



Consuming Avocado Is Associated with A Lower Risk of Developing **Type 2 Diabetes** And Modifying Glycemic Control Among Hispanic Adults in Large Studies.

More than 130 million adults are living with diabetes or prediabetes in the United States (US). Prediabetes, a serious health condition where blood sugar levels are higher than normal, increases the risk of developing type 2 diabetes.

More than 1 in 3 U.S. adults have prediabetes.



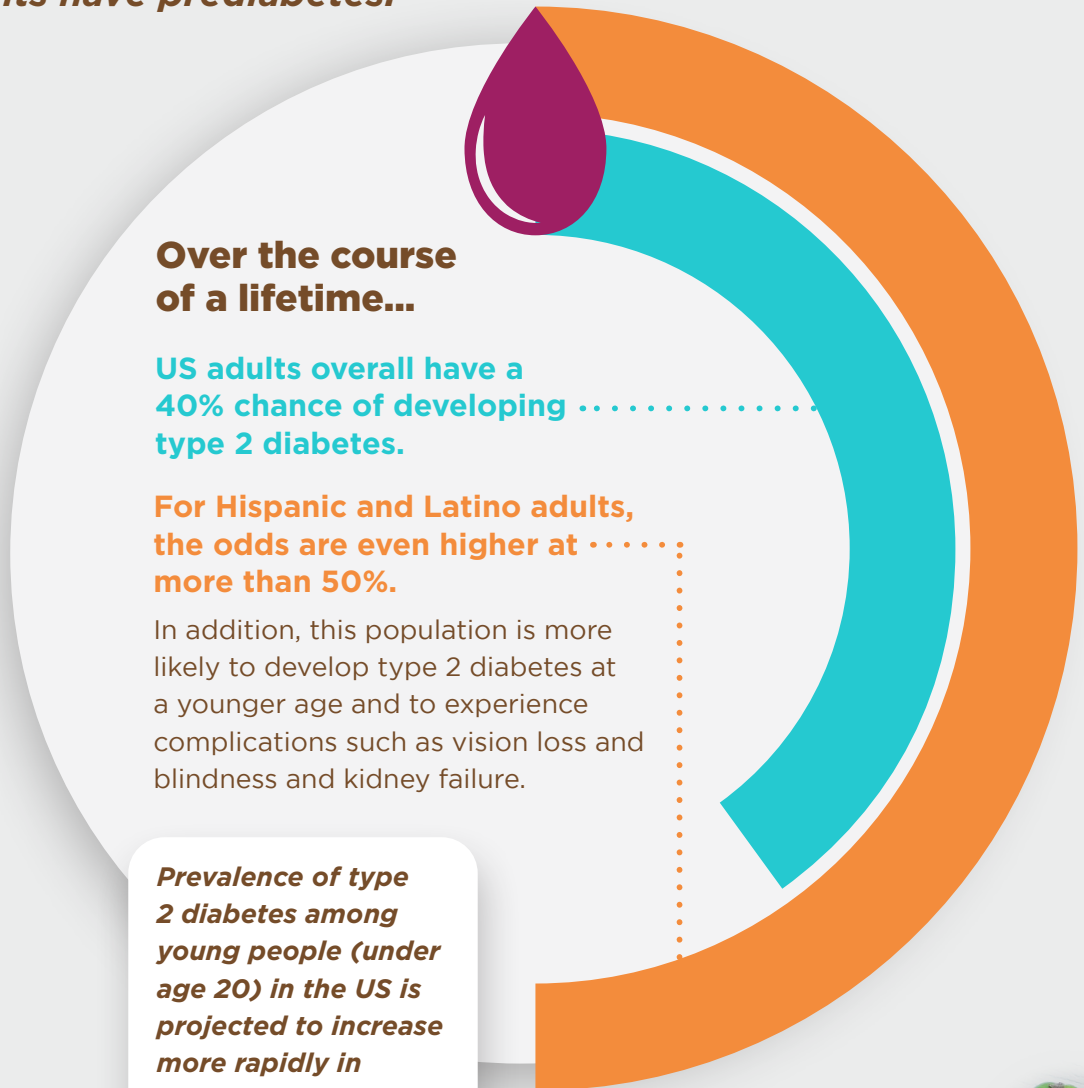
Over the course of a lifetime...

US adults overall have a **40% chance of developing type 2 diabetes.**

For Hispanic and Latino adults, the odds are even higher at **more than 50%.**

In addition, this population is more likely to develop type 2 diabetes at a younger age and to experience complications such as vision loss and blindness and kidney failure.

Prevalence of type 2 diabetes among young people (under age 20) in the US is projected to increase more rapidly in future decades.



