

Working with families to treat and prevent obesity

Professor Paul Gately
Carnegie Faculty of Sport and Education,
Leeds Metropolitan University
Director at More Life
Department of Surgery and Cancer
Imperial College, London

QUESTIONNAIRE

Very often

Often

Sometimes

Rarely

Please fill out the
questionnaire
you have been given...

Questionnaire Scoring

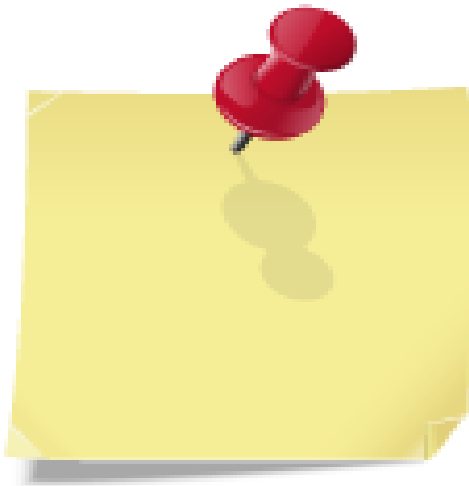
1) For items 3, 4, 5, 6, 7, 10, and 12:
score as 1 2 3 4 5

2) For items 1, 2, 8, 9, 11, 13, and 14:
score as 5 4 3 2 1

3) Add up the score for each item to get
the total score. Then divide by 14.

Activity

In groups of 3-4 people, write down on post-it notes as many consequences of obesity that you can think of.....



Focus on consequences specific to the **individual** rather than society

Does anyone recognise these themes?

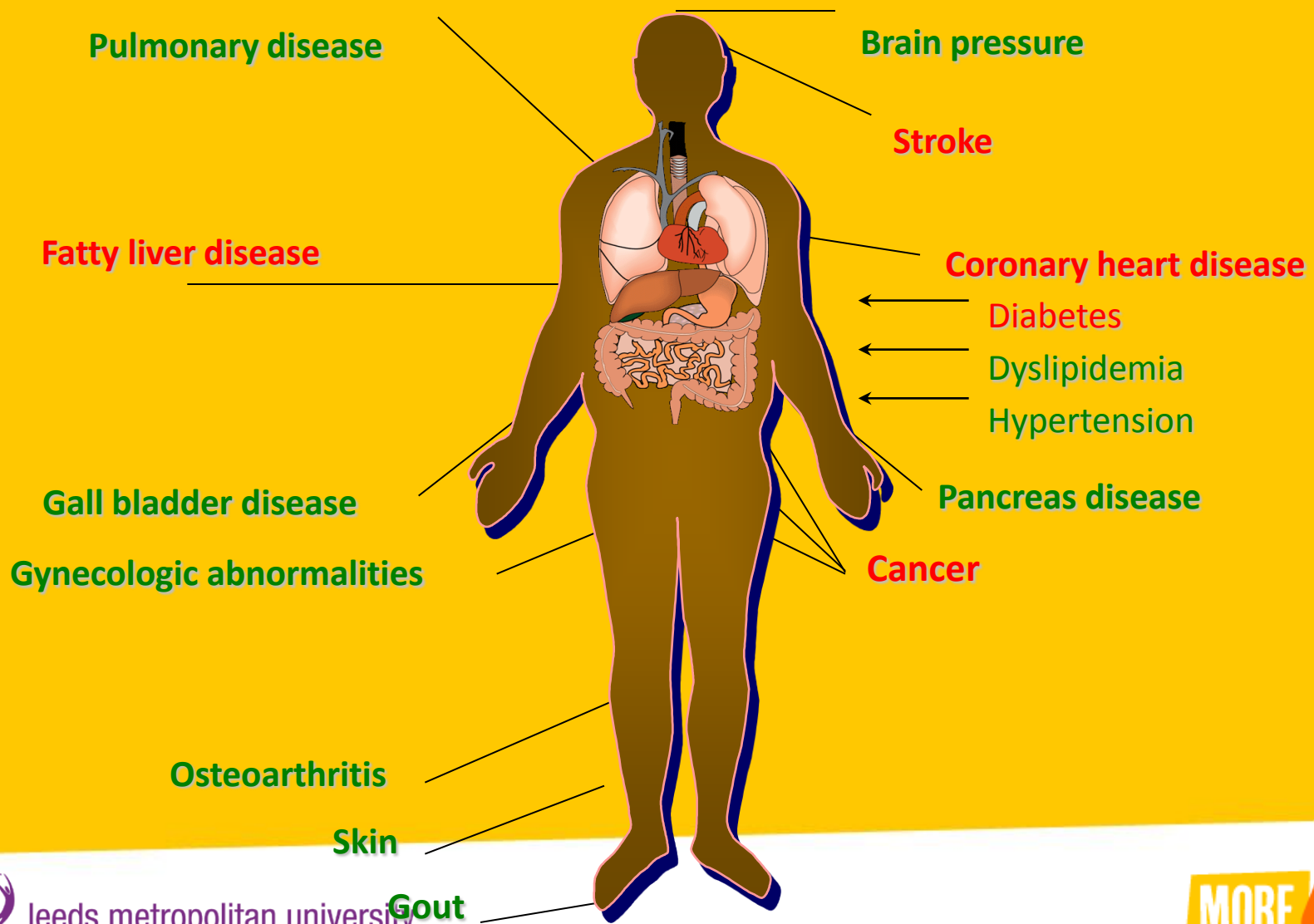
- Being Healthy
- Staying Safe
- Enjoy & Achieve
- Making a Positive Contribution
- Economic Wellbeing

