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SOUTH EASTERN ACTIVE HEALTH

WINTER WELLNESS

Handpicked tips to boost your immune system





WHY DO WE GET SICK?

BY JARROD AGOSTA

Put simply, the reason why we get sick is because microorganisms such as viruses, bacteria and parasites enter our bodies and begin to start affecting our normal bodily systems.

Our bodies have their own defence system, known as the immune system, which works to fight off these invaders and keep everything running smoothly. When an invader enters our bodies, either through a permanent opening (such as our mouth or nose) or through

a temporary opening (like a cut or a sore) our immune system recognises these invaders as foreign.

Our immune system then begins to try and remove this invader as quickly as it can using its inbuilt defences. An example of this is by increasing our core body temperature to try and eliminate the invader. We might recognise this as a typical symptom of having a coldcommonly known as a fever.





IHE IMMUNE SYSTEM

What is the Immune System?

The immune system is our bodies' natural defence to infection. It helps to fight off microorganisms in the body that can potentially do harm.

How does it work?

Our immune system works in a number of ways, but its main way of fighting off infection is to produce special molecules known as antibodies. Antibodies are like troops in the army. There are different kinds of troops for

different tasks, just like there are different types of antibodies for different kinds of infections.

How do I keeping my immune system working effectively? The main factor in keeping our immune systems working effectively is to consistently be eating a healthy, wellbalanced diet. This ensures that we are consuming all the necessary nutrients in the right quantities to keep our bodies functioning efficiently.

The other key factor is less diet-focused and falls more into maintaining good hygiene practices. Good hygiene practices include:

- Regular and thorough washing of hands, and bodies
- Cleaning of household and car environments
- Washing of linens and clothes as required
- Maintaining social distancing where possible

What are the simple steps we can do, to help our immune system protect us this winter?

- Maintain a healthy, well balanced, nutritious diet
- Get outdoors and ensure you get some sun exposure (great for Vitamin D levels)
- Keep physically active
- Maintain good hygiene practices
- Adequate sleep patterns (ideally 7-8 hours per night)
- Get your yearly flu vaccination
- If you do get sick, stay home and rest and recover!





6 IMMUNE BOOSTING NUTRIENTS

Before we get into my 6 immune boosting nutrients to help prevent and relieve illness this Winter, a little background information on macro and micronutrients.

What are they?

Macronutrients refer to the three main energy contributors in our diets: Protein, Fat and Carbohydrates.

Micronutrients refers to all the other key nutrients that we require, however we need these in much smaller quantities. This includes all the essential vitamins and minerals, such as Vitamin D and Calcium.

"The best way to stay healthy this winter is a nice, balanced diet full of all the essential macro and micronutrients. However, be sure to include food sources of these 6 key vitamins and minerals to help assist."

VITAMIN C

An important antioxidant that has shown some benefit in reducing the length and severity of colds.

Where to obtain it: citrus fruits, fruit juices, broccoli, brussels sprouts, spinach, kale, strawberries, capsicum, papaya.

How much Vitamin C do we need? 45mg per day, which can be obtained by eating 1 (90g) orange

How does Vitamin C help fight colds?

Vitamin C's main role in the body is to act as an antioxidant and assist in the regeneration of Vitamin E. In simplistic terms, when Vitamin E acts as an antioxidant it becomes damaged, and so Vitamin C acts as an antioxidant to eliminate the damaged Vitamin E. Vitamin C helps to increase wound healing. Our skin is the first barrier to infection and open wounds can put us at an increased risk of developing an infection. It also helps to form collagen in the body. Collagen is an important component in the formation of strong, healthy bones, teeth and blood vessels.

What does an antioxidant do?

Antioxidants are molecules that help protect our body's DNA from damage. They do this by neutralising (or cancelling out) other molecules, known as free radicals, which cause this damage. If left unchecked, over time free radicals cause enough damage to lead to the development of illnesses such as cancer or heart disease. Eating a diet high in antioxidants helps to protect us from this damage and to maintain good overall health.



VITAMIN A

Another antioxidant that helps in developing our resistance to infection.

Where to obtain it: eggs, liver, butter and margarine, cheddar cheese, carrots.

How much Vitamin A do we need?

- Women-700ug/day
- Men- 900ug/day

As an example, 1 medium carrot provides 509ug.

How does Vitamin A help boost our immunity?

Vitamin A is involved in the production of our epithelium cells. Our epithelium is a thin, continuous, protective layer which basically forms the outer most layer of our skin and internal membranes such as the inside of our mouths, stomach lining, blood vessel walls etc.

It also plays a role in the formation of some of our immune system antibodies and a deficiency in Vitamin A has shown to lead to a decrease in the amount of certain antibodies.





IRON

People with low iron levels have shown to have a reduced immune response and be more susceptible to infection.

Where to obtain it: red meat, fortified cereals and grains, legumes, green leafy vegetables.

How much Iron do we need?

- Women (pre-menopause) -18mg/day
- Men/Women (post-menopause) -8mg/day

100g of cooked red meat contains4.1mg. A 40g serve of Uncle Toby's PlusFibre cereal provides 3.0mg.

What does iron do for our bodies? Iron plays a vital role in our blood. This is because iron is the main component of haemoglobin which is found in our red blood cells. Haemoglobin is the molecule that carries and transports oxygen all around our bodies. Iron also plays a role in myoglobin, which is a crucial component of our muscles.

