

# Preventing diabetes at the office

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For people who already have high blood sugar, preventing diabetes could amount to just another day at the office.

A new study found that employees enrolled in a workplace intervention program as a group lost more [weight](#), showed greater reductions in fasting blood sugar and ate less fat than employees who received only written health guidelines for diabetes prevention.

The employees had been identified through a workplace screening as having prediabetes - higher than normal blood sugar levels - which affects more than a third of American adults. This condition increases risk for type 2 diabetes and cardiovascular disease.

Half of the employees participated in a 16-week group-based intervention that focused on reducing calories and fat to achieve weight loss, increasing regular exercise and attending weekly group discussions during lunch or after work. The other half received usual care: a booklet of strategies for self-regulated weight loss.

On average, the workplace intervention group lost about 5.5 percent of their [body weight](#) and kept it off for three months, compared to less than half a percent of weight lost by the [control group](#). The intervention group members also lowered their fasting glucose levels by more than double that of the control group.

"Adults spend a large portion of their time at work. This study shows that it is not only feasible to implement a comprehensive lifestyle

intervention at the work site - it is an effective way to prevent disease," said Carla Miller, professor of human nutrition at The Ohio State University and lead author of the study.

"Participants who attended more group discussion sessions and monitored their food and [physical activity](#) lost more weight, and weight loss is the primary way to prevent the development of type 2 diabetes," she said.

The research is published in the journal *Preventing Chronic Disease*.

Miller and colleagues enrolled 69 employees in the study: 35 received the 16-week lifestyle intervention, and 34 were assigned to receive usual care. Eligible employees had a body mass index of at least 25, the lowest measure in the overweight range, and [fasting glucose levels](#) of 100 to 125 milligrams per deciliter. Fasting glucose of less than 100 mg/dL is considered normal.

Those in the [lifestyle intervention](#) met in groups of 10 to 15 participants weekly with dietitians who served as lifestyle coaches. They were encouraged to set small goals each week to work toward overall goals on weight loss, reduced fat consumption and an increase in physical activity.

In contrast, the control group was invited to attend one informational session on weight-loss principles and received a booklet developed by the National Diabetes Education Program containing guidelines on losing weight.

All participants were urged to try to lose 7 percent of their body weight over the 16-week study period.

While the intervention group on average lost 5.5 percent of their body

weight, almost a third met the goal of losing at least 7 percent of their body weight, compared to just 2.9 percent of the control group who reached that goal. Previous research has shown that every percentage point of weight loss contributes to a 10 percent reduction in the risk of developing diabetes, Miller noted.

Fasting glucose values dropped to near-normal levels in the intervention group and decreased in the control group, and both groups maintained fasting [blood sugar](#) reductions until the three-month follow-up. More people in the intervention group than the control group neared the goal of 150 minutes of physical activity per week during the study period, but most participants' exercise habits dropped back to baseline levels by the three-month follow-up.

The [intervention group](#) also lowered fat intake and added more fiber to their diets than did employees in the control group.

Miller learned from the workplace diabetes prevention research that people who lose at least 2.5 percent of their body weight within a month are more likely to achieve a 5 percent [weight loss](#) by the end of an intervention and keep it off for at least three months after that.

"That first month is critical," Miller said. "And this current study suggests the regular access to lifestyle coaching plays a role in helping people lose weight."

This finding also suggests, she said, that once people at risk for diabetes lose weight, they need ongoing support to avoid gaining it back.

Provided by The Ohio State University

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