

Boosting the Immune system

Boosting the Immune system #1

What can weaken your immune system and your body's ability to defend itself?

Refined sugars & artificial sweeteners: sodas / fizzy and energy drinks, sweets, sugary juices, chocolates, cakes, biscuits

Coffee and tea: contain tannins which can inhibit nutrient absorption, particularly when taken close to a meal, which may contribute to a compromised immune system

Cigarettes and alcohol: toxins which have a negative effect on your immune system

Dairy, in particular, cow's dairy: makes your body produce more sticky mucus that the CV-19 virus can get trapped within



Boosting the Immune system #2

Avoid over-eating: keep to 3 meals a day and avoid over-eating or over snacking. Keep snacks to one healthy snack mid-morning and afternoon - dark chocolate with nuts, handful of nuts, oatcake with hummous or almond butter. Avoid sugary snacks, drinks and foods - check labels.

Avoid liquids with meals: dilutes digestive juices slowing the breakdown and release of valuable nutrients.

Light foods: opt for foods that are light and easy to digest such as warming soups. Chew well. Eat slowly.

Food is medicine: food can harm, but it can also heal. We do not just eat for pleasure. 60% of two meals daily should be a mixture of coloured vegetables. Keep fruit to non-sweet fruits such as berries, apples, pears, with a maximum of two portions daily (avoid fruit juices, eat whole fruits instead.)



Boosting the Immune system #3

Fruit and Vegetables

Phytochemicals: fruit and vegetables (especially coloured ones) contain phytonutrients - plant chemicals, which are packed with important vitamins and minerals.

Variety: each colour has different properties, so eat a rainbow of colour, different sources daily, rotate them, this helps to ensure you have a full range of plant chemicals - defences for the immune system.

Organic: eat organic whenever possible - focus on food quality

60% veg: two meals daily should consist of 60% vegetables (not all root vegetables). Limit fruit to 1-2 portions of low-sugar fruits such as berries, apples, pears, daily. Eat whole fruits instead of fruit juices which raise blood sugar quickly.



Boosting the Immune system #4

Fibre

Eliminate waste daily: Waste should be eliminated by passing a stool daily. If this doesn't happen, toxic waste can build up in the bowel - a perfect environment for viruses or infections to set up home. Fibre bulks stools and helps with elimination of waste.

Sweep out toxins: fibre acts like a bristle brush, cleaning the corners and crevices of the colon as it passes through, moving the waste along.

Water: fibre absorbs water so it is essential to increase water along with fibre. Introduce fibre slowly for the system to adjust. Introduce soluble fibre if digesting fibre is difficult (e.g. oats, soaked flaxseeds, lentils, navy beans)

Enhance elimination: add ground flaxseeds to your porridge
Aim for 60% of two meals daily to be vegetables to help get adequate vitamins minerals and fibre. Or 8 portions of veg and up to 2 of fruit.



Boosting the Immune system #5

Vitamin C

Contributes to a healthy immune system - a key compound. It is depleted hugely by viruses and stress. An anti-viral nutrient which helps to **increase the numbers** of our immune cells.

Red peppers (very high), kiwis, sauerkraut, broccoli, oranges (whole, not juice as the fibre slows the release of sugar)

If you supplement, split the dose throughout the day for maximum absorption as it quickly leaves the body via urine. General daily recommendation is 1,000mg per adult. (note: increases bowel transit, so reduce to your own tolerance if you have loose bowels)

Don't wait until you get a virus, prepare your body so that when it meets a virus or infection, your immune system is brilliantly equipped to deal with it.



Boosting the Immune system #6

Vitamin D

Plays a pivotal role in helping the body to ward off infection. It helps our “soldier” immune cells to seek out foreign invaders and destroy them

A steroid hormone, made from cholesterol when UVB rays hit the skin. Stored in the body and used up during Winter during less sunlight exposure. Can take a few days to get stores up and see the benefit.

10-20 mins of daily sun exposure (arms, legs & trunk, without sunscreen - be careful not to burn though). Eat foods such as shitake mushrooms, chlorella and wild oily fish such as salmon, mackerel, sardines. As a food source it is fat-soluble, so we need to consume fats with food sources for absorption.



Boosting the Immune system #7

Zinc and Selenium

Zinc is a vital mineral required for at least 300 processes in the body. Contributes to the normal functioning of the immune system, fighting infection and assisting wound healing. Food sources include nuts and seeds (pumpkin seeds) - pulses, grains, quinoa, oysters, spinach, asparagus, shitake mushrooms, oats, green peas.

