

Lifestyle, metformin interventions have variable effects

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(HealthDay)—For individuals with impaired glucose regulation, the

impact of lifestyle and metformin interventions vary for progression to diabetes mellitus (DM) and likelihood of regression to normal glucose regulation (NGR), according to a study published online Oct. 11 in *Diabetes Care*.

William H. Herman, M.D., M.P.H., from the University of Michigan in Ann Arbor, and colleagues used the values of 19 clinical variables measured at the Diabetes Prevention Program (DPP) baseline evaluation to examine the three-year risk of progression to DM and regression to NGR for DPP lifestyle, metformin, and placebo participants who adhered to the interventions.

The researchers found that 11 of the variables measured at baseline predicted progression to DM and six predicted regression to NGR. Participants at lowest risk of developing [diabetes](#) who adhered to a lifestyle [intervention](#) or a metformin intervention had an 8 percent absolute risk reduction (ARR) and no risk reduction, respectively, for developing DM compared with adherent placebo participants at lowest risk; they also had a 35 and 17 percent greater absolute likelihood, respectively, of reverting to NGR. For participants at highest risk of developing DM, the ARR of developing diabetes was 39 and 25 percent, respectively, for those who adhered to a [lifestyle intervention](#) and to a metformin intervention. They also had a 24 and 11 percent greater absolute likelihood, respectively, of reverting to NGR.

"The models can be used by overweight and obese adults with fasting hyperglycemia and impaired glucose tolerance to facilitate personalized decision making by allowing them to explicitly weigh the benefits and feasibility of the [lifestyle](#) and [metformin](#) interventions," the authors write.

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Davis; Merck Lipha Health Provided medication, and LifeScan Inc. donated materials. Materials, equipment, and medicines for concomitant conditions were provided by pharmaceutical, nutrition, and sports companies.

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