Body mass index (BMI) is easy to measure and inexpensive. It also has standardized cutoff points for overweight and obesity and is strongly correlated with body fat levels as measured by the most accurate methods. But BMI is an imperfect measure because it does not directly assess body fat.

On top of this, the current BMI classification system is misleading about the effects of body fat mass on mortality rates, according to an AMA Council on Science and Public Health report presented at the 2023 AMA Annual Meeting in Chicago.

“Numerous comorbidities, lifestyle issues, gender, ethnicities, medically significant familial-determined mortality effectors, duration of time one spends in certain BMI categories and the expected accumulation of fat with aging are likely to significantly affect interpretation of BMI data, particularly in regard to morbidity and mortality rates,” says the council’s report. “Further, the use of BMI is problematic when used to diagnose and treat individuals with eating disorders because it does not capture the full range of abnormal eating disorders.”

For adults, measuring BMI and waist circumference may be a better way to predict weight-related risk. But for children, there is no good reference data for waist circumference, which makes BMI-for-age the gold standard.

“There are numerous concerns with the way BMI has been used to measure body fat and diagnose obesity, yet some physicians find it to be a helpful measure in certain scenarios,” said AMA Immediate Past President Jack Resneck, Jr. MD. “It is important for physicians to understand the benefits and limitations of using BMI in clinical settings to determine the best care for their patients.”

The House of Delegates adopted new policy recognizing the issues with using BMI as a measurement because:

- Of the historical harm of BMI.
- Of the use of BMI for racist exclusion.
BMI cutoffs are based primarily on data collected from previous generations of non-Hispanic white populations and does not consider a person’s gender or ethnicity.

In addition, the policy says, there are significant limitations associated with the widespread use of BMI in clinical settings and suggests its use be in a conjunction with other valid measures of risk such as, but not limited to, measurements of:

- Visceral fat.
- Body adiposity index.
- Body composition.
- Relative fat mass.
- Waist circumference.
- Genetic or metabolic factors.

The newly adopted AMA policy also states that:

- BMI is significantly correlated with the amount of fat mass in the general population but loses predictability when applied on the individual level.
- Relative body shape and composition heterogeneity across race and ethnic groups, sexes, genders and age-span is essential to consider when applying BMI as a measure of adiposity.
- The use of BMI should not be used as a sole criterion to deny appropriate insurance reimbursement.

The AMA also will support:

- Further research on the application of the extended BMI percentiles and z-scores and its association with other anthropometric measurements, risk factors and health outcomes.
- Efforts to educate physicians on the issues with BMI and alternative measures for diagnosing obesity.

Additionally, delegates modified existing policy on the clinical utility of measuring BMI, body composition, adiposity and waist circumference to support “greater emphasis in physician educational programs on the risk differences within and between demographic groups at varying levels of adiposity, BMI, body composition and waist circumference and the importance of monitoring these in all individuals.”

Delegates also modified existing policy on eating disorders, calling on the AMA to:

- Encourage training of all school-based physicians, counselors, coaches, trainers, teachers and nurses to recognize abnormal eating behaviors, dieting and weight-restrictive behaviors in children and adolescents and to offer education and appropriate referral of adolescents.

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and their families for evidence-based and culturally informed interventional counseling.

- Consulting with appropriate, culturally informed educational and counseling materials pertaining to abnormal eating behaviors, dieting and weight-restrictive behaviors.

Read about the other highlights from the 2023 AMA Annual Meeting.