An online family-based self-monitoring and goal-setting intervention to improve children's physical activity: the FRESH feasibility trial and three-arm pilot RCT

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Plain English summary

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Project aim

This project aimed to refine and test the FRESH (Families Reporting Every Step to Health) programme, which was developed to increase physical activity in 7- to 11-year-old children and their families.

Background

- A low level of physical activity raises the risk of obesity, mental health problems and poor bone development.
- Children's physical activity levels are low and decline as they get older. Physical activity declines
 mostly outside school, yet physical activity promotion focuses mainly on schools.
- Family-based physical activity promotion has potential, but it rarely targets the whole family.

Programme

- FRESH was developed with families. This pedometer-based programme included goal-setting and rewards, and encouraged family relations by getting families to be active together.
- Children (and their families) virtually travelled across the world by accumulating steps throughout the week. They had access to a website to help set goals, received rewards for achieving goals, and unlocked fun facts about the places visited and novel activity challenges.

Findings

- We tested FRESH in two studies, recruiting 53 families and 181 participants across studies.
- Families enjoyed taking part in FRESH, enjoyed wearing the pedometers and said that the website was easy to use. Parents and children reported that they were more active together and would like to continue with FRESH.
- We saw little change in physical activity in most participants, apart from a short-term positive change among fathers.
- The main difficulty in the studies was recruiting families to take part. Additional consultation with international experts helped us find new ways of recruiting families. The top recommended approach was to speak with parents while they were waiting for their children to complete an activity, such as swimming.

Conclusion

The FRESH programme is feasible and acceptable, but it did not promote physical activity in families. Further work should refine the programme and its evaluation.

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