DO TELEVISION FOOD ADVERTS INCREASE EATING IN THE ABSENCE OF HUNGER BEHAVIOURS IN CHILDREN?

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OBESOGENIC ENVIRONMENT - TELEVISION FOOD ADVERTISING

Childhood obesity UK - 26% boys 29% girls (Ng et al., 2014).

Obesogenic environment “the sum of influences that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations” Swinburn & Egger (2002).

Television advertising primary medium of food promotion to children.

WHO (2010) “global action to reduce the impact on children of marketing of foods high in saturated fats, trans-fatty acids, free sugars, or salt”.
TELEVISION FOOD ADVERTISING STUDIES

Food advertising has been shown to increase ad libitum food intake in all participants (Halford et al., 2004).

Overweight (OW) and obese (OB) children may be more responsive to food promotion, demonstrating increased calorie intake in comparison with normal weight children (Halford et al., 2008).
EATING IN THE ABSENCE OF HUNGER (EAH)

EAH - behavioural pathway to childhood obesity

Cross sectional studies (Birch et al., 2003; Perez-Morales et al., 2013).

Prospective studies (Fisher & Birch, 2002; Shunk & Birch, 2004).

Another literature - food cues have the capacity to stimulate overeating, especially in children who are obese or overweight (Jansen, 2003), supported by research into the neural mechanisms of food motivation (Bruce et al. 2013).

No study has yet examined whether television food advertising may provoke EAH behaviours in children.
THE CURRENT STUDY

Mixed-measures design

- one between-subjects factor (physiological state; hungry or sated)
- one within-subjects factor (advert condition; food or non-food).

Participants aged 7 - 11 (N = 110)
PROCEDURE

- Food Ads first
  - McDonald's
  - Haribo
  - Oreo

- Toy ads First
  - Bratz
  - Disney
  - Toy Story

- Hunger measure

- Ad libitum food intake task

- Height and weight (2nd time only)

How hungry do you feel right now? Please put a tick on the face that best describes how you feel.

- FULL
- QUITE FULL
- NOT HUNGRY OR FULL
- QUITE HUNGRY
- HUNGRY
EXAMPLE FOOD ADVERTS
(EXPERIMENTAL CONDITION)

Haribo Tangfastic – ‘She’s Tangfastic’

Snickers – ‘You’re not you when you’re hungry’

Oreos – ‘Explanation to Daddy’

KFC – ‘Deluxe Boneless Box’
AD LIBITUM CONSUMPTION

- High fat savoury
- Low fat
- High fat sweet
- Low fat sweet
- Fruit
- Vegetable
H1 – in the hunger state, exposure to (HFSS) food advertising would increase food intake in all children, relative to after exposure to non-food advertising.

H2 - a weight status difference in response to exposure to food advertisements would occur where OW/OB participants show higher ad libitum food intake.

H3 - sated normal weight (NW) children would not increase ad libitum intake whilst OW/OB participants would still respond to TV food adverts.
PRELIMINARY ANALYSIS

3 way mixed ANOVA (within subjects factor: advert type; between subjects factors: weight status, hunger status).

**H1 – Hunger state**

No effect of food adverts on consumption across all participants when hungry.

**H2 - Weight status**

OW/OB children showed a significant increase in food consumption after watching food adverts compared with toy adverts (298.6g v 273.3g; t(20)=2.105; p=0.048).
H3 – Eating in the Absence of Hunger

When sated, OW/OB children showed a trend towards greater food intake after food ads compared to non-food ads (300.4g v 273.0g; t(12)=1.857; p=0.088) whereas NW children did not.
DISCUSSION

TV food promotion = primes further food intake in already sated OW/OB children.

Tentatively supports further tightening of regulations around food marketing to children.

Majority of food adverts are high in fat, sugar and salt (HFSS) – Boyland and colleagues (2011).

Ofcom regulations in place but exposure has not decreased since Ofcom regulations (Adams et al., 2012) and may even have increased (Galbraith-Emami & Lobstein, 2013).

Further research could explore this phenomenon in relation to other food promotion techniques (e.g., online advergames).
THANKS FOR LISTENING!

Any questions?
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