

Hormone Could Improve Diabetes Treatment

Almost everyone knows someone who has diabetes. An estimated 23.6 million people in the United States—7.8 percent of the population—have diabetes, a serious, lifelong condition. Of those, 17.9 million have been diagnosed, and 5.7 million have not yet been diagnosed. In 2007, about 1.6 million people ages 20 or older were diagnosed with diabetes.

What is diabetes?

It is a disease that changes the way your body uses food. The food you eat turns to sugar. The sugar then travels through the blood to all parts of the body. Normally, insulin helps get sugar from the blood to the body's cells, where it is used for energy. When you have diabetes, your body has trouble making and/or using insulin. So your body does not get the fuel it needs. And your blood sugar stays too high.

What are the types of diabetes?



Type 1 The body does not make any insulin. People with type1 must take insulin every day to stay alive.

Type 2 The body does not make enough insulin, or use insulin well. Most people with diabetes have **type 2**.

What are the warning signs for diabetes?

Going to the bathroom a lot, Feeling hungry or thirsty all the time, Blurred vision, Losing weight without trying, Cuts or bruises that are slow to heal, Feeling tired all the time, Tingling or numbness in the hands or feet.

Most people with diabetes do not notice any signs

Special points of interest:

- * What is diabetes.
- * Types of diabetes.
- * Warning signs for diabetes .
- * Treatment of diabetes.

Inside this issue:

- Hormone Could Improve Diabetes Treatment.
- Vitamin K.



Diabetes Treatment

With **Type 1 diabetes**, your pancreas does not make insulin. So you will need to take daily insulin injections. Insulin does not come in pill form. Injections are generally needed one to four times per day. Some people use an insulin pump. It is worn at all times and delivers a steady flow of insulin throughout the day.

With **Type 2 diabetes**, Along with meal planning and physical activity diabetes pills help people with type 2 diabetes keep their blood glucose levels on target. Medications may be switched to insulin during pregnancy and while breastfeeding. There are Several kinds of pills are available. Each works in a different way . Many people take two or three kinds of pills. Some people take combination pills. Combination pills contain two kinds of diabetes medicine in one tablet. Some people take pills and insulin.

Hormone Could Improve Diabetes Treatment

Adiponectin is a metabolic hormone that regulates a number of processes, including glucose regulation and metabolism of fat for energy production. Previous research has shown an association between adiponectin and insulin sensitivity. new study found that levels of the hormone in patients with type 2 diabetes helped predict how patients responded to certain diabetes drugs. The researchers' analysis of data from several clinical trials revealed that levels of adiponectin in the blood are able to predict activation of receptors called PPARs, which assist the genes that help cells respond to insulin



The results support the possible use of adiponectin as a biomarker to monitor glucose tolerance and to predict patient response to diabetes drugs thiazolidinediones

Did you know ...?

- Women with diabetes are more likely to have a heart attack and have it at a younger age.
- Women who have diabetes are more likely to have a miscarriage or a baby with birth defects.
- Most people with diabetes die from heart attack or stroke.
- Some women get diabetes when they are pregnant.

The American Diabetes Association recommends keeping blood sugar levels in the range of:

- 80 - 120 mg/dL before meals
- 100 - 140 mg/dL at bedtime

Reference:

1. **WWW.FDA.gov.**
2. **National Institute of Diabetes and Digestive and Kidney Diseases.**

Vitamin K

Vitamin K is a fat-soluble vitamin that plays an important role in blood clotting. The body can store fat-soluble vitamins in fatty tissue.

Function

Vitamin K is known as the clotting vitamin, because without it blood would not clot. Some studies indicate that it helps in maintaining strong bones in the elderly.

Food Sources

Vitamin K is found in cabbage, cauliflower, spinach and other green leafy vegetables, cereals, soybeans, and other vegetables. Vitamin K is also made by the bacteria that line the gastrointestinal tract.

Vitamin K deficiency

is very rare. It occurs when the body can't properly absorb the vitamin from the intestinal tract. Vitamin K deficiency can also occur after long-term treatment with antibiotics. Individuals with vitamin K deficiency are usually more likely to have bruising and bleeding.

Recommendations

The best way to get the daily requirement of essential vitamins is to eat a [balanced diet](#) that contains a variety of foods.

The Food and Nutrition Board at the Institute of Medicine recommends the following dietary intake for vitamin K:

Vitamin **K**
Food sources of vitamin K include cabbage, cauliflower, spinach and other green, leafy vegetables, as well as cereals



Children

- 1 - 3 years: 30 mcg/day.
- 4 - 8 years: 55 mcg/day.
- 9 - 13 years: 60 mcg/day.

Adolescents and Adults

- *Males and females age 14 - 18: 75 mcg/day.*
- *Males and females age 19 and older: 90 mcg/day.*

If you take warfarin (a blood thinner), you should know that vitamin K or foods containing vitamin K can affect how the drug works. Ask your health care provider how much vitamin K or vitamin K-containing foods you should consume.

Vitamin K and Bone Health

Studies have proved that supplemental vitamin K promotes osteotrophic processes and slows osteoclastic processes via calcium bonding. In Japan, a form of vitamin K2 is recognized as a treatment for osteoporosis high intakes of vitamin D but low intakes of vitamin K may still pose an increased risk of hip fracture hinting at a relationship between these two vitamins.

Vitamin K as a beauty product

A study published in the *Journal of Cosmetic Dermatology* examined the effect of applying a gel containing 2% vitamin K plus 0.1% vitamin A, vitamin E, and vitamin C. Fifty-seven adults with dark circles participated in the 8-week study, in which 47% of the testers noted "fair to moderate" improvement in their dark circles.

Vitamin K and Alzheimer's Disease

Research into the antioxidant properties of vitamin K indicates that the concentration of vitamin K is lower in the circulation of carriers of the APOE4 gene and recent studies have shown its ability to inhibit cell death due to oxidation in nerve cells. It has been hypothesized that vitamin K may exude an effect on neuronal damage and that supplementation may hold benefits to treating this disease, although more research is necessary in this area.

References

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