

Effects of protein supplementation on IGF-1 and training responses in females

We are conducting a randomised research investigation into the effect of a 12-week training course with post-exercise protein supplementation, consisting of aerobic-type exercise and upper-body resistance training, and how this may effect total IGF-1 concentration, which plays an important role in protein synthesis.

This would include 5 weekly sessions including 3 interval sessions on a cycle ergometer and 2 upper-body resistance sessions. There will also be a week before and after the 12 weeks in order to assess body composition (skinfolds, DXA scan) and exercise testing (aerobic capacity-cycling, strength -weights). Dietary intakes and gut microbes will also be measured at 4 week intervals.

We are looking for 18 – 50 year old, pre-menopausal, females, who have not been conducting resistance training in the last 6 months, not partaking in competitive sport, nor exercising for more than 1 ½ h/week on a regular basis, free from any metabolic or chronic illnesses (diabetes/cancer) and currently not using any isotretinoin-based product. You must also be either on combined oral contraceptive, or on an unregulated, menstrual cycle.

Testing will be from April – December 2022.

For more information, please contact:

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[This project has been reviewed and approved by the University of Otago Human Ethics Committee, (Health). Reference: H21/178]