

Top Tips On How To Support Your Immune System And Keep You Healthy

By **Dr Marilyn Glenville PhD**

We are living in unprecedented times and the government guidelines are being updated with each daily briefing. There are many things that are out of your direct control right now but your health is thankfully an area where you can make sure you are giving yourself the support it needs.

Making The Best Dietary Choices

Dietary choices are of course important and we all know fresh is best!

But when fresh foods are scarce and frozen/canned in limited supply are there things you can do to really optimise the way your body takes in nutrients?

You may not know that for some foods, such as carrots and tomatoes, the beneficial antioxidant properties such as beta-carotene (in carrots) and lycopene (in tomatoes) of these foods are increased when they are cooked compared to when they are raw. And the longer those two are cooked the better.

Soups would be a good way to use these two vegetables, if you can cook from scratch even better because many of the canned soups will contain sugar.

When you are cooking tomatoes you can also add olive oil as this helps your body to absorb the antioxidant lycopene present in the tomatoes.

You can improve the absorption of iron from your food by combining it with vitamin C. N on-haem iron is found in plant based foods and haem iron is found in animal foods. The non-haem iron is not absorbed as well as the haem.

If you are eating more of a plant based diet then g ood non-haem sources of iron are beans, nuts, sprouted beans, cereals and green leafy vegetables and add some form of vitamin C either lemon juice or drink some orange juice with the food.

You can also increase your absorption of calcium by making sure you have enough vitamin D. Your body can't absorb calcium well without enough vitamin D so eat foods rich in vitamin D such as oily fish and egg yolks and even consider taking a supplement at this time as vitamin D is crucial for supporting your immune function.

If your dietary choices are limited at the moment because of what you can buy, what should you prioritise?

You should always put the priority on fruits, vegetables and wholegrains in order to get as many different nutrients as possible plus good amounts of fibre.

Fibre is important to 'feed' your beneficial bacteria in your gut and these bacteria are important for your immune function.

Nuts and seeds will also be good standby and you could include a palmful each day.



If you can't get fresh fruit or vegetables then frozen is just as good.

Tinned vegetables and beans can also be good but make sure they do not contain sugar which is often the case with canned sweetcorn.

Avoid buying processed foods or foods high in sugar because these could weaken your immune system.

Think about buying foods that contain beneficial bacteria or are fermented. These might be unusual foods for some people but 70% of your immune system is in your gut so it is important to keep up good levels of beneficial bacteria at this time.

Organic live yogurt would be good but of course the sell by date will be shorter on these than foods in a jar such as sauerkraut. Other fermented foods to try would be kefir, miso, kimchi and apple cider vinegar.

It is really important to eat as healthily as possible at this time, keep active as best you can and avoid foods that could weaken your body and immune system, including processed foods, soft fizzy drinks. sugary snacks and alcohol.

Coping with stress and anxiety in times of uncertainty

We are living in very unusual times and our sense of what is normal is changing day to day.

That can make you feel very stressed and anxious because what is happening in the world now is out of your control but think about what you can control.

What can you do to help yourself feel calmer and more relaxed?

Take deep breaths when you can because when you shallow breathe you are hyperventilating and that can make you feel more anxious. Deep breathing helps to switch off the stress response.

Fit in some gentle movement during the day as that can help you feel calmer.

The knock-on effects of continually feeling too stressed are enormous, physically and mentally.

Stress can give you a number of symptoms including moods swings, anxiety, irritability, nervousness, aggressive outbursts, fatigue, palpitations, forgetfulness, anxiety, confusion, inability to concentrate, crying spells, insomnia, headaches, muscle cramps, digestive problems and food cravings.

But the most important impact stress can have your health at the moment and why it is important to look at how you can reduce it, is that it can weaken your immune function.

This can leave you more vulnerable to getting an infection and also your body's ability to recovery quickly may be compromised.

How your pattern of eating can be making you feel more stressed

You can't control what is happening in the world at the moment but you can reduce how stressed you feel and the impact it might be having on your health.

