

## **Can taking part in a fruit and vegetable research trial improve longer term fruit and vegetable intake in older adults?**

Increasing fruit and vegetable intake is widely accepted as being an important part of a healthy lifestyle and is often encouraged for the prevention of chronic health conditions, including cardiovascular disease, certain cancers and diabetes. Although public health recommendations advise us to consume at least 400g/d or a minimum of five servings of fruit and vegetables per day, intakes throughout Western populations remain low. A recent report published by the United States Department of Agriculture (USDA) highlighted that less than half of older adults eat the recommended five servings of fruit and vegetables/day.

Finding ways to encourage older adults to increase their fruit and vegetable consumption and maintain this increase in the long-term remains a challenge. Short-term increases in fruit and vegetable intake have been achieved in a number of studies that have used intensive dietetic support or food provision. In a recent trial, we demonstrated that taking part in a fruit and vegetable trial was effective in increasing fruit and vegetable intake after only 4 months. What is unknown is whether taking part in such studies has a longer term effect on fruit and vegetable intake.

When thinking about our fruit and vegetable intake it is also important to consider barriers that may prevent or hinder us from increasing our fruit and vegetable intake. Barriers such as poor nutritional knowledge, cost, dislike of fruit and vegetables, lack of awareness of fruit and vegetable recommendations and practical issues have all been linked with low fruit and vegetable consumption. In older people, practical issues related to frailty also need to be considered.

We recently carried out a fruit and vegetable trial which addressed several of these barriers (knowledge, cost, access, practical issues) in order to achieve the desired increase in fruit and vegetable intake. As part of this trial, we also wanted to see whether or not participants maintained their change in fruit and vegetable consumption 18-months after the trial had ended and whether or not participating in the trial had any effect on barriers to fruit and vegetable consumption.

This study (named the Ageing and Dietary Intervention Trial (ADIT)) was initially designed to examine the effect of increasing fruit and vegetable intake to 5 portions per day on immune function. 83 healthy, community-dwelling males and females, aged 65y and over with a low intake of fruit and vegetable (2 or less portions/day) took part. Over a period of 4 months, participants had to consume either 5 portions or more of fruit and vegetables per day (intervention group), or 2 portions or less/day (control group). Each participant received a weekly home delivery of fruit and vegetables, free of charge. Participants in the 5 portions/day group also received personal dietary advice and education regarding practical ways of incorporating fruit and vegetables into their diet and experimenting with new types of fruit and vegetables they may not have previously eaten. Recipe ideas and meal suggestions were also provided. All advice was tailored towards the

participants' physical capabilities.

Interestingly, 18-months after the trial had finished, fruit and vegetable intakes in both groups were greater than at the start of the study, particularly in the 5 portions/day group. Barriers to fruit and vegetable intake also changed after 18-months, with both groups reporting greater liking and ease in consuming fruit and vegetables and less difficulty associated with consuming fruit and vegetables. Those who had been in the 2 portions/day group also reported greater awareness of fruit and vegetable recommendations at 18-months. Overall, the study findings show that participating in a fruit and vegetable intervention can lead to longer-term positive changes in fruit and vegetable consumption.

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## **Publication**

[Participating in a fruit and vegetable intervention trial improves longer term fruit and vegetable consumption and barriers to fruit and vegetable consumption: a follow-up of the ADIT study.](#)

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