

The CAMAS Study: A Cross-sectional magnetic resonance imaging study on the myocardial effects of long-term anaerobic exercise using structure-function correlation

ACTRN12626000308392

Status	RECRUITING
Sponsor	The University of Sydney
Enrollment	40 participants

Plain Language Summary

The CAMAS Study is investigating what long-term gym-based (anaerobic) exercise does to the heart compared to endurance-based (aerobic) exercise like running or cycling. While the heart benefits of aerobic exercise are well established, much less is known about how years of weightlifting and resistance training shape the heart's structure and function — and whether there are any hidden risks.

Participants will undergo cardiac MRI scans and ECGs to produce detailed images of their heart, along with optional blood tests. The study will follow participants annually for up to ten years to track any changes and record any cardiovascular events or diagnoses over time. This long-term view will help researchers identify whether certain heart patterns seen in gym athletes are benign adaptations or potential warning signs.

You may be eligible if you are 18 or older and have trained regularly (at least 3 sessions per week for at least 5 years) in either predominantly gym-based or endurance-based exercise. You are not eligible if you have known heart disease, a recent significant COVID-19 illness, a family history of cardiomyopathy, or any implants that are incompatible with MRI scanning.

Key Eligibility Criteria

Inclusion (6)

-) Adults aged at least 18 years
-) Male or female
-) Regular exercise training for at least 5 years (at least 3 gym sessions/week, at least 120 minutes/week, including at least 1 lower body session/week)
-) Predominantly anaerobic or predominantly aerobic exercise history (per study group definitions)
-) Ability to comply with study procedures
- ... and 1 more (see full listing online)

Exclusion (6)

- A) Contraindication to cardiac MRI (e.g. pacemaker or other ferromagnetic implants, severe claustrophobia, inability to fit in scanner)
- B) Known cardiovascular disease or inflammatory cardiac conditions (ischaemic heart disease, cardiomyopathy, myocarditis, or pericarditis)
- C) Recent or significant COVID-19 infection (within 6 months, or requiring antiviral therapy or hospitalisation)
- D) Family history of cardiomyopathy or inherited arrhythmogenic cardiomyopathy
- E) Current or recent substance exposures likely to confound outcomes (illicit recreational drug use, alcohol abuse, tobacco smoking within 10 years)
- ... and 1 more (see full listing online)

Locations (1 total)

<https://www.anzctr.org.au/Trial/Registration/TrialReview.aspx?ACTRN=ACTRN12626000308392>

DISCLAIMER: This document is for informational purposes only and does not constitute medical advice. Always consult your healthcare provider before enrolling in any clinical trial. Information may not be up to date — verify details at [anzctr.org.au](https://www.anzctr.org.au). Generated by [ClinicalTrialsFinder.org](https://www.clinicaltrialsfinder.org).