There is a chance that your pattern of eating is subconsciously telling your body that it is under even more stress.

Make sure you are eating regularly and cut down or eliminate sugary foods because you want to keep your blood sugar in balance. Every time your blood sugar drops (low blood sugar or hypoglycaemia) your body will release the stress hormones, adrenal and cortisol, so your pattern of eating could be making you feel more stressed than you should be.

Try to keep your blood sugar levels and energy levels stable by eating something every three hours. Eat breakfast, lunch and dinner plus a snack mid-morning and one mid-afternoon, with no longer than three hours between.



As your blood sugar steadies, so your stress hormones will reduce and you will automatically start to feel calmer inside.

Also think about how much caffeine you are drinking, in coffee, tea, energy drinks. Caffeine is a stimulant and is going to trigger the release of the stress hormones.

Helpful Nutrients

Certain nutrients can be extremely helpful in helping to reduce stress and its impact on your health and immune function.

When you are under stress you use up a lot of your B vitamins especially vitamin B2 and B5, as well as vitamin C. These are all water-soluble vitamins, so your need to eat them in your diet on a day to day basis (or get them from food supplements) because they are not stored in your body.

One of the best sources of all the B vitamins are wholegrains, green leafy vegetables and nuts and seeds.

The other nutrient that prolonged stress depletes is magnesium. Magnesium is known as the calming mineral, often referred to as 'Nature's Tranquilliser'!! It helps to relieve anxiety and relax muscles.

Magnesium deficiency is often reflected by waking up in the early hours of the morning and not being able to get back to sleep again. Magnesium is found in green leafy vegetables, nuts and seeds.

Chromium is helpful for blood sugar balance and L-theanine for reducing stress and anxiety and helping your mind to 'switch off' at night to let you go to sleep.

The herb Siberian ginseng is also beneficial as it acts like a tonic to the adrenal glands. A good supplement I use in the clinic which contains all these nutrients plus more is NHP's Tranquil Support.

These are stressful times and it is important to keep yourself as calm and relaxed as possible. Stress can weaken your immune function so whatever you can do to help reduce anxiety is important.

The Importance of Sleep

As a society we are sleeping less; the time we sleep each night has reduced from 9 hours to 7.5 hours since the 1900s.

Sleep is important for your health because it gives your body time to recharge its batteries and repair cells and tissue. When you don't get enough or good quality sleep you can feel irritable, with poor concentration and, of course, feeling tired.

Sleep nowadays is almost seen as a luxury because it means you can pack more into the day if you sleep less.

This might seem logical because you will have more hours awake but by depriving yourself of sleep you may find that you are not as productive the next day and that lack of sleep will have long term consequences on your health.

Your Immune System and Sleep

During these difficult uncertain times you want to make sure that you are sleeping well because not getting enough sleep can weaken your immune function.

Inadequate sleep lowers your immune response.

Research has shown that missing even a few hours a night on a regular basis can decrease the number of 'natural killer cells', which are responsible for fighting off invaders such as bacteria and viruses.

You may remember that when you get the seasonal flu, all you want to do is sleep because it is



during sleep that your own immune defences are able to be more effectively mobilised. Your body is trying to sleep itself well.

Research has shown that when people are actively given the common cold virus those who have had less sleep are more likely to be infected and 'catch a cold'.

For those sleeping five hours a night the infection rate was nearly 50% compared to those sleeping seven hours a night where it was just 18%.

Sleep Routine

You want good quality and quantity of sleep so think about winding down at the end of the day.

Have a good sleep routine. Consider using some aromatherapy oils, such as bergamot, lavender, roman chamomile and marjoram in a warm bath, just before bed.

A few drops of aromatherapy oils on your pillow at bedtime can have the same effect.

Think about switching off all gadgets - tablets, laptops, televisions, phones - about an hour before you are going to bed so your body and mind can start to wind down ready to switch off.

Sleep and what you eat and drink

Anything that has a stimulant effect can keep you awake including caffeine and chocolate (especially dark chocolate) and of course the closer to bedtime, the worse the effect.

