Optimise your immunity through nutrition

By Tanya Kumar

In light of the recent pandemic, people are understandably paying more attention to the importance of their immunity and as we approach winter the emphasis on this should increase. 'Boosting' immunity is a common phrase used to draw in sales of supplements and other products. It is important to note that no single nutrient, food or supplement will boost our immune function.

The immune system is a complex one that protects us from viruses that cause infection. A 'boosted' or over-active immune system can negatively impact our health. Instead, we should strive to *maintain* or *support* robust immune function.

There are two main factors that increase our chance of picking up infections: the first is exposure to pathogens and the second is the status of our immune system. So, how can we protect ourselves and maintain robust immune function?

Avoid nutrient deficiencies

Deficiencies in energy, protein and specific micronutrients can supress immunity. Consume a diet rich in vitamins (A, D, E, B6 & B12) and minerals (Iron & Zinc) by consuming a variety of fresh fruit and vegetables, lean proteins, whole grains, beans, pulses, nuts and seeds.

Avoid crash dieting

Crash dieting and rapid weight loss will increase the stress hormone cortisol, which can depress immune function. If you're intentionally restricting calorie intake for weight loss it may be worth taking a multi-vitamin/mineral supplement as nutrient deficiencies may be more prevalent.

Stay hydrated

Sipping on water regularly throughout the day particularly before, during and after exercise will increase saliva production. Saliva contains several anti-bacterial proteins that will protect against infection, acting as your initial defence mechanism.

Get enough Vitamin D3

Vitamin D plays a vital role in immune function. Deficiencies are common during the winter months in the northern hemisphere due to restricted sunlight. Therefore, supplementing with Vitamin D3 (1000 – 4000 IU/day or $25 - 100 \mu g/day$) between October to March is recommended for those living in the UK.

Supplement wisely

The evidence surrounding other supplements and immune health is generally inconclusive. A daily probiotic supplement (Lactobacillus and/or Bifidobacterium) may reduce respiratory infections by modifying the bacteria in the gut leading to positive influences on immune function.

Gut bacteria can also be regulated by whole food sources such as fruit, vegetables, whole grains, beans and pulses. In addition, fermented foods such as live yoghurt, kombucha, sauerkraut and kefir have similar benefits.

Fuel with carbs before and during intense, long duration exercise

If you plan to exercise for longer than 60-90 mins at moderate - high intensity, a carbohydrate rich meal should be consumed 2-4 hours before. During exercise, 40g of carbohydrate should also be consumed per hour to limit the impact of exercise induced immune suppression.

Get adequate sleep

At least 7 hours each night is recommended. Missing a single night's sleep will have limited impact on immunity but if poor sleep duration (less than 7 hours) and quality (regular awakenings) persist over many nights, the risk of respiratory illnesses will increase.

Limit life stresses

Elevated levels of stress can increase the hormone cortisol which negatively impacts immune function and increases susceptibility to infection. Regular physical activity can relieve stress (e.g., walking, running, cycling, yoga, Pilates etc.) and therefore stabilises cortisol levels.

If you would like to discuss your nutrition with our in-house nutritionist, please contact tanya@tkxnutrition.com