Effect of lactose vs sucrose after exercise on postprandial blood glucose control.

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Status RECRUITING
Sponsor School of Sport, Exercise, and Nutrition, Massey University
Enrollment 12 participants

Plain Language Summary

High-intensity interval exercise (HIIE) — short bursts of intense activity followed by rest — is known to help the body manage blood sugar levels more effectively. But what you eat after this kind of workout also matters. This study is looking specifically at whether the type of carbohydrate you consume after exercise affects how well your body controls blood sugar in the hours that follow.

The focus is on two sugars: lactose (the sugar found in dairy) and sucrose (ordinary table sugar). Lactose has a lower glycaemic index, meaning it raises blood sugar more slowly and gently. Researchers want to know whether eating lactose after HIIE leads to better blood sugar control compared to sucrose — which could have real implications for dietary advice after exercise.

You may be eligible if you are aged 20 to 70, relatively sedentary (doing 150 minutes or less of purposeful exercise per week), and can tolerate lactose. You must not have diabetes, heart disease, or respiratory conditions, and your diet must include animal products including dairy and meat.

Key Eligibility Criteria

Inclusion (2)

- Sedentary (in recent months, 150 min or less of purposeful exercise per week), lactose tolerant males and females aged 20-70 years.
- Participants will be required to pass the Health Screen Questionnaire.

Exclusion (1)

- Individuals will be excluded if they have known glucose, heart and respiratory conditions such as; type I and II diabetes mellitus, atrial fibrillation, congenital heart disease, coronary artery disease, chronic obstructive pulmonary disorder, asthma, cystic fibrosis etc. Some of the study meals will contain animal products (meat, dairy) are not suitable if participants are following a vegetarian or vegan diet, so these diet patterns will be excluded.

Locations (1 total)

Auckland, New Zealand