



Looking after your immune system

Not enough is known about Covid-19 to recommend specific advice that helps protect against this virus but there are many things we can do to generally boost our immunity in these worrying times.

Our immunity is affected by many things - what we eat and drink, how often we exercise, whether we go outside into the sunshine, the quality of our sleep and how stressed we are.

Understanding these factors in more detail may be helpful to adopt immune-boosting changes and habits in our daily lives:

What to eat and drink

Vitamin C

Research suggests eating plenty of food rich in vitamin C does seem to help support your immunity (1).

Examples of these foods are: Cabbage, broccoli, green leafy vegetables, red peppers (capsicums), brussel sprouts, oranges, blackcurrants (and other dark berries such as blueberries/blackberries).

Vitamin D

Research indicates that Vitamin D can help support the immune system (2).

Vitamin D is not found in sufficiently high quantities in most foods, but there are higher amounts in oily fish such as sardines, in foods fortified with vitamin D, and in mushrooms that have been exposed to sunlight - on a sunny window ledge, for example (3).

The NHS recommends enhancing the vitamin D from your diet with 10mcg per day, from a supplement, during autumn and winter months (4).

Zinc

Some studies have shown that the mineral zinc appears to help support the body's immune systems (1).

Zinc-rich foods are: Oysters (including from a can), shellfish and fish, popcorn, seeds (in particular pumpkin seeds), walnuts, almonds, muesli (because of the nuts/seeds), tomato sauce/paste.

Prebiotic Foods

These are foods that feed your gut microbiota. This can help boost immunity because a great deal of the body's work to fight off viruses and bacteria infection takes place in the gut.

In general, most vegetables contain prebiotics, as do fruit, nuts, seeds, legumes, pulses, and whole grains.

Further examples from research: Jerusalem artichokes, chicory, radicchio, rocket, garlic, onion, leek, spring onion, asparagus, beetroot, fennel bulb, green peas, snow peas, sweetcorn, cabbage especially savoy cabbage, artichokes, apples, dark berries, and ginger.

Fermented Foods

These are foods which contain live bacteria that are beneficial to the gut microbiota and the lining of the gut.

Fermented foods examples: Natural kefir, natural yoghurt, sauerkraut, kimchi and live apple cider vinegar.

Food and drink to limit: Sugary food and drinks, and food with a lot of white flour ingredients may reduce your immune functions (5).

Exercise

Exercise boosts the immunity and helps keep us healthy; it also helps to reduce stress.

Try being creative with exercise, as any movement helps. Even a little bit of moving around makes a big difference:

- dance to your favourite songs
- go online for workouts from home, use an app or video for inspiration
- if you have stairs, run up and down them
- video call a friend and exercise together

Reducing stress where possible

Higher levels of stress increases the hormone cortisol, which can suppress the immune system.

You will each have your own individual ways to relax; here are some more ideas to help you reduce stress:

- slow down and take your time to do things, rather than rushing from one job to another
- exercise of any kind helps
- asking for help reduces stress levels - as does helping others - so turn to friends and family and support each other through these uncertain times.

Sleep

Having good quality sleep has the ability to boost our immunity and reduce feelings of stress and anxiety.

Take some time to work out what it is that is stopping you from having a good night's sleep. Generally, a quality night's sleep is 7-8 hours each night, with almost no interruptions.

See if you can alter those things that seem to hinder the quality or duration of your sleep. Have a consistent routine of bedtimes and getting up times, use an app to help meditate, unwind or drift off to sleep. Keep your room dark and cool, and stay off screens for an hour before you go to bed.

Sunshine

If you live in the UK, try and make the most of moments when the sun is shining. While you are staying at home, and when the sun is shining, stop and go outside around midday. If you don't have a garden, use a balcony or even your front doorstep.

If you can, expose some of your skin that's not seen sunlight all winter by wearing t-shirt and shorts (if it's not too cold!) - that way your body will make more vitamin D.

Bask in the feeling of the warm sunshine on your skin making you feel relaxed, while your body produces some vitamin D!

References:

1. Gombart AF, Pierre A, Maggini S. A Review of Micronutrients and the Immune System-Working in Harmony to Reduce the Risk of Infection. *Nutrients*. 2020;12(1):236. Published 2020 Jan 16. doi:10.3390/nu12010236
2. Sassi F, Tamone C, D'Amelio P. Vitamin D: Nutrient, Hormone, and Immunomodulator. *Nutrients*. 2018;10(11):1656. Published 2018 Nov 3. doi:10.3390/nu10111656
3. Cardwell G, Bornman JF, James AP, Black LJ. A Review of Mushrooms as a Potential Source of Dietary Vitamin D. *Nutrients*. 2018;10(10):1498. Published 2018 Oct 13. doi:10.3390/nu10101498
4. <https://www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d/>
5. Jafar N, Edriss H, Nugent K. The Effect of Short-Term Hyperglycemia on the Innate Immune System. *Am J Med Sci*. 2016;351(2):201-211. doi:10.1016/j.amjms.2015.11.011

This information is written by nutritional therapist and experienced chef, Emma Ellice-Flint.

For more information visit www.emmasnutrition.com

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Address & Registered Office: Winton House, Church Street, Stratford-Upon-Avon CV37 6HB