EVERY CHILD MATTERS

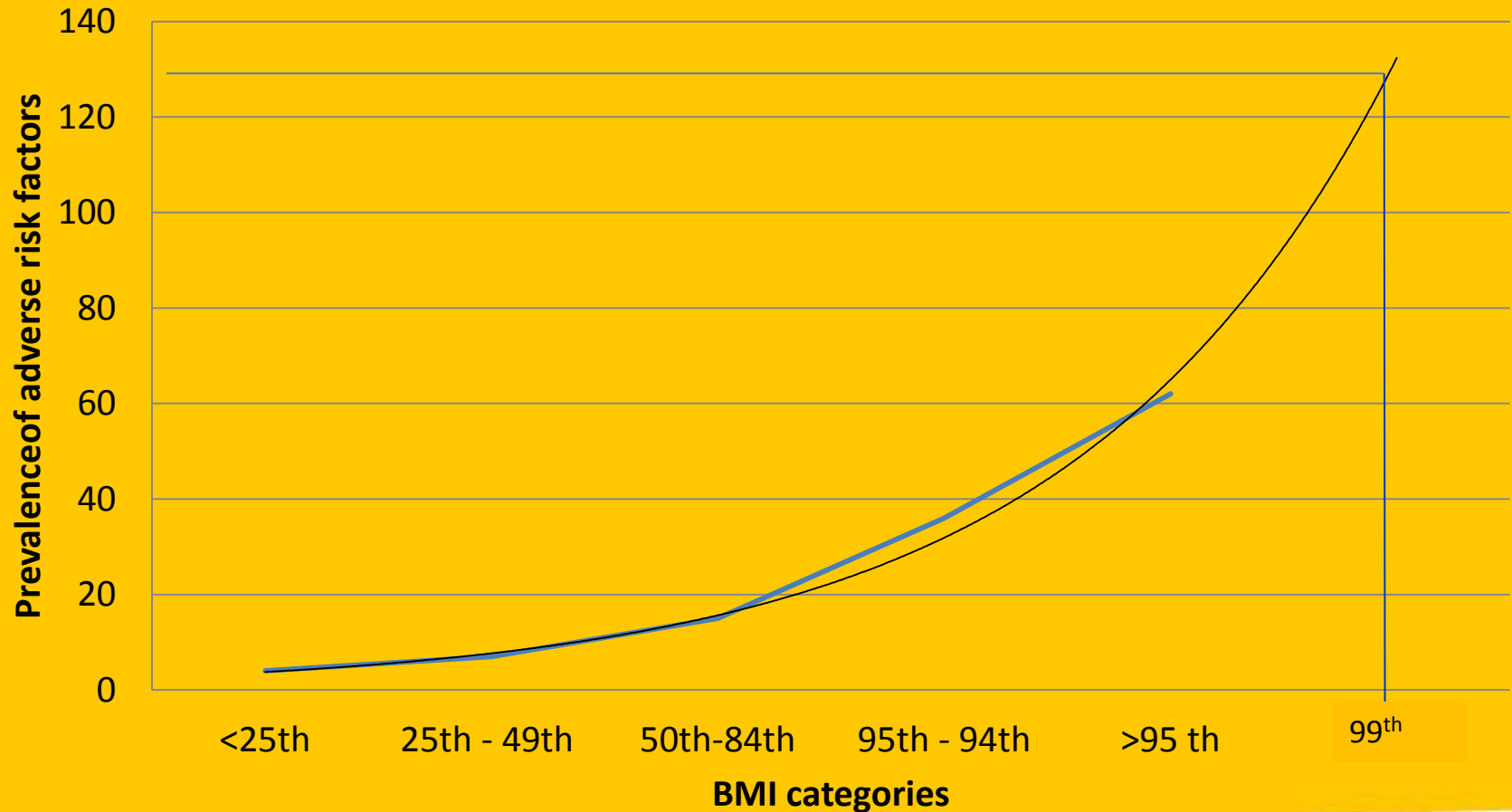
Being Healthy

enjoying good physical and mental health
and living a healthy lifestyle

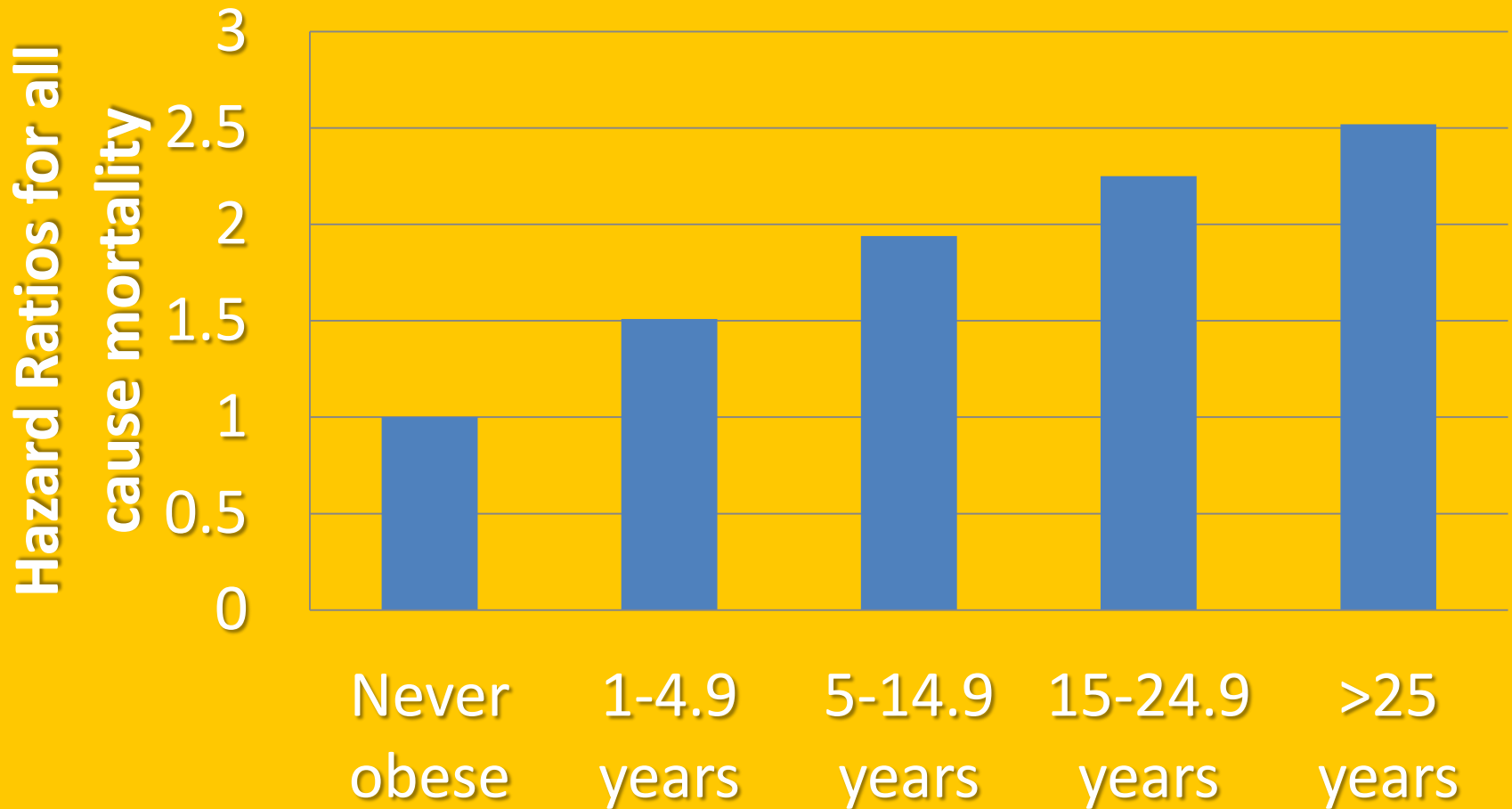
Why is this a concern?



