

## **Effective behaviour change techniques for physical activity and healthy eating in overweight and obese adults; systematic review and meta-regression analyses**

The World Health Organization's Global NCD Action Plan (2013-2020) supports commitments by Heads of State and Government to prevent and control non-communicable disease (NCDs). There is growing recognition that health behaviours, including physical inactivity, unhealthy eating, and excessive alcohol consumption are contributing to high levels of morbidity and premature mortality from NCDs in Europe, and across the globe. Behaviour Change Techniques (BCTs) can be used to increase motivation, support one's self-regulation skills, and help sustain lifestyle changes that reduce the risk of developing NCDs later in life. When looking at obesity, behaviour change is particularly effective when focused on health improvements, as opposed to targeted weight loss.

This systematic review looked at randomised controlled trials and summarises the evidence of behavioural interventions, aiming to improve physical activity and healthy eating among overweight and obese adults in the short-and-long-term. It also examines to what extent the BCTs employed (goal setting, providing instructions, adding objects to the environment) are effective.

So far, the evidence has been inconsistent. This systematic review assesses 48 studies to conclude that behaviour change interventions are a success, both when provided by professionals and lay people. Tangible actions to initiate and sustain change include addressing both 'how to' and 'why' questions in conjunction, with a person-centred and supportive communication style from the provider side. The provider can help participants define goals, identify realistic outcomes of new behaviour, give feedback on their results, and use supportive tools (including apps to physical activity levels) to sustain change in the long term. These interventions increase competence and focus on satisfying the psychological needs of people living with obesity.

*Samdal GB, Eide GE, Barth T, Williams G, Meland E. Effective behaviour change techniques for physical activity and healthy eating in overweight and obese adults; systematic review and meta-regression analyses. Int J Behav Nutr Phys Act. 2017 Mar 28;14(1):42. doi: 10.1186/s12966-017-0494-y. PMID: 28351367; PMCID: PMC5370453.*