

**Title of Intervention:** Increasing fruits and vegetables through peer-modeling

**Intervention Strategies:** Supportive Relationships, Environments and Policies, Individual Education

**Purpose of the Intervention:** To increase consumption and preference for fruits and vegetables

**Population:** Students aged 4 to 11 years

**Setting:** Three primary schools in England and Wales; school-based, home-based

**Partners:** Local health promotion units, education authorities

**Intervention Description:**

- **Supportive Relationships:** There were six peer modeling videos, each six minutes long, featuring the heroic 'Food Dudes'. Food Dudes were a group of 12-13 year olds, two boys and two girls. In each episode, the Food Dudes battled against the evil 'Junk Punks' who planned to take over the world by depriving people of their life-giving fruit and vegetables. To arm themselves for their struggle, the Food Dudes ate (and were seen to enjoy) a variety of fruit and vegetables. They urged all other children, in speech and in song, to keep the "Life Force" strong by doing the same. In addition, a series of letters addressed from the Food Dudes to the children were read to the class by the teacher. The purpose of these letters was to provide the children with praise and encouragement and to remind them of what they had to do in order to win a Food Dude prize.
- **Environments and Policies:** At snack time, which was immediately prior to mid-morning break, children were presented with a snack pack that contained two 20 gram portions of either fruit or raw vegetables. In each school, four different fruits and four different vegetables were presented in a fixed cycle. At lunchtime, as part of their meal, children who had school lunches received a serving of fruit or cooked vegetables. Four different fruits and four different cooked vegetables were presented in a fixed cycle.
- **Individual Education:** Homepacks were introduced to promote fruit and vegetables at home as well as at school. The Homepacks included suggestions about ways of reaching the '5-a-day' target and tips to encourage children to eat more fruit and vegetables. Each also included a sticker card plus stickers for the parents to give to the children when they consumed a sufficient quantity and variety of fruit and vegetables at home. Children were also rewarded for eating the fruits and vegetables served at school.

**Theory:** Not mentioned

**Resources Required:**

- Staff/Volunteers: Classroom teachers
- Training: Not mentioned
- Technology: TV, video player
- Space: Not mentioned
- Budget: Not mentioned
- Intervention: Peer modeling videos, rewards (Food Dude stickers, pens, pencil cases, rulers and erasers), supplemental fruits and vegetables, sticker cards, Homepacks
- Evaluation: Surveys, interview protocol, observational forms

**Evaluation:**

- Design: Pre-/post-test
- Methods and Measures:
  - Fruit and vegetable consumption was measured in school at lunchtime and snack time
  - Parental recall assessed food intake at home
  - Baseline and follow-up surveys assessed preference for fruit and vegetables

**Outcomes:**

- Short Term Impact: Children's liking for fruit and vegetables showed a significant increase.
- Long Term Impact: Fruit and vegetable intake during the intervention was significantly higher than during baseline at lunchtime and at snack time. Fruit and vegetable intake outside school was significantly higher during the intervention on weekdays but not weekend days.

**Maintenance:** Not mentioned

**Lessons Learned:** The peer modeling and rewards-based intervention was shown to be effective in bringing about substantial increases in children's consumption of, and expressed liking for, fruit and vegetables.

**Citation(s):**

Lowe, C. F., P. J. Horne, et al. (2004). "Effects of a peer modelling and rewards-based intervention to increase fruit and vegetable consumption in children." *Eur J Clin Nutr* 58(3): 510-22.