

THE DIABETES HEALTHY EATING INDEX (DHEI)

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Introduction: The Healthy Eating Index is the dietary index proposed to evaluate diet quality more frequently used for general population but has not been modified according to dietary guidelines for diabetes. **Aim:** To construct a dietary index that allows assessing diet quality and compliance with dietary recommendations for diabetes. **Patients and methods:** Cross-sectionally, 201 outpatients with type 2 diabetes (61.4 ± 9.7 years; $A1C 7.3 \pm 1.3\%$) underwent 3-day weighed-diet records, clinical and laboratory evaluation. The constructed DHEI assessed diet quality according to compliance with current diabetes dietary recommendations using 10 components: variety, 6 food groups, and 3 nutrients. Each component performance was evaluated by Item Response Theory analysis. The diet quality was scored from 0-100% and classified according to tertiles distribution as "low diet quality", "diet needs improvement", and "good diet quality". **Results and conclusions:** The components were grouped into 2 clusters using internal validity: "fiber sources components and diet variety" and "animal foods and fat components" (Cronbach's alpha value=0.47 and 0.48, respectively). In that clusters, the DHEI components with elevated difficulty to recommendations compliance were "carbohydrates and fiber sources", "diet variety", "dairy and saturated fatty acids", and "oils, fats, and nuts". The more informative components of dietary quality were "vegetables", "diet variety", "dairy and saturated fatty acids", and "total lipid". Low diet quality (DHEI<50%) was identified in 18.9% of patients, diet needs improvement (DHEI=51-59%) in 55.2%, and good diet quality (DHEI>60%) in 25.9% of the sample. The DHEI evaluate the diet quality and compliance with diabetes dietary recommendations in type 2 diabetic patients.