Prevalence of adverse risk factors by category of BMI (Bogalusa Heart Study 2009)



Duration of obesity & Health risk



Abdullah (2011)

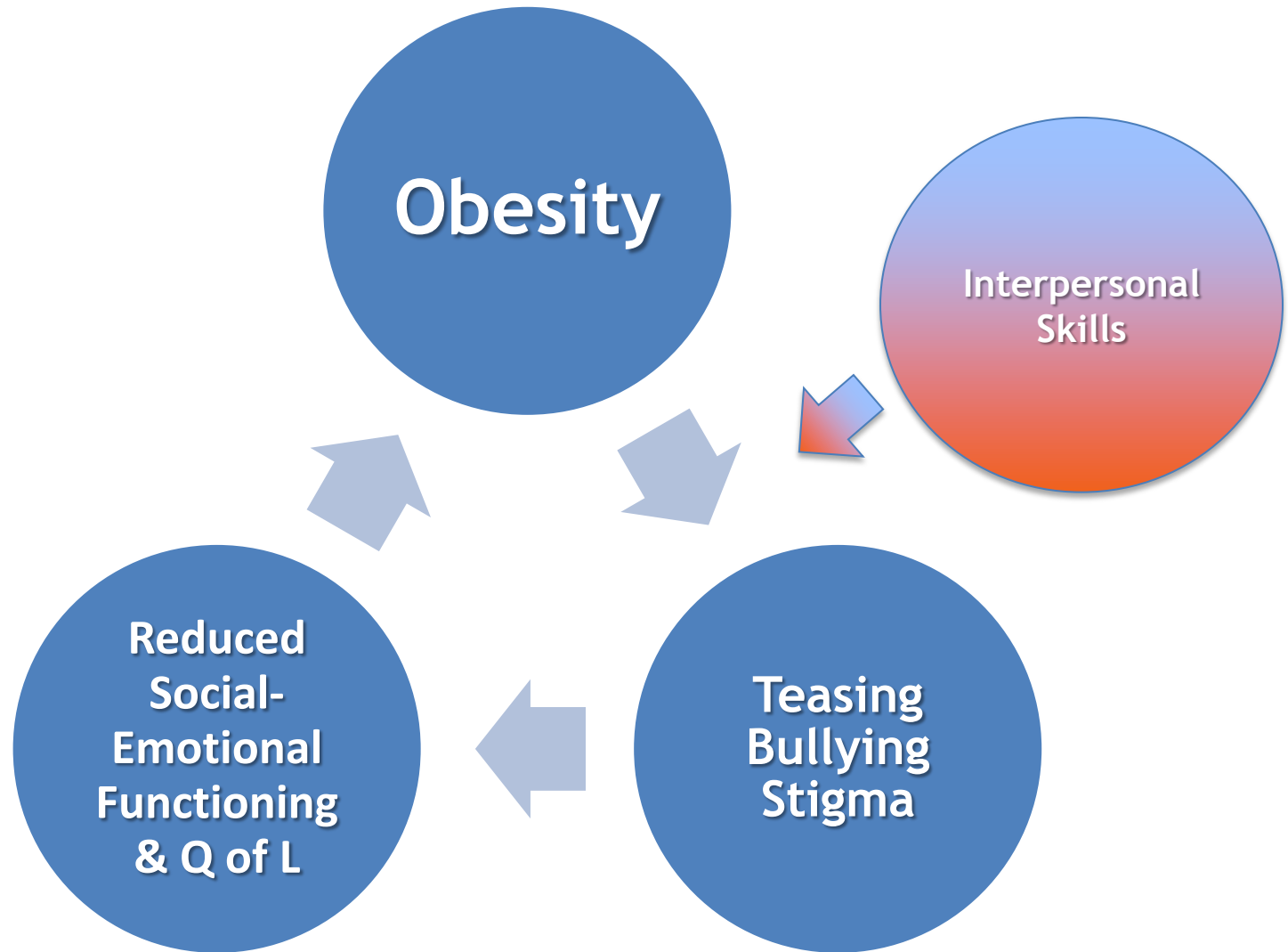
Staying safe

being protected from harm and
neglect

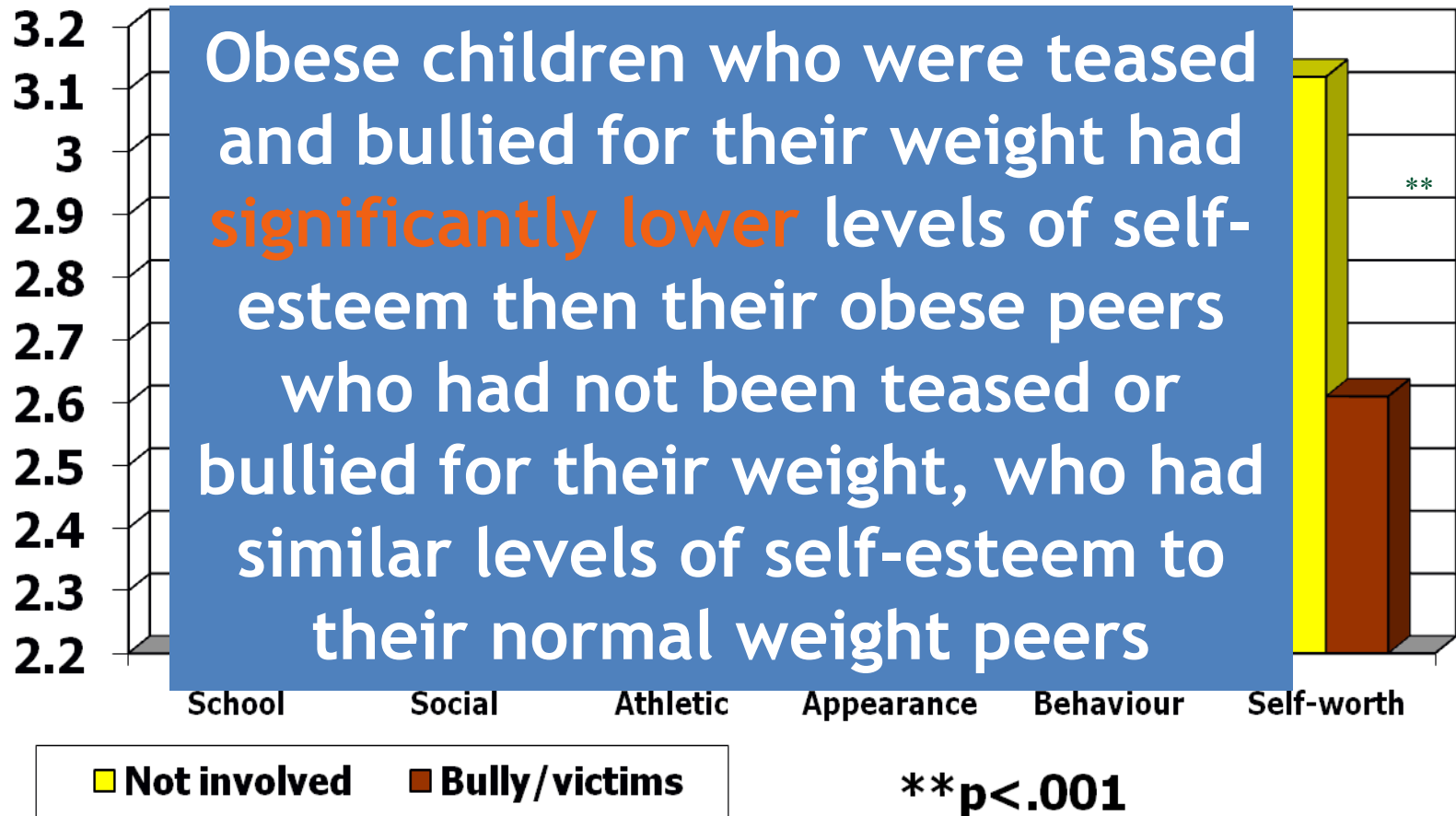


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Teasing & Self-Esteem



Young children



4-6 year olds

	Thin	Average	Fat
Nice-Mean	5.2	5.3	3.0
Smart-Stupid	5.2	5.5	2.9
Has-No Friends	5.1	5.1	3.2
Neat-Sloppy	5.6	5.6	2.3
Cute-Ugly	5.5	5.4	2.6
Best Friend	55%	38%	7%

Weight Bias & Discrimination

- Health Consequences:
 - Poorer self-esteem
 - Poorer body-image
 - Depression, anxiety
 - Increase maladaptive eating behaviours & exercise avoidance
