



Irish Section Meeting, 21–23 June 2017, *What governs what we eat?*

The effectiveness of peer support in encouraging dietary behaviour change in adults: a systematic review

S.E. Moore, C.T. McEvoy, M.C. McKinley and J.V. Woodside

Nutrition Research Group, Centre for Public Health, Queen's University Belfast, Belfast, BT12 6BJ, UK

Strong evidence suggests that consumption of a healthy diet can reduce chronic disease risk⁽¹⁾, but there is an urgent need to find effective methods of supporting individuals to make and sustain healthy dietary behaviour change. Peer support (PS) has been suggested as a flexible and cost effective strategy to support self-management of chronic diseases such as diabetes⁽²⁾. However, the effect of PS on dietary behaviour is unclear as findings from intervention studies are inconsistent, largely owing to significant heterogeneity between studies in terms of populations studied, PS provision and models used to deliver PS^(3–4). This systematic review aimed to assess the effectiveness of PS for encouraging dietary behaviour change in adults and to consider intervention characteristics linked with effectiveness.

The review protocol was registered on PROSPERO (CRD42014009994). A structured search consisting of terms relating to PS and dietary change was developed and conducted in Medline, Embase, PsycINFO, CINAHL and the Cochrane library. Following a title and abstract screen, two reviewers independently screened full text articles. Studies were eligible if they were randomised controlled trial design, assessed the effectiveness of PS in comparison with other types of intervention and/or usual care, and examined a dietary or weight related outcome. Extracted data comprised of participant characteristics, intervention details (such as intensity, PS model and peer supporter details) and results. A narrative approach was used to synthesise results.

The search obtained 20, 243 potentially relevant titles of which 67 full texts were assessed for eligibility and 26 studies were included in the review. The majority of studies took place in the USA and differed widely in terms of participant characteristics and intervention details. Dietary outcomes measured included dietary pattern, fruit and vegetable intake, fat intake and intake of other nutrients. Measurement of dietary change was largely based on self-report tools rather than objective measures of actual change. The effect of PS on dietary change varied. More studies reported a positive effect of PS on dietary change (n = 6; 23 %) or mixed effects (n = 12; 46 %), than studies that did not find an effect (n = 8; 31 %). Most studies used group based PS or a combination of models and were delivered by lay individuals. Few studies reported intervention intensity, fidelity and peer supporter training and support. Data suggested that studies reporting positive or mixed effects of PS employed more Behaviour Change Techniques (BCT) to target dietary behaviour change than studies reporting no effect. Given the heterogeneity in studies however, firm conclusions cannot be made on study characteristics linked with effectiveness.

As evidence was mixed, this review indicates that further well-designed interventions need to be undertaken to build an evidence base for the use of PS for achieving dietary change. Such interventions should use optimal methods of dietary assessment and describe factors that can inform the development of effective PS interventions for dietary change including the training and support needs of peer supporters and combinations of BCTs linked with effectiveness.

1. WHO & FAO (2003) Diet, nutrition and the prevention of chronic diseases. WHO Technical Report Series, No. 916. http://apps.who.int/iris/bitstream/10665/42665/1/WHO_TRS_916.pdf?ua=1 (Accessed March 2017).
2. Heisler M (2007) *Diabetes Spectr*, **20**, 214–221.
3. Dennis C-L (2003) *Int J Nurs Stud*, **40**, 321–32.
4. Nettles A & Belton A (2010) *Family Pract*, **27**, i33–9.