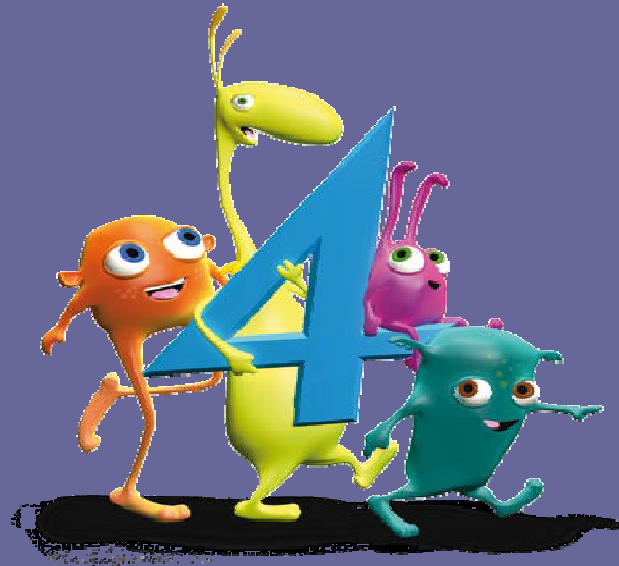


# Healthy Kids Check

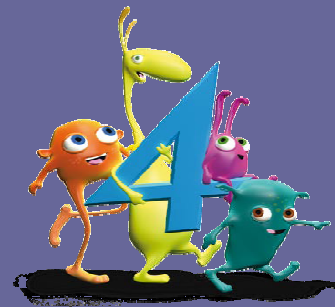


## Height and Weight

- Average Height and Weight of a four year old
- Calculating Body Mass Index (BMI)
- Identifying Lifestyle Risk Factors
- Case study

# Objectives

- Assess if child is within the healthy weight range
- Calculate BMI and assess if within healthy range
- Enhance knowledge of four year olds development and how it influences a child's eating and drinking habits
- Provide education and guidance to parents/carers regarding healthy eating habits for four year olds, empowering parents to make necessary changes
- Identify lifestyle risk factors for family
- Increase knowledge of referral pathways if child requires further investigation and assessment



## Growth Measurements

- Measurement of a child's physical growth is an essential part in evaluating their health status
- Plotting values of measurements on percentile charts shows a child's progress
- Different groups of children will have VARYING normal parameters
- Growth patterns are variable, it is advisable to compare growth measurements over time



## Weight

- Average weight of a four year old boy is 16.5 kg, “normal range” can be 13-21 kg
- Average weight of four year old girl is 16.0 kg, “normal range” can be 13 -21 kg
- Scales used should be on flat surface to ensure accuracy
- Child needs to be still when on the scale
- No shoes recommended
- Plot child’s weight on growth chart

## Height

- Height or stature is the measurement of a child whilst standing
- Height should be measured with child’s back to wall and shoes removed
- Average height of four year old boy 102cm, “normal range” 94cm-111cm
- Average height of four year old girl 101cm, “normal range” 93cm- 110cm

# Body Mass Index

## BMI

- Calculating a child's Body Mass Index (BMI) measures excessive weight in children
- It should be used as a standard measure of weight and obesity for 2-18 year olds
- Formula for calculation is

Gender

Weight (Kg) / Height  $m^2$

e.g 17.1 kg / 1.05  $m^2$

BMI is 15



Adult BMI Calculator - NSW Department of Health - Windows Internet Explorer provided by Sydney South West Health Service

http://www.health.nsw.gov.au/publichealth/healthpromotion/obesity/bmi.asp

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Adult BMI Calculator - NSW Department of Health

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## Adult BMI Calculator

One measure commonly used to measure overweight and obesity is the Body Mass Index (BMI). The BMI is a relationship between weight and height that is associated with body fat, nutritional status and health risk.

BMI is determined by your weight in kg divided by your (height in metres)<sup>2</sup>.

For adults over 18, a healthy BMI is between 18.5 and 25. A result below 18.5 indicates that you may be underweight. A figure of or above 25 indicates that you may be overweight. (World Health Organisation figures 2000).

Fill in the following Adult BMI calculator (For 18 years and over) to figure out your Body Mass Index (BMI) and your risk of being overweight or underweight.

Gender

Age (yrs)

Weight (kg)

Height (cm)

BMI Value

EMERGENCY NUMBERS

### Obesity

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Healthy School Canteen

What Can I Do About Childhood Obesity?

Facts About Childhood Obesity

- Health Implications

- Factsheets

Adult BMI Calculator

Publications

Links

Done

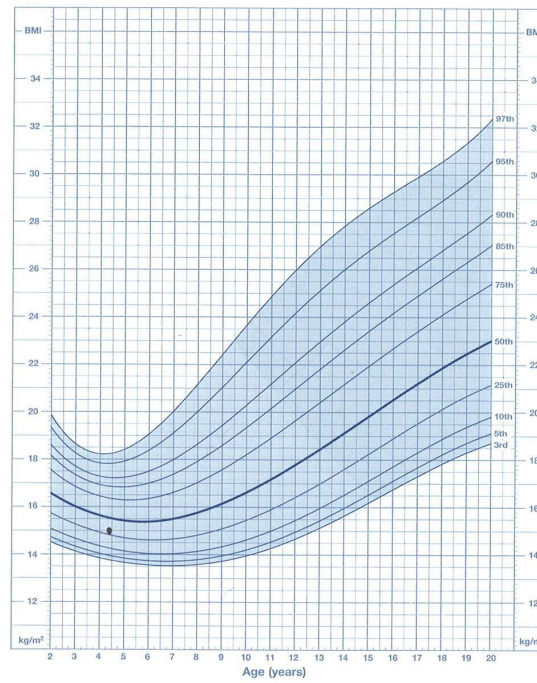
Local intranet

100%

- [www.health.nsw.gov.au](http://www.health.nsw.gov.au)



