

Portion sizes: The amounts kids consume could be related to the amounts parents serve themselves

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Research conducted by five universities in Texas, USA, with African American and Hispanic families underscores the relation between portions offered by caregivers and the amounts children consume. The team of researchers performed an in-home observational study with 145 families in order to investigate how the amounts served and consumed by children might be associated with the amounts parents serve themselves.

Evidence from previous research suggests that parents can contribute to their children's overconsumption when offering portions that exceed the appropriate size. Therefore, the aim of this study was to investigate in more detail whether and how the amount of food that parents serve themselves could be related to the amount they serve their children, and in turn to the amounts children consume at dinner time.

In total, 145 African-American and Hispanic families were recruited in 33 family centres in Houston, Texas. The study involved three in-home observations during a family's dinner time. Families were asked to cook their regular meal of the day and serve it in standardised utensils that were provided to them. Researchers took standardised photos of the food that parents served themselves and their children. Two trained dietitians then visually estimated the amount that had been served, in grams. In addition, parents provided the researchers with detailed information on all menu items, recipes and preparation methods in order to facilitate estimation of dietary intake. Food intake was estimated by subtracting the amount of plate waste, minus the non-edible rubbish such as bones or corn cobs which was weighed after the dinner, from the estimated served amount.

Results showed that the amount of food served to the children was associated with the amount that parents served themselves – parents who served large portions to themselves in an eating occasion also served large portions to their children, compared to parents who served themselves smaller portions, regardless of the type of food consumed.

The more the children were served the more they ended up consuming, but no association could be observed between the amount served/consumed and the children's weight status. The authors suggest that this may be explained by the fact that other factors, such as the energy expenditure, that were not measured in this study account for any compensatory effects on food intake. Further exploration of demographic data in the study population showed that African-American compared to Hispanic, and employed compared to unemployed parents served larger portions in general. It should be noted that the presence of researchers during observations could have biased some of the participants' eating behaviours.

These findings, which apply to dinner time meals only, indicate that factors unrelated to the child, i.e. serving habits of parents, are strongly related to a child's food consumption. As shown in this study, the relationship between what parents serve themselves and what they serve their children has important

implications as larger portion sizes may translate into increased food intake.

The authors argue that the results of the study could be applied in interventions targeted at children to increase or reduce food intake. By consistently serving large portions, parents may impose a consumption norm onto their children that may lead them to eat more, in general. By serving smaller portions, however, parents could also prevent excess energy intake in children who are overweight or living with obesity. Future interventions should aim at improving parents' ability to estimate appropriate serving sizes in order to positively influence children's growth outcomes. It should be noted, however, that due to the observational nature of the study, no conclusions can be made regarding the causal effect of the amounts served to children to their food intake.

For further information, please see:

[Johnson SL, et al. \(2014\). Portion sizes for children are predicted by parental characteristics and the amounts parents serve themselves. American Journal of Clinical Nutrition. Published online ahead of print 29 Jan 2014. DOI: 10.3945/ajcn.113.078311.](#)