

AVOCADOS: A FOOD-FIRST APPROACH TO DIABETES CARE AND MANAGEMENT

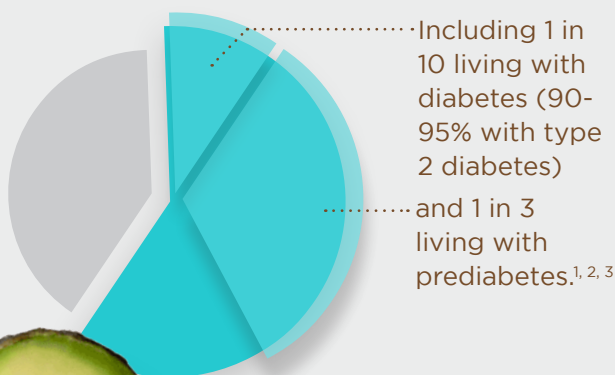
Healthy eating, including greater intake of fruits and vegetables, is a cornerstone of type 2 diabetes management and risk reduction.

Avocados – Love One Today® is helping to empower lifestyle medicine by providing resources that make it easy for health professionals to support patients who want to improve their health and make diet-related behavior changes with the help of fresh avocados.

This toolkit includes resources from both the American College of Lifestyle Medicine (ACLM) and Avocados – Love One Today to support efforts to manage and reduce the risk of type 2 diabetes.

DID YOU KNOW?

More than half of adults in the U.S. today have **one or more diet-related chronic diseases**.



People with diabetes are more likely to have certain risk factors, such as high blood pressure or high cholesterol, that increase their chances of developing heart disease, another chronic disease that can be influenced by dietary patterns.

A shift to eating more nutrient-dense foods like fruits and vegetables, along with other healthy lifestyle behaviors, can help promote optimal health and reduce the risk of chronic diseases.⁴

Lifestyle medicine is a medical specialty that uses therapeutic lifestyle interventions as a primary modality to treat chronic conditions including, but not limited to, cardiovascular diseases, type 2 diabetes, and obesity. The six pillars of lifestyle medicine include: a whole-food, plant-predominant eating pattern, physical activity, restorative sleep, stress management, avoidance of risky substances and positive social connections—also provides effective prevention for these conditions.

References:

1. Center For Disease Control 2022, Chronic Disease in America. <https://www.cdc.gov/chronicdisease/resources/infographic/chronic-diseases.htm>
2. Center For Disease Control 2023, Type 2 Diabetes <https://www.cdc.gov/diabetes/basics/type2.html>
3. Center For Disease Control 2022, Prediabetes – You’re Chance to Prevent Type 2 Diabetes <https://www.cdc.gov/diabetes/basics/prediabetes.html>
4. 2020-2025 Dietary Guidelines for Americans https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf

RESEARCH RELATED TO AVOCADO CONSUMPTION AND TYPE 2 DIABETES

Research supported by the Avocado Nutrition Center, the world's only independent resource for comprehensive avocado nutrition research, explores meals containing avocado and improvement of blood markers associated with diabetes and heart health.



In a randomized controlled trial, researchers counseled 93 adults with insulin resistance to exchange carbohydrate foods in their usual diet with avocado or low-fat, low-fiber energy-matched foods for 12 weeks. In the avocado group, total dietary intake of unsaturated fat, fiber, and vegetables increased and C-reactive protein (CRP), a marker of inflammation that is generally higher in people with diabetes than those without, was significantly lower. In addition, trends favoring glucose control as measured by HbA1c were observed in the avocado group but were not significant. Researchers found no changes in body weight or composition, insulin sensitivity index, glucose, or lipids between the two groups.

An observational study of over 6,000 adults in the Hispanic Community Health Study/ Study of Latinos found that regular avocado intake (based on 24-hour dietary recalls) was associated with a 28% reduction in the risk of developing diabetes for the overall study population and a 31% reduction in risk of developing diabetes among those with prediabetes.

A clinical study of 961 adults with larger waist sizes found that eating one large avocado daily for six months lowered overall dietary glycemic load compared with a control group, even without dietary counseling. Glycemic load may be an important factor in the prevention and management of several chronic diseases.

Although these results cannot be generalized to all people and do not demonstrate a cause-and-effect relationship, the data suggest a role for avocados in blood sugar management and in promoting a healthy lifestyle that may contribute to reducing the risk of type 2 diabetes.

In addition, scientific studies investigating specific nutrients, such as vitamin K, folate, and fiber, and their relationship to improvements in blood markers associated with glycemic control and insulin resistance, continue to grow.

**DOWNLOAD NUTRITION
RESEARCH FACT SHEET**

**PDF
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AVOCADO'S ROLE IN MANAGEMENT OF TYPE 2 DIABETES

More than half of adults in the US today have one or more diet-related chronic diseases, including 37.3 million living with diabetes and 96 million living with prediabetes. Most Americans do not follow the recommended healthy dietary pattern associated with the reduction of diet-related chronic diseases, such as type 2 diabetes.

A shift to eating more nutrient-dense foods, like fruits and vegetables, can help promote optimal health and reduce the risk of disease.

RESEARCH RELATED TO NUTRIENTS FOUND IN AVOCADO AND TYPE 2 DIABETES

Scientific studies investigating specific nutrients and food sources of these nutrients, as well as their relationship to improvements in blood markers associated with glycemic control and insulin resistance, continue to grow.

A cross-sectional study of 2,719 men and women reported higher intake of vitamin K was associated with greater insulin sensitivity and glycemic status, as measured by 2-hr glucose tolerance test, although oral glucose tolerance test, although intake was not associated with HbA1c. Although adjustments for many factors were made, it's possible that vitamin K is simply a surrogate marker for better diet quality. One serving of avocado provides a good source of vitamin K.

