

## **Changing Standards for Diagnosis**

In 1997, the American Diabetes Association (ADA) and the federal government lowered the per se standard for diagnosing diabetes from a fasting blood glucose level of 140 mg/dL to 126 mg/dL.7 The CDC's Morbidity and Mortality Weekly Report notes that "the potential impact on the prevalence estimates of the change in diagnosis of diabetes adopted by the ADA in 1997 should be accounted for." However, the CDC's estimate of a 61 percent increase fails to account for changes in how diabetes is diagnosed.

The ADA's "Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus" notes:

"Widespread adoption of the new criteria may, however, have a large impact on the number of people actually diagnosed with diabetes. Presently, about half the adults with diabetes in the U.S. are undiagnosed, but many might now be diagnosed if the simpler FPG [Fasting Plasma Glucose] test were always used."

Doctors Steven Woolf and Stephen Rothemich from Virginia Commonwealth University report in the journal *American Family Physician* that among American adults this redefinition increased the number of diabetics by nearly 50 percent:

"Lowering the diagnostic threshold shifts the definition of diabetes into the central bulge of the bell curve where the glucose level of most Americans falls. Among U.S. adults 40 to 74 years of age who have not been diagnosed with diabetes, 1.9 million have fasting plasma glucose levels of 126 to 140 mg per dL (7.0 to 7.8 mmol per L), which is almost as many as the 2.2 million who have levels over 140 mg per dL (7.8 mmol per L). Under the new guidelines, at least 1 million Americans (and possibly more) with fasting plasma glucose levels of 126

## Myth: Obesity Has Made Diabetes Epidemic

- Changing standards for diagnosis
- Pre-diabetes & impared fasting glucose
- Increased awareness
- Syndrome X
- Myth: Childhood diabetes is an epidemic
- A misdiagnosed "epidemic"

## **Chapter Selection**

65% of Americans over...

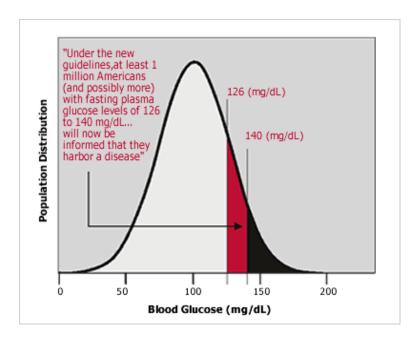
to 140 mg per dL (7.0 to 7.8 mmol per L), who previously would have been told that they had normal (or impaired) glucose tolerance, will now be informed that they harbor a disease ... The evidence used for the new diagnostic criteria is from epidemiologic studies cited by Mayfield that show a progressive increase in the risk of complications beginning with fasting plasma glucose levels as low as 110 to 120 mg per dL (6.1 to 6.7 mmol per L). There are three problems with basing the new policy on these data. First, other studies show no increase in risk at these low levels. Second, even if risk is increased, the new policy argues that having a risk factor (a mildly elevated fasting plasma glucose level) is tantamount to having a disease ... Third, and most important, there is no prospective evidence that correcting these mild elevations improves health ... Whether normalizing fasting plasma glucose levels in the range of 126 to 140 mg per dL (7.0 to 7.8 mmol per L) has a meaningful impact on patient outcomes is unknown."

Case Western Reserve University professor Paul Ernsberger explains the implications of the ADA's 1997 redefinition:

> "Is the overall incidence of diabetes rising? It is difficult to say. This is because the standards for diagnosing diabetes have changed radically over the last 30 years. We have gone from measuring glucose in the urine to carrying out an elaborate procedure known as the oral glucose tolerance test and finally to relying solely on fasting blood glucose. The level defining diabetes was dropped from 140 to 126 mg/dL in the 1990s. Loosening the diagnostic standards greatly increased the number of people classified as diabetic. Also, screening for diabetes has been stepped up, and now most people over age 45 are supposed to be checked every 3 years. In contrast, the average fasting blood glucose level in the adult population is about 85 mg/dL, and this value has not changed in decades. If there truly were an epidemic of diabetes, the average blood glucose

level would rise, just as the average body weight has risen."

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"The definitional changes for diabetes and for being overweight are not based on trials but solely on extrapolations from the experiences of patients with more advanced disease."

-Effective Clinical Practice, 1999

According to an article in *Effective Clinical Practice* by Dartmouth Medical School's Lisa Schwartz and Steven Woloshin, the new definitions for both diabetes and overweight not only artificially inflate the diseases' prevalence, but also pose new problems for clinicians:

"Adopting the new definitions would dramatically inflate disease prevalence. Changing the threshold for diabetes from a fasting glucose level of >140 mg/dL to >126 mg/dL would result in 1.7 million new cases ... For hypercholesterolemia and being overweight, the number of new cases would be 42 million and 29 million, respectively ... The impact of such ubiquitous labeling is difficult to quantify but is probably substantial. In a nation already obsessed with weight and

body image and in which eating disorders (e.g., anorexia nervosa and bulimia) are prevalent, labeling half of the population 'overweight,' for example, may be traumatic.

"Treatment side effects represent another potential harm. Even if serious side effects are rare, the enormous increase in the number of people exposed to treatment means that more will occur. The cardiovascular abnormalities related to the use of dexfenfluramine and fenfluramine (i.e., Phen-Fen) to treat obesity are a recent salient example."

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in the PDF version of the book.