

NCOSS – June 2017

Improving outcomes for vulnerable young people – why child obesity matters

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**the
childr^en's
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**THE UNIVERSITY OF
SYDNEY**

Obesity

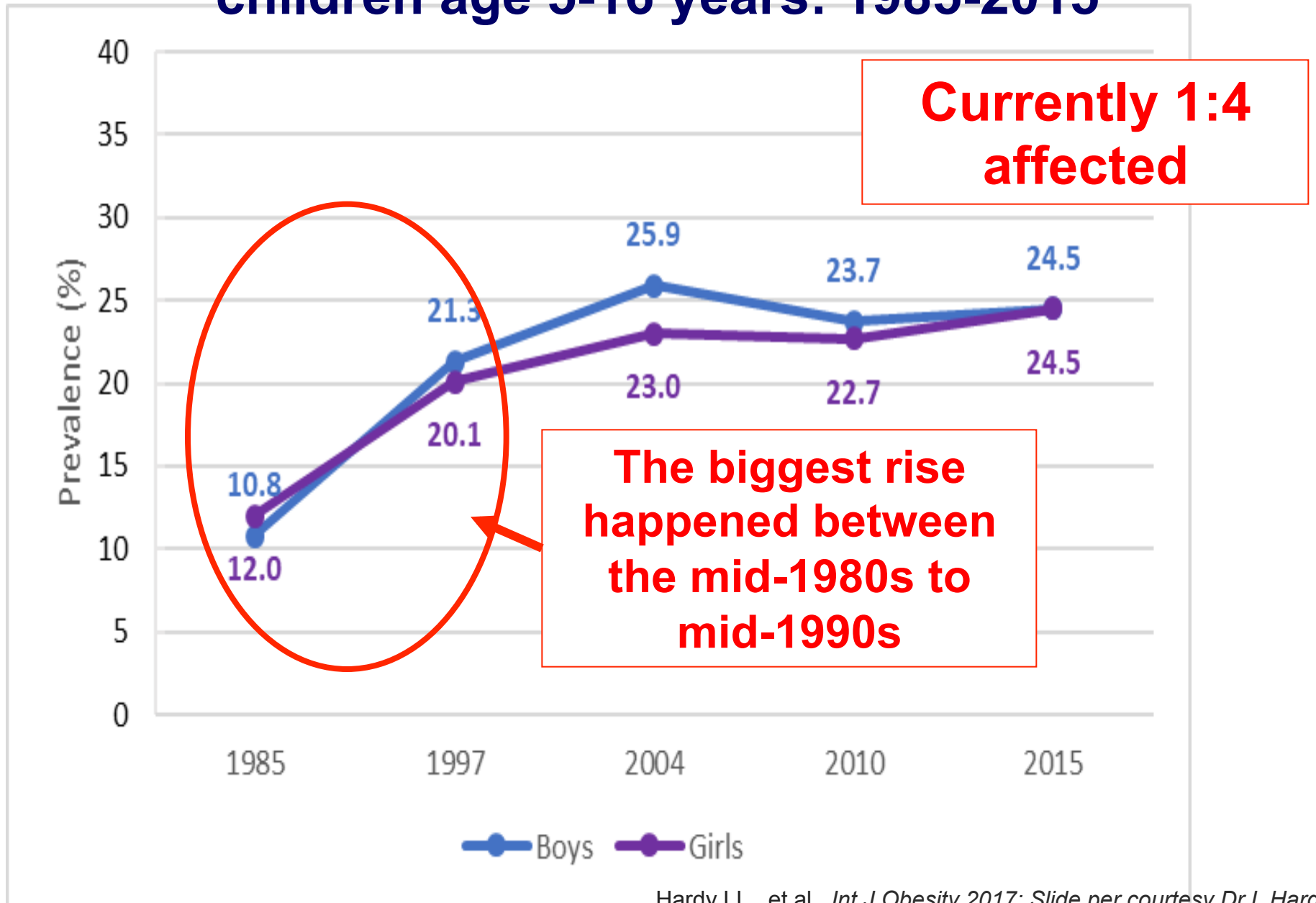
- **A serious, chronic, relapsing disease**
 - **Highly prevalent among adults in Australia and globally**
- **But is it really an issue for young people?**

