A 16-KM RECREATIONAL RUNNING EVENT AS A HEALTH PROMOTION ACTIVITY

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Abstract

THEORETICAL BACKGROUND
The benefits of regular physical activity (PA) on health are well documented (Chakravarty et al, 2012; Garber et al., 2011). However, the actual amount of engaged physical activity is below recommended levels in all Western countries. It has been hypothesized that recreational running events could be used as a health promotion activity. In a Swiss study it was shown that the health status of participants in a 16-kilometre run was significantly better than in the average population (Chatton and Kayser, 2013). Moreover, earlier studies have shown that a majority of participants train in preparation for running events (Celie et al, 2010; Marti et al, 1988). However, it is not known if and in what magnitude training for a recreational run effects running physical activity (RPA) and overall lifestyle and what factors predict a change in RPA.

AIM OF ABSTRACT
What is the effect of a 16-km recreational running event on RPA and lifestyle? And what are predicting factors for an increase in RPA.

METHODOLOGY, RESEARCH DESIGN AND DATA ANALYSIS
We randomly invited 9058 runners (of 54,000 participants) of a 16-km recreational run (Dam tot Damloop) in the Netherlands to participate in this study. Runners of all levels were invited to participate. Two days after the run participants were requested to complete an online survey. In the survey the following issues were addressed: background variables (age, gender, experience with running), running physical activity (RPA: measured by amount of trained kilometres per week at three times (before start training phase, during training phase and intention after event)), health and lifestyle (health, bodyweight, diet, smoking and drinking behaviour and energy level). The difference in RPA between

baseline, training phase and post run was calculated. For all participants it was assessed whether the physical activity was decreased, equal or increased. Using logistic regression possible predictors for an increase in physical activity were studied.

RESULTS
Of all invited 2,969 (33%) runners agreed to participate. The average age of the respondents was 40 years and 57% was male. 39% of respondents participated in a previous version of the run. The RPA before the start of the training phase was less than 5 kilometres per week in 15% of respondents, for 32% it was between 5 and 10k, for 29% between 10 and 20k and for 23% more than 30k per week. Of all respondents 24% was overweight (BMI > 25), and 13% smoked.
In preparing and training for the 16-k run 48% of participants reported that their RPA was increased. Moreover, 41% percent indicated that they had the intention to maintain this higher RPA after the run. Of all participants 60% indicated that they also motivated others to move, 58% indicated that they felt more healthy, 34% that they improved their diet and 34% that they lost weight. Of participants smoking 37% smoked less in training for the run and 24% has the intention of maintain this decrease.
The strongest predicting factor for an increase in RPA is the RPA at baseline. A RPA below 10k at baseline increases the odds on an increase in RPA with 6.1 ($p<0.00001$). Other significant predicting factors on increase in RPA are the use of an app or online training schedule (Exp B between 1,6 and 1,9; $p<0.0001$). Male participants have a lower chance to increase RPA compared to women (Exp B; $p<0.00001$).

DISCUSSION AND IMPLICATIONS/CONCLUSIONS
This study shows that a recreational run can be used as a health promotion activity, which is contrary to elite sport events for which the literature finds mostly no effect on PA. By training for a recreational run the amount of physical activity increased in almost half of all participants, also participants indicated that they improved their lifestyle and felt more healthy. More research will be done to compare various recreational sporting events and search for optimal conditions to increase health of the participants

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