



# Obesity in children – what is the best management?

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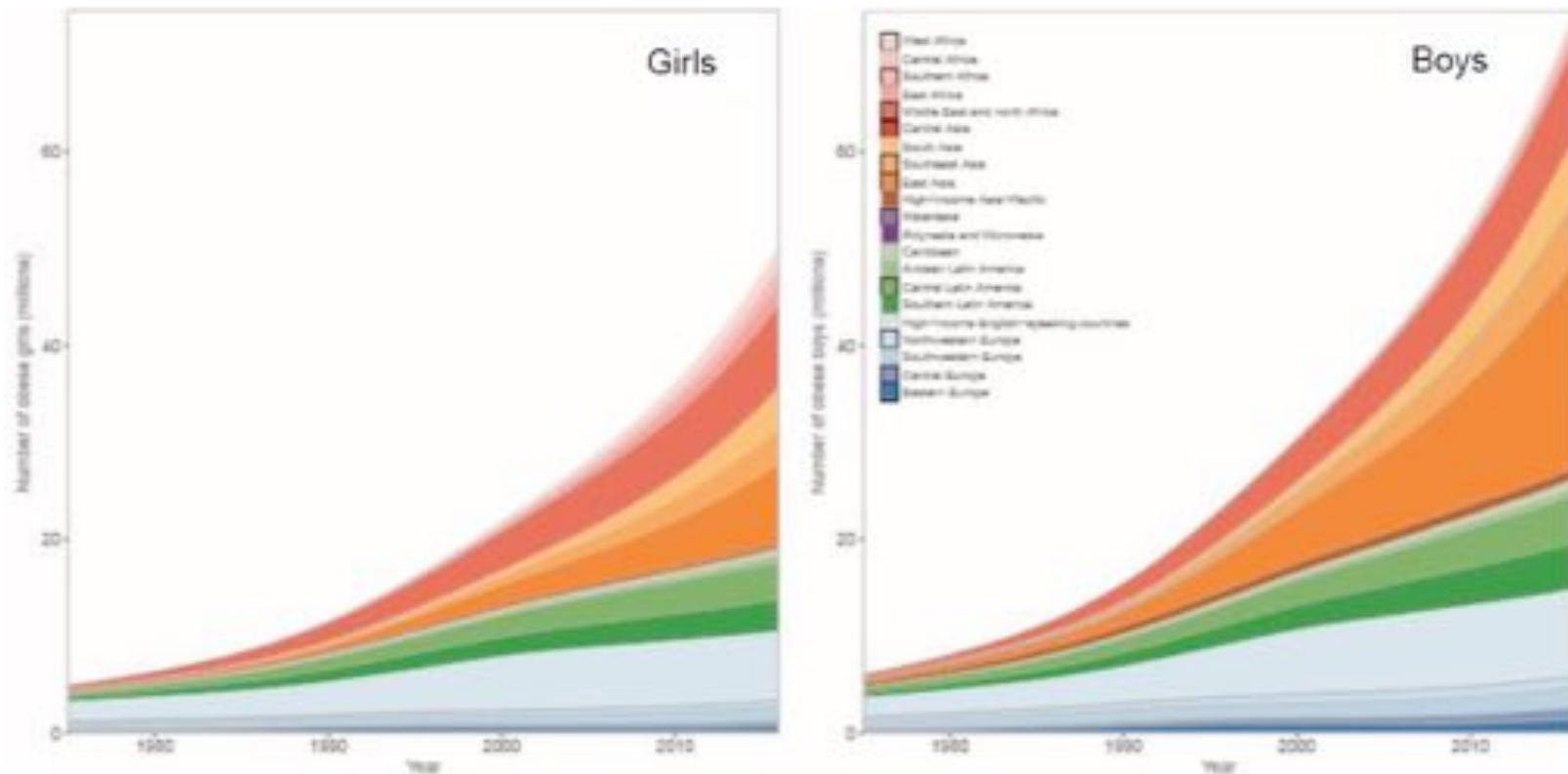
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# Obesity: Increasing 124 million obese children worldwide (Lancet, 2017)

Figure 1. Number of obese children worldwide, age 5-19, 1975-2015.



