

Can United States Adults Accurately Assess Their Diet Quality?

Using a single question to assess an individual's diet quality could reduce researcher burden when screening potential participants for dietary interventions. Thus, the purpose of this study was to determine if United States (US) adults can accurately assess the quality of their diet.

Data from two cycles of National Health and Nutrition Examination Survey (NHANES), 2015-2016 and 2017-2018, were used for this study. Self-assessed diet quality was measured with a single question asking adults, aged ≥ 20 years, how healthy is your diet? The five responses included excellent, very good, good, fair, and poor. Measured diet quality was assessed using the 2015 Healthy Eating Index (HEI-2015) and based on 24-hour dietary recalls. HEI-2015 total scores were categorized using a 10-point grading scale as A (90-100), B (80-89), C (70-79), D (60-69) and F (0-59). The following matches between self-assessed and measured diet quality were classified as accurate assessments: excellent=A, very good=A or B, good=B or C, fair=C or D, and poor=D or F. All others were classified as inaccurate assessments. Descriptive statistical methods for complex survey designs were used to analyze the data.

Based on 9,757 adult participants, 8%, 22%, 41%, 24%, and 6% self-assessed their diet as excellent, very good, good, fair, and poor, respectively. For measured diet quality, < 1%, 3%, 9%, 19%, and 70% of participants scored grades of A, B, C, D, and F, respectively. Overall, 15% of participants accurately assessed their diet quality with accuracy percentages as high as 96% in the poor self-assessment group and between 1% and 22% in the other four self-assessment groups. Of the 8,002 participants who inaccurately assessed their diet quality, 75% overrated the healthfulness of their diet.

In general, US adults cannot accurately assess the quality of their diet with the exception of those assessing the healthfulness of their diet as poor. The tendency of US adults to overrate their diet quality suggests that work is needed to educate adults about what constitutes a healthful diet with the knowledge gained potentially resulting in more healthful dietary intake.

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