 - Avoidance of health care services



Weight Bias & Discrimination

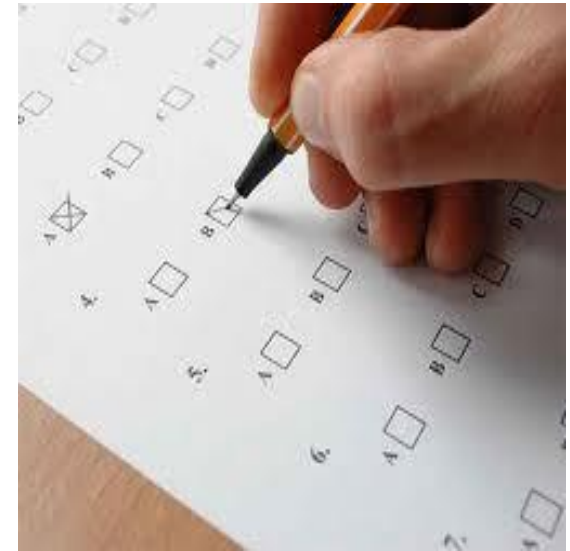
- Social Consequences:
 - Inequalities in employment
 - Barriers in education
 - Compromised health care
 - Barrier to obesity being viewed as a medical condition



Remember the questionnaire from earlier...

FPS: measures negative attitudes towards & stereotypes about people with obesity

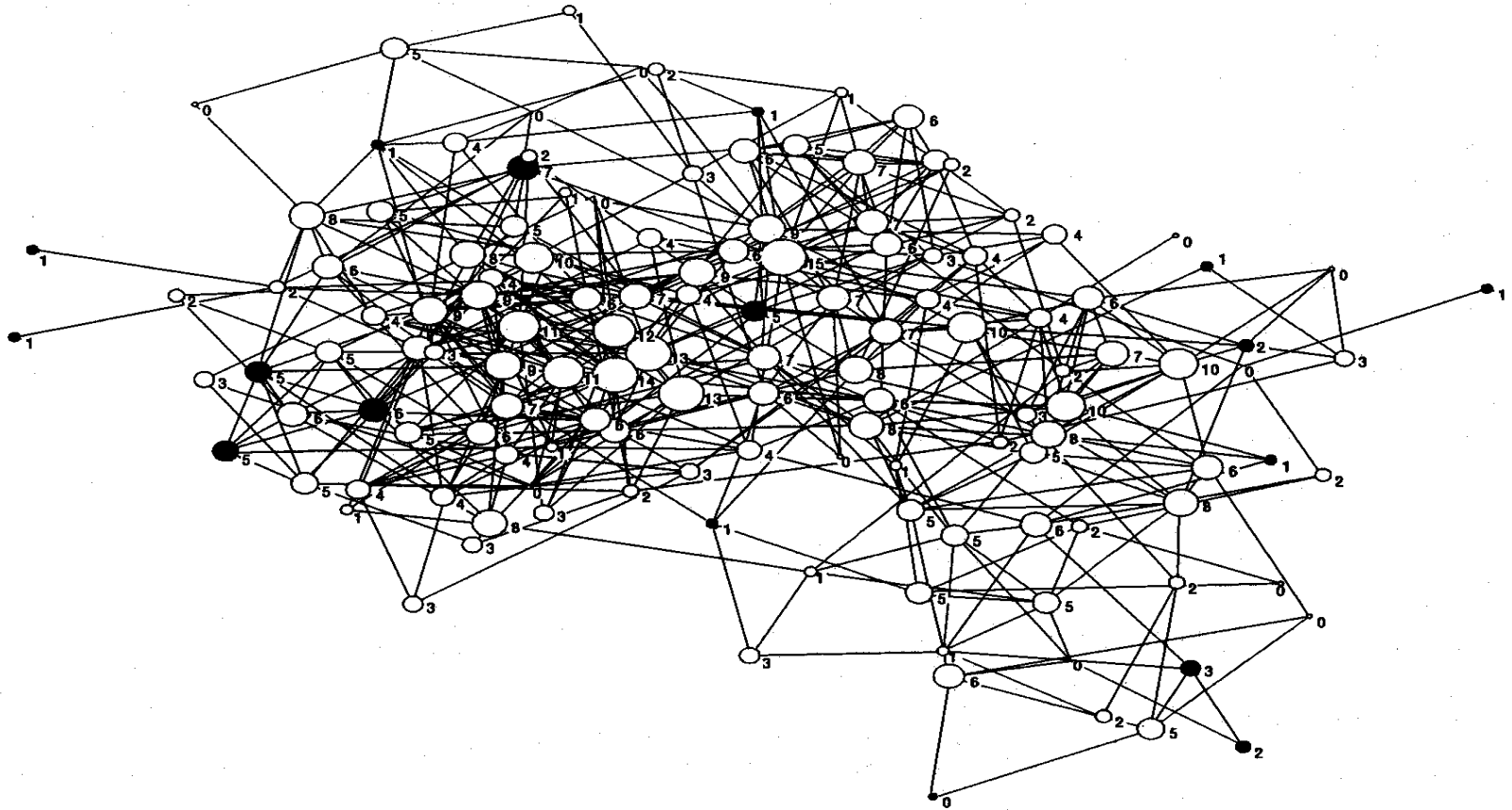
- Score range between 1-5
- Higher score = more fat phobia



Making a positive contribution

being involved with the community and society

Peer friendship choices



Enjoy and Achieve

getting the most out of life and developing
the skills for adulthood



Enjoy

IF YOU'RE NOT.

