



## **NUTRITIONAL PROTOCOLS**

## for healthy immune systems at school

The human immune system remains the most effective protection we have against SARS-CoV-2 that causes Covid-19. However, not everyone's immune system functions optimally and this can be down to a number of reasons. This includes our nutrient status, physical activity and sleep quality, as well as the nature of our social environment and emotional state. Additionally, we know that children are less likely to transmit SARS-CoV-2 or become seriously ill from it. This is likely down to the greater capacity of the innate immune system in children to prevent serious infection, this function being itself dependent on various nutrients, including vitamin D, vitamin C and zinc.

This flyer provides summary guidance from two independent non-profit, expert organisations, namely the <u>Alliance for Natural</u> <u>Health (ANH) International</u> and the <u>British Society for Ecological Medicine (BSEM)</u>, on key nutritional elements that contribute to the proper and healthy function of our immune systems.

The guidance has two parts: 1) guidance on healthy eating, and 2) guidance as to additional intakes of specific micronutrients in food supplements that are known to improve immune system function in children and adults.

## Healthy eating guidance

The <u>Food4Health campaign area</u> of the ANH website contains guidance and information about ways of eating that help to minimise systemic inflammation and oxidative stress while improving immune function. You will find a healthy eating plan for children (Food4Kids guidelines, for ages 1-6) as well as the Food4Health guide (for children 7 and over, and adults). There is also a specific vegan version of the Food4Health guide. **All three guides are downloadable from the links below**. This guidance is underpinned by extensive scientific evidence and focuses not only on what you eat, but also when and how you eat. The guidance documents can be printed and fixed to refrigerators or noticeboards to help keep those responsible for preparing foods on track.







>>> Download Food4Kids guidelines

>>> Download Food4Health guide



## Food supplement guidance

Recommendations on supplemental dosages of the following three micronutrients is given below.

Micronutrient	Daily dosage of food supplements			
	Children (4-6 years)	Children (7-10 years)	Children (10-17 years)	Adults (18 years and over)
Vitamin D	20-25 micrograms (800-1000 IU)	25 micrograms (1000 IU)	50 micrograms (2000 IU)	100 micrograms (4000 IU)
Vitamin C*	2,500 milligrams (half a rounded teaspoon of pure ascorbic acid) daily in divided doses	5,000 milligrams (1 rounded teaspoon of pure ascorbic acid) daily in divided doses	7,500 milligrams (1.5 rounded teaspoons of pure ascorbic acid) daily in divided doses	10,000 milligrams (2 rounded teaspoons of pure ascorbic acid) daily in divided doses
Zinc <sup>+</sup>	10 milligrams	10 milligrams	15 milligrams	25 milligrams

\*Vitamin C (ascorbic acid) should be taken throughout the day and evening to maintain blood levels. The daily dose of powder can easily be dissolved in warm water which can then be chilled, diluted to taste and taken throughout the day, in divided doses. It can also be taken in tablet or capsule form, for instance in 500 mg and/or 1000mg capsules several times a day. Note: Too much vitamin C may give you loose bowels. This is not an adverse effect but rather a sign that you have taken enough and can reduce the dose slightly.

+ Zinc supplements (e.g. citrate, monomethionine forms) should preferably be consumed with main meals that do not contain cereals or grains given these can reduce zinc absorption. Alternatively, zinc gluconate may be consumed between meals in lozenges.



<u>bsem.org.uk</u>