A Mobile Phone App for Dietary Intake Assessment in Adolescents: An Evaluation Study

# Details

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## Sample

148 9th-grade studens from several schools in 1 major city in Sweden, of whom 85 were girls (57.4%) and 63 boys (42.6%).

## Implications For Stakeholders About

# Abstract

Background:
There is a great need for dietary assessment methods that suit the adolescent lifestyle and give valid intake data.

Objective:
To develop a mobile phone app and evaluate its ability to assess energy intake (EI) and total energy expenditure (TEE) compared with objectively measured TEE. Furthermore, to investigate the impact of factors on reporting accuracy of EI, and to compare dietary intake with a Web-based method.

Methods:
Participants 14 to 16 years of age were recruited from year nine in schools in Gothenburg, Sweden. In total, 81 adolescents used the mobile phone app over 1 to 6 days. TEE was measured with the SenseWear Armband (SWA) during the same or proximate days. Individual factors were assessed with a questionnaire. A total of 15 participants also recorded dietary intake using a Web-based method.

Results:
The mobile phone app underestimated EI by 29% on a group level (P