

# Low glycemic breakfast may increase benefits of working out

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The benefits of physical activity and a balanced diet are well documented and form the basis of many public health recommendations. This is because each of these factors can independently influence risks for many chronic diseases such as obesity, type 2 diabetes, and some forms of cancer.

Some research also suggests that exercise and diet interact to influence health. For instance, exercising after short-term fasting (such as before breakfast) may increase the amount of [fat](#) burned. Similarly, consumption of a meal eliciting a low blood glucose response prior to exercise may also boost the use of body fat (instead of glucose). However, most of these studies have used either trained athletes or recreational exercisers, and none has looked at effects of the type of pre-exercise meal on metabolism during and after exercise.

To better understand the effects of pre-exercise meal composition on fat metabolism in more typical (sedentary) individuals, a group of researchers headed by Dr. Emma Stevenson at the University of Nottingham conducted a controlled human intervention trial. The results of their study are published in the May 2009 issue of *The [Journal of Nutrition](#)*.

As expected, blood glucose concentrations were higher after the HGI than the LGI meals and had returned to baseline levels by the time exercise was commenced, after which they were not influenced by breakfast type. Plasma free fatty acids (FFA; a marker for adipose oxidation) fell after consumption of both HGI and LGI breakfasts, but began to rise at ~2 h post-breakfast in the LGI (but not HGI) treatment. Exercise caused a rapid increase in FFA in both groups, but this was higher in the LGI trial compared to the HGI trial (P

subsequent exercise and improved satiety during recovery in sedentary females. as such, individuals trying to shed fat may consider choosing lgi foods eaten prior to when they [exercise](#).

Source: American Society for Nutrition ([news](#) : [web](#))

The authors concluded that consuming a lgi breakfast increases fat oxidation during

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