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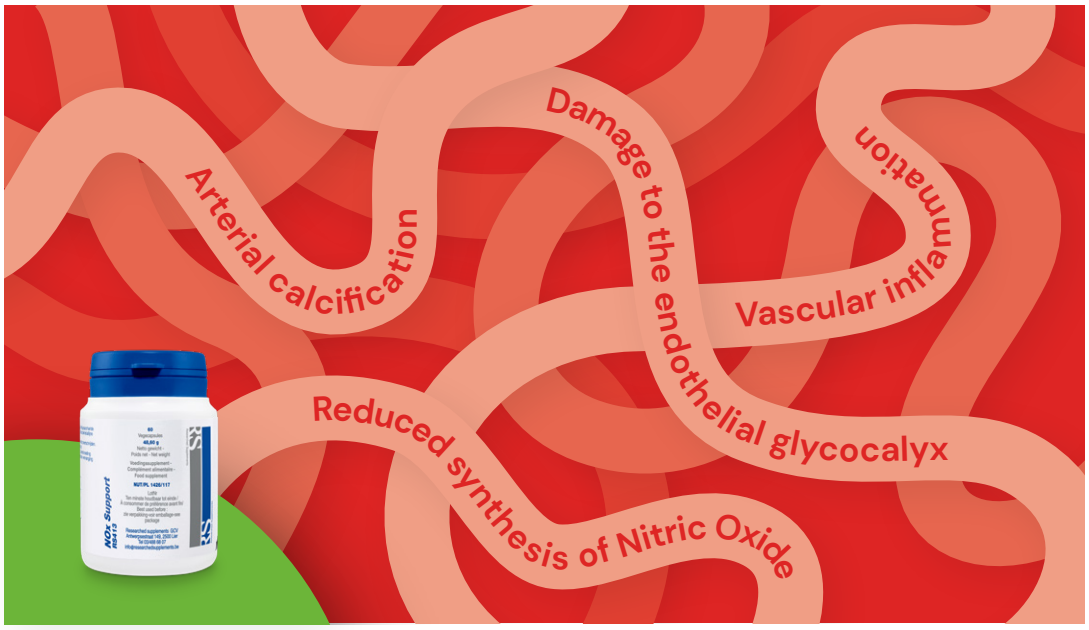
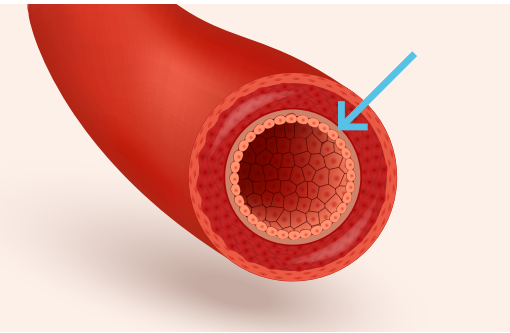
new

Nitric Oxide, the key factor in vascular health



New insights in vascular health

Healthy arteries are flexible and elastic.
In arterial **dysfunction** or arterial **aging**, arteries lose elasticity and the delivery of oxygen and nutrients to cells and tissues gets compromised.



