# American Pistachios and DIABETES MANAGEMENT

Globally, roughly

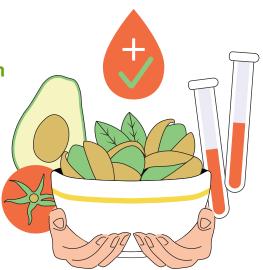


with more than 95% of all diagnosed cases being type 2 diabetes.<sup>1</sup>



As the 8th leading cause of death worldwide, diabetes is a serious condition that should be discussed.<sup>3</sup>

There are various lifestyle changes that can help prevent the development of prediabetes and type 2 diabetes including an active lifestyle and eating healthy.



## PISTACHIOS' IMPACT

Nut intake has been shown to have a beneficial effect on glucose metabolism and **pistachios have multiple nutrients that can benefit glycemic control and overall health**. Research continues to support the benefits of eating pistachios on **blood glucose and insulin sensitivity.**<sup>4</sup>



### **RESEARCH STUDIES**

1 Effect of Premeal Pistachio Supplementation on Cardiometabolic Risk Factors among Asian Indian Adults with Prediabetes: A Randomized Controlled Trial

Ashwini K, Abirami K, Gayathri R, et al. *J Nutr.* Published online January 31, 2025.

This randomized controlled trial evaluated the effect of 30 g pre-breakfast and 30 g pre-dinner supplementation of pistachios for 12 weeks on glycated hemoglobin (HbA1c), other glycemic markers, anthropometry, and lipid profile of Asian Indians with prediabetes. The intervention group (n = 60) received 60 g of pistachios daily for 12 weeks while the control group (n = 60) followed their normal diet without nuts. The results indicated that the 60 g of pre-meal pistachios lowered HbA1c and improved cardiometabolic profiles in the intervention group.

Read the Abstract Here

Intake of Pistachios as a Nighttime Snack Has Similar Effects on Short- and Longer-Term Glycemic Control Compared with Education to Consume 1-2 Carbohydrate Exchanges in Adults with Prediabetes: A 12-Wk Randomized Crossover Trial.

Riley TM, Kris-Etherton PM, Hart TL, Petersen KS. *J Nutr.* 2024;154(4):1219-1231.

A randomized crossover trial examined pistachios' role in glucose regulation in prediabetic adults. Participants (n = 66) were given 57 g of pistachios as a nighttime snack or followed a routine diet with guidance on a carbohydrate as a nighttime snack. Results indicated that consuming 57 g of pistachios as a nighttime snack increased diet quality, and had similar effects on glycemic markers compared with the carbohydrate snack.

**Read the Abstract Here** 

#### **RESEARCH STUDIES**

3 Effect of chronic consumption of pistachios (Pistacia vera L.) on glucose metabolism in pre-diabetics and type 2 diabetics: A systematic review.

Ribeiro PVM, Silva A, Almeida AP, Hermsdorff HH, Alfenas RC. *Crit Rev Food Sci Nutr.* 2019;59(7):1115-1123.

In this systematic review researchers analyzed studies in which the effect of chronic consumption of pistachio on markers of glucose metabolism was evaluated in pre-diabetic and type 2 diabetics. Studies reported pistachio consumption was associated with a decrease in fasting blood glucose, insulinemia, HOMA-IR, and fructosamine, but no change in HbA1c.

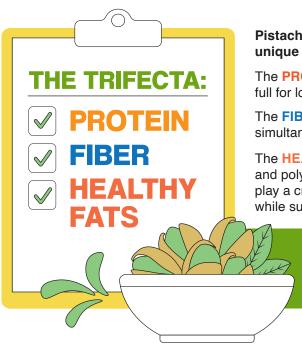
**Read the Abstract Here** 

Acute Effect of Pistachio Intake on Postprandial Glycemic and Gut Hormone Responses in Women With Gestational Diabetes or Gestational Impaired Glucose Tolerance: A Randomized, Controlled, Crossover Study

Feng X, Liu H, Li Z, Carughi A, Ge. Front Nutr. 2019;6:186. Published 2019 Dec 17.

In this randomized, controlled, crossover study, researchers evaluated the acute effects of two isocaloric test meals, 42 g pistachios and 100 g whole-wheat bread (WWB) on postprandial glucose, insulin, and gut derived incretin levels in Chinese women with gestational impaired glucose tolerance (GIGT) or GDM. Results found isocaloric pistachio intake induced significantly lower postprandial glucose, insulin and GIP but higher GLP-1 levels compared to WWB. This suggests pistachios are an effective alternative to a low-fat, high-carbohydrate food to improve postprandial glucose, insulin, and GLP-1 response in women with GDM and GIGT.

**Read the Abstract Here** 



Pistachios are often hailed as a powerhouse due to their unique combination of protein, fiber, and healthy fats.

The **PROTEIN** content in pistachios helps to keep you feeling full for longer periods, potentially curbing overeating.

The **FIBER** found in these nuts aids digestion while simultaneously contributing to a sense of fullness.

The **HEALTHY FATS** in pistachios, including monounsaturated and polyunsaturated fats, take longer to digest and can also play a crucial role in satiety and providing sustained energy while supporting overall metabolic health.

Together, this nutrient trifecta of American-grown pistachios may help positively manage type 2 diabetes.

#### References:

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- Hernández-Alonso P, Salas-Salvadó J, Baldrich-Mora M, Juanola-Falgarona M, Bulló M. Beneficial effect of pistachio consumption on glucose metabolism, insulin resistance, inflammation, and related metabolic risk markers: a randomized clinical trial. *Diabetes Care*. 2014;37(11):3098-3105.



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