TREATMENT OPTIONS FOR COVID-19

Covid-19 is an illness that is caused by a virus known as "SARS-CoV-2".

The purpose of this factsheet is to share with you some of the key facts about this viral illness and some of the treatment options that are available to treat it.

COVID-19 IS A VIRAL ILLNESS: Covid-19 is a viral illness that is caused by a coronavirus known as "SARS-CoV-2". Covid-19 is a relatively new condition that was first identified in China in late 2019. [1]

EXPOSURE TO SARS-CoV-2 DOES NOT ALWAYS RESULT IN ILLNESS: Many infections with SARS-CoV-2 are asymptomatic (i.e. the person does not suffer any symptoms as a result of coming into contact with the virus that can cause Covid-19). [2]

A HEALTHY LIFESTYLE MAY REDUCE THE RISKS OF DEVELOPING SEVERE COVID-19:

A healthy lifestyle may make the difference between having an asymptomatic infection with SARS-CoV-2 or becoming extremely ill and needing treatment in an intensive care ward. A good diet, appropriate exercise and sunshine exposure help to support good general health and immune system function. A healthy lifestyle also reduces the risk of developing the types of conditions that are associated with higher risk from SARS-CoV-2 (such as diabetes, cardiovascular disease or obesity). [3]

Studies have shown that low vitamin D levels are associated with a much higher risk of severe Covid disease. (One study found that people who were deficient in vitamin D were ten times more likely to die from Covid-19 than were people who had sufficient vitamin D.) [4] In the summer months, appropriate sunshine exposure on bare skin (without sunscreen – but being careful not to get sunburned) can provide most people with vitamin D for free. [5] (At other times of the year a vitamin D supplement may be desirable depending upon how far away from the equator you live and other factors.)

Exercise not only helps you get fitter and stronger but can assist with helping to maintain a healthy weight or lose weight if you need to do this. Also, an antioxidant known as extracellular superoxide dismutase (EcSOD) that released by muscle cells in response to exercise can reduce inflammation in the lungs. [6]

OVER THE COUNTER TREATMENT OPTIONS FOR COVID-19:

There are a number of over-the-counter nutrients that may be used to support the immune system during a mild SARS-CoV-2 infection. These include vitamin C which has long been known to help white blood cells work more efficiently [7] and there is some evidence that vitamin C supplements can help to reduce the risk of developing pneumonia from other viral infections [8] and also treat pneumonia. [9] Zinc is also emerging as an important nutrient in relation to Covid-19 as it helps to inhibit an enzyme used by the virus [10] and there is evidence that zinc "may potentially reduce the risk, duration and severity of SARS-CoV-2

infections." [11] A bioflavonoid called quercetin may also be helpful as it acts to help zinc enter the body's cells. [12] (Quercetin is naturally found in many plant foods including capers, onions, spring onions, red leaf lettuce, the skins of apples etc. [13] and is available as a supplement.) Please consult a health professional for advice about the use of these nutrients.

PRESCRIPTION MEDICATION TREATMENT OPTIONS FOR COVID-19:

There are a number of prescription medicines that are potentially useful as treatments for Covid-19.

A drug called hydroxychloroquine has been shown to be useful when given in the early stages of Covid-19. Hydroxychloroquine has been on the international market for over 60 years (it is used to treat malaria and some autoimmune diseases) and has a good safety record when it is administered in the correct dose to patients for whom the medication is suitable. To treat Covid-19, hydroxychloroquine may be combined with zinc and an antibiotic called azithromycin. [14]

Ivermectin is another prescription medication that has been used to treat Covid-19. It has a long history of use as a treatment for parasitic infections and was investigated as a possible treatment for Covid-19 after it was found to kill the SARS-CoV-2 virus in test tube studies. It may be used to prevent the infection as well as treat Covid-19. [15]

TREATMENT OPTIONS FOR SEVERE CASES OF COVID-19:

Treatment plans based on the use of high dosages of intravenous vitamin C in conjunction with other medications that are appropriate for the patient are emerging as useful treatments for severe Covid-19. A study from Shanghai of patients who were critically ill with Covid-19 and on ventilators fond that there was greatly improved survival among those who were given intravenous vitamin C in addition to other appropriate medications (compared to those who had a sterile water placebo treatment rather than the intravenous vitamin C). [16] It was also recently reported that a 40 year old man who was in an Australian hospital suffering from Covid-19 and sepsis recovered and was able to walk out of hospital after receiving very high doses of intravenous vitamin C. [17]

LOW FATALITY RISK FOR MOST PEOPLE:

It now appears that SARS-CoV-2 is not as deadly as was initially feared when the virus was first identified in China. The United States Centers for Disease Control (CDC) released its new infection fatality rate (IFR) estimates for SARS-CoV-2 in September 2020. Based on these figures, the survival rate for children and teenagers 0-19 years old is 99.997 percent; for adults 20-49 years old is 99.98 percent; for adults 50-69 years is 99.5 percent; and for adults 70 years old or older, 94.6 percent. [18]

IMPORTANT NOTE: The information on this factsheet is for educational purposes only and is not intended to substitute for the advice of a qualified health professional.

Covid-19 vaccines will be available in NZ in 2021 and a factsheet on Covid-19 vaccines is available at this link: https://therealnews.nz/fact-sheets/.

REFERENCES AND NOTES

- [1] https://virological.org/t/novel-2019-coronavirus-genome/319
- [2] Up to 80% of cases of SARS-CoV-2 may be asymptomatic according to a report on cases on a cruise ship: https://thorax.bmj.com/content/75/8/693
- [3] Conditions associated with higher risk of mortality from Covid-19 are discussed here: https://www.bmj.com/content/368/bmj.m1198
- [4] https://childrenshealthdefense.org/news/vitamin-d-deficiency-is-associated-with-covid-19-severity-and-mortality/
- [5] https://naturalmedicine.net.nz/news/is-vitamin-d-deficiency-the-reason-why-more-people-with-darker-skin-are-dying-from-covid-19/
- [6] https://www.psychologytoday.com/us/blog/balanced/202005/exercise-and-covid-19
- [7] https://pubmed.ncbi.nlm.nih.gov/29099763/
- [8] https://www.cochrane.org/CD005532/ARI vitamin-c-for-preventing-and-treating-pneumonia
- [9] https://www.mdpi.com/2072-6643/12/12/3760
- [10] https://www.spandidos-publications.com/10.3892/ijmm.2020.4790/download
- [11] https://pubmed.ncbi.nlm.nih.gov/32837895/
- [12] https://pubmed.ncbi.nlm.nih.gov/25050823/
- [13] https://www.superfoodly.com/quercetin-foods/
- [14] For evidence supporting the use of hydroxychloroquine please see this link:

https://www.americasfrontlinedoctors.com/references/science-of-hcq/ and

https://www.americasfrontlinedoctors.com/wp-content/uploads/2020/09/White-Paper-on-

<u>HCQ-2020.2.pdf</u> NB: Hydroxychloroquine is a prescription-only medication in NZ and the datasheet for the medication is available here:

https://www.medsafe.govt.nz/profs/Datasheet/p/Plaqueniltab.pdf Please note that Pharmac only subsidises hydroxychloroquine for the use of malaria, active rheumatoid arthritis and systemic and discoid lupus erythematosus, not Covid-19.

https://pharmac.govt.nz/news-and-resources/covid19/covid-19-hydroxychloroquine/

[15] For evidence supporting the use of ivermectin please see this link:

https://covid19criticalcare.com/wp-content/uploads/2020/11/FLCCC-Ivermectin-in-the-prophylaxis-and-treatment-of-COVID-19.pdf Ivermectin is a prescription-only medication in NZ and the datasheet for the medication is available here:

https://medsafe.govt.nz/profs/datasheet/s/Stromectoltab.pdf

- [16] http://orthomolecular.org/resources/omns/v16n50.shtml
- [17] <u>https://www.abc.net.au/news/2020-12-03/mega-dose-of-vitamin-c-treats-sepsis-florey-institute-austin/12939202</u>
- [18] https://www.breitbart.com/politics/2020/09/25/cdc-data-shows-high-virus-survival-rate-99-plus-for-ages-69-and-younger-94-6-for-older/