**How much of a problem is overweight
& obesity in Australian (and NSW)
children and adolescents?**

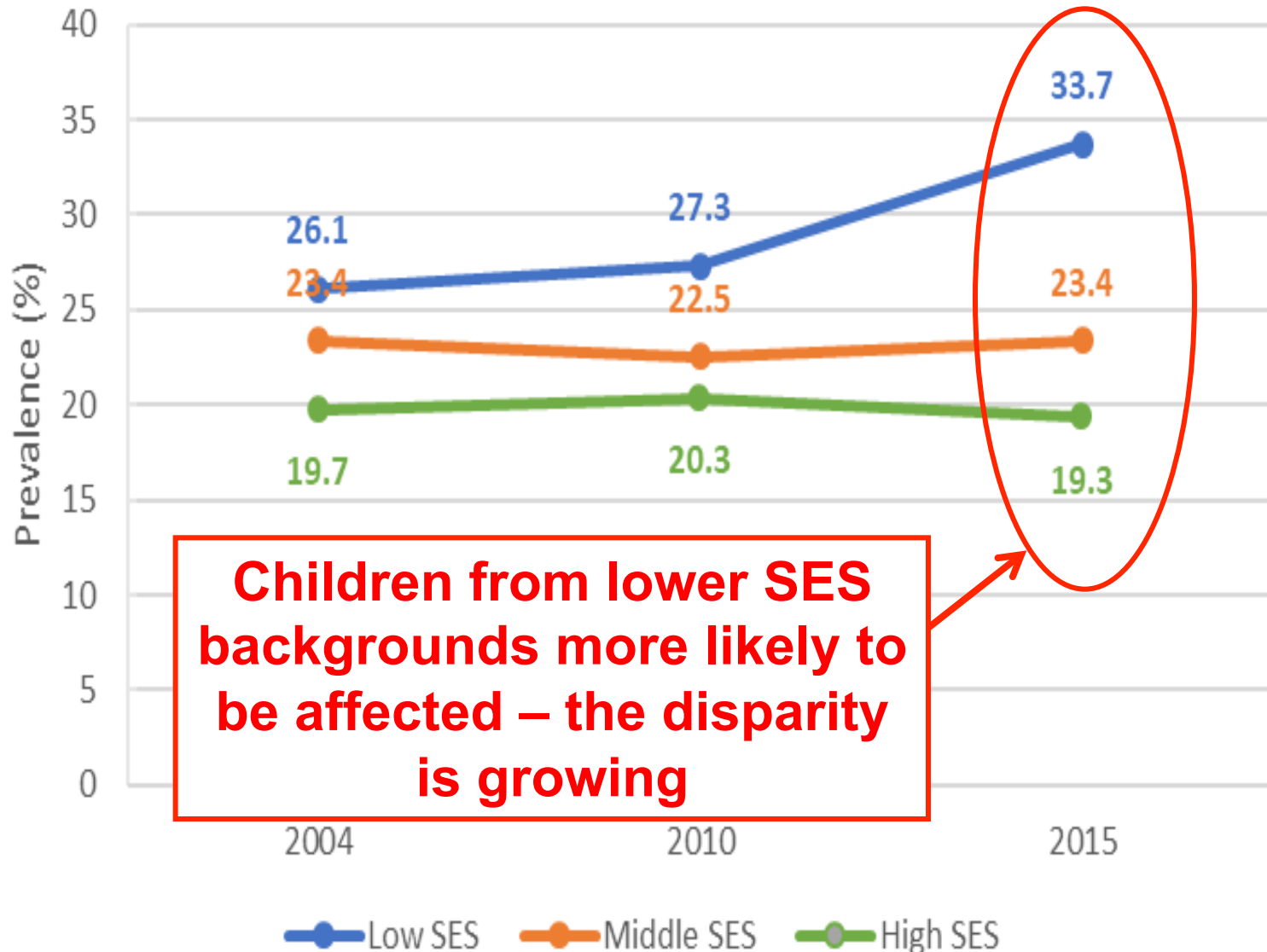
Your thoughts please. What percentage in each group is affected by overweight or obesity?

