Diet and Physical Activity Apps: Perceived Effectiveness by App Users

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Introduction
To maintain healthy eating and physical activity is difficult. Using apps could support healthy eating and physical activity.

Aims
1) To identify how using diet and physical activity (PA) apps affected their users. 2) To investigate if using apps was associated with changes in diet and PA.

Methods
Focus group discussions
Participants: 23 Norwegians: 15 app users and 8 non-users, age 24.2 years (SD ± 6.4)

App survey
Participants: 500 Norwegians: half users and half non-users, age 25.8 years (SD ± 5.1)
Design: Non-users answered:
- Behavior questions – eating behavior, PA behavior
- Opinions towards apps
- Personal questions
Users answered:
- All the same questions as above, and
- Diet app questions and/or PA app questions

Results
- >50% of the users: using apps were effective in assisting them to eat healthily and to exercise more.
- Users who used both types of apps, perceived that using apps as more effective (between 17-25%) than users who only used one type of app (all P<.05).
- Using diet apps were more effective when the apps were frequently used (increased usage frequency) and over a long period of time (>1m), compared to short and infrequent use.
- App users were better at maintaining diet (at least 12% more likely to maintain) and PA behaviors (at least 13% more likely) than non-users (all P<.05).

A model of app effect on users:

Conclusions
App usage influenced action, consciousness, self-education about nutrition and PA, and social life. It facilitated in maintaining a healthy diet and more exercise. Diet and PA apps of the future can be further strengthened by being tailored to meet personal needs.

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