

Are worldwide efforts to promote fruit and vegetable consumption effective enough?

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Despite numerous policy interventions to promote fruit and vegetable consumption, daily intake of fruits and vegetables is still below recommended levels worldwide. In a recent review published in the peer-reviewed journal *Appetite*, researchers from the University of Sydney, Australia, present an overview of the major campaigns of the last two decades, that have aimed to promote a long-term and sustainable increase in fruit and vegetable intake. The impact of these initiatives was low to modest and the authors identify recommendations to help promote future approaches in achieving a more significant behavioural change in the broader population.

Large-scale surveys in Europe, the US and Australia have shown that the average intake of fruits and vegetables in the general population is much lower than the recommended 400 grams of fruit and vegetables per day according to the World Health Organization (WHO). This increases the risk for cardiovascular disease, cancer, diabetes and obesity. In order to cope with this problem, governmental authorities around the globe, often in collaboration with industry and non-profit organisations, have initiated information and education campaigns to increase the consumption of fruits and vegetables.

Despite the fact that the main aim of the most outstanding campaigns was to promote awareness among consumers and increase the consumption of fruits and vegetables, the different methods applied in each of them make it difficult to compare their effectiveness. The authors suggest that the Danish '6 A Day' and the British 'Food Dudes' programmes have been more successful in increasing fruit and vegetable consumption, while the 'Go for 2&5', 'Fruits & Veggies – More Matters' and '5+ A Day' programmes were more effective in increasing awareness, rather than actual consumption among consumers. Existing interventions have only led to a small to medium increase in the actual consumption of fruits and vegetables, which is not sufficient to meet the WHO recommendations.

Factors influencing fruit and vegetable consumption

The authors distinguished between three broad categories of influencing factors, namely produce-related, distribution-related and consumer-related factors.

Price, seasonality, perishability, nutritional content, origin and quality are factors related to food production, while accessibility and variety are important aspects of how the food is distributed and reaches consumers. Additionally, factors such as income, education, gender, culture, etc., may also have a significant impact on fruit and vegetable consumption.

To increase the effectiveness of future interventions, all these factors should be taken into account when designing and implementing campaigns to promote fruit and vegetable intake. Providing understandable information to consumers should be accompanied by more subtle and proactive strategies such as creating

default options with fruits and vegetables; side-dishes in food service outlets; increasing availability, visibility and prominence at point of purchase; creating convenient packaging to facilitate consumption; offering price discounts and bonus packs; using positive role models and verbal praise to children.

A winning strategy for consumption uptake

The authors conclude that holistic approaches are more likely to result in sustainable behavioural change. Collaboration between industry, retail, governments and quasi-government organisations, such as heart and cancer foundations or societies, in developing and implementing strategies may increase the success of future initiatives. Intensive long-term campaigns that communicate simple, unambiguous messages through many different channels and involve the whole family in an interactive way have been found to be more effective. Moreover, targeting specific groups of the population and ensuring support by other economic initiatives such as economic subsidies, reduced taxes, increased accessibility and availability, are elements which are expected to increase the effectiveness of future interventions. The authors suggest that interventions should aim at increasing consumption frequency rather than serving size, and that fruits and vegetables should be targeted separately, with a greater focus on increasing the consumption of vegetables. Further research is needed to develop novel and effective approaches which will ultimately achieve actual and sustainable behavioural change.

For more information, please see:

[Rekhy R & McConchie R \(2014\). Promoting consumption of fruit and vegetables for better health. Have campaigns delivered on the goals? *Appetite* 79;113–123. DOI: 10.1016/j.appet.2014.04.012.](#)