Vitamin D may help in Covid-19 fight, studies show

It’s linked to preventing and treating infection; S’pore experts say better clinical data needed

Timothy Goh

Multiple studies suggest that having adequate amounts of vitamin D may play a role in helping people stave off or combat the coronavirus, although the jury is still out on whether the results are conclusive, or why this is so.

Commonly known as the "sunshine vitamin", vitamin D, which is known for its immune-boosting function, is mainly made in the skin when it is exposed to the ultraviolet B rays of the sun. It can also be obtained from other sources such as eggs, liver and oily fish.

At least one overseas study has associated vitamin D deficiency with a higher risk of Covid-19.

Published in medical journal Jama Network Open on Sept 3, the study observed 469 patients from the University of Chicago Medicine health system.

Patients with vitamin D deficiency and who were not given treatment for it were 1.77 times more likely to test positive for Covid-19 than those who were not.

The study also noted that other research had found Covid-19 was less prevalent in groups that had lower rates of vitamin D deficiency.

Lockdowns and other measures to reduce the spread of Covid-19 could also decrease exposure to the sun, the researchers pointed out.

They added: "The low costs of vitamin D and its general safety... support arguments for population-level supplementation, perhaps for targeting groups at high risk for vitamin D deficiency and/or Covid-19."

A similar call was made in medical journal The Lancet on Aug 3 by researchers from the University of Cambridge and the Queen Mary University of London, who suggested increasing efforts to ensure members of the public had sufficient vitamin D.

Citing several other studies on the subject, as well as vitamin D's ability to protect against other acute respiratory infections, the researchers also called for more trials to investigate whether it could help reduce the severity of Covid-19.

Closer to home, another study analysed 43 Covid-19 patients aged 50 and above at Singapore General Hospital.

Published in the science journal Nutrition last week, it found that treating such patients with a combination of vitamin D, magnesium and vitamin B12 was associated with a "significant reduction" in the number of those who went on to require oxygen support or admission to intensive care.

While experts here acknowledged the legitimacy of such studies, they called for caution and said that more research is required.

Dr Ben Ng, an endocrinologist from Arden Endocrinology Specialist Clinic at Mount Elizabeth Novena Specialist Centre, said the current data may appear to support the role of vitamin D in tackling the coronavirus, but that "rebuttal clinical data" is needed, given how new the disease is.

He noted also that the pandemic will likely have resulted in people here having decreased levels of vitamin D, given the reduction in outdoor activities.

"Considering that it will benefit musculoskeletal health and may help with overall Covid-19 risk, I would encourage all patients who may be at risk of vitamin D deficiency to consider taking vitamin D replacement," he said.

Dr Gail Cross, consultant at the National University Hospital's division of infectious diseases, took a more conservative stance.

"If anything, the most these types of studies provide us with is evidence to look at conducting a prospective study to examine the question of how vitamin D impacts Covid-19... We all need to wait for more and better-quality evidence," she said.

Too much vitamin D can also cause toxicity and lead to an excess of calcium in the body, which can be dangerous, Dr Cross warned, adding that she discourages people from taking supplemental vitamin D to fight Covid-19 unless they have a deficiency and their doctor tells them to do so.

But she agreed that treating vitamin D deficiency can be beneficial to one's overall health, with the possible spillover effect of helping in preventing or treating Covid-19.

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 Additional reporting by Joyce Teo