The GO-ACTIWE randomized controlled trial - An interdisciplinary study designed to investigate the health effects of active commuting and leisure time physical activity - DTU Orbit (01/01/2019)

**The GO-ACTIWE randomized controlled trial - An interdisciplinary study designed to investigate the health effects of active commuting and leisure time physical activity**

Regular physical activity is efficacious for improving metabolic health in overweight and obese individuals, yet, many adults lead sedentary lives. Most exercise interventions have targeted leisure time, but physical activity also takes place in other domains of everyday life. Active commuting represents a promising alternative to increase physical activity, but it has yet to be established whether active commuting conveys health benefits on par with leisure time physical activity (LTPA). A 6-month randomized controlled trial was designed to investigate the effects of increased physical activity in transport (bicycling) or leisure time domains (moderate or vigorous intensity endurance exercise). We included 188 overweight and class 1 obese sedentary women and men (20-45years) of which 130 were randomized to either sedentary controls (n=18), active commuting (n=35) or moderate (n=39) or vigorous (n=38) intensity LTPA. At baseline and after 3 and 6months, participants underwent a rigorous 3-day biomedical test regimen followed by free-living measurements. In a sub-sample, physical activity level and energy expenditure were monitored by means of personal assistive technology and the doubly labeled water technique. Additionally, the delivery, reception and routinization of the exercise regimens were investigated by ethnological fieldwork. One year after termination of the intervention, participants will be invited for a follow-up visit to investigate sustained health effects and continuous physical activity adherence. By combining biomedical, technological and humanistic approaches, we aim to understand the health benefits of physical activity in different domains of everyday life, as well as how to improve adherence to physical activity.

**General information**

State: Published
Organisations: Department of Applied Mathematics and Computer Science, Cognitive Systems, Technical University of Denmark, University of Copenhagen
Pages: 122-129
Publication date: 2017
Peer-reviewed: Yes

**Publication information**

Journal: Contemporary Clinical Trials
Volume: 53
ISSN (Print): 1551-7144
Ratings:

BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 2.63 SJR 1.536 SNIP 0.97
Web of Science (2017): Impact factor 2.658
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.15 SJR 1.266 SNIP 0.894
Web of Science (2016): Impact factor 2.095
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.22 SJR 1.249 SNIP 0.943
Web of Science (2015): Impact factor 2.052
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 1.88 SJR 1.222 SNIP 0.871
Web of Science (2014): Impact factor 1.935
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 1.93 SJR 1.216 SNIP 0.997
Web of Science (2013): Impact factor 1.986
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 1.74 SJR 1.18 SNIP 0.954
Web of Science (2012): Impact factor 1.597
Original language: English
Keywords: Exercise, Metabolic health, Multidisciplinary, Obesity, Overweight
DOIs: 10.1016/j.cct.2016.12.019
Source: FindIt
Source-ID: 2350078038
Research output: Research - peer-review : Journal article – Annual report year: 2017