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Nutrient	Why?	Where?
Vitamin C	Vitamin C contributes to immune defences by supporting various cellular functions of the immune system. Deficiency is known to result in impaired immunity and higher susceptibility to infections. With its antioxidant properties, vitamin C provides protection to cells from the increased free radical production and subsequent oxidative stress associated with viral infections. Vitamin C is also required to clear away toxic cells, protecting tissue from damage	Examples of Vitamin C rich foods include: yellow and red peppers, broccoli, cauliflower, kale, kiwi fruit, strawberries and citrus fruit.
Zinc	Zinc affects multiple aspects of the immune system; in fact, the immune system cannot function properly without sufficient zinc levels	The best food sources of zinc generally come from animal origin, however plant-based options can also provide good intakes. Zinc rich foods include: Meat, shell-fish, chickpeas, lentils, sesame and pumpkin seeds, cashew nuts, dairy, eggs, mushrooms, spinach, asparagus and wholegrains.
Vitamin A	Vitamin A is known as an anti-inflammation vitamin because of its critical role in enhancing immune function. It is involved in the development of the immune system and plays a regulatory role in cellular immune responses and immune processes, supporting the health of moist mucous membranes lining the throat and lungs, the area's most likely to be affected by a virus. Vitamin A also plays an important role in supporting the health of the gut lining where the majority of immune cells reside.	Vitamin A is primarily found in animal products such as meat. However, its pre-cursor beta-carotene (which turns into vitamin A by the body) is in high amounts in orange fruit and vegetables, especially dark green leafy veg. Sweet potatoes, carrots and butternut squash are great options to stock up on as they can be kept for weeks or even months. Eggs, dairy products and salmon also provide a source of vitamin A.
Selenium	Selenium is an essential micronutrient that affects various aspects of human health, including optimal immune responses. It is also an important anti-oxidant.	Selenium rich foods include seafood, poultry, tofu, Brazil nuts, fish, pork, eggs, brown rice and cottage cheese.
Vitamin D	Vitamin D is important for immune function and may play a role in the inhibition of viral infections. There is considerable scientific evidence that vitamin D has a variety of effects on immune system function and vitamin D deficiency may compromise the integrity of the immune system, and lead to inappropriate immune responses	Vitamin D is found naturally in only a few foods in small amounts; such as oily fish, eggs and mushrooms. The majority of the vitamin D we need must therefore be synthesised by the skin upon exposure to the sun's rays
Vitamin B12	Vitamin B12 is an important nutrient for immune function as it is involved in DNA synthesis and deficiency has been shown to impact the ratio and activity of certain immune cells.	Vitamin B12 is primarily found in animal based products; fish, meat, poultry, eggs, milk, and milk products. It can also be found in yeast extracts, nutritional yeast flakes and breakfast cereals and plant based milks that are fortified with it.

Eat A Rainbow. Focus on nutrient dense foods, and aim to eat a variety of different coloured foods with every meal. This is the best way to ensure that you are achieving a good daily intake of micronutrients, such as *vitamin A, C, B, zinc, and selenium*. Also increase your daily intake of foods with a particularly high antioxidant content; such as berries, dark leafy green vegetables (e.g. kale and spinach), cacao, and citrus fruits, to provide further protection for your immune system as well as respiratory tract. Smoothies are a great way to increase nutrient intake; using both fruits and vegetables

Stay Hydrated. Unsurprisingly, we need to stay properly hydrated for our body to function optimally and this goes for our immune system too. Regular water intake can even help to wash any lingering pathogens in the throat down into digestive tract for the stomach acid to kill off, providing additional protection for our immune system. Look out for symptoms of dehydration; fatigue, light-headedness, confusion, irritability and dark coloured urine

Now is a good time to make the most of store cupboards and freezers; frozen fruit (berries, chopped bananas) and vegetables are now generally just as nutrient dense as fresh. Ensure a good supply of nutrient dense staple options in the cupboard; wholemeal pasta, brown rice, quinoa grains, pearl barley, lentils, mixed nuts, mixed seeds, tinned fish (tuna, mackerel), chickpeas, butterbeans, tomatoes …

The following ideas are an example of how to incorporate those nutrients known for their positive influence on immunity function, into meals:-

Salmon – vitamin B12, vitamin D, and selenium
Brown rice – selenium
Asparagus and broccoli – vitamin C, vitamin A and zinc

Omelette (egg) – vitamin B12, vitamin D, vitamin A, zinc, selenium
Mushrooms – zinc, vitamin D
Spinach – zinc, vitamin A, vitamin C

<u>Stir-fry Chicken with Roasted Sweet Potato and Butternut Squash</u>
Yellow Pepper – vitamin C and vitamin A, Broccoli – vitamin C and vitamin A
Kale- Vitamin C and vitamin A, Mushrooms- zinc and vitamin D
Chicken – selenium and vitamin B12
Roasted Butternut Squash and Sweet Potato – vitamin A and vitamin C

<u>Fruit and Yoghurt</u>
Raspberries, strawberries, blueberries – vitamin A and vitamin C
Yoghurt – zinc, Vitamin A, vitamin B12
Mixed nuts and seeds – selenium and zinc

Reference sources available …