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Assessing the impact of a healthy eating intervention modelled on cooperative learning

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Diet and its role in disease prevention has been well documented⁽¹⁾ and the role of dietary phytochemicals⁽²⁾ i.e. those present in plants and in plant based diets has been recognised as an important factor in disease prevention in particular in the prevention of cancer⁽²⁾. As a consequence there are government-sponsored initiatives to promote healthy eating⁽³⁾, especially among schoolchildren.

The current project was carried out as part of the Angus Learning Festival, a local council educational initiative, in which the focus was on 'health'. The aim of the project was to assess the impact of a 'healthy eating' intervention on awareness of a healthy diet in parents and pupils attending the event based at Arbroath High School, in Angus, UK. The format of intervention was modelled on cooperative learning which has been demonstrated as an effective method for promoting successful learning^(4–6).

Pupils were accompanied by parents and jointly participated in a variety of workshops during the course of the evening. Workshops included identification of herbs and their uses, analysis of a fast-food (McDonald's) menu, designing a healthy dessert and identification of food items using 'touchy-feely' boxes (abstract)⁽⁶⁾. Parents and pupils were invited to fill out an evaluation sheet before and after completion of the workshops. Evaluation forms had been prepared by senior pupils (age range 16–18 years) and were modified versions of a pre-existing evaluation form. Prior to participation in the workshops, all those taking part were given an evaluation form on which they recorded their awareness of healthy eating and the feasibility of changing to a more healthy diet using a linear analogue scale. The range on the scale was 1–10 where 10 was the maximum value. On completion of the workshops participants answered the same two questions and reported their awareness about healthy eating and feasibility to change their diet. Participants were also asked about their usage of soya and the likelihood of practising what they had learned in the workshop. Completed forms were analysed and the impact of the intervention on participants' awareness of healthy eating and the feasibility of changing to a healthier diet were assessed using a Student's *t* test.

Completed evaluation sheets were obtained from fifty-four attendees and analysed.

Group	<i>n</i>	Before intervention		After intervention		<i>P</i> *
		Awareness of healthy eating		Awareness of healthy eating		
		Mean	SE	Mean	SE	
Adults	27	6.9	0.3	7.9	0.2	<0.01
Pupils	27	7.4	0.3	8.3	0.2	<0.01
Pupils and adults	54	7.1	0.2	8.1	0.1	<0.001

*Two-tailed Student's *t* test.

There was a significant feasibility to change diet to a more healthy option after the intervention for adults ($P < 0.05$, one-tailed) and for pupils ($P < 0.05$, one-tailed) and for both groups ($P < 0.001$, one-tailed and $P < 0.001$, two-tailed).

Cooperative learning is a useful and suitable method at school level for carrying out an intervention about healthy eating that involves pupils and adults.

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