Title: Mitigating the Symptoms of Chronic Diseases Through the Administration of Probiotics



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ABSTRACT

The human intestines are colonized by a variety of bacterial phyla that with the host co-ordinate numerous metabolic processes in health and disease. As such the intestinal microbiome can positively and adversely affect end organ physiological functions (e.g., liver, skeletal muscle, adipose tissue). Several studies have shown that the gut microbiome can influence metabolic processes, such as signaling pathways, mucus secretion, immune homeostasis, cellular proliferation and maturation, metabolic regulation and stability. The nature of the human microbiome is such that it is largely dependent on dietary practices, physical activity and mode of birth. A diet rich in fermented foods and beverages likely to contain probiotic bacteria has been posited to provide health benefits. The intestinal microbiome can be adversely affected by the administration of pharmaceuticals such as antibiotics, the level of sanitation, as well as lifestyle psychological stressors. The bacteria associated with the gut microbiome undergo a natural selection through inflammatory reactions and only those that tolerate the host immune response survive where a symbiotic or parasitic relationship can be established. Medlab's research is centered on the therapeutic/pharmacological symbiotic effects of probiotics / gut microbiome with beneficial effects on health and that gut ecology disruptions can lead to adverse outcomes to end organ physiological functions. Numerous clinical studies that have investigated the administration of probiotics and prebiotics on various disease states or conditions including antibiotic or infective diarrhoea, pneumonia, various inflammatory intestinal diseases, liver disease, respiratory function, kidney function, skin conditions, allergy, joint diseases, diabetes and obesity. A plausible mechanistic and efficacious pharmacobiotic effect of probiotic bacteria is advanced. This presentation will focus on the adjuvant administration of multi-strain probiotic formulations NAFLD, T2DM and depression, utilising specific combinations of probiotics to effect therapeutic benefit.

Biography

Dr Sean Hall founded Medlab in August 2012. Sean has over 20 years experience in nutraceutical sales and development, as well as early drug discovery in Australia, Asia and the US. Sean has led

and inspired his teams to author multiple patents, write peer reviewed articles and deliver lectures at global scientific conferences. His passion is leading his researchers into novel areas and strong commercialisation opportunities. Sean is also an active member of Medicines Australia, AusBiotech, American Federation of Medical Research (AFMR), The American Academy of Anti-Ageing Medicine (A4M), World Medical Associated (WMA), Special Operations Medical Association (SOMA), and a Board Member of the International Probiotics Association (IPA).

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