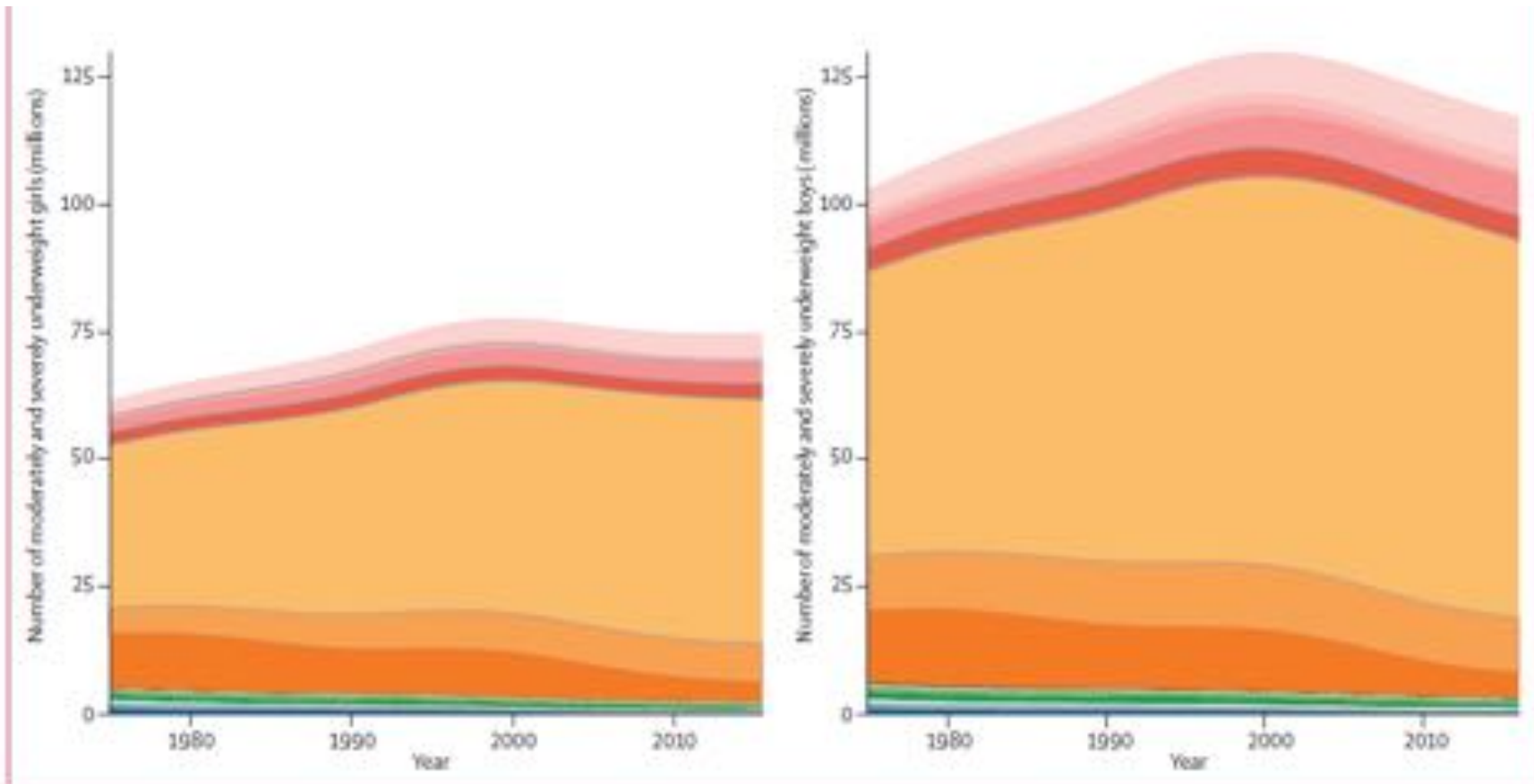
Source: NCDRisC Collaboration, The Lancet, forthcoming.





# Underweight: Declining

192 million underweight children worldwide  
(Lancet, 2017)



## 1st Cochrane Review (2004): Easiest to reach those most motivated

- 18 randomized controlled studies (975 participants)
- Best research conducted in populations most likely to respond to interventions, such as motivated white educated middle-class families
- Lack of generalizability to everyday practice

Summerbell CE et al. Interventions for treating obesity in children. Cochrane Review 2004

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## 2nd Cochrane Review (2009): Behavioral component important

- 64 RCTs (5230 participants)
- 10 drug trials, 54 lifestyle trials in school age children
- **Combined** (food + physical activity + behavior) interventions produce a significant and clinically meaningful reduction in overweight.

