

Systematic review of published interventions aiming to increase vegetable intakes

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INTRODUCTION

The health benefits of a high fruit and vegetable consumption are well known and considerable current work attempts to improve intakes⁽¹⁾. Fruits and vegetables, however, are separate food groups, that tend to be consumed differently, and tend to be consumed or avoided as a result of different determinants^(2,3). Increasing work also suggests health benefits from a high consumption specifically of vegetables, and low vegetable intakes across Western countries, but fruit and vegetable interventions typically tend to have more success for fruit intakes than for those of vegetables^(e.g.4).

This study aimed to systematically review the published literature for all studies reporting an intervention to specifically increase intakes of vegetables as a distinct food group.

METHOD

PubMed, PsychInfo and Medline were searched over all years of records until April 2015.

Search terms were 'vegetable' and 'vegetables' in the 'title'.

All searches were conducted, and all titles and abstracts screened for relevance by two independent review authors (KMA, AH or HH).

Studies were included in the review if they involved an intervention designed primarily to increase vegetable intakes as a specific and distinct food group, and if they intended to change behaviour – vegetable selection, purchasing, or vegetable consumption.

We made no attempt to assess study quality, or to combine interventions, e.g. through meta-analysis.

RESULTS

Search outcomes are given in Figure 1. Review outcomes are given in Figure 2.

Figure 1: Outcomes of the searches

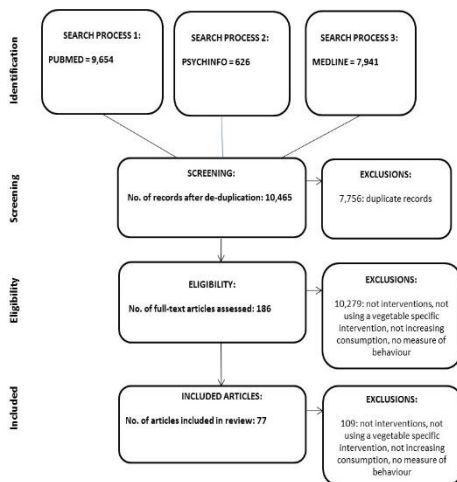
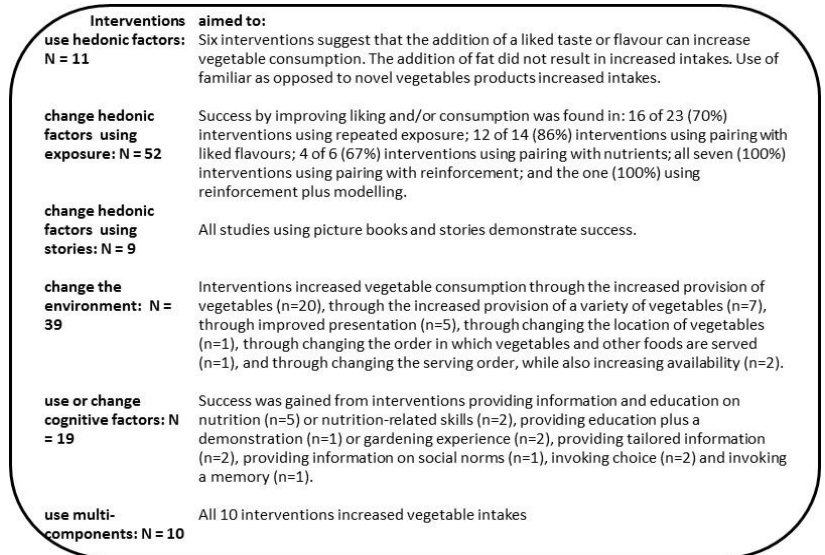


Figure 2: Outcomes of the review



DISCUSSION

Limited work is currently available assessing the impact of behavioural interventions for increasing vegetable intakes, and further work is required. Success is reported, but the majority of effects seem small and inconsistent. Greater percent success was found from environmental, educational and multi-component interventions. Publication bias is also likely in this new area of research, and long term effects and cost-effectiveness were rarely considered. Interventions should be developed based on the underlying determinants of poor vegetable consumption, and should include long-term and cost-effectiveness assessments. Certain population groups – adolescents, adults, older people and individuals living on a low income are also largely absent from the current list of tried interventions.

REFERENCES

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