UK Medical Freedom ALLIANCE

COVID-19 PREVENTION: Vitamin C - PATIENT INFORMATION LEAFLET

Vitamin C is important for immune functioning

Vitamin C has important anti-inflammatory, immunomodulatory, antioxidant and antimicrobial properties and can help combat acute respiratory distress syndrome (ARDS) and sepsis, common in severe COVID-19. Vitamin C has 11 antiviral mechanisms and should be the first line of defence against any viral disease, including COVID-19.

How common is deficiency, especially in COVID patients?

UK's National Diet and Nutrition Survey, based on a cross section of the UK population, reports that 4% of 65+ year olds (480,000 people) and 40% of those institutionalised in care homes are deficient (<11nmol/l). In the UK, 25% of men and 16% of women in the low-income population are deficient in vitamin C.

The majority of critically ill COVID-19 patients in intensive care have low vitamin C, with the lowest levels among those who died; a Spanish study found that 94% in had undetectable vitamin C levels. Many COVID patients have such low levels of vitamin C that they are at risk of scurvy.

Can vitamin C help prevent COVID-19?

Low vitamin C is commonly found in COVID-19 patients and it can help reduce incidence, severity and duration of other respiratory infections. While there are no clinical trials, as yet, proving that vitamin C can help prevent COVID-19 it makes sense that increasing intake could help prevent COVID-19.

How can I increase my intake of vitamin C?

Fruits and vegetables can be high in vitamin C, particularly citrus fruit, kiwi fruit, berries, melons, other tropical fruits, peppers, broccoli and Brussels sprouts. However, fruits are also rich in sugar and you are unlikely to obtain the levels of vitamin C needed for COVID-19 protection. Supplements will usually be needed.

How much Vitamin C to supplement with?

The body's requirement for vitamin C changes on a daily basis and is particularly high when infected or warding off infection. The normal measure of how much vitamin C is required is bowel tolerance – when the body has sufficient, it triggers loose stools or diarrhoea. It is usually recommended to take vitamin C to bowel tolerance for prevention, but as soon as the tell-tale signs of infection are observed, then take 1-2g every couple of hours until the symptoms have subsided. For more details see: *www.vitaminC4covid.com*

Vitamin C is also an effective treatment for COVID-19

Studies have shown that oral vitamin C can be used specifically in the treatment of COVID-19. Meta-analyses show that oral vitamin C reduces the length of stay in intensive care and duration on mechanical ventilation.

The use of intravenous vitamin C for COVID-19 has also excited much interest, numerous clinical trials now in progress, often in combination with other therapies. It has proved effective for COVID-19 patients, reducing the inflammatory response and improving oxygenation and immune function. Trials found shortened ventilation time, allowing patients to recover and to be discharged from hospital earlier. Vitamin C was mainly included in study protocols in conjunction with other remedies. The US Frontline COVID-19 Critical Care Alliance (FLCCC), who give 3g of intravenous vitamin C every 6 hours for up to 7 days, have reported zero COVID-19 deaths in intensive care in those patients without end-stage co-morbidities.

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