An adult's perspective on children's portion size

9 May 2017, by Keri Mccrickerd
Children develop their eating behaviors in the environments they grow up in, and whether at home, in childcare or out in eateries, adults determine the quality and quantity of children's food provisions.

**Serving size matters**

Childhood obesity is a serious public health concern in Singapore and around the world, partly caused by the frequent consumption of large portions of calorie rich foods.

Adults and children tend to eat more when served large portions. Research investigating 'The Portion Size Effect' has shown that children as young as 2 years old eat more when served larger-than-normal portions at meal times. This effect is strongest in foods we like the most, which unfortunately are not typically the whole grains and vegetables we actually want children to eat more of.

**The unique role of childcare in Singapore**

The Early Childhood Development Agency reports that 99 per cent of pre-school age children (6 years old and below) attend a pre-school center, where they often eat several meals and snacks. This places childcare providers at the heart of a child’s early food environment.

In a study recently published in the journal *Appetite*, we investigated the influence of portion size on children's lunch intake in a local pre-school. We found that the portions children were served by their teachers were very similar to those the children would serve themselves. This means that, in this particular school, the teachers were relatively 'in tune' with the children's individual portion needs and average portions served to children were in-line with those recommended by Singapore's Ministry of Health (MOH) and Health Promotion Board (HPB).

Importantly, when the teachers were asked to serve a bit extra at lunch (about 50 per cent more than each child's usual lunch intake), the children ate more. This Portion Size Effect was strongest in the oldest children (5–6 years old), who ate everything they were served, and weakest in the young children (2–3 years old), who consistently had leftovers in their bowl. This shows how the portions adults pick can influence how much children eat, especially if children are encouraged to eat everything served.

**Portion Distortion**

So how do adults know how much to serve growing pre-school age children?

In Singapore, pre-school centers like the one we studied can follow the HPB's Healthy Meals in Child Care Centres Programme for guidance on menu-planning, healthier cooking methods and age-appropriate portion sizes.

A potential problem is that younger children (less than 4 years old) rarely consume fixed portions and often eat different amounts depending on the meal or day. In reality, appropriate portions depend on a range of factors, including the size of the child's previous meal, their height, weight and activity level. This variability can lead parents and caregivers to question whether standardized portion guidelines actually apply to their child.

Some parents report 'just knowing' the portions to serve their child. But adults could unintentionally serve too much if portion decisions are biased by factors unrelated to the child's needs, such as serving children portions you would like to eat, or not believing children are full when they are say they are.

**Adults have a role to play in healthy portion decisions**

It is important to recognize that portion sizes will only be problematic if they are consistently inappropriate for a child's age, size and activity level.

If a young child is showing healthy weight gain as
they grow (e.g. is not underweight or overweight for their age and height), the portion sizes they are consuming day-to-day are probably appropriate for their needs. Here, urging children to finish everything on their plate may be unnecessary and could prevent children attending to their own feelings of hunger and fullness.

There is a need for public health professionals to better understanding of how parents and caregivers make portion decisions for children, and assess the use of existing portion guidelines. With such a high rate of preschool childcare attendance, Singapore is in a unique position to be at the forefront of promoting appropriate portion sizes so all adults can support healthy growth in children.


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