- School-aged children?
 - 22-24% (7% obesity)
- School-aged adolescents?
 - 27-28% (5.5% obesity)
- 4-5 year olds?
 - 20%
- 4-5 year olds who are Indigenous?
 - 28%
- School-aged children of Middle Eastern background?
 - 42%

30-year trends in overweight and obesity in children age 5-16 years: 1985-2015

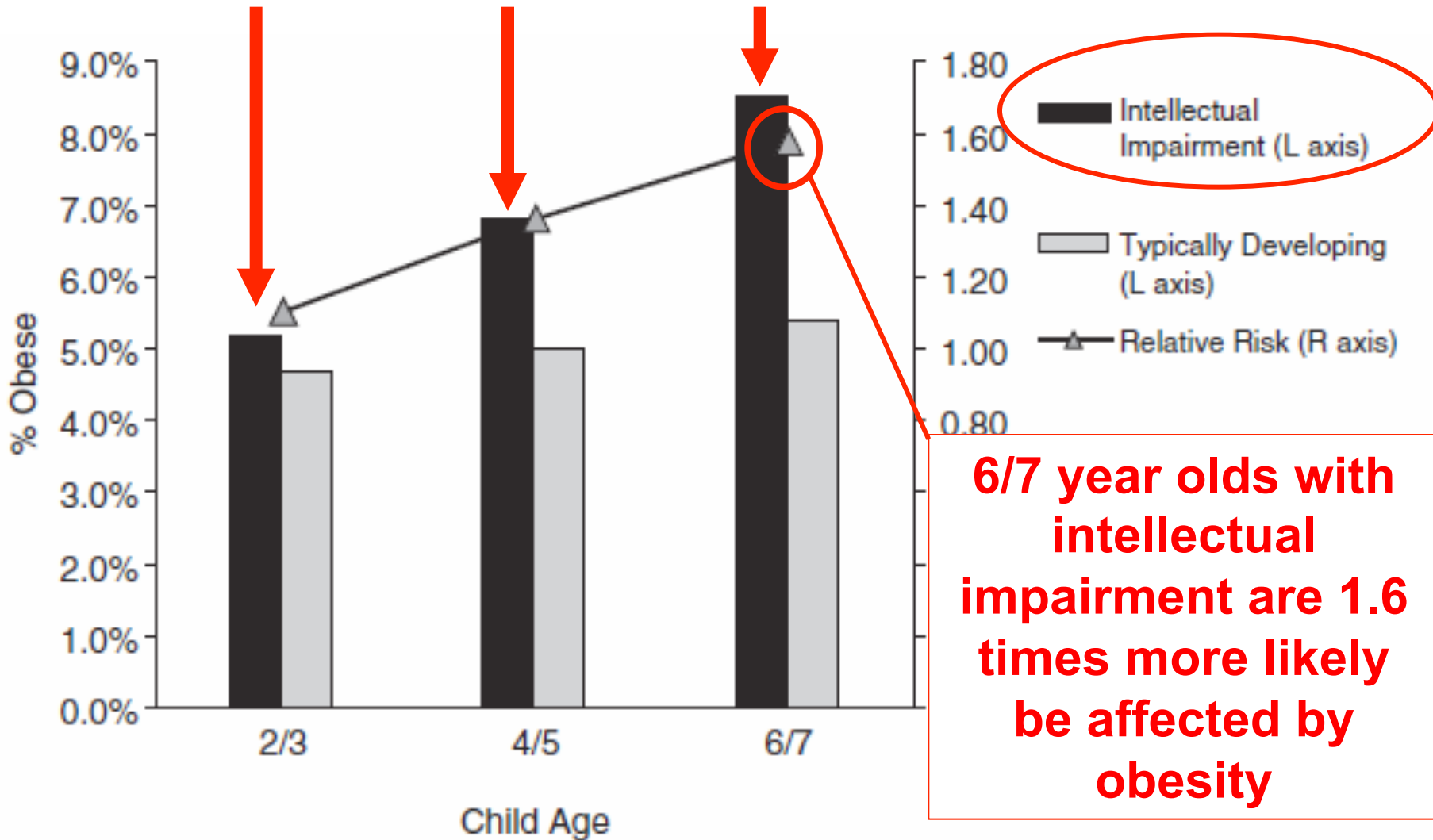


... and the social disparities in prevalence of overweight & obesity are widening



Young people with disability are also at increased risk of obesity – even at a young age in children with intellectual disability

Rates and relative risk of obesity among young Australian children (Emerson & Robertson, *Int J Pediatr Obes* 2010)



Longitudinal Study of Australian Children (LSAC): ~4,500 at each time point; Obesity - BMI and IOTF definition; Child intellectual impairment – more than 1 SD below population mean for LSAC; Based on short form of MCDI, Parents' Evaluations of Developmental Status Scale; PPVT, WAI Test of School Readiness & parent/ teacher ratings

How much of a problem is it?

