



Incretins



Examples: Byetta (injectable), Januvia (pill)

Used To Treat: Insulin Resistance - Diabetes

How They Work: The incretins are derived from a compound found in the saliva of the Gila monster, a large lizard native to the southwestern US. This compound mimics the function of GLP-1, a protein made in the intestine that increases the release of insulin. The good news is that this drug only works in the face of glucose, thereby minimizing the opportunity for a “hypoglycemic attack”. Secondly, these drugs reduce the rate of gastric emptying and can decrease food intake. This might minimize the hypoglycemic potential after a large carbohydrate meal and might result in some weight loss.

Side Effects: Diarrhea, vomiting, jittery feeling and a sense of fullness are relatively rare side effects.

What is Diabetes?

Diabetes is a disease where the body doesn't make or use the proper amount of insulin. Insulin is a hormone made by the pancreas in the Islets of Langerhans and is necessary for the body to appropriately utilize glucose, our major source of energy. Clinically diabetes takes on an even more serious side because it can exist in a “pre-symptomatic” state for as long as 10 years all the while causing vascular problems that can later cause kidney disease, heart disease and/or stroke.

Diabetes is often genetic. It is thought that the disease becomes “active” after the body reaches a certain state of fattiness. After the body has acquired enough fat, the insulin resistance gene is “turned on” exacerbating and accelerating the process.

If properly managed, diabetes does not have to be “all that bad”. But, it does take a lot of patient participation. Diet is important and all efforts should be made to increase the relative amount of protein in the diet and decrease the “simple carbohydrates”. Exercise is essential and weight management an overriding concern.

Medications are an essential part of the treatment process in order to minimize insulin resistance, to protect the kidney from further damage, and to protect the patient from heart attack and stroke. Most diabetics are on medications that limit insulin resistance (like actos or avandia), protect the kidneys (an ACE or ARB), and limit the risk of heart attack and stroke (statins).