

How to support your immune system

These are my top tips on how to support your immune system through your diet and general lifestyle advice, which at this time is more important than ever:

- 1. <u>Stress</u> If our nervous system is frayed then we are more prone to infection. Chronic stress can negatively alter our immune response. So make sure you laugh, try to have fun! Try meditation or mindfulness, which has been shown to alter how our brain functions when in stressful situations. Practice gratitude and celebrate all the positive things in your day.ⁱ
- <u>Sleep</u> Going to bed well before midnight, and waking at the same time every day has a positive effect on the immune system. Turning off all screens at least 1 hr. before sleep, and having a cool, dark and quiet room is good sleep hygiene.ⁱⁱ¹ⁱⁱⁱ
- 3. <u>Exercise</u> Moderate and regular exercise can assist in improving circulation, decreasing stress hormones, and supporting the immune system. If you can't go out there are many classes that can be done from home Yoga or Pilates, or a keep fit class are all being streamed on the Internet.^{iv}
- 4. <u>Gut health</u> 60-70% of your immune system resides in your gut. All my clients know that the first place I focus on is gut health, keeping your microbiome well fed and supported, so it is diverse and strong. What can you do at home to improve your gut health?
 - Eating fermented foods, which contains beneficial bacteria.^v
 - Feeding those microbes! Lots of vegetables and their fibre, half our plate should be veg. ^{vi}
 - Limit sugar and limit fried or processed foods.
 - Take a multi strain probiotic (for some with digestive issues this can make things worse; we are all individual! Please get in touch if you need advice on this) ^{vii}.
- 5. <u>Eat a rainbow every day!</u> ^{viii}When we eat antioxidants (which come mostly from our fruit and veg) our immune system is supported and free radicals get neutralized. Antioxidants work like a fire hose, putting out the flames of inflammation.
 - Make sure your diet is rich in Vitamin C, a major antioxidant that also supports immune cell functions. Found in kiwi fruit, bell peppers, tomatoes, strawberries, broccoli, papaya, kale, sweet potato and so many other fruits and veg.^{ix}
 - Lycopene from cooked tomatoes is strong antioxidant and an easy one to incorporate into our diets.



- Beta-carotene that comes from orange vegetables and fruit is an antioxidant carotenoid. Beta carotene is absorbed better when it is consumed with some healthy fat and has been cooked (but there are so many other wonderful antioxidants in orange fruit; no need to cook them).
- Berries contain antioxidants in the form of Vitamins E and C along with other plant chemicals that we need to support our immune system.
- 6. <u>Vitamin D</u> You need optimal vitamin D for a fully functioning immune system for both your innate and adaptive immunity. Low levels are associated with respiratory tract infections. The best source is sunshine, getting outside as much as possible now the winter is over is important as our skin converts Vitamin D via the liver and kidney for our cells to use. ^x
- <u>Zinc</u> This mineral is needed for over 300 enzymatic functions in the body but one of the big players is the immune system, but its also needed for nerve function, the health of our skin and even wound healing.^{xixii} Zinc rich foods are
 - Meat
 - Shell fish
 - Legumes
 - Seeds and Nuts
 - Eggs
 - Whole grains
 - Dairy

The above is all just general advice, if you would like to look at your health and your immunity from an individual perspective I work via video conference calls with my clients. I can offer a free 15 minute phone chat to see if us working together is right for you, just contact me via my website www.katewaters.co.uk.

ⁱ What happens when your immune system gets stressed out? Cleveland Clinic. Published March 1, 2017. Accessed 7th April 2020. <u>https://health.clevelandclinic.org/what-happens-when-your-immune-system-gets-stressed-out/</u>

ⁱⁱ Besedovsky L, Lange T, Born J. Sleep and immune function. Pflugers Arch. 2011;463(1):121-137. doi:<u>10.1007/s00424-011-1044-0</u>

ⁱⁱⁱ Olson EJ. Lack of sleep: can it make you sick? Mayo Clinic. Published November 28, 2018. Accessed 7th April 2020. <u>https://www.mayoclinic.org/diseases-conditions/insomnia/expert-answers/lack-of-sleep/faq-20057757</u>

^{iv} Exercise and immunity. MedlinePlus. Updated March 4, 2020. Accessed 7th April, 2020. <u>https://medlineplus.gov/ency/article/007165.htm</u>

^v Fermented foods for better gut health. Harvard Health. Accessed 7th April, 2020. https://www.health.harvard.edu/blog/fermented-foods-for-better-gut-health-2018051613841

^{vi} Fibre famished gut microbes linked to poor health. Scientific America. Accessed 7th April 2020. https://www.scientificamerican.com/article/fiber-famished-gut-microbes-linked-to-poor-health1/

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^{ix} Hemilä H. Vitamin C and doi:10.3390/nu9040339

infections. Nutrients. 2017;9(4):E339.

^x Bergman P, Lindh AU, Björkhem-Bergman L, infections: a systematic review and meta-analysis of randomized controlled trials. PLoS One. 2013;8(6):e65835. doi:10.1371/journal.pone.0065835

^{xi} Hulisz D. Efficacy of zinc against common cold viruses: an overview. J Am Pharm Assoc (2003). 2004;44(5):594-603. doi:10.1331/1544-3191.44.5.594.hulisz

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