Influence of choice on vegetable intake in children: an in-home study
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Appetite (2015), 91, 1-6

http://dx.doi.org/10.1016/j.appet.2015.03.025

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ABSTRACT

Children's vegetable consumption is still far below that recommended, and stimulating their intake is a challenge for caregivers. The objective of this study was to investigate whether choice-offering is an effective strategy to increase children's vegetable intake in an in-home situation. Seventy children (mean age 3.7; SD 1) randomly assigned to a choice or a no-choice condition, were exposed 12 times to six familiar target vegetables at home during dinner. In the choice group, two selected vegetables were offered each time, whereas the no-choice group only received one vegetable. Vegetable intake was measured by weighing children's plates before and after dinner. A mixed linear model with age, gender, and baseline vegetable liking as covariates was used to compare intake between the choice and the no-choice group. Mixed linear model analysis yielded estimated means for vegetable intake of 48.5 g +/- 30 in the no-choice group and 57.7 g +/- 31 for the choice group (P = 0.09). In addition, baseline vegetable liking (P < 0.001) and age (P = 0.06) predicted vegetable intake to be higher when the child liked vegetables better and with older age. These findings suggest that choice-offering has some, but hardly robust, effect on increasing vegetable intake in children. Other factors such as age and liking of vegetables also mediate the effect of offering a choice.

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