

Metformin

Examples: Metformin (glucophage or fortamet)

Used To Treat: Insulin Resistance - Diabetes

How They Work: Metformin decreases the hepatic production of glucose and intestinal absorption of glucose. It also improves insulin sensitivity by increasing peripheral glucose uptake and utilization. After eating, the amount of insulin necessary for the appropriate utilization of glucose ingested during the meal will decrease. This, in turn, decreases the usual increase in appetite that can come as a result of very high insulin levels. Further, the utilization of fats will improve.

Side Effects: Diarrhea, nausea and vomiting and not uncommon but usually resolve after the first several weeks of taking the drug.

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.



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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).

