

# A preliminary investigation on the effects of intermittent exposure to hypoxia on glucose homeostasis

ACTRN12616000525482

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Status	RECRUITING
Sponsor	Southern Cross University
Enrollment	25 participants

## Plain Language Summary

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This study is looking at whether brief, repeated sessions of breathing slightly lower-oxygen air (called intermittent hypoxia) can help improve blood sugar levels in people who have higher-than-normal fasting blood glucose but haven't yet developed full diabetes. Participants will breathe through a special device that lowers their oxygen level slightly — similar to being at altitude — for short sessions over 4 weeks. Blood sugar, insulin, and other markers will be measured before and after.

You may be eligible if:

- You are aged 18 to 65 years
- Your fasting blood glucose is above 6.0 mmol/L
- Your BMI is above 25 (overweight or obese)
- You are not planning to change your diabetes medications or lifestyle significantly during the study

You may NOT be eligible if:

- You have a diagnosed cardiovascular disease
- You have anaemia or have donated blood in the past 3 months
- You have severe COPD, uncontrolled asthma, or obstructive sleep apnoea
- You currently smoke or drink more than 3 standard alcoholic drinks per day
- You are pregnant
- You have a neurological or mental illness

Talk to your doctor about whether this trial might be right for you.

## Key Eligibility Criteria

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### Inclusion (4)

- Fasting blood glucose greater than 6.0 mM
- Body mass index >25 (i.e. overweight or obese);
- No planned changes to medication regimen for hyperglycaemia (e.g. metformin, acarbose) or other metabolic diseases (e.g. lipid lowering drugs); and
- No planned major lifestyle changes during the testing period (i.e. commencement/ceasing of exercise regimen, pregnancy, etc.)

### Exclusion (15)

- Cardiovascular diseases;
- Anemia or blood donation within past 3 months;
- Severe chronic obstructive pulmonary disease;
- Smoking;
- Alcohol consumption for more than 3 standard drinks per day;

... and 10 more (see full listing online)

<https://www.anzctr.org.au/Trial/Registration/TrialReview.aspx?ACTRN=ACTRN12616000525482>

### Locations (1 total)

This information 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](http://anzctr.org.au). Generated by [ClinicalTrialsFinder.org](http://ClinicalTrialsFinder.org).