Stop childhood obesity. strong4life.com

© 2010 National Childhood Obesity Prevention Council



Achieve

Weight Status & Academics

Obesity is associated with:

1. poorer school functioning
2. poorer academic performance
3. lack of attendance
4. reduced future academic goals



Economic wellbeing

not being prevented by economic disadvantage from achieving their full potential in life

EMPLOYMENT AGREEMENT

1. AGREEMENT Employer employs employee at the above mentioned premises, and employee agrees to such employment.

2. DESCRIPTION OF EMPLOYEE'S DUTIES

Subject to the direction of the Employer, the employee shall perform the same or similar duties as those assigned to him/her.

3. M...



Wrongful termination
Denied promotions
Not being hired
Being the object of derogatory
humour from co-workers

from implicare
employee • n.
employer • n.
employment • n.
ng. 2 a person



Future life outcomes

- Employment based discrimination
 - Significant in women - minimal in men
 - Weight in women limits job prospects and salary
- Educational attainment
 - Weight associated with lower years in education
 - This compounds employment discrimination
- Marriage
 - Less likely to marry
 - More likely to delay marriage
 - More likely to divorce.



What Causes Obesity?



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TODAY
LET'S BLAME OBESITY ON:



2004

Simple: Energy Balance

When energy 'in' is greater



than energy out
= weight gained

When energy 'in' is less

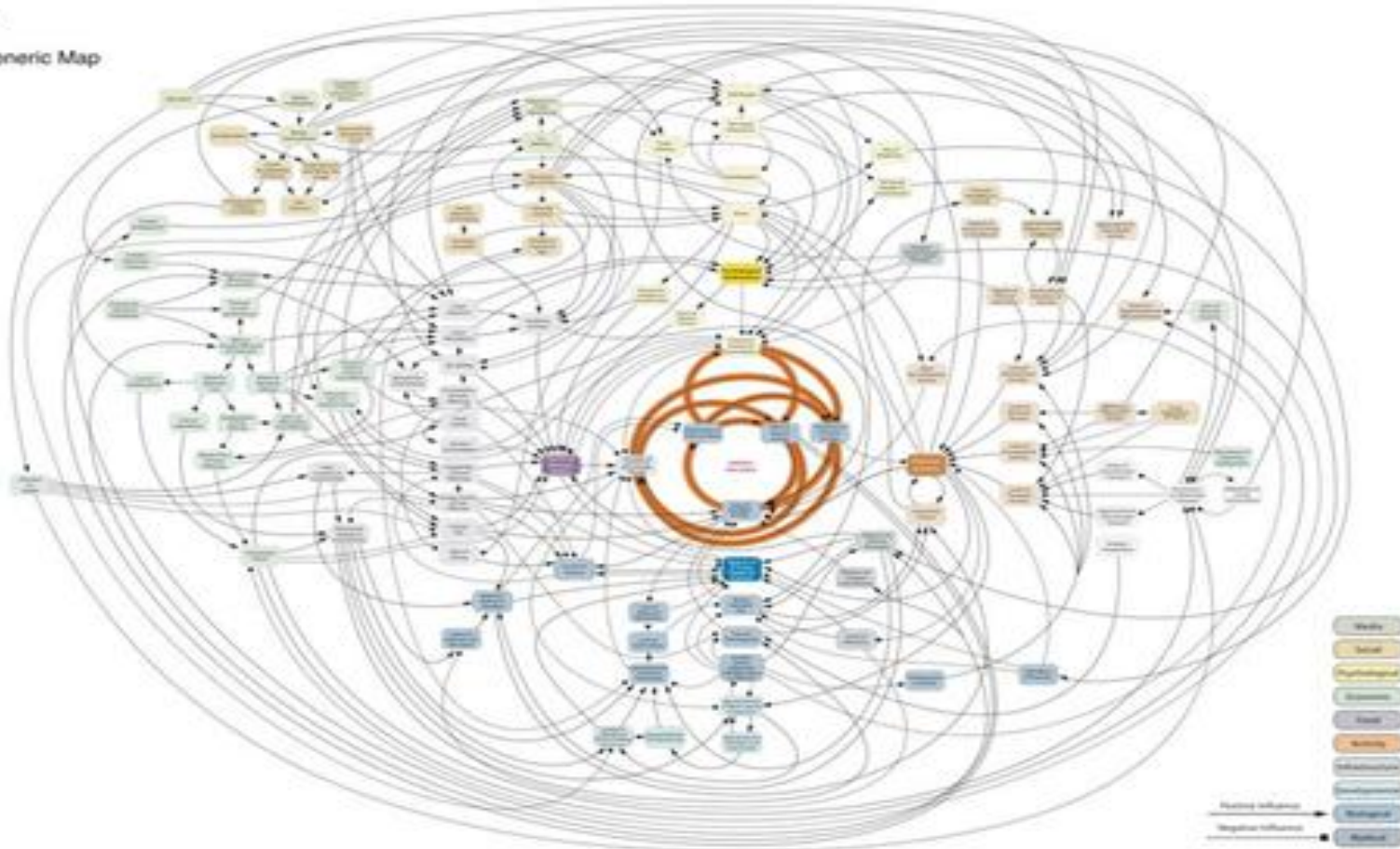


than energy out
= weight lost

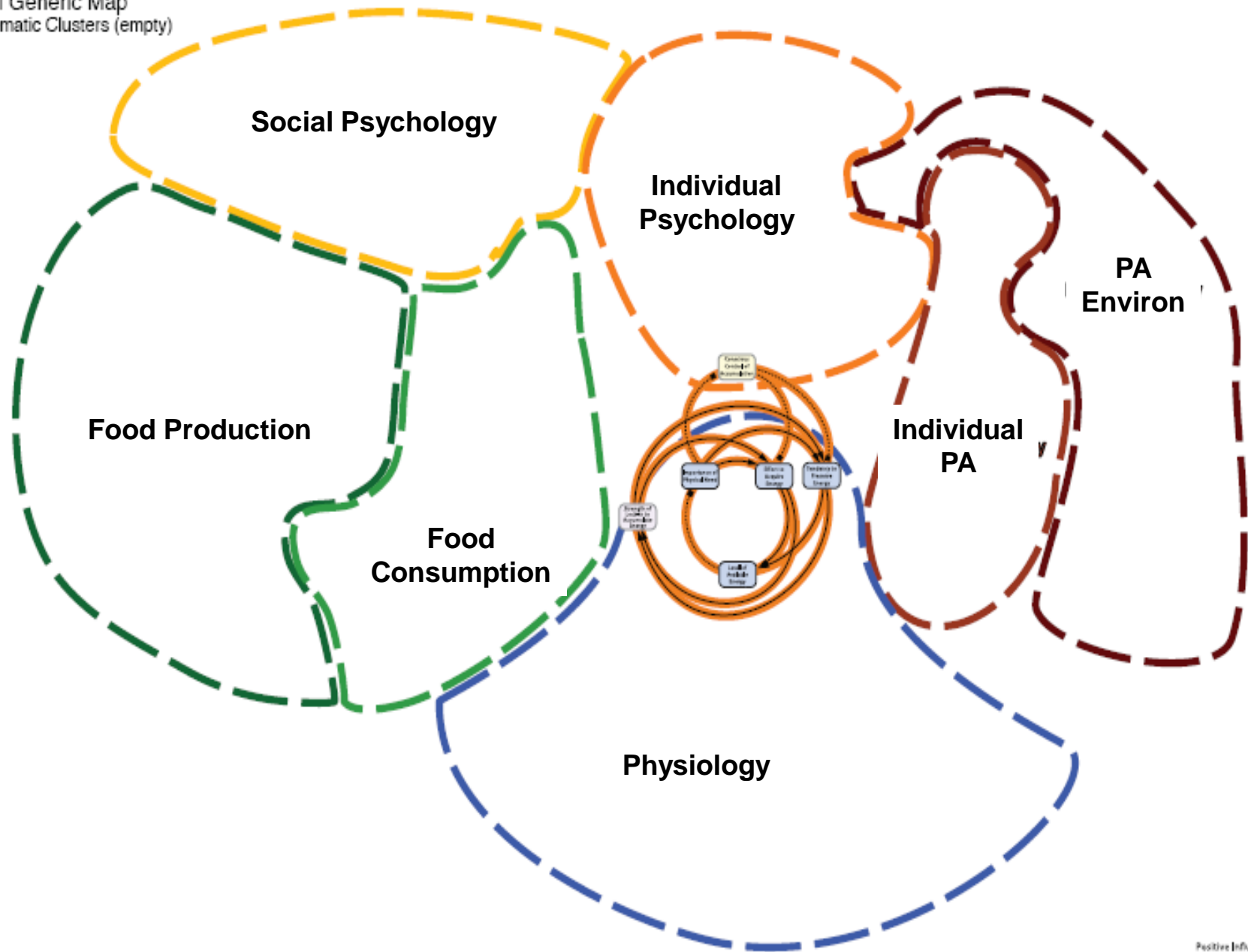
But it's much more complicated!

Map 0

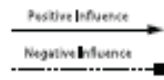
Full Generic Map



Source: Foresight - Tackling obesity: future choices - http://www.foresight.gov.uk/Obesity/Obesity_final/Index.html



- Media
- Social
- Psychological
- Economic
- Food
- Activity
- Infrastructure
- Developmental
- Biological
- Medical



Can you *see* risk?



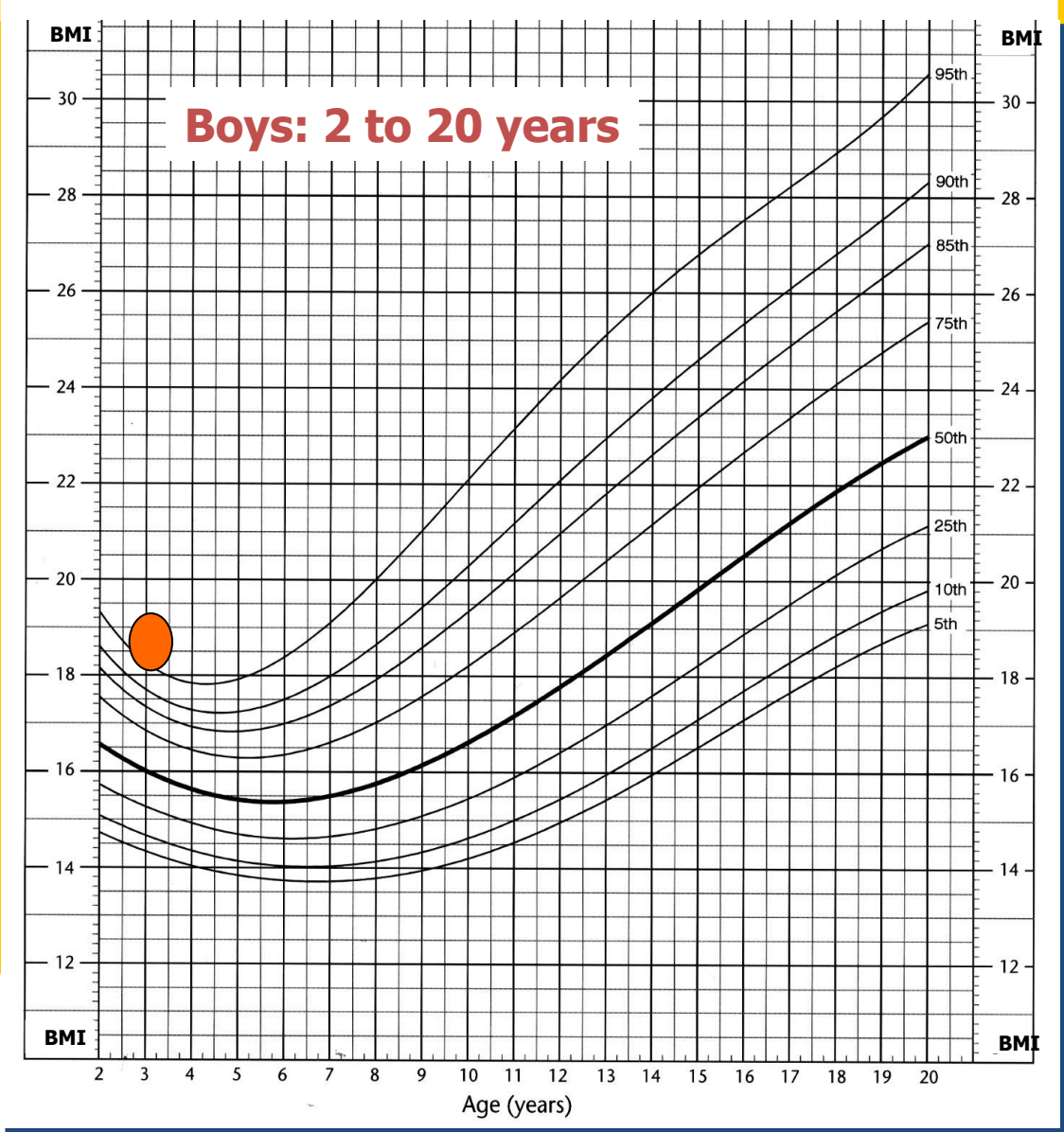
- This boy is 3 years, 3 weeks old.
- Is his BMI-for-age
 - below the 5th percentile:
underweight?
 - 5th to <85th percentile:
normalweight?
 - \geq 85th to <95th percentile:
overweight?
 - \geq 95th percentile:
obese?