For some of you, it may be better not to have any caffeine after midday as some people are very sensitive to it causing sleep problems.

Alcohol can also change your sleep pattern as you don't get such deep sleep and can wake easily and also it acts as a diuretic so you will need to get up to pass urine.

Tryptophan is an amino acid which occurs naturally in certain foods and your body uses this amino acid to make serotonin, the relaxing and calming brain neurotransmitter.

Many antidepressants, like Prozac, are called Selective Serotonin Reuptake Inhibitors (SSRI) and they work by helping to keep serotonin levels high in the brain.

Tryptophan occurs naturally in certain foods including fish, whole grain, beans, almonds, eggs, bananas and dates. Tryptophan is one of a number of amino acids broken down from the protein you eat. But there are less tryptophan molecules in food than the other amino acids and it is easy for the tryptophan molecules not to get into your brain because they are competing with the other amino acids to get through.

If you are not sleeping well then combine a protein with a carbohydrate (e.g. fish and rice, brown rice is better if possible, at the evening meal).

The insulin released when you eat carbohydrates is used by the other amino acids from the protein and the tryptophan can get across your blood/brain barrier helping you to sleep.

Herbs to help you sleep

There are some very good traditional herbs that have been used for centuries to help with sleep problems.

These include valerian, chamomile, hops, lemon balm and passionflower. Valerian has been shown to reduce the time it takes to fall asleep by 15-20 minutes and improve sleep quality.

Chamomile has calming effects which decrease anxiety and help to initiate sleep.

Lemon balm has been used with stressed volunteers with anxiety disorders and sleep disturbances.



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It not only helped them sleep better but also reduced anxiety.

Passionflower is helpful for sleep problems and when combined with valerian and hops was as effective as a mediation for insomnia at improving sleep quality.

The amino acid I-theanine is really helpful if you feel 'tired but wired' where you are exhausted but as soon as your head hits the pillow your brain is very active and doesn't allow you to fall asleep.

There has also been good research on tart cherries which has shown that these have helped people with insomnia increase sleep time by up to 84 minutes.

There is a good combination I use in my clinics called NHP Sleep Support which contains all these nutrients.

I cannot stress how important it is to sleep well in these difficult times, because sleep allows your body to recuperate and your immune system to stay healthy.

Make sure you have got a good sleep routine, we talk about sleep hygiene, switching off electronic devices one hour before bed, winding down before you go to bed, limiting caffeine and having a good quality and quantity of sleep.

Can Supplementing Help?

The short answer is yes! The best supplements for overall health and wellbeing are a good all round multivitamin and mineral.

The multi will give you a good range of all the different vitamins and minerals that are going to be of benefit for your general good health including the B vitamins, zinc, selenium, vitamin A, chromium, calcium magnesium, vitamin E etc.

These nutrients will be found in a good diet including fruits, vegetables, wholegrains, legumes, nuts and seeds but some of these may be in shorter supplies at the moment so having a multivitamin and mineral supplement can help to bridge some of those gaps.

There are a number of excellent supplements that are available to support your immunity and general health. I would recommend The Natural Health Practice which offer organic and vegan supplements, to find out more about their range, click www.naturalhealthpractice.com/key-supplements.

However with such a wide variety of brands to choose from, it is important to look at the levels of the different nutrients and the form that they are in so that you are getting enough of each nutrient plus the form can make the difference as to how easily your body can absorb that vitamin or mineral.

Look for brands that have these qualities:

- Nutrients in their most bio-available form to aid absorption eg organic minerals like calcium citrate
- Hypoallergenic free from sugar, gluten, starch, wheat, yeast, soya and dairy
- Free from genetically modified organisms (GMOs)
- Made without the use of artificial flavours, colours or preservatives
- No fillers, binders, anti-caking agents, artificial sweeteners etc.
- Vegan and vegetarian approved (except omega 3s)
- Choosing a brand that carries approved certification for reassurance to those with dietary, lifestyle or religious beliefs.



Vitamin C

This is the nutrient that often comes to mind first when we think of immune function and for a good reason.

