Untitled

Kristian Lian

31 1 2023

# Glucose ingestion before and after resistance training does not augment ribosome biogenesis in young moderately trained adults

## 

Correspondance style

## Abstract

Lorem ipsum dolor sit amet, consectetur adipiscing elit. In eu libero sollicitudin, cursus nulla gravida, vestibulum neque. Phasellus nec scelerisque metus, sit amet bibendum purus. Nam accumsan volutpat mi sit amet pretium. Morbi odio dui, cursus et nibh ac, ultricies dignissim diam. Aenean posuere ipsum felis, id convallis ante sollicitudin sit amet. Nullam non purus libero. Nunc leo nulla, commodo in neque non, tempor malesuada leo. Suspendisse eu urna ut augue elementum tristique.

Donec eu nisl et enim vestibulum egestas. Donec malesuada porta arcu quis luctus. Mauris ullamcorper interdum arcu, sed ultrices magna faucibus a. Integer condimentum a purus consectetur sollicitudin. In faucibus mi at commodo consequat. Nunc magna dui, laoreet eget scelerisque in, pulvinar ac velit. Vivamus mi massa, tincidunt sed sapien eget, varius finibus nibh. Maecenas fermentum lorem vitae diam porttitor, id maximus orci auctor. Morbi tempus mattis orci, vitae accumsan magna dignissim sed. Donec vel mauris vitae massa luctus dignissim. Proin aliquam elit id lorem commodo volutpat. Vestibulum ut justo et diam viverra ultrices.

Fusce vestibulum ex a quam feugiat faucibus. Mauris nec nunc sodales, tincidunt justo quis, placerat lectus. Vestibulum sollicitudin dapibus ipsum, quis maximus felis pretium vel. Praesent eleifend risus orci, vel faucibus massa suscipit eget. Suspendisse tincidunt justo ante, luctus malesuada quam luctus sodales. Donec nec lorem et enim imperdiet lobortis venenatis ut lacus. Ut vitae cursus massa.

## Nam ultrices tincidunt diam, vel convallis nibh gravida nec. Cras vel eros sed mauris consequat tempus sit amet non libero. Cras ut enim dignissim, convallis lacus.

## Methods

This data set is a part of a larger project involving several investigators and other outcomes not covered here. All participants were informed about the potential discomforts and risks associated with the study and gave their informed consent prior to study enrollment. The project was approved by the regional ethical committee (REK, ID nr. 153628), pre registered at clinicaltrials.gov (Identifier: NCT04545190) and conducted according to the Helsinki declaration

### Participants

Sixteen male and female participants (20-33yrs, Tab 1) were recruited to the study through facebook advertisement and word of mouth and taken through the selection process (Fig 1). The eligibility criteria were non-smokers and moderately trained (i.e. 2-8 resistance training sessions per 14 days for the last six months). Exclusion criteria were previous injury leading to impaired strength, inability to perform resistance training and symptoms, and a medical record of metabolic disorders including hyperglycemia, i.e. fasting venous plasma glucose ≥6.1 mmol/L and/or 2-hour glucose tolerance ≥7.8 mmol/L, and/or HbA1c >42 mmol/mol. Our goal was to recruit 20 participants to the study, however due to the advents of Covid-19, we were not able to do so.

Sixteen participants commenced the intervention, during which three dropped out. One participant had a sick child, and was unable to resume the intervention, two participants experienced muscular discomfort connected to heavy resistance training (Fig 1). Baseline characteristics (Tab 1) were measured by means of DXA (Prodigy Advance PA+302047, Lunar, San Francisco, CA, USA) at Day -1, the last day preceding the RT intervention.

defeqgWGEWgwGEWGRHRG

|  |  |  |
| --- | --- | --- |
| Variable | Female (n=7) | Male (n=9) |
| Age (yrs) | 24.6 (4.8) | 23.7 (1.8) |
| BMI | 23.2 (1.4) | 25.2 (2.5) |
| Fat mass (kg) | 17 (5.7) | 14.9 (6.1) |
| Fat free mass (kg) | 52.2 (6.8) | 64.4 (4.6) |
| Height (cm) | 172.1 (5.8) | 176.7 (5) |
| Lean body mass (kg) | 49.5 (6.5) | 61.1 (4.5) |
| Body weight (kg) | 68.5 (3.5) | 78.4 (6.1) |

#### Paper

##### Paper

###### Paper