How is it related to our immune response?

A lack of iron in our diet commonly leads to frequent bouts of infection and illness. This is because iron is a critical nutrient for the creation and function of immune bodies such as lymphocytes. These immune bodies are the basic components that make up our immune



systems and defence against infection. A lack of iron means less immune bodies, both in number and effectiveness, which means a greater chance that an infection will be able to prosper once inside us.

How can we absorb it best?

Iron comes in two forms in foods, haem and non-haem. Haem iron is found primarily in red meat and it is the best absorbed type in the body. Non-haem iron is found in plant-based products and is less well absorbed.

A handy tip for increasing iron absorption in the body is to eat foods that are rich in iron in combination with foods that are high in Vitamin C. It is best to avoid foods that are rich in phytates (such as wholegrains, beans and nuts) when eating iron rich foods as they may inhibit some absorption of iron in the body.





Under investigation for its ability to prevent and shorten the duration of colds. Also aids in the healing of wounds and cuts.

Where to obtain it: red meat, oysters, legumes, nuts and seeds.

How much Zinc do we need?

- Women-8mg/day
- Men- 14mg/day
- One oyster contains ~5.5mg

How is Zinc involved in our immune systems?

Zinc is crucial in the development of healthy, functioning immune system antibodies. It also functions as an antioxidant and can neutralise those damaging free radicals.

SELENIUM

Maintains our resistance to disease and works as part of an antioxidant to inactivate free radicals in the body.

Where to obtain it: Brazil nuts, seafood, liver, poultry, eggs.

How much Selenium do we need?

- Women- 60ug/day
- Men-70ug/day
- Just 2-3 brazil nuts contain the daily requirement







VITAMIN E

Studied extensively for its role in the prevention of cancers and heart disorders. Acts as an antioxidant and helps maintain the membranes in our cells throughout our body.

Where to obtain it: Almonds, peanuts, tuna, avocado, sunflower seeds and oil.

How much Vitamin E do we need?

- Women-7mg/day
- Men- 10mg/day

23 almonds contain the daily requirement

Do we need to take supplements?

In someone consuming a healthy, well balanced diet full of all the essential nutrients then supplements are not really necessary. However, there are a variety of reasons why achieving this may be unattainable for some.

Some of these reasons may include:

- Having a food allergy or intolerance
- Following a particular dietary lifestyle (Vegetarianism, Veganism, Gluten Free etc.)
- Lack of knowledge around food and nutrition (including food preparation skills)
- Lack of food accessibility (e.g. regional, seasonal, transport issues)
- Exclusion of foods or food groups due to taste preferences
- Difficulty with food consumption or absorption (e.g. missing teeth, poor appetite, following Gastrointestinal surgery, cognitive impairment)



SUPPLEMENTS

In the situations mentioned on the previous page a dietary supplement can be very beneficial to help fill the nutritional gaps that may be present in your diet.

Should I try to eat better or just take a supplement?

First of all, great question! It can be tricky to know which is the best option for your individual situation with a lot of conflicting information out there. If none of the above circumstances apply to you, then getting as many of our nutrients from food sources is the best approach. This is because when present in food sources the nutrients are better absorbed by our bodies. This is known as bioavailability. Nutrients in supplement form (tablets, powders, liquids) tend to be less well absorbed by our bodies and have a lower

bioavailability.

Additionally, aiming to consume our nutrients from food and not from supplements enables us to achieve a number of other benefits that come with consuming wholefoods. These include:

- FIBRE! real foods give us the important fibre which is needed for proper digestion among a number of other vital bodily processes.
- ENJOYMENT! eating can be such an enjoyable experience, whether sharing it with loved ones or the simple sensory gratification that comes with enjoying your favourite meal.
- MYSTERY PRIZES! (OTHER UNKNOWN BENEFITS) - There is a huge amount of science being conducted on how the



combinations of nutrients in real food combine to give us added benefits. Antioxidants, polyphenols, flavonoids, the list goes on! All these components of food may have unknown positive effects that simply taking a supplement cannot replicate.

However, as mentioned earlier for some people there may be a need to be taking a supplement and this should be looked upon in a positive way. Supplements can play a very important role in achieving good health and taking a supplement should be used in conjunction with advice from your local doctor and dietitian.

Metagenics dietary supplements are available at South Eastern Active health. To view the range see www.metagenics.com.au or speak to your Practitioner at your next appointment.

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TROPICAL IMMUNITY Smoothie

Serves 2

What you will need:

- 1 Banana (peeled)
- ¹/₂ Papaya (peeled, deseeded)
- ¹/₂ Orange (peeled, deseeded)
- 30ml lime (30ml)
- 125ml Vitasoy Protein Plus Almond Milk or So Good High Protein Almond Milk
- 2-3 small ice cubes or small handful of crushed ice
- Blender or NutriBullet type mixer

How to prepare:

- 1. Roughly chop banana, papaya and orange into small segments.
- 2. Add to mixer and blitz until smooth.
- 3. Add the lime juice, almond milk and ice and blitz again until the mixture is combined.
- 4. Pour into a glass and consumer immediately.
- 5.Enjoy!

Credit: The Juice Bar. Sara Lewis. Parragon Books