PROMISING LONG-TERM EFFECTS ON BODY WEIGHT, 18 MONTHS AFTER LIFESTYLE COUNSELING BY PHONE OR INTERNET

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Purpose
New approaches are needed to prevent obesity. In this study we evaluated, in a randomized controlled trial, the long-term effectiveness of personal lifestyle counseling by phone or e-mail in an overweight working population.

Methods
Employees were randomized to a binder based program with phone counseling (phone group; N=462), a web based program with e-mail counseling (internet group; N=464) or lifestyle brochures (control group; N= 464). The intervention used behavior modification techniques and took six months. Body weight was measured at baseline and at two years. Self reported physical activity and dietary behaviors were measured by questionnaire. Statistical analyses were performed with multiple linear regression, adjusting for baseline value and creating dummies for study group allocation. Chi square analysis was used for categorical data.

Results
Complete data on body weight were available for 244 employees in the phone group, 242 in the internet group and 246 in the control group. Baseline characteristics did not differ significantly between groups. 69% was male, mean age was 44.9 (SD 8.1) years and mean BMI 29.2 (SD 3.2) kg/m².

A comparison with the control group showed a difference of -0.6 kg (p=0.14) for the phone group and -1.1 kg (p=0.01) for the internet group. Clinically relevant weight loss, i.e. loss of at least 5% of initial weight, was 20.1% (p=0.04) in the telephone group and 19.4% (p=0.06) in the internet group, vs. 13.9% in the control group. So, e-mail counseling resulted in significant absolute weight loss and phone counseling resulted in significant relative weight loss.

An increase in physical activity was observed in the intervention groups compared with the control group: 413 MET-min per week (p=0.29) for the internet group and 670 MET-min per week (p=0.07) for the phone group. However, neither were significant. No significant differences in the consumption of fat, fruit and vegetables were found, compared with the control group.

On no single outcome significant differences were observed between the telephone-based and internet-based group.

Conclusions
Internet counseling results in higher absolute weight loss, while phone counseling produces slightly higher relative weight loss. Both communication methods show promising long-term weight loss results that are relevant for public health.

Keywords: Lifestyle, Overweight, Intervention

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