***Consequences of obesity in childhood
and adolescence***

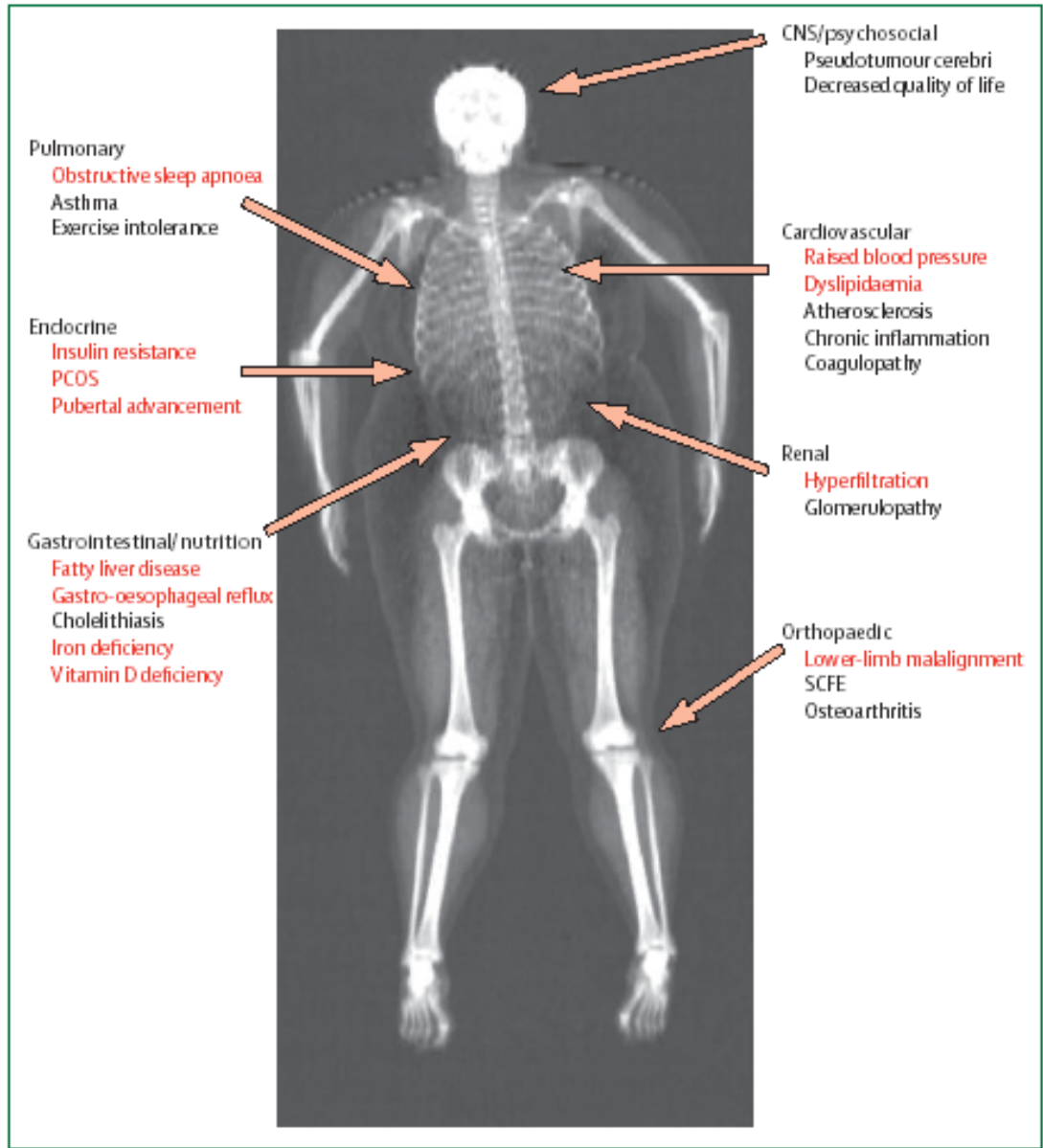


Figure 3: Complications associated with childhood obesity

Image obtained by dual energy x-ray absorptiometry from a teenage girl with BMI 38 kg/m². Disorders that are of high prevalence and are well established in their association with childhood obesity are shown in red. PCOS=polycystic ovary syndrome. SCFE=slipped capital femoral epiphysis.

