# CAN DIABETIC EYE DAMAGE BE PREVENTED?

## TIGHT BLOOD SUGAR CONTROL CUT THE RISK 76%.

**76%** lower risk of developing retinopathy with tight blood sugar control over about 6.5 years (DCCT trial, 1,441 people with type 1 diabetes).

DCCT Research Group. New England Journal of Medicine, 1993 [1]

## WHAT DID THEY CHANGE?

- **Intensive blood sugar control**
- **Frequent blood sugar checks**
- **Close medical follow-up**

*This was a blood-sugar-control trial, not a diet trial. Diet studies are on the back.*

## WHAT SHOULD YOU ASK YOUR DOCTOR AND EYE DOCTOR?

1. **How often should I have a dilated eye exam?** [2]
2. **What blood sugar (A1c) target will best protect my eyes?** [1]
3. **Could changing my diet help protect my eyes?** [3,4,5]
4. **If my blood sugar drops quickly, should my eyes be checked more often?** [6]

## 5 If my numbers improve, could we lower my diabetes medication? [4]

**30%** of 44 people with retinopathy saw their eyes improve on Dr. Kempner's rice-and-fruit diet in the 1950s, once thought impossible (no comparison group).

Kempner et al. · Postgraduate Medicine · 1958 [5]

**! Work with your doctor, not around them. Never stop a medication on your own.**

**BOTTOM LINE** Your eyes ride on your blood sugar. Strong proof for control; diet studies are promising. Keep your eye exams.

## MORE OF THE EVIDENCE

- In 1,441 people with type 1 diabetes, tight blood sugar control lowered the risk of developing retinopathy by 76% and slowed its worsening by 54% over about 6.5 years. [1]
- In a 22-week randomized trial of 99 people with type 2 diabetes, a low-fat vegan diet lowered A1c by 1.23 points vs. 0.38 on a standard diabetes diet (among those whose medications did not change). Eyes were not measured. [4]
- In a diet trial of 3,614 people with type 2 diabetes, a Mediterranean diet with extra-virgin olive oil was linked to 44% lower risk of new retinopathy than a low-fat diet. This was a secondary analysis with only 74 cases. [3]
- In the 1950s, Dr. Walter Kempner put 100 people with diabetes on a very low-fat rice-and-fruit diet. Of the 44 with retinopathy, 30% saw their eyes improve, once thought impossible. There was no comparison group (highlighted by Dr. Greger). [5,7]

**Keep in mind:** Quickly lowering blood sugar can briefly worsen retinopathy in some people, though the long-term benefits are far larger. Keep up with eye exams when your numbers change.

> **My own diabetic retinopathy cleared up after I went plant-based in February 2013. That's my story, not proof.**
>
> Lex Frasure, HealthyAgingWithLex.com (not a medical professional)

## WE TAKE ZERO PRESCRIPTIONS.

That's our choice, not a rule for you. Some prescriptions save lives, like antibiotics for an infection. If you are not changing your diet, stay on the medications your doctor prescribes. If you go plant-based, keep up with your blood work. That way your doctor can safely reduce your medications or take you off them altogether.

**I'm not anti-medicine. I'm pro-health.**

Don't take my word for any of this. Check it with your favorite AI, read the original studies, then bring them to your doctor.

# NOTES FROM MY APPOINTMENT

### DATE AND DOCTOR

### WHAT WE AGREED TO TRY

### WHEN WE WILL RECHECK

# SOURCES


[1] DCCT Research Group. New England Journal of Medicine, 1993. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. https://pubmed.ncbi.nlm.nih.gov/8366922/

[2] National Eye Institute. Diabetic Retinopathy. https://www.nei.nih.gov/learn-about-eye-health/eye-conditions-and-diseases/diabetic-retinopathy

[3] Díaz-López A, et al. Diabetes Care, 2015. Mediterranean diet, retinopathy, nephropathy, and microvascular diabetes complications: a post hoc analysis of a randomized trial. https://pubmed.ncbi.nlm.nih.gov/26370380/

[4] Barnard ND, et al. Diabetes Care, 2006. A low-fat vegan diet improves glycemic control and cardiovascular risk factors in a randomized clinical trial in individuals with type 2 diabetes. https://pubmed.ncbi.nlm.nih.gov/16873779/

[5] Kempner W, et al. Postgraduate Medicine, 1958. Effect of rice diet on diabetes mellitus associated with vascular disease. https://pubmed.ncbi.nlm.nih.gov/13591100/

[6] DCCT Research Group. Archives of Ophthalmology, 1998. Early worsening of diabetic retinopathy in the Diabetes Control and Complications Trial. https://pubmed.ncbi.nlm.nih.gov/9682700/

[7] Greger M. NutritionFacts.org video, 2015. Can Diabetic Retinopathy Be Reversed? https://nutritionfacts.org/video/can-diabetic-retinopathy-be-reversed/

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