Oude Luttikhuis et al, Cochrane Review 2009

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Europe  
2010

## **Evaluation of the Overweight/Obese Child – Practical Tips for the Primary Health Care Provider: Recommendations from the Childhood Obesity Task Force of the European Association for the Study of Obesity**

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- 
- ✓ Careful and comprehensive evaluation
  - ✓ Assessment of risk factors
  - ✓ Multidisciplinary approach





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2013

## Position Paper 2013 The Academy of Nutrition and Dietetics: Interventions for the Prevention and Treatment of Pediatric Overweight and Obesity

- Multicomponent interventions most effective, especially for primary care prevention.
- Family important of secondary prevention/treatment.
- Interventions should be age-appropriate.

Hoelscher, JADA 2013





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Europe  
2015

**Obesity Facts**  
The European Journal of Obesity

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## Clinical Information

# Childhood Obesity Is a Chronic Disease Demanding Specific Health Care – a Position Statement from the Childhood Obesity Task Force (COTF) of the European Association for the Study of Obesity (EASO)

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Jens Christian Holm<sup>e</sup> Paulina Nowicka<sup>f</sup> Grace O'Malley<sup>g</sup> Ram Weiss<sup>h</sup>

- ✓ Chronic disease
- ✓ Long-term follow-up and treatment





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2017

Clinical Review & Education

JAMA | US Preventive Services Task Force | RECOMMENDATION STATEMENT

## Screening for Obesity in Children and Adolescents

US Preventive Services Task Force  
Recommendation Statement

US Preventive Services Task Force

### **CONCLUSIONS** (JAMA 2017;317(23):2417-2426)

- Comprehensive, intensive behavioral interventions (26 contact hours) in children and adolescents 6 years and older who have obesity can result in improvements in weight status for up to 12 months.
- There is inadequate evidence regarding the effectiveness of less intensive interventions.
- The harms of behavioral interventions can be bounded as small to none, and the harms of screening are minimal.



## Update of the best practice dietetic management of overweight and obese children and adolescents: a systematic review protocol

Vanessa A. Shrewsbury; Tracy Burrows; Mandy Ho; Megan Jensen; Sarah P. Garnett; Laura Stewart; Megan L. Gow; Louisa J. Ellis; Li Kheng Chai; Lee Ashton; Jacqueline L. Walker; Robyn Littlewood; Daisy Coyle; Paulina Nowicka; Amy Ashman; Alessandro Demai; Kerith Duncanson; Clare Collins

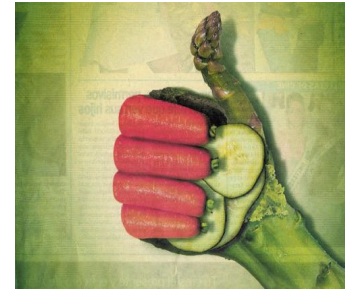


- Dietary improvements through obesity interventions?
  - To examine in detail **the dietary outcomes** of the included dietary interventions,
  - **The characteristics** of these interventions which are associated with improvement in adiposity and dietary outcomes.
- Children and adolescents with overweight or obesity
- Update of previous systematic reviews

Collins CE, Warren JM, Neve M, McCoy P, Stokes B. Systematic review of interventions in the management of overweight and obese children which include a dietary component. *JBIR Libr Syst Rev* 2007; 5(1): 1-70.

Ho M, Jensen ME, Burrows T, et al. Best practice dietetic management of overweight and obese children and adolescents: a 2010 update of a systematic review. *JBIR Database of Systematic Reviews and Implementation Reports* 2013; 11(10): 190-293.

## Characteristics of the successful interventions



- 159 eligible RCTs with dietary interventions
- 101 studies (63.5%) reported on at least one dietary-related outcome
- The interventions that achieved dietary improvements were
  - of high intensity
  - face-to-face individual or group lifestyle interventions
  - requiring participation for at least three months
  - followed by a longer follow-up component of moderate intensity  
(less frequent face-to-face or periodic contact via phone, text messaging or newsletters, plus a home based transition component)  
for a period of time ranging from a further three to 18 months.
- Interventions aimed at children over the age of 10 years were directed towards the participating child.
- Interventions for children under 10 years were directed at a parent, or were parent and child focused.



# Summing up

## What is the best management?

- For younger children
- Multidisciplinary
- High intensity
- Involving parents

## What doesn't work?

- One-component interventions (diet-only or physical activity only)
- Not involving parents
- For older children
- Involving socially disadvantaged families

Thank you! Paulina

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