Complications associated with obesity in childhood and adolescence

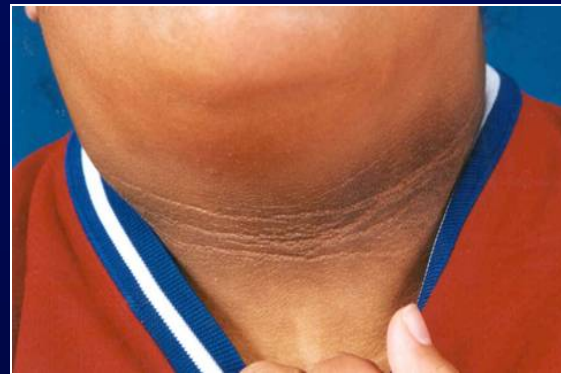
→ **MANY organ systems are potentially affected. More likely: severe obesity, adolescents**

Slipped femoral epiphyses (growth plate slippage at the hip joint)

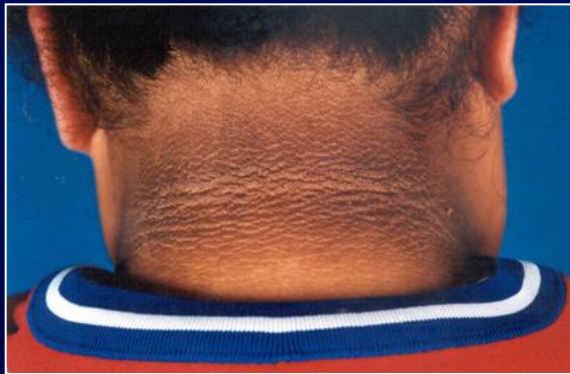


Obstructive sleep apnoea

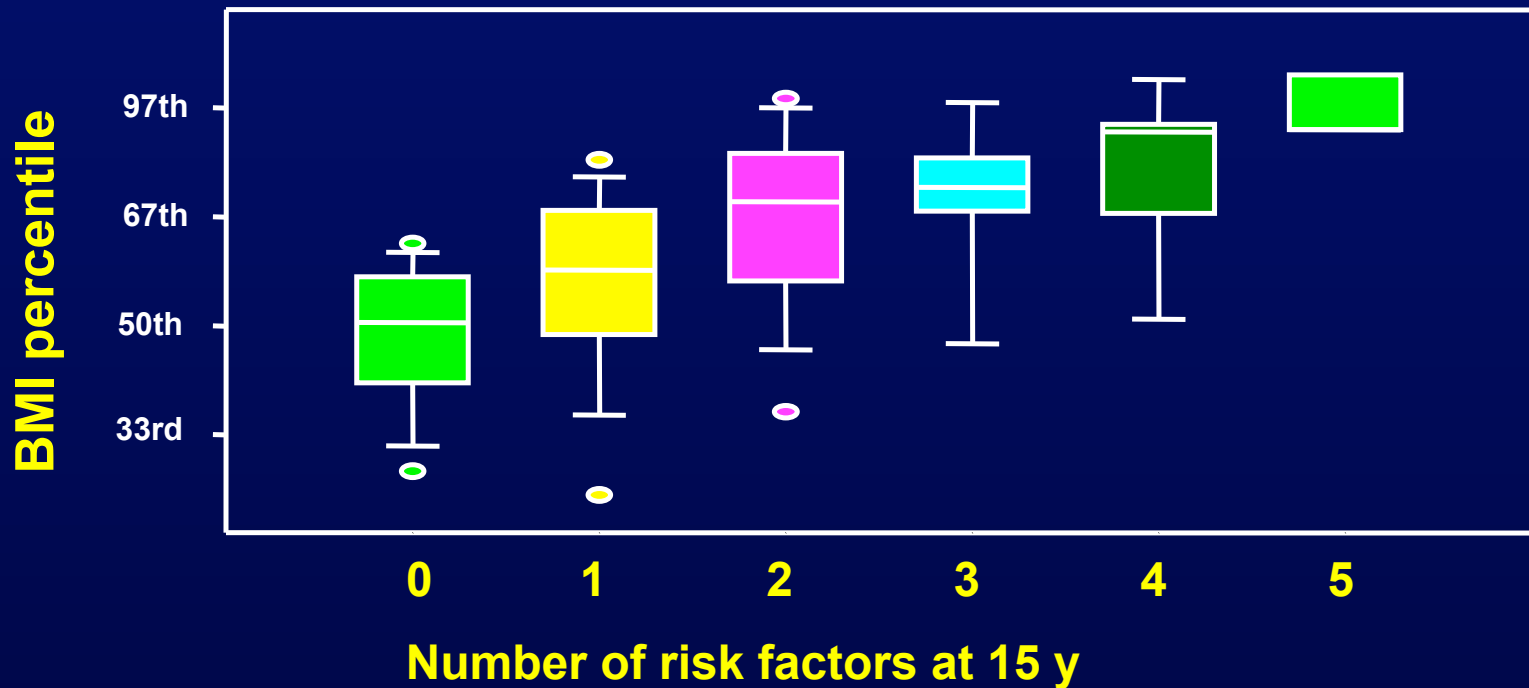
We are seeing more of these & other obesity-associated complications in children and adolescents



