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This New Study May Stop Diabetes in Its Tracks

Our diets have given rise to a diabetes epidemic but fixing the imbalance of nutrients could be the key to ending the disease.

Mounting evidence shows that what you eat is important for promoting good health and avoiding the development of chronic and autoimmune diseases.

Because the modern Western diet features a lot of processed foods, most people are consuming too many omega-6 fatty acids (found in most refined vegetable oils, meat products, and snacks like corn chips, crackers, cookies, and sweets) and not enough omega-3 fatty acids (mainly in fish, some nuts, pumpkin and sesame seeds, flaxseeds, avocados, and some leafy green vegetables like spinach and kale).

While both fatty acids are essential for health, an imbalance can cause harmful inflammation, particularly, higher levels of omega-6. That inflammation leads to an increased risk of obesity, diabetes, and autoimmune and other serious diseases.

Our diets and lifestyles have caused an epidemic of chronic, degenerative disease conditions brought on by a "silent" inflammation. There is no pain, no fever, but it continues to attack the cells and organs of the body. Recent findings show that this type of inflammation is at the core of not only neurodegenerative diseases and type 2 diabetes, but also type 1 diabetes and other autoimmune conditions.

Stopping the attack

Type 1 diabetes (T1D) occurs when the immune system mistakenly destroys the insulin-producing cells in the pancreas. Inflammation may be one of the triggers that leads to disease onset.

Studies have shown that people with T1D have high levels of omega-6 fatty acids, and low levels of omega-3 fatty acids and vitamin D. Several scientific reports suggest consuming more omega-3 fatty acids and vitamin D may benefit people with autoimmune conditions, like T1D.

At the Diabetes Research Institute/University of Miami, we are conducting a new patient study to test whether the use of these supplements can curb the inflammation that underlies disease progression, with the goal of blocking the attack on the insulin-producing cells.

Initial results with our research partners have demonstrated that a very simple intervention of high-dose omega-3 and vitamin D supplementation can slow down and even stop diabetes progression after diagnosis. The clinical trials, which will enroll both children and adult subjects with new-onset and established T1D, will help us determine if we can confirm these initial results in more rigorous controlled clinical studies. ■

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