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Photo from UC Berkeley Longitudinal Study,
1973

Plotted BMI-for-Age

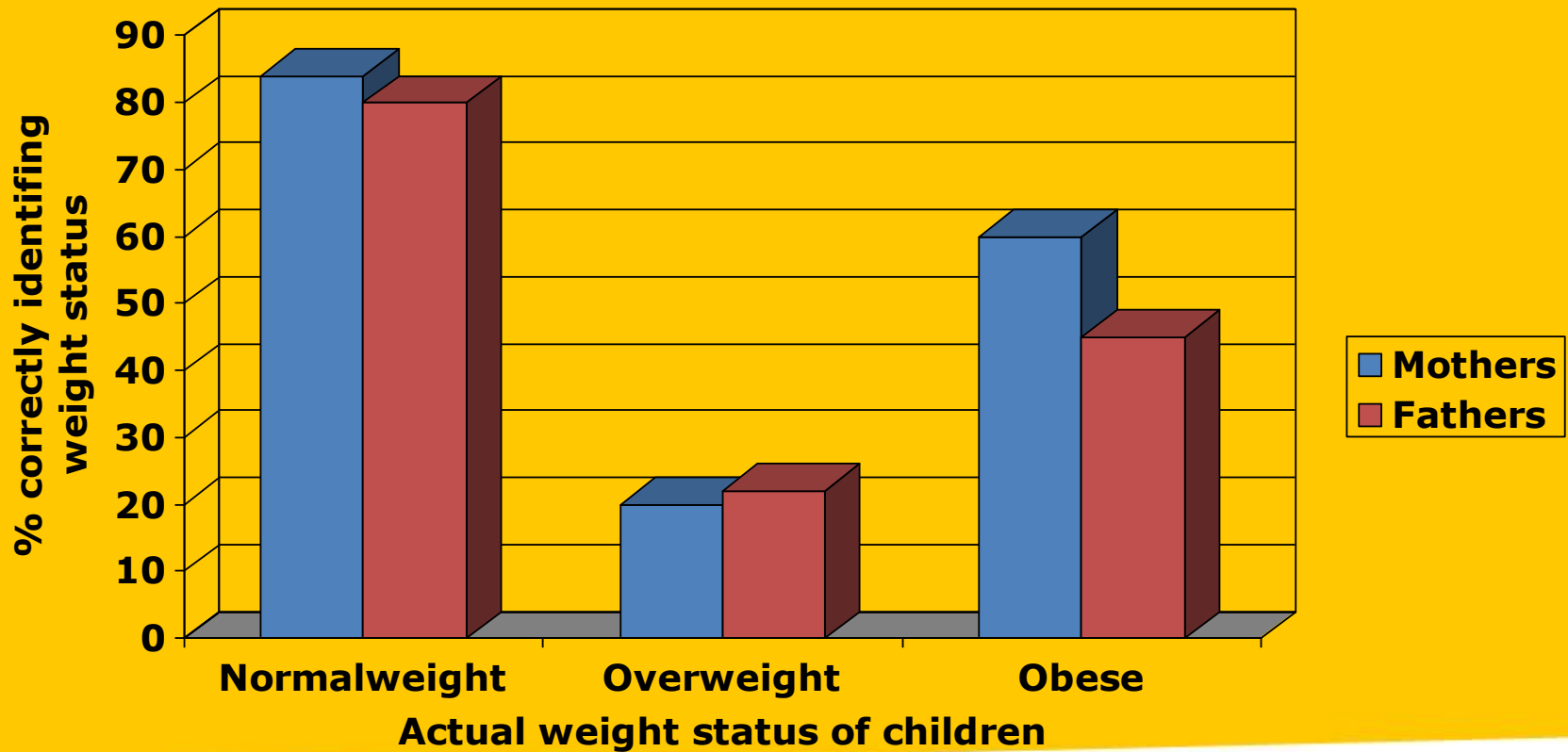


Measurements:
Age=3 y 3 wks
Height=100.8 cm
(39.7 in)
Weight=18.6 kg
(41 lb)
BMI=18.3
BMI-for-age=
>95th percentile
= obese