Acanthosis nigricans – insulin resistance/pre-diabetes



**In the Nepean Birth Cohort Study (western Sydney),
at 15 years: the higher the body mass index, the greater
the number of risk factors for heart disease and diabetes**



*Defined as 3 or more of the following: high glucose, insulin, triglycerides, systolic blood pressure, or low HDL-cholesterol (*Lambert et al. 2004*); *Garnett et al, Am J Clin Nutr 2007; 86:549-555*

Obesity in childhood and especially adolescence has many medium to long-term problems as well

- **Risk factors for later heart disease & diabetes**
- **Poorer psychosocial functioning in early adulthood (women)**
- **Persistence of obesity into adulthood**
- **Increased risk of metabolic syndrome in early to mid adulthood**
- **Increased risk of a variety of cancers in mid-adulthood**

Young people, however, are generally more worried about the psychosocial consequences of obesity

- **Bullying**
- **Stigmatisation**
- **Lowered self-esteem**
- **Poor body image**
- **Risk of depression (adolescent girls)**

... and about fitting in with their peer group

So, what is causing this high prevalence of obesity?

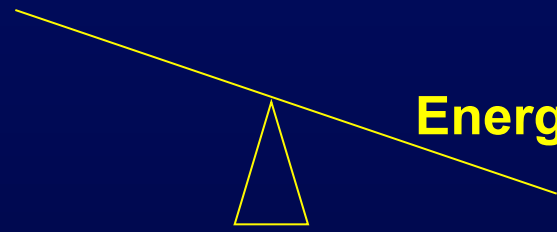
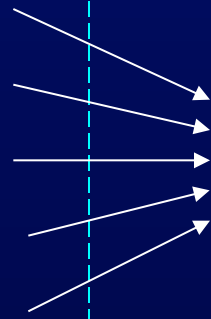
Genetic predisposition

Chronic energy imbalance

**Numerous
environmental
influences**

Energy expenditure

Energy intake

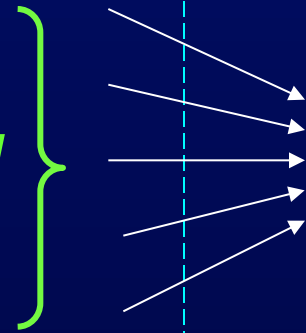


Genetic predisposition

Chronic energy imbalance

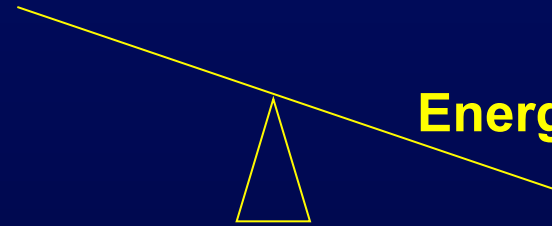


Numerous environmental influences



Energy expenditure

Energy intake



epigenetic influences; medications; parenting styles; psychosocial stress; smoking; early life factors...


**It is the environment which
determines whether an
individual's genetic predisposition
to obesity is manifest or not**



Home Action Adventure Board Dress Up Fighting Fly

Ads by Google Play All Games Shooting Games Strategy Games Fighting Game

Nesquik Quest



Hi there!
Join me on an **adventure** in the city!
Can you help me get my glass of **Nesquik**?
Pick an **adventure** !

1 2 3 4 5 6 7 8

Instructions



Our cultural wallpaper



The default response to most westernised environments – especially much of Australia – is to be *less physically active, more sedentary and to over-consume energy-dense foods & drinks*

So, given it is a problem, how then do we respond to it?

