Does Genetic Testing for Diabetes Help Motivate Healthier Habits?

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If individuals were to receive advance warning that they are at a high genetic risk of developing type 2 diabetes, might they be motivated to develop healthier habits? The answer is no, according to a recent study published in the journal PLOS Medicine that suggests this alert wouldn't stop people from engaging in behaviors that could trigger the blood sugar disorder, The New York Times reports.

For the study, researchers at Cambridge University provided written information about type 2 diabetes risk factors, prevention, treatment and consequences to 59 middle-aged men and women before dividing them into three groups. One group received only the written advice. The second group received a "genetic risk score" for type 2 diabetes based on methods used by several genetic testing companies. Those in the third group were given a risk score based on their health characteristics—rather than their DNA—that factored age, gender, smoking status, blood pressure and family history into their diabetes risk.

After conducting follow-up interviews with participants eight weeks later, scientists found no differences between the groups in what they ate or their level of activity. In addition, findings showed that none of the participants exhibited a change in anxiety levels about their risk of developing diabetes.

"The consumer-direct testing companies would have you believe that genetic information is more motivating in behavior change," said Job G. Godino, MD, PhD, an epidemiologist at the University of California, San Diego and lead study author. "We tested that. It isn't."

Researchers concluded that these findings nullify the claims of popular DNA testing companies, such as 23andme, Gene by Gene and MyMedLab, that if consumers understood their genetic predisposition to contract different illnesses, they would choose healthier lifestyles.

Click here to learn more about the genetic risk factors for type 2 diabetes.

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