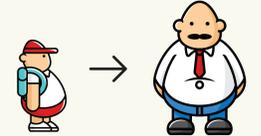




LA Tan, Shubash SG, Chandrika J, Fazila HA, MFuad MA, Nazirah A, Azahadi O
Institute for Public Health
National Institutes of Health, Kuala Lumpur

INTRODUCTION

Childhood obesity is a serious public health problem which has seen a dramatic rise in worldwide prevalence over the past three decades.¹⁻³ **About two-thirds of obese children eventually become obese adults.**⁴



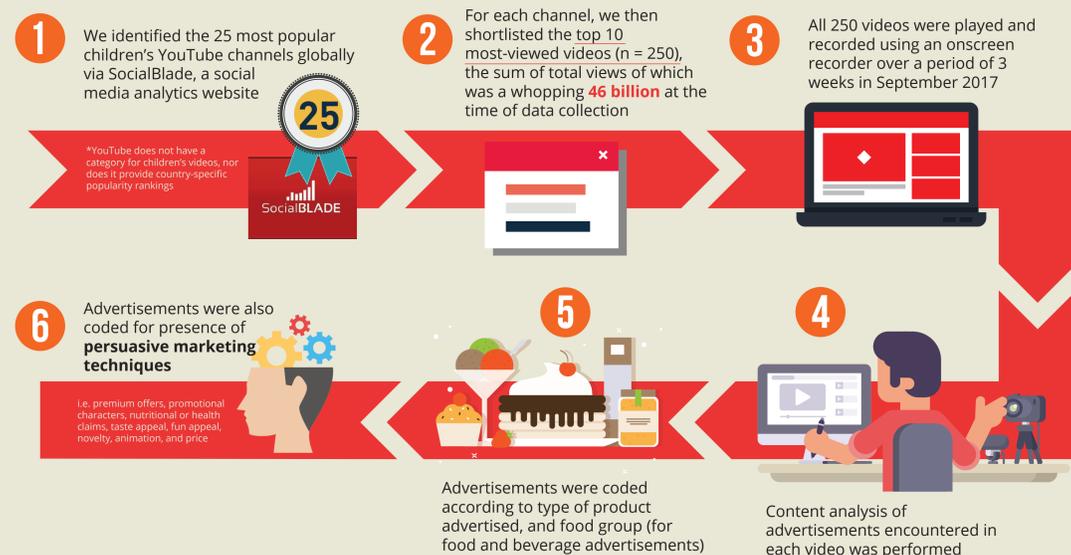
The problem of childhood obesity is a multi-factorial one, with genetic, behavioural, dietary, and environmental components at play.⁵ **A key environmental factor** is the exposure of children to **food and beverage advertising** on television (TV) and other media, which has been shown to influence children's food preferences and consumption.^{6,7}

The **regulation** of food marketing to children has been identified as a promising **avenue for intervention**.⁸ Most research examining food marketing targeted at children has focused on traditional media, specifically TV advertising.^{9,10}



There are relatively few studies examining food marketing to children in **new media** despite its growing popularity. For example, YouTube has **taken center-stage in children's lives** with half accessing it every day and almost all using it at least occasionally.¹¹

METHODS



RESULTS

54hrs
Total duration of videos recorded in this study

3/4 of all videos viewed had at least one ad, of which:
58% were banner ads
42% were video ads (both skippable and non-skippable)

38%
Food and beverage ads were most frequently encountered,

Nutritional or health claims (54%) was the most commonly employed persuasive marketing technique, followed by taste appeal (51%) and novelty (32%)

where **49%** of these promoted foods **high in fat, salt and sugar**

- 45%** DAIRY PRODUCTS
- 28%** CONVENIENCE / FAST FOOD
- 21%** SWEETS AND CANDY

DISCUSSION

- About half of food advertisements aimed at children on YouTube were for unhealthy food products, reflecting similar trends seen in television advertising
- Food marketing via new media is possibly far more potent as content is actively sought out, rather than being broadcast, and is accessible anytime and anywhere
- In light of this, more stringent regulations governing food marketing to children online needs to be considered

REFERENCES

- Lobstein, T., Baur, L. & Uauy, R. Obesity in children and young people: A crisis in public health. *Obes. Rev.* 5 Suppl 1, 4-85 (2004).
- Morgen, C. S. & Sørensen, T. I. A. Obesity: Global trends in the prevalence of overweight and obesity. *Nat. Rev. Endocrinol.* 10, 513-514 (2014).
- Ng, M. et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: A systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 384, 766-781 (2014).
- Wang, Y. & Beydoun, M. A. The obesity epidemic in the United States - Gender, age, socioeconomic, racial/ethnic, and geographic characteristics: A systematic review and meta-regression analysis. *Epidemiol. Rev.* 29, 6-28 (2007).
- Lake, A. & Townshend, T. Obesogenic environments: exploring the built and food environments. *J. R. Soc. Promot. Health* 126, 262-267 (2006).
- Cairns, G., Angus, K. & Hastings, G. The extent, nature and effects of food promotion to children: a review of the evidence. Technical paper prepared for the World Health Organization: World Health Organization (2009).
- Cairns, G., Angus, K., Hastings, G. & Caraher, M. Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary. *Appetite* 62, 209-215 (2013).
- Hawkes, C. & Lobstein, T. Regulating the commercial promotion of food to children: A survey of actions worldwide. *Int. J. Pediatr. Obes.* 6, 83-94 (2011).
- Kelly, B. et al. Television food advertising to children: A global perspective. *Am. J. Public Health* 100, 1730-1736 (2010).
- Kelly, B. et al. Children's exposure to food advertising on free-to-air television: An Asia-Pacific perspective. *Health Promot. Int.* 31, 144-152 (2016).
- Children spending more time online than watching TV for the first time | Media | The Guardian. The Guardian (2016). Available at: <https://www.theguardian.com/media/2016/jan/26/children-time-online-watching-tv>. (Accessed: 15th November 2017).

Corresponding author: **Dr LeeAnn Tan**
Institute for Public Health
leeann@moh.gov.my