Complementary approaches to prevention

Individual behaviour change

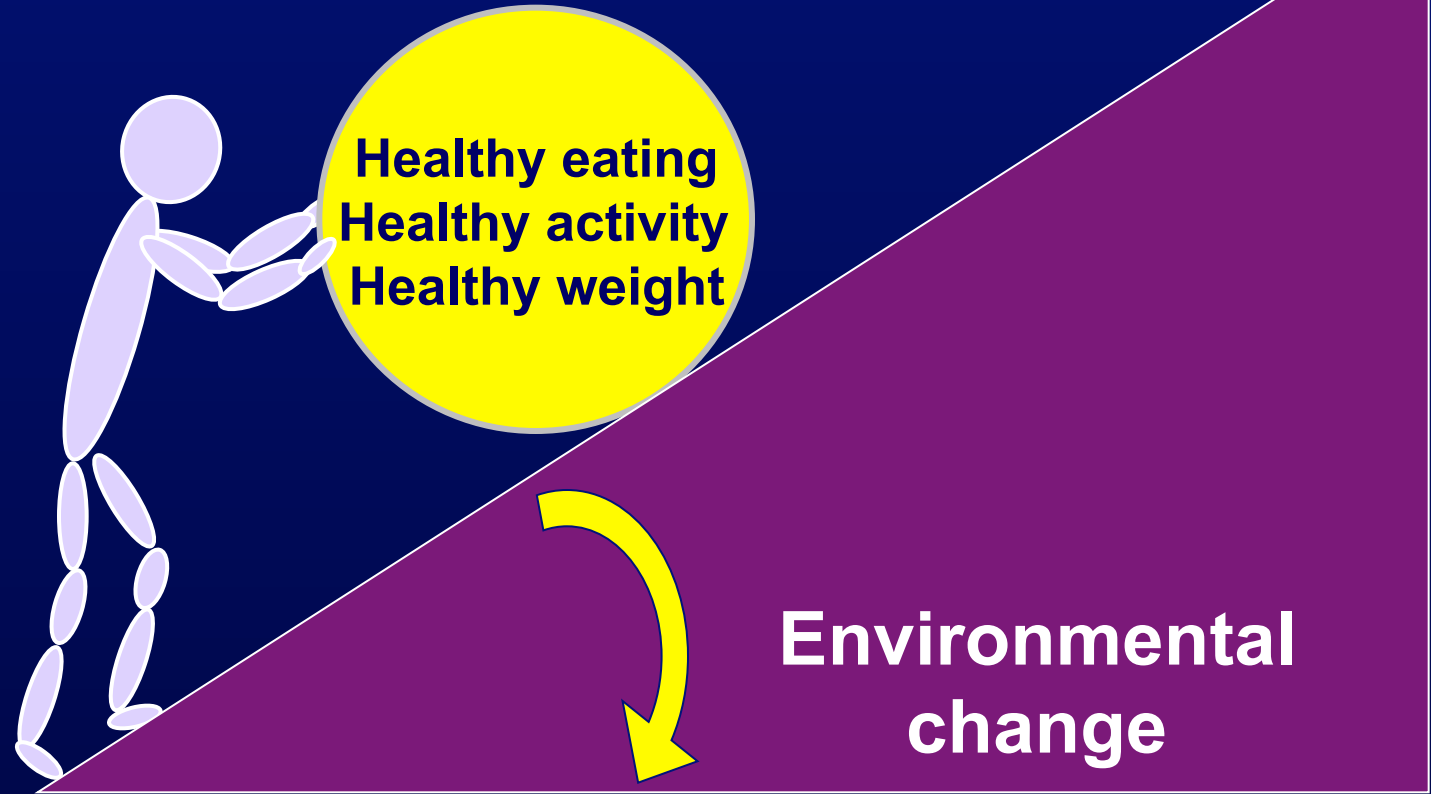


Environmental change

The environmental gradient is steep

Complementary approaches to prevention

Individual behaviour change



So, changing the gradient ...

Complementary approaches to prevention

Individual
behaviour change



... will make it easier
to change behaviour

So, what approaches can:

Make the gradient less steep?

and/or

**Support individuals and families
to change behaviour?**

**Today, many of the speakers
will be addressing the broader
environmental factors**

**So here are some
recommendations for
individuals, carers, families, or
organisations looking after
young people**

What are the basic healthy lifestyle factors that can be promoted in a household?

