

Struggling to manage Diabetes? A new type of medicine may help you!

Living with Type II Diabetes is difficult. You follow the restrictive diet, monitor your blood sugar, exercise, and take medicine. Still, you don't get needed results. Good news - there is hope ahead!

Recently, a novel type of medicine was introduced that acts in a completely different manner from standard medicines. Standard diabetic medicines increase insulin continually. The new medicine, "GLP-1 stimulators", increase insulin only when needed, that is when you eat. The result is more effective diabetes management. The medicines also stay in the body longer, giving them the name "long-acting" GLP-1 stimulator. They must be injected, but only once a day or week. Most importantly, these medicines further lower blood sugar when added with standard medicines, the key to diabetes management.

There are several such new diabetes medicines, including exenatide and liraglutide. Which one is most effective and with what side-effects? To answer these questions, scientists administered either weekly exenatide or daily liraglutide, alongside the standard medicine to over 900 Type-II Diabetes patients. Concurrently, they assessed parameters reflective of successful diabetes management.

Either medicine decreased body weight, fasting blood sugar and Hb_{A1C}, which reflects long-term blood sugar. Levels of HDL ("good fat") also improved. Liraglutide slightly reduced cholesterol and LDL ("bad fat"). Patients themselves reported improved quality of life. Either medicine improved diabetes management and overall health, though liraglutide had larger effects.

Side effects were mainly digestion related, such as nausea, diarrhea and vomiting, and seen in two-thirds of patients. With Liraglutide's increased effectiveness came more side-effects. Nonetheless, side-effects dramatically tapered out after the first month, and only 1 in 25 patients stopped study participation due to side-effects. Initial side-effects are inevitable, but the benefits of liraglutide or exenatide can be life-changing!

- Sonya Dave, PhD