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## All Things Medical

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### Diabetes (the "new" criteria)

The criteria for the diagnosis of diabetes was changed by the experts in a special committee sponsored by the American Diabetes Association. Normal fasting blood sugar is less than 110 or, two hours after eating, less than 140. A blood sugar of 126 or greater when fasting, or greater than 200 two hours after eating a large carbohydrate meal, constitutes the diagnosis of diabetes. The fasting level of between 110 and 125 is frequently seen in Syndrome X (elevation of blood pressure, low good cholesterol, high triglycerides in a patient with a fat belly). In the next century, compared to the present, the treatment of diabetes will be to keep the blood sugar as close to 100 as possible.

In the DCCT (Diabetic Control and Complication Trial) a study was done in Type 1 diabetes showing that intensive control of DM with insulin made a difference and dramatically lowered the rate of complications that includes kidney disease, eye problems, cerebral-cardiovascular complications and prolongs the quality and quantity of

life. In a similar study done with Type 2 diabetes, called the Komotomoto study (of course, in Japan), the level of hemoglobin A1-C was the key to the study. Hemoglobin A1-C is a reflection of what one's blood sugar has been in the last three months. Normal levels are between 4 and 6. For every one point higher, there is an average elevation of blood sugar of 30 mg/dL (or just plain 30). In the United States the average hemoglobin A1-C is 9.5, so this study is very comparable to the population and perhaps you. Those patients with the lower hemoglobin A1-C had much less complications with eye, kidney and cardiovascular disease. Fructosamine is a similar test, but mirrors the blood sugars over only the last three weeks. With 180-220 considered good, over 280 means the blood sugar is too high and complications are occurring. Therefore, good control does make a big difference.

The thinking these days is rather than pushing one drug to the maximum dose, several drugs with different mechanisms known to help type 2 diabetes, are used. Prandin (a newer type of drug such as Gucotrol or Micronase) stimulates the pancreas to make more insulin, Glucophage decreases the amount of sugar coming from the liver and Rezulin (Avandia, Actos) makes your tissue more sensitive to the insulin that is already present.