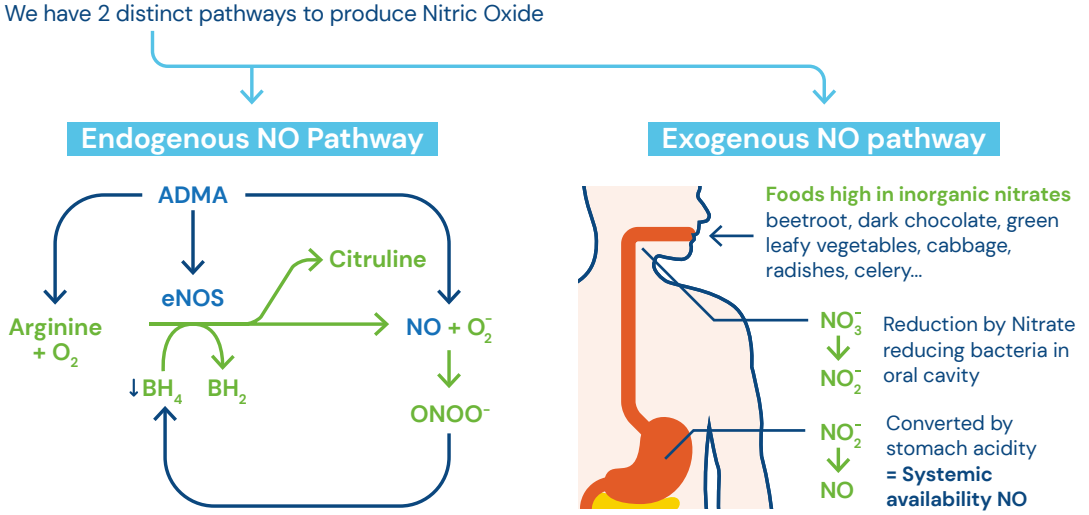
The endothelium

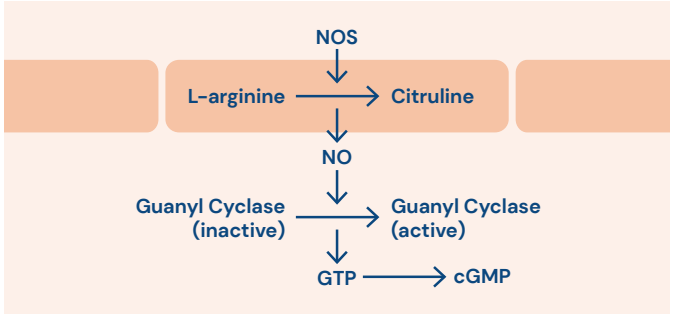
The endothelium, where Nitric Oxide is produced, is the index of cardiovascular health.

The endothelium is the largest metabolically active organ, it covers the luminal surface of blood vessels and lymphatics.

Nitric Oxide

We have 2 distinct pathways to produce Nitric Oxide





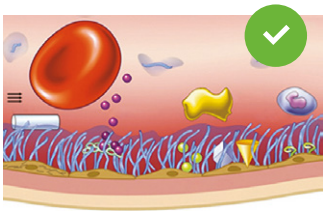
Despite its very short half-life, NO diffuses across the endothelium wall and acts on cGMP, what is responsible for the **biological effects of NO: smooth muscle relaxation and vasodilatation.**

With this mechanism, NO controls blood pressure and coagulation.

The endothelium glycocalyx

The endothelium is protected by a gel-like shield, a carbo-hydrate-covering that we call the endothelium glycocalyx. When the glycocalyx is robust, **it protects the endothelium and upregulates the synthesis of NO.** In that case the access of leukocytes is limited, what prevents vascular inflammation.

Endothelium dysfunction is always preceded by damage to the endothelium glycocalyx.



Glycocalyx under physiological conditions

Damaged glycocalyx

Damaged endothelial glycocalyx

→ endothelial dysfunction
→ production of NO↓
→ cascade to vascular damage

= widespread vascular damage

Different factors cause damage to the endothelial glycocalyx and contribute to endothelium dysfunction:

- traditional risk factors like smoking, obesity, elevated homocysteine
- hormone imbalance
- chronic inflammation, autoimmune dysfunction
- stress, depression, elevated TMAO
- ADMA, infections

Identifying cardiovascular risk:

- **arterial calcification**
- **damage to the endothelial glycocalyx, the protective layer that covers the endothelial**
- **reduced synthesis of Nitric Oxide**
- **vascular inflammation**

Complementary recommendations

Oramax

The conversion of dietary nitrates requires a good oral microbiome

> Product sheet on page 7

Guttae pepsine

The conversion of dietary nitrates requires sufficient stomach acid

> Product sheet on page 8

Tri-Fortify®

Oral Liposomal Glutathione protects the activity of e NOS (endothelial NO synthetase)

> Product sheet on page 9

NOx Support

NOx Support is the research-based & complementary solution to address arterial dysfunction and prevent arterial aging.

indication	Promotes NO synthesis Prevents vascular calcification Cardioprotective Modulates blood pressure Repairs endothelial glycocalyx	
dosage	Take 2 capsules per day	
packaging	60 capsules per container	
daily dose (based on 2 capsules)	Beetroot Potassium Polysaccharide (Ramnox) Huperzia serrata Vitamin K2	600 mg 140 mg 125 mg 20 mg 180 µg

