

Boost your. immunity

With winter on your doorstep, learn how to strengthen your body's defences so you stay sniffle-free. Naturopath **Tania Flack** reports.

Uh-oh ... the irritating tickle at the back of your throat that won't go away, muscle aches and pains, a dull headache and general feeling of lethargy, followed by the realisation of "Oh no, I'm coming down with something!" Welcome to the opening scenes of your next bout of flu or a cold, as reliable as the start of the season, as people sniffle and hack their way through offices, trains, movie theatres, and cafes, seemingly eager to

spread their germs. The question is: will you shake it off in a couple of days with only mild symptoms and minimal disruption to your life? Or will you be knocked sideways and end up in bed for two weeks, then spend a further fortnight – or longer – getting back on your feet? The answer depends entirely on how resilient your immune system is and what you do to support it – and the good news is, there is plenty you can do to ward off winter health woes.

Your immune system

This is a highly sophisticated cellular army that is responsible for keeping foreign invaders like viruses and bacteria out of your body. The fever you get in the early stages of a cold or flu is your immune system's way of trying to make your body an inhospitable place for intruders to settle in and multiply. Immune system cells congregate in the areas that are the main interface between us and the outside world, including the respiratory system - the mucous membranes lining the airways are a key entry point for viruses, and much depends on how well nourished these tissues are and how effectively they are able to act as a barrier.

So, why is it that some people have such effective immune systems that they rarely get

sick, while others have a very different experience? Immune fatigue occurs when the immune system becomes so worn down that it is unable to launch a strong enough defence to fight off the next infection. Perhaps the biggest immune system crime you can commit is 'soldiering on.' Not allowing yourself the time to rest and recover from your last infection can often be the starting point of immune fatigue. Repeated infection means that your body can't manufacture a new supply of fully differentiated and primed white blood cells fast enough. When this happens, the body is forced to release immature white blood cells that are less efficient at fighting off an infection – the immune system's 'army reserve', if you like. Once this starts to happen, you'll be prone to repeated infection and longer recovery time.

Inadequate nutrition is a key factor in immune fatigue; launching an immune response to an invading organism significantly increases our need for nutrients. You may think you have a good diet, but is it meeting your current requirements? Any increase in stress, working hours, or even exercise, will automatically increase your nutritional requirements. Eating on the run, poor absorption, a diet high in processed foods and low in fresh wholefoods can lead to nutritional insufficiency, which contributes to immune system fatigue.



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5

times the antioxidant activity of vitamin C.



Immune-boosting soup

The chicken provides easily digested protein; the vinegar releases minerals from the bones; garlic and onions contain allicin, an immune stimulant; ginger is anti-inflammatory; pepper improves absorption of the antioxidant turmeric; and the veggies are rich in vitamin C and beta carotene.

- 1 kg organic chicken legs
- 2½ litres filtered water
- 3 tablespoons apple cider vinegar
- 2 tablespoons extra virgin olive oil
- 4 large carrots, grated
- 1 turnip, grated
- ½ a bunch of celery, diced
- 6 cloves garlic, finely minced

- 2 tablespoons fresh ginger, finely grated
- 1 teaspoon finely grated fresh turmeric
- 1 bunch of flat leaf parsley, finely chopped
- 2 large brown onions, diced
- freshly ground black pepper

1. Heat oil in a large saucepan over medium heat. Sauté onions and garlic until translucent, then add turmeric, ginger and pepper and stir until the aromas release.
2. Add water, chicken and vegetables, and bring to the boil. Reduce heat and add vinegar.
3. Simmer for one hour, and then carefully remove the chicken legs with tongs. Discard skin and bones and return meat to the soup, along with parsley.

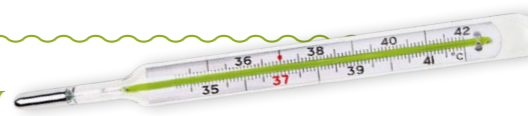
Green medicine

Herbs have been used throughout history to modulate and support the immune system and were once all we had to treat infection. The effect of herbs on the immune system has been the subject of intense scientific scrutiny: many have immune-modulating effects, however there are three absolute standouts. **Echinacea:** This is one of the most widely used medicinal herbs and its effects on the immune system have been the subject of exhaustive research. Echinacea acts as an immunomodulator, which means it will stimulate a strong immune system and support one that is weakened. It can be used at any stage of infection, but best results are achieved when taken at the first sign of symptoms. It also has anti-inflammatory, antioxidant and mild antiviral properties and has a beneficial effect on the lymphatic system, promoting healing. A large Cochrane meta-analysis, which compared the findings of 16 clinical trials involving a total of 3396 participants, concluded that echinacea is effective in the treatment of the common cold. Two more recent meta-analyses, published in *Clinical Therapeutics* and the *Lancet*, support this and also found evidence that it is effective in its prevention, too.

The biggest mistake you can make is ‘soldiering on’. Not allowing yourself the time to rest is often the starting point of immune fatigue.