Vitamin C is essential to the health of your immune cells and they need almost double the amount when you are unwell.

Research has shown that good levels of vitamin C can help to reduce the length of time you might suffer from an infection by up to 50%. Vitamin C has anti-viral activities and evidence confirms the effectiveness of vitamin C against viral infections.

I don't think that the current recommended guidelines of 90mg for men and 75 mg for women of vitamin C a day are high enough in the present climate.

You need higher amounts at the moment because the present situation is very stressful and stress depletes your stores of vitamin C.

You should take at least 1,000mg of vitamin C a day. Take 500mg vitamin C twice a day (because this vitamin is water soluble, it is better taken in two amounts, as it gets excreted through your urine every few hours).

You can't manufacture vitamin C in your body. It has to come in from your diet or in supplements. It is water soluble so you excrete it every few hours through your urine, it is not a vitamin that your body stores like fat soluble vitamins such as A or E, you have to keep replenishing it.

And at a time like this when you need to support your immune function, a good quality vitamin C supplement is crucial.

Animals that can manufacture their own vitamin C, in the liver and kidneys, do so when they are stressed, replenishing stores to restore health.

Because the human body can't make its own vitamin C, you need to make sure that, during times of anxiety or when wanting to support your immunity, you supplement your own stores not only with increased intake of vitamin C rich foods, but also with a good vitamin C supplement.

When choosing a vitamin C supplement, look for one in the alkaline form of magnesium ascorbate as this is much gentler on the digestive system than the acidic form of vitamin C, ascorbic acid. It is important to choose the alkaline form of vitamin C if you have digestive issues.

7inc

Zinc is another nutrient that good for supporting your immune system.

It is an essential mineral which means that it cannot be made in your body and like vitamin C has to come in from food or in supplement form.

Zinc is needed by every cell in your body and affects your immune system in many ways.

Research has shown that zinc deficient people can have increased susceptibility to a variety of pathogens. Like vitamin C, zinc has also been shown to shorter the direction of a cold and interestingly one of the signs of a zinc deficiency is a lack of taste and smell.

You may have noticed that throughout this guide there is no mention of 'boosting' or 'strengthening' your immune function.

You want to support your immune function so that it does what it needs to do at every step of an infection.

You want it to be 'strong' at the start of an infection to try and stop the infection taking hold.

But you don't want your immune system to be so strong that it starts to over react which is then known as a cytokine storm and can be deadly.



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Fascinating research has shown that zinc helps to control infections by putting the brakes on the immune response when it would start to spiral out of control creating deadly inflammation.

Research has also shown that if there is not enough zinc available at the start of an infection the consequences can include excessive inflammation.

Zinc has a balancing effect on your immune function, enabling it to do what is needed at each stage of an infection.

Vitamin D

Like zinc, vitamin D is an immune modulator, it has a balancing effect on your immune function.

It can bring up your immune function if it is low and bring it down if overactive. Again this is important in stopping the risk of a cytokine storm where the immune response goes into overdrive.

Your body does not expect to get much vitamin D from your food as it is made by the exposure of the skin to sunlight, so at this time of the year, your level could be generally low.

That is why Public Health England recommend that all adults and children over one should be supplementing with vitamin D.

Vitamin D is found in oily fish and eggs. A 100g of grilled salmon contains 284ius of vitamin D and a 100g of tinned pilchards contains 560ius of vitamin D, the yolk of one egg contains about 20ius of vitamin D.

It is so important to have sufficient levels of vitamin D because research has shown that this versatile nutrient plays a key role in keeping you in good health, not only for supporting your immune function but also for your general health.

For example, it has been found to:

- be vital for bone health and osteoporosis
- play a major role in breast and bowel cancer prevention
- help with other conditions as diverse as type 2 diabetes, heart disease, joint pains and arthritis, dementia, autoimmune diseases, fertility, autism, and allergies
- help with SAD (Seasonal Affective Disorder).

When selecting a vitamin D supplement, choose one where the form of vitamin D is D3 - cholecalciferol not D2 - ergocalciferol. It has been shown that vitamin D3 is 87% more effective at raising and maintaining vitamin D levels than D2.

