philly.com
anything & everything philly



Posted on Mon, Aug. 2, 2010

# More than the sum of our BMIs

## The Body Mass Index doesn't mean as much as some would have you believe.

By Patrick Basham and John Luik

The fat police are coming to a doctor's office near you. Under the terms of last year's federal stimulus package, new federal regulations require that an obesity rating must be part of every American's electronic health records by 2014.

The most common measure of whether a person is overweight or obese, and hence his or her obesity rating, is derived from weight and height and known as the Body Mass Index, or BMI. Because it's easy to apply, the BMI is used almost universally to define obesity - despite its manifest shortcomings.

The BMI is wholly arbitrary, having no scientifically valid relationship with mortality. It's inadequate as a measure of body fat because it cannot account for the composition of a person's body - fat, muscle, organs, water, etc. It's also affected substantially by a person's frame and the relative length of his or her legs and torso. And it does not take into account whether body fat is well-distributed or concentrated around the waist, the latter being more likely to indicate health risks.

Official public-health pronouncements have held that people with BMIs in excess of 25 but under 30 are overweight, and that those with BMIs of more than 30 are obese. It's also been repeatedly alleged that these measurements are associated with an increased risk of disease. All of this suggests that the BMI and these classifications are based on evidence and science.

In fact, the 1997 decision to set new (and lower) BMI measurements as acceptable was made by the International Obesity Task Force, a nongovernmental organization that gets 75 percent of its funding from the pharmaceutical industry, which stands to benefit if more people are classified as overweight or obese.

There is scant scientific evidence to support assertions by the federal government and others that being overweight or obese increases one's mortality risks, or that the overweight and moderately obese can improve their health by losing weight. Such claims ignore 40 years of international data suggesting that obesity is not a cause of premature mortality. Many studies have demonstrated that the effects of diet and physical activity are independent of the effects

of BMI and other measures of body size or fat.

Age, sex, race, height, weight, blood type, and insulin resistance are among a host of characteristics that can account for profound differences between people with similar BMI scores. Such differences make it difficult to arrive at conclusions and recommendations that are generally valid, or to characterize body mass as having any reliable correlation with health.

Recent empirical analysis of the relationship between BMI and mortality found that death rates were essentially the same given BMIs ranging from 20 to 35. Normal-weight individuals of both genders do not appear to live longer than the mildly obese (those with BMIs of 30 to 35). This suggests that the only scientifically justified obesity interventions pertain to the small fraction of the population with BMIs of more than 40 (3 percent to 4 percent of adults).

This relatively small group might well benefit from medical and pharmaceutical interventions of various kinds - interventions that will depend on a better biological and medical understanding of obesity. Whatever the nature of these treatments for the extremely obese, the important point is that they - not those classified as merely overweight or moderately obese - should be the focus of any publicly funded antiobesity campaign.

The BMI has acquired unwarranted authority. And the new federal regulation, telling us to accept a correlation of "high" BMI scores with shorter lives, is contrary to the available evidence. It's too bad the fat police aren't as interested in the weight of the scientific evidence as they are in that of Americans.

---

Patrick Basham, an adjunct scholar at the Cato Institute, and John Luik, a senior fellow at the Democracy Institute, coauthored (with Gio Gori) the U.K. best-seller "Diet Nation: Exposing the Obesity Crusade." They can be reached at patrickbasham@gmail.com and luik.janus@sympatico.ca.