
	Astragale (<i>Astragalus membranaceus</i>)	70 mg
	Shiitake (<i>Lentinula edodes</i>)	25 mg
	Dancing mushroom = Maitake (<i>Grifola frondosa</i>)	25 mg
	Zinc (as zinc citrate)	15 mg
	Selenium (as L-Selenomethionine)	70 µg

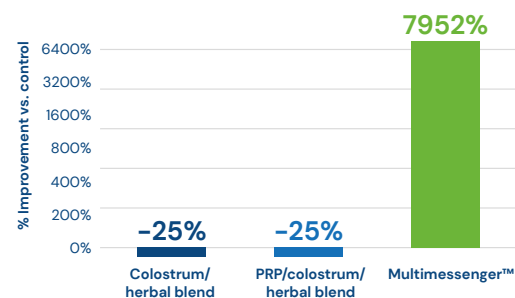
Please find our referenced version on the professional section of our website.
All information is exclusively aimed at and released to an audience of health care professionals.

Natural Killer Cell activation*

Innate immune system activation



Immune modulation IL-10**



* % improvement in Mean Fluorescent Intensity for CD 69 Receptor on Natural Killer Cells. (CD69 is highly correlated with NK cell activity)
** % improvement in Mean Fluorescent Intensity for IL-10 on Peripheral Blood Mononuclear Cell Cultures (PBMC)