Selenium is a mineral that supports the immune system and acts as an antioxidant, fighting inflammation. It is abundant in Brazil nuts, also salmon, sardines, cod, prawns, scallops, shitake mushrooms, asparagus

Add pumpkin seeds and Brazil nuts (2-3 a day) to your porridge, or simply eat nuts and seeds daily (a small fist size) as snacks. Rotating sources of nutrients daily is important. Soaking overnight makes them easier to digest, or you can grind them in a pestle and mortar or in a coffee grinder.



Superfoods (a)

Certain foods have more vitamins and minerals than others and contain many of the vitamins and minerals the body needs. They are abundant in phytonutrients and fibre. Many are available, here are a few: -

Chlorophyll: the green pigment found in algae and plants such as in grasses e.g. wheatgrass and barleygrass, green leafy vegetables, and algae such as chlorella. They are foods that help enhance the immune system. Avoid over-cooking as it is heat sensitive. Start slowly with very small amounts initially. It is similar to human blood, with magnesium at its core instead of iron, hence their traditional role in TCM as blood tonics and detoxifiers.

Sprouts (microgreens): broccoli sprouts, for example, are more than 10 times more nutritious as mature broccoli and help support the liver, which helps to remove toxins and viruses from the body. These are easy to grow at home.



Boosting the Immune system #9

Superfoods (b)

Certain foods have more vitamins and minerals than others and contain many of the vitamins and minerals the body needs. Here are a few more: -

Garlic: best used raw for immune-boosting properties, or add at end of cooking, and on a low heat. Crush before use to activate the enzymes. Garlic has anti-microbial and anti-viral properties. Black / aged garlic has less odour - easier to slice and have raw.

Turmeric: anti-inflammatory, helps with immune support, supports liver detoxification. Use in cooking (with fat and black pepper for maximum absorption), or substitute for coffee (turmeric latte). Note: Do not take with medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)

Beta Glucans: found in mushrooms. Boost “soldiers” - interferons - which play a role in managing viral infections.



Boosting the Immune system #10

Water

- Water is crucial for life - it is the most important nutrient
- Water makes up around 60% of the body
- Water is a transport system
- It helps deliver immune cells around the body, and excretes waste
- Dehydration is stressful for the body and slows down the immune system
- Approx 1.5 to 2 litres of filtered water is recommended daily for most adults
- Reduce and ideally eliminate diuretics such as caffeine (tea, coffee, sodas)
- these drinks do not count for fluid intake, as you will probably need more water to replace lost fluid
- Take regular sips of water throughout the day, rather than all in one go
- Avoid with meals which dilutes digestive juices (small 100ml glass is OK)
- Drinking cold beverages slows down the digestive system which can impair the immune system. Incorporate warming herbal teas. Avoid freezing cold water or ice

DRINKING WATER CAN HAVE A PROFOUND EFFECT ON HEALTH

Boosting the Immune system #11

- Fresh is best, but don't worry if you don't always have access to fresh fruit and vegetables, frozen fruit and vegetables can still give you the nutrients you need, particularly peas, carrots, frozen berries, tinned chickpeas, lentils etc.
- Don't rush out and start taking too many supplements. Not only is it best to get nutrients from food, the body is not used to taking lots of supplements, which may actually put a burden on the body, particularly if the nutrients are not needed. Some nutrients antagonise each other, for example zinc can antagonise copper, Vitamin A can antagonise Vitamin D etc., it is best to take a good multivitamin instead. Vitamins should only be used to supplement the diet and should not be used long term.
- Stress is very demangling of nutrients, particularly vitamin C, zinc, B vitamins, potassium and magnesium. By taking steps to reduce stress with gentle exercise, yoga, Tai Chi, meditation etc., you will use up less of your valuable nutrients.
- 70% of our immune system is in our gut, gut microbes are also important for our immune system. Following the previous slides will help to support a healthy gut microbiome, you can learn more about the gut microbiome in my separate Fact Sheet.

Sleep

- Good quality sleep is essential for the immune system to function optimally and helps increase levels of white blood cells such as natural killer cells, which defend the body against infection.
- Sleep allows the body to regenerate. It gives the digestion a rest so that it can focus on repairing the body.
- Aim for 7-9 hours of good quality sleep to optimise the immune system
- Eating a diet high in sugar, low in protein, high in caffeine or alcohol, can impair sleep, or eating too late in the evening (if the body is digesting food, it can keep you awake, or wake you in the night).
- Avoid looking at smart phones, tablets, lap tops or TV before bed as light can lower melatonin (the sleep hormone) levels.
- Wear an eye mask to support appropriate release of melatonin Eat some cherries which contain melatonin
- Herbal teas such as passionflower or chamomile may be helpful