

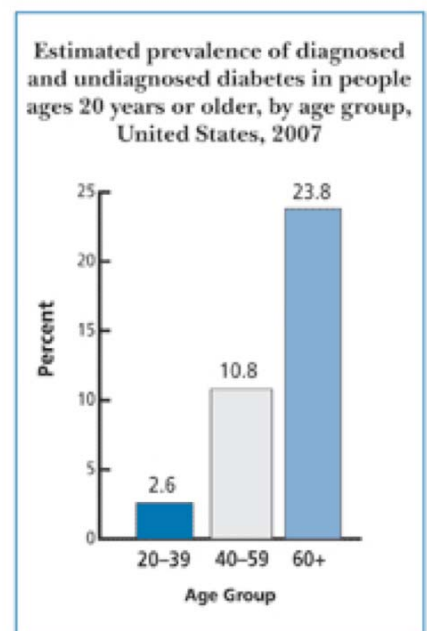
DIABETES (even mild)



Before 2025, diabetes will rank as the number one killer in the US. Diabetes is running rampant, but treatments can effectively prolong your life if aggressively applied early in the disease. Maybe we will find a dietary factor that is responsible, and genetics may have played a large role, perhaps even viruses (coxsackie?) are to blame. Now however, we need to stop blaming and start effective treatments.

Diet and exercise are known to improve diabetic control. But it is rare to entirely reverse diabetes that way. We must work on diet exercise and weight control along with taking medicine prescribed to control this disease quickly. Blood pressure and cholesterol should also be in exemplary control even if we need to use medicine for now. “I can do better” is not an excuse for bad numbers. When you complete that marathon and lose those 50 extra pounds, THEN we can try cutting out some of the medications. If cost is keeping you from taking your medications, TELL US and we will get the \$4 generics or scare up drug samples or even apply for compassionate drugs from the manufacturer.

Diabetes is a glycohemoglobin (HBA1C or A1C for short) over 6.0. A1C refers to the amount of sugar stuck on the hemoglobin molecule in your bloodstream. This correlates well with the amount of sugar in your blood over the last 3 months. Many important enzymes get coated with sugar when your blood sugars are high, this is one of the ways the elevated sugars hurt your body. We can bring that number below 8 with good medications, if we go too low (under 6.0) we run the risk of “hypoglycemia.” That usually makes you feel sweaty, anxious and gives you palpitations. Really low numbers can put a person in a coma, so we need to move slowly and deliberately when we improve your sugars. Recent studies balance that risk with the risk of abnormal sugar in the body, and the current thought is that getting the HBA1C in the low 7's is ideal.



We don't immediately have you start checking your blood sugars unless we are unable to get your HBA1C under 8 within 3 months. Be motivated to get controlled NOW and avoid sticking yourself... at least for a while. For most people diabetes is a progressive disease. So we must be ready to respond to challenges to our keeping you in excellent control. If in 3 months we need to have you poke your finger once or twice a day, you will be amazed at how easy that really is. Oral medications can control most diabetics, but if they don't we must use insulin by injection. Very simple to use needles in the form of a pen make carrying your insulin easy and you barely feel the tiny needles now.

It doesn't seem fair, but having diabetes means you will have a more challenging goal for both your blood pressure and your cholesterol. You must monitor your blood pressure at home, even if it is normal. It is very important to write your blood pressure numbers on a small spiral notebook or a calendar and BRING THOSE numbers to your office visits. Some people have “white coat” hypertension which does not need treatment and others have normal blood pressure in the office but high ones at work or at home. Having a blood pressure cuff allows you to check your blood pressure at various times and places and assures that we are not hurting your kidney.

Cholesterol has an additive effect with blood pressure and diabetes (and smoking and obesity). Our goal with you is now even lower: LDL under 100 instead of 130. If you can get it to 80, that's even better. All of these goals

can be achieved with a combination of medications. Sure diet helps (think salsa diet!) and exercise will give your organs more blood flow. But don't wait! We must control now and hold hope of reducing medications as your overall health improves.

Talking to a diabetic educator is expensive, but not nearly as expensive as never getting that advice. Other classes are run by the hospital and may or may not be covered by your insurance. This disease makes us more vigilant to your heart (more and sooner EKGs and stress tests), nerves (loss of sensation on legs especially), kidneys (urinalysis yearly) and feet (podiatrist must see you annually) and most importantly eyes (ophthalmologist must see you annually). In years past diabetics went blind, lost legs and died early with heart disease. Those should not happen with the kind of vigilance we are advocating here.

Sometimes getting all this information at once is overwhelming. Sometimes not giving all this information at the start minimizes the impact of the disease. Keep this paper and review it until you know it cold!

Today a reasonable goal is to start metformin while getting your education, rechecking a HBA1C in 2 months, possibly adding sulfonylurea or a glitazone (Avandia, Actos) if we are close ... or giving an evening dose of long acting injectable insulin (levemir). Then we need to check it again in 2 months and adjust accordingly. Sitagliptin (Januvia) has an effect on a 'counter hormone' related to the stomach. Remember that food will need to be controlled as to the times and amounts. For some people we may need to add shots of short acting insulin at meal times. That is a very flexible way of controlling "after meal" sugars. Any time we are unable to reach our goal it is vital that we get more help in the form of a specialist in endocrinology. If we wait until we have bad control for a decade then we miss a decade's worth of protection of our body from the ravages of uncontrolled sugars.

When you monitor your blood sugars, 2 hours after you eat sugars should be 140-180, and before meals 90-130. But don't be too hard on yourself, most people in great control have sugars in that range only 1/2 the time. We base our control on the HBA1C. Monitoring the glucose helps you learn how foods affect your sugars and how you need to adjust your intake or medication accordingly.

Blood pressure control is vital. Even if your blood pressure is perfect we will likely start lisinopril or another ACE or ARB to keep your kidney in a bit more relaxed state to prevent kidney failure. Blood pressures should be in the 130/70 area. Lots of choices are available for blood pressure control, so if you have a hard time with the first medication, let's try another!

Cholesterol needs to be low. Diet is a small factor, genetics is a big factor. Exercise helps a little. The statin medications [atorvastatin (Lipitor), fluvastatin (Lescol), lovastatin (Mevacor), pravastatin (Pravachol), rosuvastatin (Crestor), simvastatin (Zocor)], sometimes cause muscle cramps. Supplementation with coenzyme Q10 (CoQ10) is now popular for those on statins, and may prevent cramping. We now think a minor nutritional deficiency is present in those with cramps. We should check a CPK blood level anytime you have a problem with a statin as well. Gemfibrozole (Lopid- not a statin) is another good medication and don't forget the (over the counter) omega 3 oil (fish oil or flax seed) is also a natural way to lower your cholesterol.

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<http://www.nlm.nih.gov/medlineplus/diabetes.html>

nice free website free of ads- funded by the national institute of health with interactive tutorials.

TODD S. GIESE, M.D, RACQUEL N. RAMIREZ, M.D, GEORGE B. GANCAYCO, M.D, JAMIE T.M. GANCAYCO, M.D.
CARING FAMILY, S.C. 815 459-2200 WWW.CARINGFAMILYSC.COM

