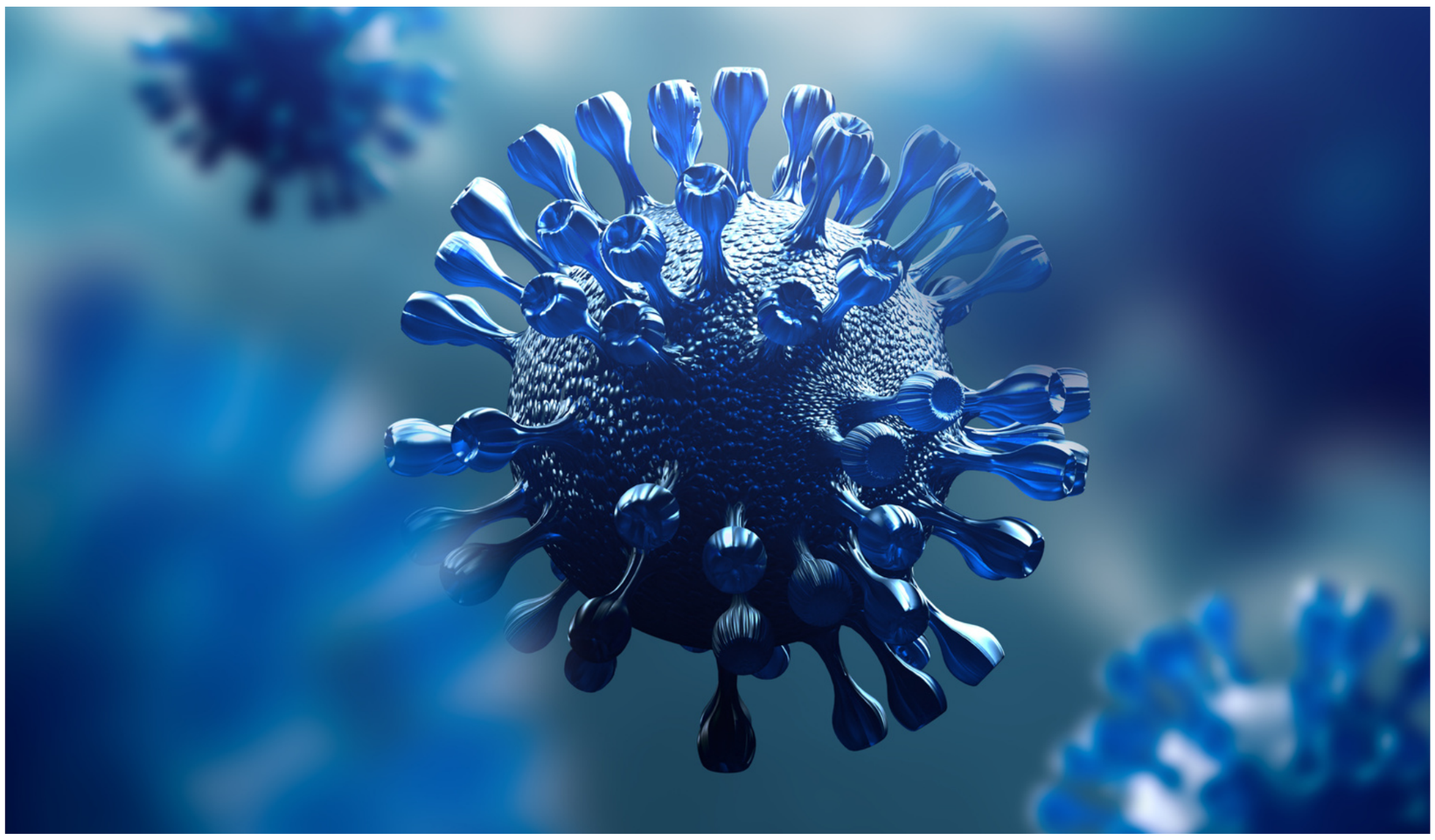
Probiotics & Long-COVID



PROBIOTIC IMPROVES SYMPTOMATIC AND VIRAL CLEARANCE IN COVID19 OUTPATIENTS: A RANDOMIZED, QUADRUPLE-BLINDED, PLACEBO-CONTROLLED TRIAL

Gut Microbes 2022

Covid-19 is a disease of the lungs, which differentially affects those it infects. There are currently no therapies that have been approved for use in Covid-19 patients. However recent evidence has highlighted a possible link between the gut and the lungs, known as the gut-lung axis indicating a new avenue for investigation. Previous trials on probiotics have indicated a role in infections such as cold and flu highlighting a possible role in Covid-19 infection. This randomised control trial of 300 Covid-19 patients aimed to determine the efficacy and safety of a probiotic known as AB21 containing several strains of Lactoplantibacillus plantarum and Pediococcus acidilactici. The results showed that after 30 days, the rate of remission from Covid-19 was higher in those who were given the probiotic, which was regardless of age, sex, confounding metabolic illness, viral load, and days from symptom start. Symptom duration and viral load were also reduced with probiotic use. Higher amounts of Covid-19 associated immune activity and lower biomarkers of inflammation were also reported following probiotic use. Probiotic use was shown to be safe during Covid-19 infection. It was concluded that the use of AB21 in Covid-19 patients was safe and associated with increased viral and symptom resolution compared to placebo, possibly driven by immune alterations via the gut-lung axis. This study could be used by healthcare professionals to seriously consider the use of this probiotic to stimulate immune activity and aid viral and symptom resolution in patients suffering from Covid-19.

