

**Why should I learn anything about diabetes ! My View: Robert DiBianco, MD**

1. New studies indicate that proper care of diabetes can prevent more than half of the medical complications and problems resulting from diabetes.
2. Poorly managed diabetes is associated with premature damage to many important organs and is a major risk factor for blindness, heart attack, stroke, kidney failure and need for dialysis, neuropathy (nerve pains and poor nerve function), and limb amputations for gangrene.

**What is diabetes and how is diagnosed ?**

3. Diabetes is much more than a blood sugar problem.  
Diabetes is a multisystem, vascular and metabolic disease.  
This means controlling blood sugar is only part of treatment.
4. Diabetes is diagnosed in several ways:
  - Fasting morning glucose (sugar) found over 125 mg%
  - A glucose of over 200 mg% 2 hours after eating or with symptoms of diabetes
  - Hemoglobin A1C is over 6.5 %

Blood Sugar	Normal	"Pre-Diabetic"	Diabetes Mellitus
<b>Fasting</b> (Morning-before breakfast)	<b>Under 100</b>	<b>100 to 125</b>	<b>Over 125</b>
After Meals (2-hours after eating)	Under 140	140 to 199	Over 200
<b>Hemoglobin A1C</b> (12-week average glucose)	<b>Under 6.0 %</b>	<b>6.0-6.5 %</b>	<b>Over 6.5 %</b>

**To lower risk of heart attack, stroke, peripheral artery disease, eye, kidney, and nerve disease, we must treat more than diabetes?****5. Controlling the major cardiovascular (CV) risk factors is critical:****BP (blood pressure) under 130/80 while at rest and relaxed****Cholesterol Profile Total cholesterol under 200 mg% - ideally under 175 mg%****LDL "Lousy-type" under 100 mg% - ideally under 70 mg%****Triglycerides under 150 mg% - ideally under 100 mg%****Weight - Avoid being overweight with an increased waistline****Try to maintain BMI (Body Mass Index) under 25 with a reduced waistline!****An example of BMI of 25: at 5'10" – body weight should not exceed 175 lbs!****Activity at least one hour a day of physical activity (walking, stairs, bicycle etc.)****Smoking -absolutely none -including second-hand smoke**

6. Maintain: Fasting-sugars should be below 100 mg% in the morning, before eating.  
2-hours after eating - sugar should be below 140 mg%  
Anytime after eating - sugar should be below 180 mg%

**7. Higher risks are associated with:****Older age (men over 45 yrs or post-menopausal women or if older than 55 yrs)****-consider taking a low-dose aspirin, 81 mg, each day if not allergic.****Immediate family history that is positive for heart disease, vascular disease or stroke.**

## **If You Have Diabetes, Here's Are Some Facts You Can Live With!**

A new 8 year study published in the New England Journal of Medicine shows:

- **You can prevent most of the heart attacks and stroke you're at risk for.**
- **You can prevent most of the painful nerve problems too.**

Doctors from a major diabetes center in Denmark compared 80 patients treated in the "usual way" to 80 patients treated "comprehensively" to take better control of their diabetes and other important cardiac risk factors.

"Comprehensive" treatment meant the patients worked with their doctors to:

- Get their **Hemoglobin A1C (Hgb A1C) under 6.5 %**  
(Blood sugars must be lower over a 2 to 3 month period to reduce the Hgb A1C)
- Have a resting **Blood Pressure under 130 systolic (top number)**  
and 80 diastolic (bottom number).
- Have a **Total cholesterol under 175 mg/dl** which usually means the
  - **LDL cholesterol, lousy type, is usually below 100**
  - **HDL cholesterol, healthy type, is over 40**
  - **Triglycerides (another blood fat) is under 150**
- Get any protein spilled into the urine down by **taking an ACE inhibitor or ARB-type of medication**
- **Take an aspirin every day** (low dose, 81 mg or regular, 325 mg)
- Change bad habits; **Stop smoking , Eat less fat , Walk daily**

When patients continued comprehensive care for less than 8 years, compared to patients getting usual care, **the patients with the comprehensive care showed:**

- 53% fewer heart attacks, deaths, strokes and bypass or artery operations
- 61% fewer patients with kidney failure needing dialysis
- 58% fewer patients with eye problems leading to visual loss and blindness
- 63% fewer nerve problems that cause painful legs and feet, digestive problems and poorly controlled blood pressure that can cause lightheadedness with standing.

**Help us help you prevent these dangerous medical complications of diabetes.**  
**Let us show you how at your next appointment.**

Published: P. Gaede et al, Denmark's Steno Clinic, New England Journal of Medicine, Jan 30, 2003

Addendum: Now a 13-year follow-up has been completed and published. This shows **comprehensive treatment started early, reduced the number of deaths by 20% compared to casual care or comprehensive care started late** – so let's get started!

Published: P. Gaede, MD et al. 13 yr. Follow-up. New England Journal of Medicine, Feb 7, 2008