

## Topic Area: Research Methodologies

### Abstract Title

The message writing process behind SmartAPPetite, a smartphone application for improving food knowledge and dietary behaviours among high school adolescents.

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### Abstract

**Purpose:** Poor dietary behaviours in adolescence can carry into adulthood and contribute to the development of chronic disease; consequently, adolescence is a critical time to establish healthy dietary habits. Since the majority of adolescents own smartphones, smartphone-based interventions to improve food knowledge and dietary behaviours are a logical approach. The objective of this abstract is to describe the message-writing process that was developed to ensure consistent, evidence-based nutrition messages for a smartphone application.

**Process:** SmartAPPetite is a multidimensional application that sends messages to help users make healthier choices. It was developed through an interdisciplinary collaboration with an overall goal of improving food knowledge, food purchasing, and diet quality of adolescents.

**Systematic Approach Used:** A database of over 1000 messages was created with a range of nutrition and lifestyle topics, such as sports nutrition, eating away from home, information about specific nutrients, seasonality and origin of foods, and how to choose, prepare, and store various fresh food items. A Youth Advisory Council of high-school students assisted with the selection of topics and assessing the relatability of messages. A writing guide was created and used to standardize the messages which included dietitian-approved sources to gather nutrition information. Messages were written by undergraduate and masters level nutrition students, edited by senior writers, and approved by dietitians. Using program algorithms, SmartAPPetite selected messages from the database according to the user's age, sex, and reported dietary preferences. User feedback also allowed the app to continually adjust message selection algorithms.

**Conclusions:** SmartAPPetite messages have undergone a thorough planning, writing, editing, and approval process to ensure users are provided with evidence-based, expert recommended nutrition and lifestyle messages.

**Recommendations:** A systematic approach must be used to ensure nutrition and healthy lifestyle messages are of high-quality and evidence-based.

**Significance to Field of Dietetics:** Nutrition-related smartphone applications have the potential to reach a large proportion of Canadian adolescents and enhance dietary behaviours.

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