Body Mass Index-for-age percentiles - BOYS, 2 to 20 years



CDC Growth charts - United States Published May 30 2003  
Source: Developed by the National Center for Health Statistics in collaboration  
with the National Center for Chronic Disease Prevention and Health Promotion (2000)

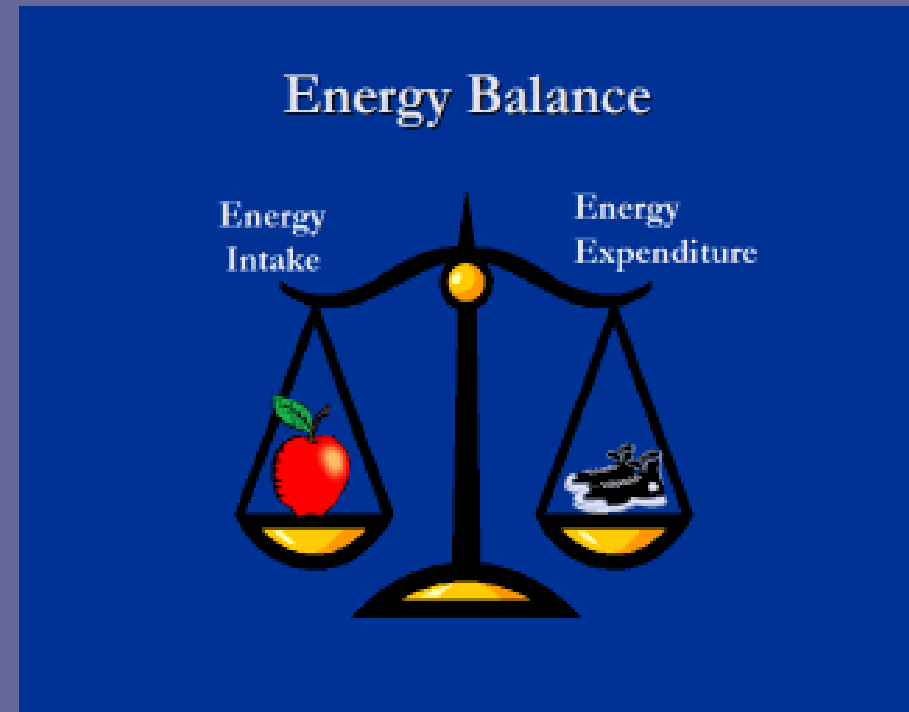
## Children in New South Wales...

- In NSW in 2004 25% of boys and 23.3% of girls are either overweight or obese
- The rates of obesity in children have doubled in twenty years
- By 2016 if trends continue 35.6% of boys and 31.7% of girls in NSW will be overweight or obese
- Parents and caregivers have the greatest control and influence over their children's diet and environment
- Education begins with carers

- Being overweight or obese in childhood increases the risk the individual will be overweight or obese as an adult
- This association is stronger as the individual becomes older
- Parental obesity is a risk factor for children developing obesity
- It has been recommended when a child attends a GP practice for their immunisations their weight and height be taken and then recorded in the Personal Health Record

# Lifestyle Risk Factors

- Being overweight or obese develops through an imbalance of energy
- Energy intake is the nutrition that is supplied to the body
- Energy expenditure is the physical activity exerted by the body





Less physical activity



Fast Food and highly processed food



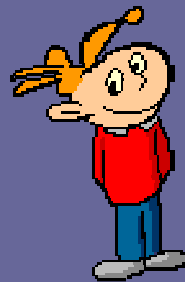
Larger meal portions



High Density housing

## When to be concerned

- If a child's height and weight are vastly disproportionate
- There has been a "drop off" from previous percentiles (more than 2 percentile bands)
- If there is a sudden increase or decrease in growth and is significantly represented on percentile charts





[www.healthykids.nsw.gov.au](http://www.healthykids.nsw.gov.au)



# Publications and Reports

- NHMRC (2003) Clinical Practice guidelines for the Management of overweight and Obesity in Children and Adolescents
- New South Wales Department of Health (2009) NSW Government Plan for Preventing Overweight and Obesity in Children, Young People & their Families 2009-2011
- NSW Centre for Overweight and Obesity (2005) Creating Healthy Environments
- NSW Centre for Overweight and Obesity (2007) The weight of Opinion- General Practitioners perception about child and adolescent overweight and obesity



## Case Study

- Jenny attends the practice with her mother for her four year immunisations, she is 4 yrs and 3 months of age
- You notice Jenny seems tall for her age and mum appears average
- The consult begins with you asking mum how Jenny has been in general and are there any concerns that she has for Jenny, mum has no concerns and states she is here for the immunisations
- Due to Jenny's age you explain to mum that Jenny is due for her 4 year "Healthy Kids Check" and gain mum's consent to continue
- You weigh and measure Jenny and plot her measurements on the percentile chart
- Weight is 21.5 kg; Height is 115cm; BMI is 16

# Questions