8 for a healthy weight

Information is relevant for children aged 2 years and older



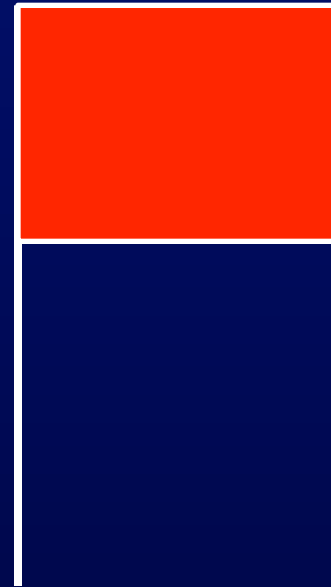
Healthy Kids for Professionals:
<https://pro.healthykids.nsw.gov.au/>

A very sensible – but at times challenging – starting point for all households

Co-production between existing clinical services and NSW Ministry of Health. Went “live” -May 2017. Now being adapted for specific cultural groups

Red flag areas

- Food, TV and other screens used routinely as behaviour reinforcers
- Family members or friends who give extra foods (or even TVs and screens) as treats
- Only the biggest young person is singled out for *“the healthy lifestyle”*
- → importance of family/ household role modelling – one healthy rule for all!



When weight problems are *already* present

- **See the GP, ask for a medical assessment and a management plan**
- **Get support to make changes in lifestyle:**
 - **All of the healthy lifestyle basics will still apply**
 - **Support from a dietitian, clin psych, nurse or exercise professional can be extremely helpful**
 - **People with low levels of physical activity will need lower energy intake**

When weight problems are *already* present

- Consider whether these free NSW Health programs may be suitable
 - Go4Fun (7-13 year olds)
 - Get Healthy Phone Coaching (16+ y)



Register

What

Why

Where

When

FAQ

A free lifestyle program for kids aged 7 – 13



**FREE PERSONAL TELEPHONE
HEALTH COACHING**

When weight problems are *already* present

- **Get support to manage weight-related complications, such as diabetes, sleep apnoea ...**
- **Get support to pro-actively manage weight gain complications of some medications (e.g. anti-psychotics, some anti-epileptics ...)**

Remember, there are barriers to providing treatment services in real-life settings

Barrier	Potential intervention strategy
Poverty	Focus on low-cost food alternatives Provision of low cost physical activity alternatives
Culturally & linguistically diverse patients	Culturally sensitive weight management advice
Learning disabilities & developmental disorders	Greater family involvement Intensive practical interventions Involvement of specialist support services
Illiteracy or poor literacy	Minimise/eliminate written material Simple key messages Frequent phone support
Family in crisis	Crisis intervention Case management until the situation stabilises Additional support services
Psychiatric disorders	Mental health treatment & support services Case management until the situation stabilises

As a health professional, if you want further information about clinical management options

NSW Ministry of Health website with resources for health professionals, local referral pathways

healthykids
for professionals


Weight management resources
for health professionals

Online Learning

Videos

FAQ

Resources

 Home

Assess

Advise

Assist

Arrange



This website is designed to help health professionals manage children above a healthy weight, and their families.

 ASSESS

 ADVISE

 ASSIST

 ARRANGE

Healthy Kids for Professionals provides you with all the resources you need to:

- understand the health and social impacts of children above a healthy weight
- accurately assess a child's weight status and identify children above a healthy weight
- sensitively discuss the issue of weight status with their families
- communicate key lifestyle messages sensitively to parents
- provide children and families with resources and practical support to make positive lifestyle changes
- refer child programs.

<https://pro.healthykids.nsw.gov.au/>



WEIGHT4KIDS

Weight4Kids Core Module

Weight4KIDS is a professional development online learning program for all health professionals.

Read more >

... and well evaluated e-learning resources:

- Professional development online learning program for ***ALL health professionals*** dealing with children
- A series of short e-learning modules
- Includes basic anthropometry, growth charts, raising the issue, initial advice, ... interpreting blood tests
- Freely available on NSW MoH website

<https://pro.healthykids.nsw.gov.au/>

Summary

- **Child and adolescent obesity *does* matter:**
 - **Especially prevalent in those:**
 - **from disadvantaged backgrounds**
 - **with intellectual disability**
 - **Obesity in particular is associated with a range of immediate and future health risks**
- **We need effective ways of both preventing AND treating obesity in children and young people**
- **There is a vital role for households, families, carers, NGOs in providing a healthy lifestyle for all children and young people**
- **New NSW Health resources**

8 for a healthy weight

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Thank you!

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