NUTRITION, THE DIGESTIVE SYSTEM AND IMMUNITY IN COVID-19 INFECTION

Bold, J ; Harris, M ; Fellows, L ; Chouchane, M

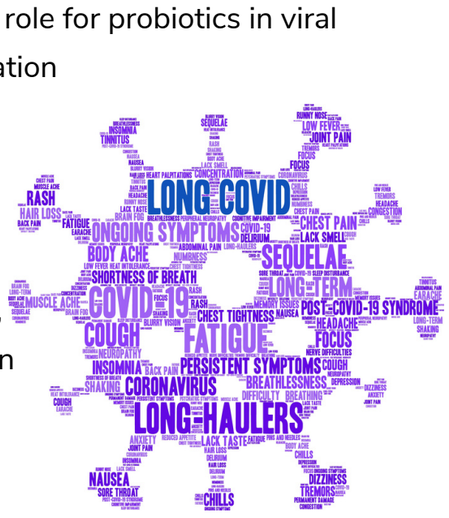
Gastroenterology and hepatology from bed to bench. 2020;13(4):331-340

Covid-19 needs both prevention and recovery strategies to reduce complications. This review study aimed to discuss the associations between nutrition, obesity, and the impact these have on stomach symptoms associated with Covid-19. Obesity has been identified as a risk factor for Covid-19 and this could be due to several factors such as impaired immune function, increased inflammation, increased susceptibility to infection and the high number of cells on fat tissue, which express the receptor known to allow Covid-19 into cells. The involvement of the gut microbiota of obese individuals was extensively reviewed and gut dysbiosis has been associated with many diseases, thus improving gut microbiota may go some way to improving Covid-19 outcomes. Nutritional interventions to reduce obesity need to be part of a multi-pronged strategy and the possible introduction of vitamin D supplements and probiotics. The paper did not draw any conclusions; however this paper could be used by healthcare professionals to understand the role of obesity in increasing the risk of Covid-19 infection, complications that may arise upon and after infection and nutritional strategies as part of a management plan.

PROBIOTICS IN PREVENTION AND TREATMENT OF COVID-19: CURRENT PERSPECTIVE AND FUTURE PROSPECTS.

Kurian, SJ ; Unnikrishnan, MK ; Miraj, SS ; Bagchi, D ; Banerjee, M ; Reddy, BS ; Rodrigues, GS ; Manu, MK ; Saravu, K ; Mukhopadhyay, C ; Rao, M
Archives of medical research. 2021

The novel coronavirus pandemic of 2019 (COVID-19), an emerging infectious disease, is caused by multiple strains of Severe Acute Respiratory Syndrome Coronavirus-2. The main aim of this study was to outline the potential role of probiotics in fighting the COVID-19. This study focuses on recent evidence on the association between microbiota, probiotics, and COVID-19, the role of probiotics as an immune-modulator and antiviral agent. Findings support probiotics' role in regulating the immune system, suggesting a definitive role for probiotics in viral infections. Thus, probiotics supplementation could reduce the severity of COVID-19 morbidity and mortality.
Authors conclude that supplementation of probiotics in high risk and severely ill patients, and frontline health workers, may help to limit the infection and flatten the COVID-19 curve. However, further studies should be conducted for more conclusive evidence.



A RANDOMIZED CONTROLLED TRIAL OF THE EFFICACY OF SYSTEMIC ENZYMES AND PROBIOTICS IN THE RESOLUTION OF POST-COVID FATIGUE

Rathi, A ; Jadhav, SB ; Shah, N
Medicines (Basel, Switzerland). 2021;8(9)

Coronavirus disease-19 (Covid-19) usually lasts for 7-10 days but in a proportion of individuals, long-term symptoms may develop such as fatigue, which can last for at least 12 weeks. Disruptions to the immune system and parts of the cell which produce energy have been observed in these individuals. This randomised control trial of 200 individuals aimed to determine the combined effects of two different multi-enzyme and probiotic supplements; ImmunoSEB and ProbioSEB on Covid-19 induced fatigue. The results showed that supplementation resolved fatigue and lowered fatigue in those who were still fatigued after 14 days compared to taking a placebo.
Mental fatigue was also reduced in the supplemented group compared to placebo. It was concluded that 14 days of supplementation with ImmunoSEB and ProbioSEB resolves post-Covid-19 fatigue.
This study could be used by health care professionals to recommend the supplementation of ImmunoSEB and ProbioSEB to improve feelings of and in some case resolve fatigue associated with Covid-19.