

Stacy T.Sims, PhD

Senior Research Scientist at the University of Waikato

An environmentally sustainable alternative to Whey Protein: Native New Zealand Algae

The primary use of whey protein for athletes and sport is to facilitate muscle protein synthesis (MPS), post-exercise, and to provide a quick source of amino acids for MPS and lean mass development throughout the day. Several issues exist with whey protein: intolerance to dairy (lactose), cultural views of the dairy industry and waste product; the quality of the protein powder (processing, heavy metals, hormones from the original milk); thus a viable alternative is welcomed by the market as demonstrated by the recent upsurge of plant based protein supplements. The innovative concept of utilizing seaweed stems from the Scandinavian laws of "no waste" and the marine peptide industry. This talk will take the audience through the comparisons of whey, algae, and marine peptides; discuss the outcomes of a recently completed project determining native New Zealand algae species which have equivalent amino acid profile to whey protein; and discuss the next phase of the project.