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NOx Support

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OraMax™

Complete oral health complex

OraMax™ is a comprehensive oral health solution that promotes a healthy oral microbiome, disrupts harmful plaque-causing biofilms, and provides antioxidant protection to support oral tissue and periodontal health. Include OraMax™ as part of standard dental care to optimize patient oral health.

indication	Oral probiotic to support a healthy oral microbiome	
dosage	Dissolve 2 x 1 tablet per day in mouth after brushing teeth	
packaging	60 dissolvable tablets per container	
daily dose (based on 2 dissolvable tablets)	Lactobacillus reuteri (LRE-15)	50 mg
	Green tea leaf extract	50 mg
	Cinnamon bark	24 mg
	Cinnamon bark extract	12 mg
	Lysozyme	8 mg
	Bifidobacterium lactis (HN019)	3,34 mg
	Peppermint leaf oil powder	2 mg
	Lactobacillus salivarius (LS-33)	1,66 mg

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Researched Nutritionals
solutions for life

Guttae Pepsini

indication	Stomach acid deficiency Poor digestion Intestinal malabsorption Rebuilds intestinal pH
dosage	Start with 3 x 5 drops at the start of each meal, dilute in water and swallow immediately Gradually increase the dose with 1 drop per day until 3 x 20 drops or until the saturation dose has been reached (warm feeling in stomach) In that case the optimal dose is 3 drops less than the saturation dose
packaging	30 ml per bottle
daily dose (based on 60 drops)	Purified water 1,11 ml Glycerol 0,73 ml Hydrochloric acid HCl 37% 0,2 ml Pepsine 0,15 ml

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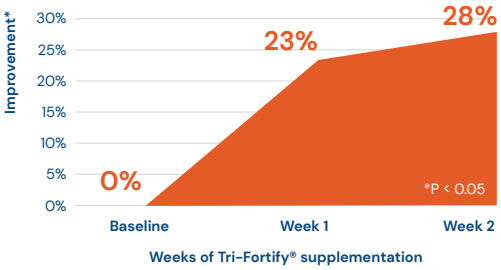
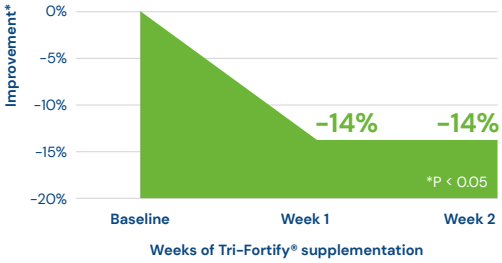
Tri-Fortify Orange® or Watermelon®

indication	Detoxification with glutathione in high bioavalable formulation, powerful antioxidant on tissue level and brain level Natural Killer Cell support
dosage	1 teaspoon (1 pack) per day, away from food
packaging	236 ml per tube or 20 packs per box
daily dose (based on 1 teaspoon = 5 cc or 1 pack)	Glutathione Liposomal 450 mg Vitamin C 50 mg

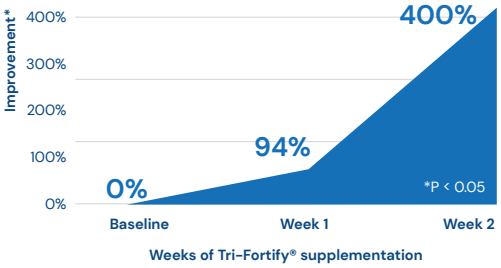
Glutathione levels
Increase in red blood cell levels (Erythrocytes)



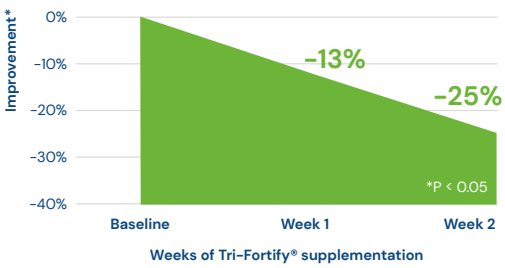
Oxidative stress markers
Oxidized / Reduced GSH



Immune function
Natural Killer Cell activity



Lipid Peroxidation
(Reduced Cellular Membrane Oxidation)



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