

Short walks after meals may prove important tool in managing diabetes

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Blood glucose monitoring. Credit: Wikipedia

New research from New Zealand's University of Otago suggests that people managing type 2 diabetes should walk after meals to gain the greatest blood sugar-lowering benefits.

Current advice in New Zealand is for people with type 2 diabetes to walk at least 30 minutes a day. No particular time of the day is advised. The Otago research indicates that walking after meals is better at reducing blood sugar levels than taking a single 30 minute walk at any time of the day.

The researchers prescribed walking to 41 patients with type 2 diabetes in two-week blocks, separated by a month. The patients - who were fitted with accelerometers to measure their [physical activity](#) and devices that measured their blood sugar every five minutes - were to walk either for thirty minutes a day as advised by guidelines, or to walk for 10 minutes after each main meal.

Study first author Dr Andrew Reynolds says the study found that post-meal [blood sugar levels](#) dropped 12 per cent on average when the participants followed the walking after meals advice compared to walking at any time of the day.

"Most of this effect came from the highly significant 22 per cent reduction in blood sugar when walking after evening meals, which were the most carbohydrate heavy, and were followed by the most sedentary time," Dr Reynolds says.

Corresponding author Professor Jim Mann says that post-meal glucose is regarded as an important target in managing type 2 diabetes, given its independent contribution to overall [blood sugar control](#) and cardiovascular risk.

Professor Mann and his colleagues (Dr Reynolds, Dr Bernard Venn and Associate Professor Sheila Williams) write that "postprandial physical activity may avoid the need for an increased total insulin dose or additional mealtime insulin injections that might otherwise have been prescribed to lower glucose levels after eating. An increase in insulin dose might, in turn, be associated with weight gain in patients with type 2 diabetes, many of whom are already overweight or obese."

They conclude that: "The benefits relating to physical activity following meals suggest that current guidelines should be amended to specify post-meal activity, particularly when meals contain a substantial amount of carbohydrate."

Their findings are published this week in the prestigious international journal *Diabetologia*. A second UK-based study in the same edition of the journal shows that increasing your amount of activity also confers greater benefit in [blood sugar control](#).

More information: Andrea D. Smith et al. Physical activity and incident type 2 diabetes

mellitus: a systematic review and dose–response meta-analysis of prospective cohort studies, *Diabetologia* (2016). link.springer.com/article/10.1007/s00125-016-4079-0

Andrew N. Reynolds et al. Advice to walk after meals is more effective for lowering postprandial glycaemia in type 2 diabetes mellitus than advice that does not specify timing: a randomised crossover study, *Diabetologia* (2016). link.springer.com/article/10.1007/s00125-016-4085-2

Provided by University of Otago

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