

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/342882944>

# Evaluating the feasibility of administering a combination of online dietary assessment tools in a cohort of adults in Alberta, Canada.

Conference Paper · January 2017

CITATION

1

READS

29

6 authors, including:



**Nathan Solbak**

Alberta Health Services

26 PUBLICATIONS 396 CITATIONS

SEE PROFILE



**Geraldine Lo Siou**

Alberta Health Services

24 PUBLICATIONS 240 CITATIONS

SEE PROFILE



**Ala Al Rajabi**

The University of Calgary

54 PUBLICATIONS 349 CITATIONS

SEE PROFILE



**Sharon I Kirkpatrick**

University of Waterloo

155 PUBLICATIONS 7,276 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Reductions in Secondhand Smoke Exposure among Non-smokers Post-legislation [View project](#)



ASA-24 [View project](#)

## **Evaluating the feasibility of administering a combination of online dietary assessment tools in a cohort of adults in Alberta, Canada**

Nathan M. Solbak<sup>1</sup>, Geraldine Lo Siou<sup>1</sup>, Seol Paek<sup>1</sup>, Ala Al Rajabi<sup>1</sup>, Jennifer E. Vena<sup>1</sup>, Sharon I. Kirkpatrick<sup>2</sup>, Paula J. Robson<sup>1,3</sup>

<sup>1</sup> Cancer Measurement, Outcomes, Research and Evaluation, CancerControl Alberta, Alberta Health Services, Calgary, Alberta, Canada

<sup>2</sup> School of Public Health and Health Systems, University of Waterloo, Waterloo, Ontario, Canada

<sup>3</sup> Department of Agricultural, Food and Nutritional Science, Faculty of Agricultural, Life and Environmental Sciences, University of Alberta, Edmonton, AB, Canada

**Topic:** Assessment and Methodologies in Behavioral Nutrition and Physical Activity – Research methods and measurement innovations

*Abstract length: 350 words*

**Purpose:** Evidence suggests that combining tools, such as 24-hour recalls and food frequency questionnaires, may allow more accurate assessment of diet in epidemiologic studies. Web-based technology should make this approach more feasible than in the past, but it is important to explore response rates and acceptability of such an approach in real-world settings. We sought to determine the feasibility of using a combination of online tools (Automated Self-Administered 24-hour (ASA24) Dietary Assessment Tool and Diet History Questionnaire-II (DHQ-II)) in a sub-set of participants in Alberta's Tomorrow Project (ATP); a prospective cohort of 55,000 adults  $\geq 35$ y in Alberta, Canada.

**Methods:** Invitations to the feasibility study were mailed to 550 ATP participants. Those who consented (n=331) were asked to complete a health questionnaire, four ASA24 recalls (approximately three weeks apart over a four month period, with staggered start dates between June and December 2016), followed by the DHQ-II, and an evaluation survey.

**Results:** The majority of participants [mean (SD) age =57.1 (10.1)] were women (70.7%), urban residents (84.8%) and non-smokers (95.7%). Of the 229 participants who completed at least one ASA24, roughly equal proportions completed one (24.8%), two (24.5%), three (24.5%) and four recalls (26.2%). One third (n=102) of consenting participants did not respond to any ASA24 recall requests, with "lack of time" given as the primary reason. Only 41% of consenting participants (n=136) completed the DHQ-II; of these, 40% (n=55) completed all four recalls.

Median (25th-75<sup>th</sup> percentile) completion times were 46 (26-64) minutes for the first ASA24 recall and 50 (40-90) minutes for the DHQ-II.

**Conclusions:** Over half of participants completed at least two or more ASA24 recalls, and those who completed a greater number of recalls also completed the DHQ-II, demonstrating that the approach is feasible in the ATP cohort. However, response rates may be sensitive to the timing and frequency of recall administration. Future investigations will (i) evaluate the dietary data collected from each tool; (ii) explore methods of combining the data to optimize assessment of diet in the cohort, while accounting for the fact that not all participants will complete the entire dietary assessment protocol.