Probiotics

Over the last few years, research into probiotics and how these beneficial bacteria can affect your health has exploded – proving that probiotics have a far more significant effect on your whole body than only the positive effects on your gut health.

We now know that 70% of your immune function is in your the gut and your digestive system is the largest barrier between you and the outside world so at a time like this when you want maximum support for your immune system, having good levels of beneficial bacteria are even more important.

Your digestive system contains billions of bacteria, weighing in at around 1kg (about 2lbs).

As well as the benefit to your immune function, your beneficial bacteria help to improve you nutrition as they manufacture the B vitamins and vitamin K.



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They also help you to digest your food efficiently and improve detoxification by stopping food sitting in your gut too long producing toxins.

You also need good levels of beneficial bacteria to help to keep control of pathogenic bacteria, parasites and yeasts.

There is also a direct connection between your brain and digestive system and the gut is often termed our 'second' brain as we have a nervous system in our guts and the same neurotransmitters, like serotonin, that are found in our brain.

At a time like this when stress and anxiety can be common and also low mood, it is important that you have good levels of beneficial bacteria.

Research has shown that having enough of these beneficial bacteria can help us cope more easily with stress and that they can help to reduce depression.

Also for older people a probiotic could be helpful as the natural levels of these beneficial bacteria fall as we get older.

With probiotics, don't go for the probiotic drinks, as they can be loaded with sugar which is not helpful for your immune system particularly at this time.

Probiotics are better taken as a supplement. Choose one that does not contain maltodextrin. Maltodextrin is a very easily digested form of carbohydrate and is digested as rapidly as glucose (which is 100 on the GI chart). There are also concerns that maltodextrin could increase inflammation in the digestive system.

You also want a probiotic that contains at least 22 billion organisms (including both lactobacillus and bifidobacteria strains) and does not have to be refrigerated because the contents are freeze dried, which makes it much more convenient especially when travelling.

Having a probiotic that contains a prebiotic can be particularly helpful as the prebiotic is the food that the good bacteria use to thrive on so are useful in helping to make sure that the levels of your beneficial bacteria stay high.

All Round Immunity Support

Nature also gives you other powerful substances to support you through these difficult times and there are some excellent traditional herbs that have been used for centuries to support immune function.

Traditional herbs like black elderberry and olive leaf are particularly helpful especially if combined with beta glucans which are found in oats and wholegrains.

These have a specific benefit for immune function and so do mushrooms such as reishi, maitake and shitake which contain good amounts of these beta glucans.

The restrictions to our normal way of life, which are important to be followed, may be in place for a number of months.

So think about how you can keep yourself healthy and what you eat and drink and the food supplements you take which will not only keep you well but also help support your immune function during these difficult times.

NEW 30 Minute Telephone Or Skype Nutritional Consultation

If you would like to know more about keeping yourself well and how to support your immune system in these unprecedented times, my Glenville Nutrition Clinics are now offering a new 30-minute remote consultation by Skype or telephone.



Your consultation will be with one of my highly qualified nutritionists who will give you practical advice on how you can keep healthy in these unsettling times.

You'll also learn how to support your immune system and keep it healthy naturally.

To find out more about these special consultations or to book your consultation just click on the link below https://glenvillenutrition.com/glenville-nutrition-clinic-remote-consultation

Dr Marilyn Glenville PhD is the UK's leading nutritionist specialising in women's health.

She is the author of 16 internationally bestselling books on nutritional health and is The Former President of the Food and Health Forum at the Royal Society of Medicine.

Dr Glenville runs a several nutritional health clinics in Harley Street, London, Tunbridge Wells and Ireland www.marilynglenville.com.

In association with **The Natural Health Practice** Dr Glenville formulated their exclusive range of premium quality supplements which she also uses as her brand of choice in all of her nutrition clinics.

For more information about supplements that contain all the nutrients mentioned above just click the link below. www.naturalhealthpractice.com/key-supplements.