

## Intense workouts best for exercising diabetics

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The aim of the research is to make it easier for diabetics to exercise by providing a baseline from which to work, Prof Jones says. Credit: Daniel Lee

REALLY working up a sweat while exercising by ramping up intensity has eliminated the need to eat and drink in order to stabilise blood sugars before exercise in Type 1 diabetics.

During really <u>vigorous activity</u> the body produces glucose because of the stress caused by that <u>exercise</u>, WA Children's Diabetes Research and



Education Centre for Research Excellence co-director Tim Jones says.

This activity eliminates the need for Type 1 diabetics to take preexercise glucose via drinks or food.

He says it is the most surprising finding of recent research which sampled nine adolescent or young adult diabetics.

They are among the 14,000 West Australian sufferers of the disease which is caused when the pancreas stops making insulin, without which the body can't turn glucose into energy.

More than half of the 2000 Australians diagnosed with the disease annually are children.

It's a life-long disease and diabetics faced many difficulties including testing blood up to seven times a day, monitoring food intake and injecting insulin by pump or injection, Professor Jones says.

Many people are reluctant to exercise despite its many health benefits, because they have <u>low blood glucose</u> or hypoglycaemia and this is exacerbated by exercise, he says.

A further complication is that often the symptoms of hypoglycaemia can be normally associated with exercise fatigue like shakiness, sweating, poor physical co-ordination and confusion.

"If they eat carbohydrates before exercise it can prevent them going low in glucose but if they have too much they will go high which is just as dangerous, so we are trying to get closer to the exact amount people need when they do exercise," he says.

The study tested participants exercising at four different exercise levels



over 40 minutes on four separate days.

In terms of <u>moderate exercise</u> over that time, the researchers found diabetics needed up to 20 grams of <u>glucose</u> per hour before their levels went too high but the amount varied with different people depending on their size.

The aim of the research is to make it easier for diabetics to exercise by providing a baseline from which to work, Prof Jones says.

"This gives them a guideline and after that they have to do the trial and error; so do exercise and test blood sugar and see if it worked but this gives a starting point as to what sort of exercise causes what sort of response," he says.

**More information:** Effect of exercise intensity on glucose requirements to maintain euglycaemia during exercise in type 1 diabetes. <a href="https://www.ncbi.nlm.nih.gov/pubmed/26765581">www.ncbi.nlm.nih.gov/pubmed/26765581</a>

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