

## The Effects of a Mediterranean Diet on the Need for Type 2 Diabetes Treatment

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The full report is titled “Effects of a Mediterranean-Style Diet on the Need for Antihyperglycemic Drug Therapy in Patients With Newly Diagnosed Type 2 Diabetes. A Randomized Trial.” It is in the 1 September 2009 issue of *Annals of Internal Medicine* (volume 151, pages 306-314). The authors are K. Esposito, M.I. Maiorino, M. Ciotola, C. Di Palo, P. Scognamiglio, M. Gicchino, M. Petrizzo, F. Saccomanno, F. Beneduce, A. Ceriello, and D. Giugliano.

### What is the problem and what is known about it so far?

People in some developed countries in the Mediterranean region develop heart disease and diabetes less often than do people in other countries. This observation has led some scientists to suggest that a Mediterranean diet might prevent heart disease and diabetes. Compared with the standard U.S. diet, the Mediterranean diet includes larger amounts of nuts, whole grains, fruits, and vegetables. It also includes fewer carbohydrates and larger amounts of “healthy” oil and fat, such as olive oil. The diet has been shown to improve risk factors for heart disease and diabetes in people at risk for those diseases. However, its effects in people who already have the diseases have not been studied, and few direct comparisons of Mediterranean and other diets are available.

### Why did the researchers do this particular study?

To compare the effects of a Mediterranean diet and a low-fat diet in people with newly diagnosed type 2 diabetes.

### Who was studied?

215 overweight people with newly diagnosed type 2 diabetes who were not yet treated with drugs.

### How was the study done?

The researchers randomly divided the participants into 2 groups. They gave the first group the information they needed to eat a Mediterranean diet. They gave the second group the information they needed to eat a low-fat diet. They then followed the 2 groups for 4 years. They compared the time it took participants’ blood sugar levels to increase high enough to require treatment with diabetes drugs.

### What did the researchers find?

After 4 years, fewer participants in the Mediterranean diet group needed treatment with diabetes drugs. Participants who ate a Mediterranean diet also lost more weight and had greater improvements in some risk factors for heart disease.

### What were the limitations of the study?

The researchers responsible for prescribing the diabetes drugs knew which diet the study participants were assigned to. Knowing which treatment a participant is receiving may lead researchers to conduct a study so that the treatment they think is better seems to be better. Also, the researchers did not directly assess the foods that participants actually ate.

### What are the implications of the study?

Compared with a standard low-fat diet recommended to prevent chronic disease, a Mediterranean diet prevented or delayed the need for drug treatment in patients with newly diagnosed type 2 diabetes. A Mediterranean diet may be useful instead of or in addition to a low-fat diet and drugs in patients with diabetes.

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