Olive leaf: The olive tree is one of the oldest cultivated plants; its leaves are naturally rich in antioxidants and have antimicrobial and anti-inflammatory properties. Stephen Eddey, principal of Health Schools Australia, has reviewed the research and reports that olive leaf extract has a powerful twofold action against viral infection. “Firstly, it appears to stimulate phagocytosis (the process in which immune system cells engulf and destroy invading organisms), and

5 rules of recovery



- Rest:** Especially important in the first few days – and that means bed rest, not working from home.
- Nourish:** Slow-cooked, easy to absorb, nutrient-rich foods, like soups and casseroles.
- Hydrate:** Fluids are vitally important; aim for two litres per day. Fresh vegetable juices, herbal teas and filtered water are all good choices.
- Lighten up:** Adequate vitamin D is essential for a healthy immune system. Twenty minutes of gentle sunlight, morning and afternoon, will boost your levels
- Move:** Once you start to feel a little better, gentle exercise, like walking or stretching, will help drain the lymphatic system and revitalise the immune system.

secondly it interferes with the ability of bacteria and viruses to replicate and cause infection”. Eddey adds that studies have shown its key active constituent, oleuropein, is effective against a range of micro-organisms, including influenza and parainfluenza viruses. Australian research has found that olive leaf extract has five times the antioxidant activity of vitamin C. According to Eddey, this potent antioxidant activity helps to reduce the symptoms of colds and flu by minimising the amount of oxidative damage caused by the inflammation associated with viral infection. Olive leaf extract is ideal for both acute and chronic infection and helps to promote immune resilience.

Andrographis: This has a long history of use in Ayurvedic medicine and traditional Chinese medicine, where it is renowned for its ability to help fight infection and reduce fever. It also acts as a stimulant to the immune system and has mild anti-viral and anti-inflammatory properties. Its efficacy in the treatment of viral upper respiratory tract infections has been demonstrated in several clinical trials, reducing both the severity of symptoms and duration of infection. A meta-analysis published in *Planta Medica* compared the results of seven clinical studies that involved 1765 participants and found andrographis to be an effective treatment for upper respiratory tract infection. Traditionally, it is used to treat the acute phase of infection and should be taken at the first sign of symptoms.

The defensive diet

Your nutritional requirements skyrocket during an infection. Several key nutrients are particularly important to support speedy recovery and build immune resilience.

Vitamin A: Improves white blood cell function to help fight off infection and is vital for healthy mucous membranes. It is found in cod liver oil and eggs or it can be manufactured in the body from beta carotene, which is found in orange and yellow coloured vegetables, such as carrots, red capsicums, pumpkin, and sweet potato.

Vitamin C: Perhaps the best known of all nutritional remedies for colds and flu, it is essential for the formation of collagen, tissue strength, and to promote healing. It also acts as a powerful antioxidant. Infection and inflammation rapidly decrease vitamin C stores in the body. Continually replenishing vitamin C helps to overcome infection and ensure a speedy recovery. Good sources of vitamin C include citrus fruit, red and green capsicums, broccoli, Brussels sprouts, kiwi fruit, and strawberries.

Vitamin D: Although not commonly recognised as an immune system nutrient, vitamin D helps strengthen the immune system as well as our bones. Regular exposure to sunlight will boost production of vitamin D and you can also increase your levels by eating oily fish, such as herring, salmon, tuna, and sardines. If you are struggling with a poor immune system you can have your vitamin D levels checked by your naturopath or doctor, as deficiency is relatively common.

Zinc: This is one of the most important minerals to support a healthy immune system and unfortunately zinc deficiency is common in Australia. It’s linked to lowered immunity, increased susceptibility to repeated infections, and poor wound healing. Eating more zinc-rich foods can help support immune function; these include oysters, shellfish, red meat, eggs, and liver.

When to call the doctor



Dr Lyn Tendek is an integrative medical specialist and general practitioner who combines Western medicine with nutritional and herbal medicine in her practice. Tendek often sees patients who are concerned that their upper respiratory tract infection (URTI) caused by common cold or flu virus requires treatment with antibiotics. “I try to reassure them that the majority of URIs are caused by viral infection and antibiotics will be of no use. In fact, overuse of antibiotics has led to a significant increase in multi-drug resistant bacteria or ‘superbugs,’” she says.

In the case of simple viral infection, Tendek recommends the use of herbs and nutrients and agrees that rest is the best medicine to assist in healing, but she acknowledges that further measures are required when secondary bacterial infection sets in. “There is a definite role for antibiotics in the minority of people who have a bacterial infection or where a secondary bacterial infection develops on top of a pre-existing viral URTI. In this case, the use of antibiotics can be life-saving.”

Here’s how to tell the difference between a viral and bacterial infection:

Viral infection: Mild to moderate sore throat, no difficulty breathing, coughing up clear or white phlegm, mild temperature, progressively feeling better over several days or not feeling worse; action – rest and recover.

Bacterial infection: Severe sore throat, difficulty breathing, coughing up green phlegm, high temperature, feeling significantly worse over several days; action – see your doctor.

Tania Flack is a leading naturopath and nutritionist with a special interest in hormonal and reproductive health and immune system support. References available on request. www.taniaflack.com