A systematic review of studies including more than 10,000 adults with diabetes or prediabetes reported increased fiber intake reduced glycated hemoglobin (HbA1c), fasting plasma glucose, and insulin resistance, and other markers of metabolic health including lipids, body weight, and C-reactive protein when compared to low fiber diets. One serving of avocado is a good source of fiber.

A 30-year study of 4,704 young adults reported that intake of folate, but not vitamin B6 or B12, was associated with a reduced incidence of diabetes. One serving of avocado is a good source of folate.

While data (interventions) may exist (e.g., findings do not demonstrate cause-and-effect, and limited by study under population heterogeneity, and may be affected by confounding variables) - the recommendation to consume higher intakes of fruits and vegetables to build healthy dietary patterns that have beneficial outcomes on diet-related conditions, such as diabetes, is well-supported.

A study of 26 participants showed that when approximately one-half of a fresh avocado was added to a lunch consisting of a salad with Italian dressing, a baguette, and cookies, participants felt more satisfied and had less desire to eat following the meal. The participants also had a lower immediate rise in insulin levels than when the same lunch was eaten without the avocado; however, there was no significant difference in insulin levels over the three hours.

While none of these studies can be generalized to all populations, body weight, or different amounts consumed, there is alignment to a growing body of evidence supporting avocado's role in blood sugar regulation. Its beneficial role in a type 2 diabetes diet, and ongoing information on an increasing population.

off your day!

Stuffed Avocado
Use your snack with some fresh, its flavor.

com/PistaAvocado

Facebook, Instagram, LinkedIn icons

AVOCADOS: NUTRIENTS TO SUPPORT BLOOD SUGAR MANAGEMENT

One serving of avocado (1/3 of a medium avocado)

6 grams of good, unsaturated fats:

The American Diabetes Association recommends limiting saturated fats and eating unsaturated fats in moderation.⁵

A good source of fiber:

Just 4 grams of carbohydrate, 3 grams being fiber, which slows down food digestion and reduces rapid rises in blood glucose following a meal.

No sugar:

Unlike most other fruits, avocado contains zero grams of naturally occurring sugar and does not affect the glycemic response.

Heart-Healthy:

Low in saturated fat + cholesterol- and sodium-free.



LEARN FROM EXPERTS

Tune into the following podcasts and videocasts to discover more from leading experts.



The Importance of Nutrient-Dense Diets

American Diabetes Association Diabetes Core Update Podcast

- o Dr. Neil Skolnik, Nikki Ford, PhD, and Lizz Hanna, MS, RDN, CDCES

Good Sources of Fats and Fiber for Diabetes Management

Association of Diabetes Care & Education Specialists, The Huddle Podcast

- o Sacha Uelmen, RDN, CDCES and Erin Palinski-Wade, RD, CDCES, LDN, CPT

Pathways to Healthy Eating Patterns in Hispanic and Latino Communities

Association of Diabetes Care & Education Specialists, The Forefront Videocast: Captured Conversations in Diabetes Care

- o Sacha Uelmen, RDN, CDCES and Lorena Drago, MS, RDN, CDN, CDCES

Avocados, Satiety and Mindful Eating in Diabetes

Sound Bites Podcast

- o Melissa Joy Dobbins, MS, RDN, CDE and Erin Palinski-Wade, RD, CDE, LDN, CPT

References:

5. American Diabetes Association, Fats <https://diabetes.org/healthy-living/recipes-nutrition/eating-well/fats>

EDUCATIONAL RESOURCES

Tools that can help support enjoying more fruits and vegetables and embracing other healthy lifestyle behaviors.

Click the links below to download free PDFs that can be easily shared.



The Plate Method for Type 2 Diabetes Management: A visual guide to meal planning

Lifestyle Pillars for the Prevention and Treatment of Type 2 Diabetes



Avocado 101: How to pick, store, and prepare fresh avocados

SIMPLE, PROACTIVE STEPS TOWARDS NUTRIENT-DENSE EATING

Small changes = Key to success

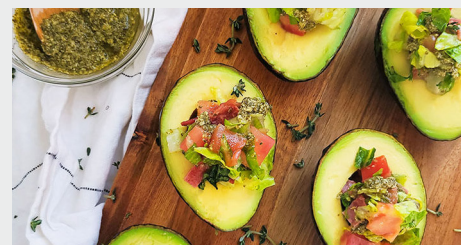
- *7 small shifts to include nutrient-dense foods with every meal*
- *Simple Ways to Eat Avocados*
- *Whole Food Plant-Based Eating on a Budget: Easy and low-cost meals for every day of the week*

Nutritious recipes from [LoveOneToday.com/recipes](https://www.LoveOneToday.com/recipes) that make it easier to include more fruits and vegetables as well as nutrients like fiber which can play a role in managing blood sugar levels.

These recipes include no added sugars and can be prepared in 35 minutes or less.



Avocado Pancake Roll-Ups



Pesto BLT Stuffed Avocados



Heart-Healthy Cumin Lime Shrimp over Creamy Cauliflower Risotto



Instant Pot® Sunny Spiced Lentil Bowl with Avocado Lime Crema

CONTINUING EDUCATION

Learn more about the role of lifestyle behaviors in reducing the risk of chronic diseases, like type 2 diabetes, through 5.5 free hours of continuing education from ACLM. Highlighted by the White House Conference on Hunger, Nutrition and Health, this continuing education series demonstrates how better nutrition can lead to improved patient outcomes.

EARN CONTINUING EDUCATION CREDITS