Physical activity and weight loss in the Healthy Weight Coaching, a 12-month online weight loss intervention

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The Healthy Weight Coaching

- Online weight loss program
- 12 months
- One-on-one coaching with a healthcare professional
- Exercise, nutrition, stress-management strategies
- Available nationwide throughout Finland

Intro

- Online weight loss interventions are **as effective** and **more accessible**, compared to in-person interventions[1,2,3]
- The Healthy Weight Coaching
  - **Larger scale** and **longer duration** than similar studies
  - **Real-life,** non-randomized study

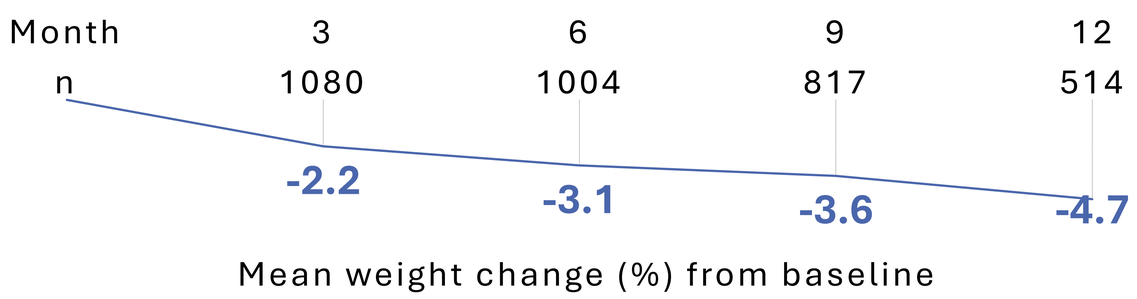
Study population

- Referred by physician
- N=1080
- Women: 86.3%
- Age, years: 51 (21–81)
- Baseline body mass index, kg/m^2: 39.8 (26.5–72.5)

Mean (Range)

Weight Loss

- Self-reported data
- Mean weight loss at each time point
- **44%** (225/513) of participants with **clinically significant weight loss** (≥5%) at 12 months



Physical Activity

- Self-reported data
- Total physical activity: intensity (metabolic equivalent) x duration (hours) x frequency (days/year) ÷ 365 = MET-h/day
- Mean total **physical activity increased**

0 months: **2.3** MET-h/day leisurely walking → 12 months **3.5** MET-h/day biking

- Increasing total physical activity was **associated with greater weight loss**

  Correlation with weight change, throughout the study

  Total (Intensity*Duration*Frequency): B=-0.207 (95% CI: -0.287 to -0.127), P<0.001

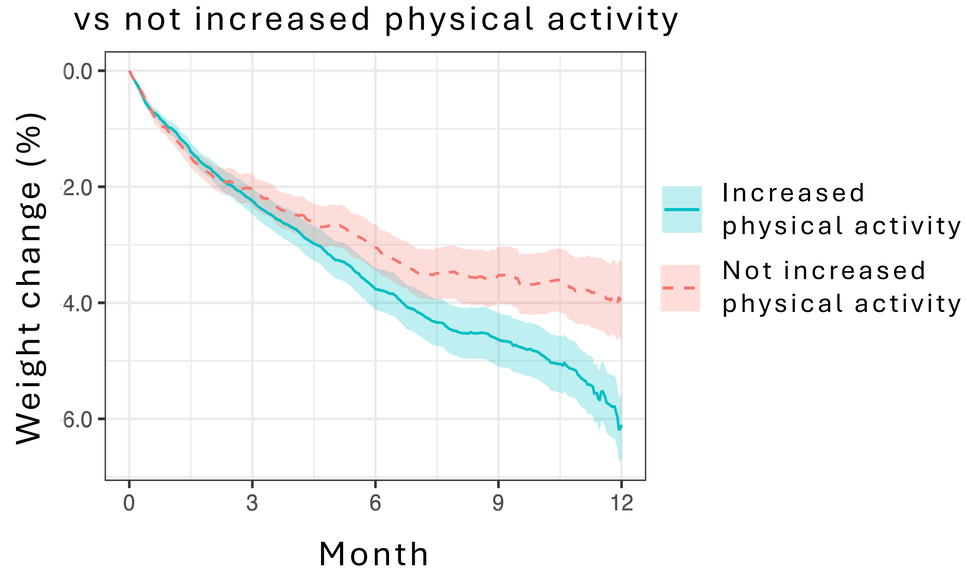
- Increasing duration and frequency of physical activity were associated with weight loss; increasing intensity was not

  Correlation with weight change, throughout the study

  Frequency: B=-0.004 (95% CI: -0.006 to -0.002), P<0.001

  Duration: B-0.552 (95% CI: 1.180 to -0.023), P=0.041

- Participants who did increase physical activity (55%, 172/314) had **greater weight loss** at 12 months, compared to those who did not increase physical activity (6.1% vs. 4.0%, P=0.009)



In the online weight loss program:

Participants **increased physical activity** and **lost weight**

Increases in physical activity were associated with greater weight loss

References: 1. Jahangiry L, Farhangi MA, Shab-Bidar S, Rezaei F, Pashaei T. Web-based physical activity interventions: a systematic review and meta-analysis of randomized controlled trials. Public Health. 2017;152:36–46. 2. Lahtio H, Rintala A, Immonen J, Sjögren T. The Effectiveness of Physical Activity-Promoting Web- and Mobile-Based Distance Weight Loss Interventions on Body Composition in Rehabilitation Settings: Systematic Review, Meta-analysis, and Meta-Regression Analysis. J Med Internet Res. 2022;24(3):e25906. 3. Suojanen LU, Ahola AJ, Kupila S, Korpela R, Pietiläinen KH. Effectiveness of a web-based real-life weight management program: Study design, methods, and participants' baseline characteristics. Contemp Clin Trials Commun. 2020;19:100638.. Funding: Research, Innovation & Scholarly Endeavors at USF Health, Morsani College of Medicine, Academy of Finland; Finnish Medical Foundation; Gyllenberg Foundation; Novo Nordisk Foundation; Finnish Diabetes Research Foundation; Paulo Foundation; Sigrid Jusélius Foundation; University of Helsinki and Helsinki University Hospital; Government Research Funds.