

Can rewarding healthy food choices improve adolescents' dietary patterns?

reward



www.rewardstudy.be
RewardStudy@Twitter

Van Lippevelde W¹, De Cock N², Vangeel J³, Van Camp J², Eggermont S³, Maes L¹, Beullens K³, Huybregts L², Lachat C², Goossens L⁴, Verbeken S⁴, Vervoort L⁴, Kolsteren P², Braet C⁴

¹Department of Public Health, Ghent University, Ghent, Belgium

²Department of Food Safety and Food Quality, Ghent University, Ghent, Belgium

³Leuven School for Mass Communication Research, KULeuven, Leuven, Belgium

⁴Department of Developmental, Personality, and Social Psychology, Ghent University, Ghent, Belgium

Correspondence to: wendy.vanlippevelde@ugent.be

Background / Aim

- Health promotion programs until now have limited effects in changing adolescents' dietary behaviours and curbing the obesity epidemic among adolescents.¹
- REWARD proposes a paradigm shift that will introduce reward-based learning paradigms to create behavioural change in adolescents' food choices.
- REWARD will
 - Study the utility, effectiveness, and practicality of this innovative paradigm
 - develop new approaches derived from the reward-based paradigm, and
 - design and test products and procedures that are founded on the principles of this paradigm.

Method

- Three studies will be conducted



Study 1: cross-sectional study

Objectives: 1) to assess the variability of reward sensitivity (RS) in a non-clinical sample of adolescents
2) to gain insight into adolescents' eating patterns and game play and their determinants
3) to assess correlations between RS, dietary intake and game play

Sample: a representative sample for the Flemish region of 1200 adolescents aged 14-16 of general, technical and vocational education

Study 2: experimental research

Objective: to investigate how non-food reward schemas (reward types: i.e., status, competition, self-expression, altruism) may compete with palatable foods in adolescents

Sample: a convenience sample of 100 adolescents



Study 3: intervention study

Objective: to test the effectiveness of a serious mobile game intervention including reward schemes to trigger healthy snacking in adolescents

Sample: a pilot study among 1600 adolescents aged 14-16 of general, technical, and vocational education

If the REWARD project proves to be successful, it will offer a new evidence-based vision, guidelines and practical tools stakeholders can use to move to better dietary habits in the society leading to a healthier population.

References

¹Doak, C., Visscher, T., Renders, C., & Seidell, J. (2006). The prevention of overweight and obesity in children and adolescents: a review of interventions and programmes. *Obesity Reviews*, 7(1), 111-136. doi: 10.1111/j.1467-789X.2006.00234.x; Kamath, C., Vickers, K., Ehrlich, A., McGovern, L., Johnson, J., Singhal, V., & Montori, V. (2008). Behavioral Interventions to Prevent Childhood Obesity: A Systematic Review and Meta-analyses of Randomized Trials. *Journal of Clinical Endocrinology & Metabolism*, 93(12), 4606-4615. doi: 10.1210/jc.2006-2411