Abstract

Vegetables as First Foods for Babies: Results from a Randomised Controlled Trial †

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Abstract: Many children do not meet vegetable intake recommendations. However, starting complementary feeding (CF) with vegetables only may improve child vegetable consumption. The aim was to examine whether exposure to a vegetables-only diet during the first 4 weeks of CF increases later vegetable acceptance, compared with a control group including fruit and vegetables. In this randomised controlled trial, 108 Auckland infants received either vegetables only (Veg-only, n = 56) or a combination of fruit and vegetables (control, n = 52) for a duration of four weeks at home, starting from the first day of CF; plain cooked meat, fish and/or poultry purée could also be offered to meet iron requirements. At 9 months of age all infants were offered two target vegetables (broccoli, spinach) and a fruit (pear), and the primary outcome measure was intake (grams) of target vegetables. Vegetable liking, rate of acceptance/eating and daily consumption of vegetables/fruit were additional measures. Independent t-test or Mann–Whitney tests were used to compare group differences. Veg-only infants ate significantly more of the target vegetables than controls: median (25th, 75th percentile) broccoli was 47 (27, 72) vs. 30.0 (16, 62) grams, p = 0.024, respectively; spinach was 37 (19, 55) vs. 24 (12, 41) grams, p = 0.028, respectively. Veg-only infants accepted and ate vegetables at a greater rate; daily vegetable intake was also higher (Veg-only 86 (53, 146) grams vs. controls (68 (38, 101) grams, p = 0.042). Fruit intake and other acceptance variables were similar.

Providing vegetables as first foods increased vegetable intake at 9 months of age, and may be a simple strategy to help parents improve their child’s vegetable consumption.

Keywords: infants; weaning; introducing vegetables; food preference; vegetable intake

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data described in the manuscript, code book, and analytic code will not be made available because this was not stated in the ethics application.

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