

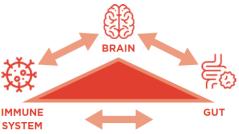


SCIENCE BASED DIY SECRETS TO OPTIMISE YOUR IMMUNE FUNCTION

So you can stay on top of the world!



There are several areas we can take action on to strengthen our immune soldiers. By working on all areas, we can create the strongest army. As the triangular diagram shows, Brain and Gut are inseparably linked to Immune function. So here are science based choices we can all make to effectively counter infections:



GUT: Diet/Nutrients

• Choosing for a clean, whole food diet - organic as much as possible

Our immune system, just like other body systems, needs nutrients to function well. Vitamin D, zinc and vitamin A are an important trio for good immune strength. We also want to avoid toxins (pesticides) to make sure our immune system recognizes food as food and does not have to use its capacity on toxins creating a danger/stranger situation. Drinking plenty of clean water is important to deliver nutrients to the cells.

• Reducing sugar/refined carbohydrate intake

Sugar weakens our immune system. Blood sugar dysregulation 'steals' our energy, causes oxidative stress, can impair sleep and affects our mood. (Daily recommended maximum: 6 tsp for women, 9 tsp for men). Sugar hides in many things, check your food and drink labels carefully!

BRAIN: Stress management

• Developing a habit of using stress management techniques

Stress causes the brain to signal production of cortisol and **cortisol suppresses our immune system**, i.e. it's putting our immune soldiers to sleep! Here are some suggestions to explore, e.g. <u>breathing techniques</u>, going for walks in nature, gratitude, putting your bare feet on grass or soil, meditation (check out <u>free apps</u>), ...

• Eating in a relaxed state of mind / taking some deep belly breaths before eating (e.g. box breathing)

Good digestion is key for the body to make use of the nutrients from good food choices and good digestion is dependent on energy flowing to the digestive organs when we eat. This only happens when we are in a rest and digest nervous system mode (vs. in a fight or flight mode which will direct the energy to the extremities, away from the digestive organs). Good digestion is also key for avoiding food sensitivities which when we have them occupy a good portion of our immune soldiers and cause cortisol to rise, which – remember – suppresses our immune system!

IMMUNE FUNCTION during Sleep

• Prioritising sleep / going to bed on time to allow for 7 hours of sleep or more

The importance of sleep as an important pillar for good health is greatly underrated. Sleep is the time for the body to repair, restore, replenish and detoxify. During sleep cortisol should be low, melatonin should be high. With low cortisol our immune system can work at full strength and melatonin has important immune modulating properties. <u>Recommended sleep duration per age group</u>.

• Developing good sleep hygiene habits for sound sleep quality

Here are some top tips that can be very effective:

- avoiding screen time at least one hour before bed (blue light emitted from the screens fools the body into thinking it's time to be awake)
- keeping mobile devices out of the bedroom
- keeping the bedroom dark (melatonin is only created sufficiently in darkness)
- paying attention to temperature and noise levels.
- avoiding stressful activities in the evening, anything that can raise our cortisol levels (e.g. paying bills, responding to emails, stressful conversations, ...)

OTHER SUPPORT

Stimulating lymph flow through movement

The lymphatic system is the circulatory network of our immune system and it does not have a pump like our blood circulation does. Movement and muscle contraction support lymph flow. Exercise should be appropriate for our unique body, over-exercising puts the body under stress, which raises cortisol, which suppresses the immune system! An interesting read <u>here</u> including additional tips for good lymph flow.

• Choosing wise supplement support

Even with making healthy food choices our bodies often need extra nutrient support. Here are a few examples why that is: Due to modern farming and top soil erosion, there are less minerals in the ground, so also less minerals in the plant foods we eat. Elevated stress levels burn through certain vitamins which can increase the need for nutrients beyond what we can get from food. In the darker months of the year we cannot make vitamin D from the sun. We may not eat enough fish to get sufficient omega 3s from our diet.

Simply scan the QR code on the next page to access our list of suggested supplements.

If you have not guessed it yet: STRESS is the #1 threat to our immune system!

Our fundamental immune support supplement suggestions

• Vitamin C

"Vitamin C contributes to immune defense by supporting various cellular functions of both the innate and adaptive immune system." <u>Source</u>

Magnesium

Magnesium is our relaxation mineral and it's also critically important to convert vitamin D into its final form hence we recommend to start this about 5 days prior to introducing vitamin D to replenish it first. <u>More</u>

• Vitamin D

"Vitamin D helps the immune system stay balanced, much like a gymnast walking a balance beam". Source

• Zinc

"Zinc is known to play a central role in the immune system, and zinc-deficient persons experience increased susceptibility to a variety of pathogens." <u>Source</u>

• Quercetin

"Quercetin has been shown to reduce viral internalization and replication in vitro, and viral load, lung inflammation and airways hyper-responsiveness in vivo." <u>Source</u>

• Omega 3

"This family of polyunsaturated fatty acids exerts major alterations on the activation of cells from both the innate and the adaptive immune system." <u>Source</u>. It also has important anti-inflammatory properties.

We know that finding good quality supplements can be a time consuming endeavor. Be aware that a high price does not necessarily mean good quality. To save you time and help you choose with confidence, we have shortlisted our top supplement recommendations from one single supplier (see the link and QR code below).

In our selection we took into account different quality markers (well absorbed forms of active ingredients, allergy information, and purity) as well as price in order to give you good value for money options.

For more info also read the supplement Q&A.

The quantities in the recommendation will last for 2 months for one adult or 1 month for 2 adults.

Click or scan the QR Code to access list and shop now



If you would like more personalised support to build resilient health, don't hesitate to contact us at <u>www.functionalmedicine-europe.com</u>.

We invite you to join our community here.

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