Large studies evaluate avocado consumption & type 2 diabetes risk

An observational study among 6,159 adults from the Hispanic Community Health Study/Study of Latinos assessed the relationship between avocado consumption and incident type 2 diabetes. Among this sample, regular avocado intake was determined by two, 24-hour dietary recalls. Avocado consumers tended to have a better overall diet quality as measured by the Alternative Healthy Eating Index-2010 and a lower body mass index. Additionally, those who regularly ate avocados were distinct in distribution of Hispanic heritage, with more identifying as Mexican (48%) than those who weren't avocado consumers. Across the overall population, avocado consumption was associated with a 28% reduction in the risk of type 2 diabetes. When assessing the impact of baseline glucose levels on this relationship, those with prediabetes experienced a 31% reduction in risk. While an effect was observed in those with normal blood sugar levels at baseline, the association between avocado consumption and risk of type 2 diabetes was not significant in this group.

Another study of more than 14,000 Hispanics revealed that consuming avocados is associated with better insulin responses in those with normal blood sugar. In people with type 2 diabetes, avocado consumption was linked to lower average blood sugar and better insulin-related measures. However, no notable connections were observed for those with prediabetes. Study limitations include self-reported diet data, difficulty interpreting effect size, inability to differentiate between diabetes drug use, and the observational nature hindering causal conclusions.

A study of 28,000+ Mexican adults suggests a link between eating avocado and lower diabetes risk in women. Women who ate avocados had notably lower odds of diabetes, even after adjusting for factors. Average avocado intake ranged from 30-38 grams/day. However, no such association was observed in men.

Strength of the studies include the large sample size and the prospective study design conducted at multiple sites throughout the U.S. and Mexico. Yet, the findings from these studies cannot be considered causal or generalized to other populations. The Avocado Nutrition Center supported the research, and the findings add to a growing body of evidence indicating that avocados are beneficial for blood sugar management and promoting a healthy lifestyle that may contribute to reducing the risk of type 2 diabetes.

Further in clinical research, scientists provided MyPlate nutrition education in a study of 72 Hispanic American (97% Mexican) families combined with one of two avocado intake levels (3 avocados/family/week vs. 14 avocados/family/week). Avocado allotment did not change body weight, BMI, or waist circumference despite the extra calories. The study was funded by the Avocado Nutrition Center and study limitations including the drawbacks of all validated food frequency questionnaires, and prevent the generalization of the findings.



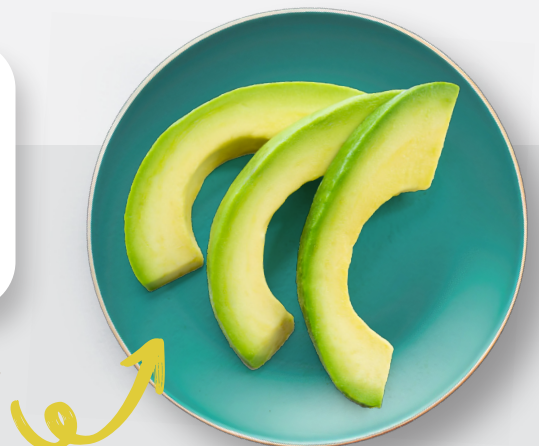
THE AMERICAN DIABETES ASSOCIATION RECOMMENDS:

- Choosing whole, minimally processed food,
- Including lots of non-starchy vegetables in a healthy eating pattern,
- Minimizing added sugars and refined grains,
- Selecting nutrient-dense foods rich in fiber, vitamins, and minerals, and
- Replacing foods high in saturated fat with foods rich in unsaturated fats.

Fresh avocados are a non-starchy vegetable that are naturally sugar-free and low in saturated fat. **One-third of a medium avocado provides nearly 20 vitamins and minerals, 3 grams of fiber, and 6 grams of unsaturated fats.**

Reference:

1. Wood, A, et al. "Associations Between Avocado Intake and Lower Rates of Incident Type 2 Diabetes in US Adults with Hispanic / Latino Ancestry." *Journal of Diabetes Mellitus*. 2023.
2. MacKenzie S.K., et al. "Associations Between Avocado Intake and Measures of Glucose and Insulin Homeostasis in Hispanic Individuals With and Without Type 2 Diabetes: Results from the Hispanic Community Health Study / Study of Latinos (HCHS/SOL)." *Nutrition, Metabolism, & Cardiovascular Diseases*. 2023.
3. Cheng, F.W., et al. "Association between avocado consumption and diabetes in Mexican adults: Results from the 2012, 2016, and 2018 Mexican National Health and Nutrition Surveys." *Journal of the Academy of Nutrition and Dietetics*. 2024.
4. Pacheco, L.S., et al. Effects of Different Allotments of Avocados on the Nutritional Status of Families: A Cluster Randomized Controlled Trial." *Nutrients*. 2021.



Recipes to support a **healthy eating** pattern for your patients

Following a meal plan can help your patients get the nutrition they need while maintaining healthy blood sugar levels. Encourage your patients to try these recipes that are a good source of fiber and have no added sugars when planning meals and snacks for the week ahead!

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Crispy Avocado Bites

A perfect snack combo with a crunchy outside and creamy avocado inside



Mexican Street Corn Salad

A zesty, better-for-you twist on a traditional classic side dish



Air Fryer Avocado Black Bean Taquitos

An easy recipe for a meatless lunch or dinner bursting with flavor

For additional recipes that your patients will love, please visit www.LoveOneToday.com/recipes