

# Cutting caffeine may help control diabetes

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Daily consumption of caffeine in coffee, tea or soft drinks increases blood sugar levels for people with type 2 diabetes and may undermine efforts to control their disease, say scientists at Duke University Medical Center.

Researchers used new technology that measured participants' glucose (sugar) levels on a constant basis throughout the day. Dr. James Lane, a psychologist at Duke and the lead author of the study, says it represents the first time researchers have been able to track the impact of caffeine consumption as patients go about their normal, everyday lives.

The findings, appearing in the February issue of *Diabetes Care*, add more weight to a growing body of research suggesting that eliminating caffeine from the diet might be a good way to manage blood sugar levels.

Lane studied 10 patients with established type 2 diabetes and who drank at least two cups of coffee every day and who were trying to manage their disease through diet, exercise and oral medications, but no extra insulin. Each had a tiny glucose monitor embedded under their abdominal skin that continuously monitored their glucose levels over a 72-hour period.

Participants took capsules containing caffeine equal to about four cups of coffee on one day and then identical capsules that contained a placebo on another day. Everyone had the same nutrition drink for breakfast, but were free to eat whatever they liked for lunch and dinner.

The researchers found that when the participants consumed caffeine, their average daily sugar levels went up 8 per cent. Caffeine also exaggerated the rise in glucose after meals: increasing by 9 percent after breakfast, 15 percent after lunch and 26 per cent after dinner.

“We’re not sure what it is about caffeine that drives glucose levels up, but we have a couple of theories,” says Lane, who is the lead author of the study. “It could be that caffeine interferes with the process that moves glucose from the blood and into muscle and other cells in the body where it is used for fuel. It may also be that caffeine triggers the release of adrenaline – the ‘fight or flight’ hormone that we know can also boost sugar levels.”

Either way, he says, the higher sugar levels that result from caffeine are bad news for diabetic patients.

There are no current guidelines suggesting diabetics shouldn’t drink coffee, but Lane says that day may come, if further studies bear out their findings.

“Coffee is such a common drink in our society that we forget that it contains a very powerful drug – caffeine. Our study suggests that one way to lower blood sugar is to simply quit drinking coffee, or any other caffeinated beverages. It may not be easy, but it doesn’t cost a dime, and there are no side effects,” Lane says.

Source: Duke University Medical Center

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