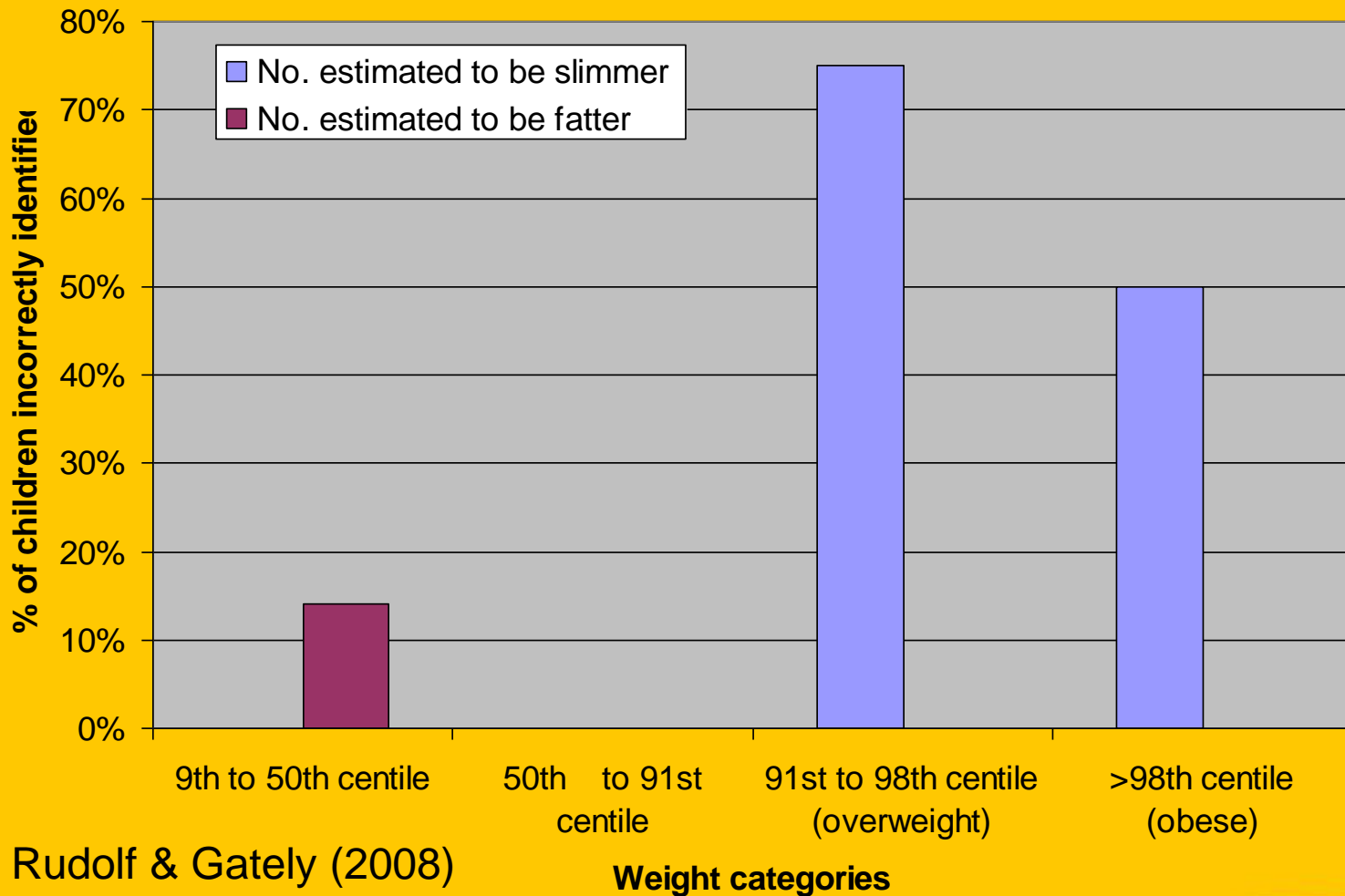


Parental perceptions

Distorted perceptions by parents of childrens weight status
(Jeffery et.al. 2005)



Health Care Professional recognition



Smith, Rudolf & Gately (2008)

Consumer insight work from DH.

the MIND evidence review. It also includes an overview of the attitudes of parents from ethnic minority communities.

HEALTH

Parents were unaware of the risks associated with behaviours such as sedentary lifestyle or constant snacking

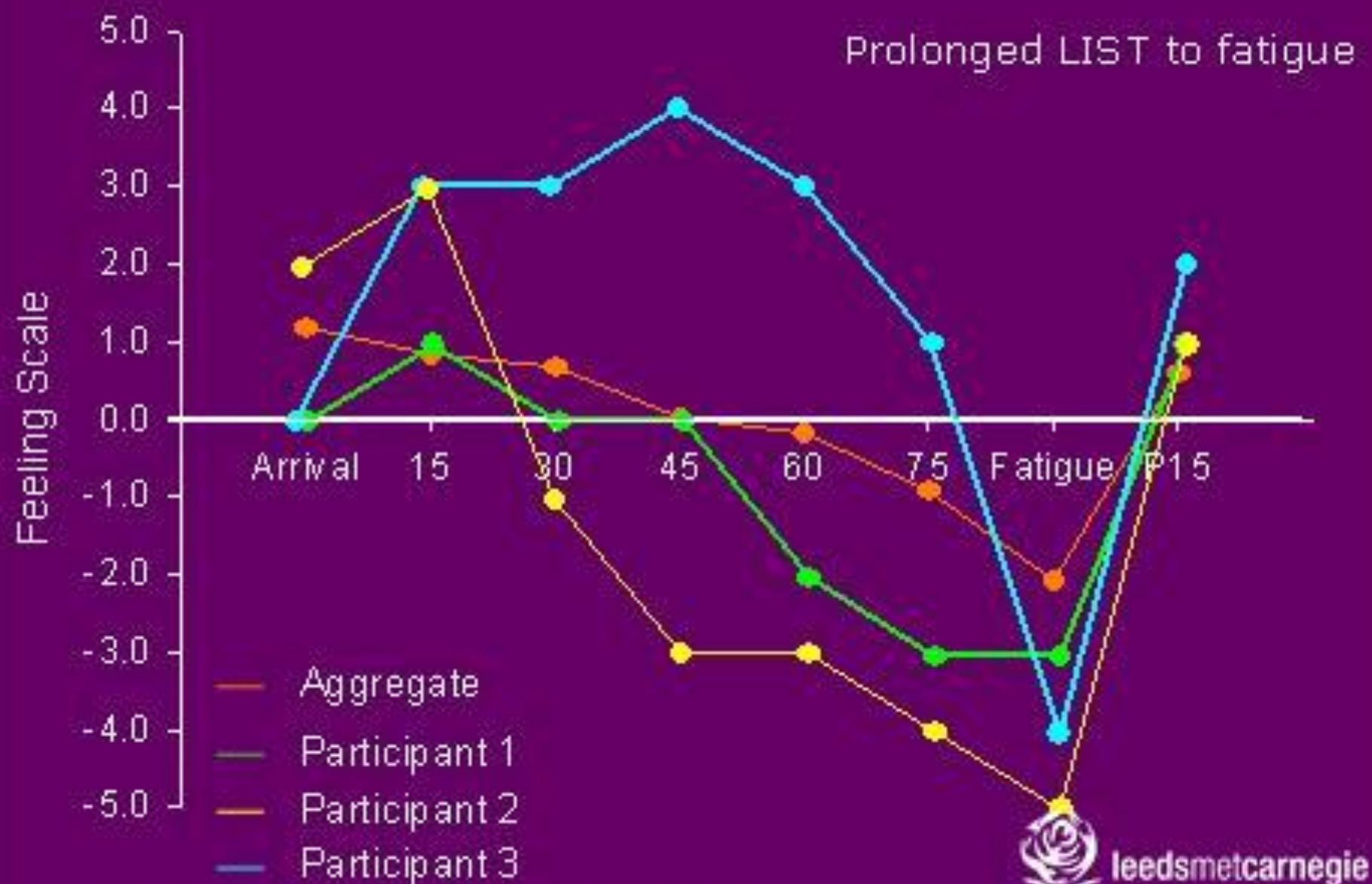
Many parents underestimated the risks associated with their children's diet and levels of physical activity. Unhealthy behaviours like eating a lot of convenience foods, high levels of unhealthy snacking and sedentary behaviour were prevalent, yet perception of risk was low. Priority cluster families were also largely unaware of their own risk behaviours; they exhibited 'optimistic bias' – underestimating how many unhealthy foods they consumed and overestimating the amount of activity their children did.

was linked with unhappiness.

'They love it when we go to McDonald's once a week, because there are never any arguments and everyone's happy. We all have a good time there, so why not go back?' Mother, Birmingham

Research indicates that parents feel that this was reinforced by a constant stream of advertising messages equating fun and pleasure with sedentary play and branded convenience foods. These have a far more powerful effect on attitudes and behaviours than any pro-health messages.

Inter-Individual Variability



Obesity and Eating disorders

- Cochrane review (2009)
 - 10 of 64 studies assessed potential negative impact and found no influence.
- Many interventions show positive impacts on eating behaviours.
- Whilst more research is needed.
- Such concerns should not limit action

MoreLife Services: Child population

BMI centile	Classification
91st and above	Overweight
98th and above	Severely Overweight

Why do we use BMI?

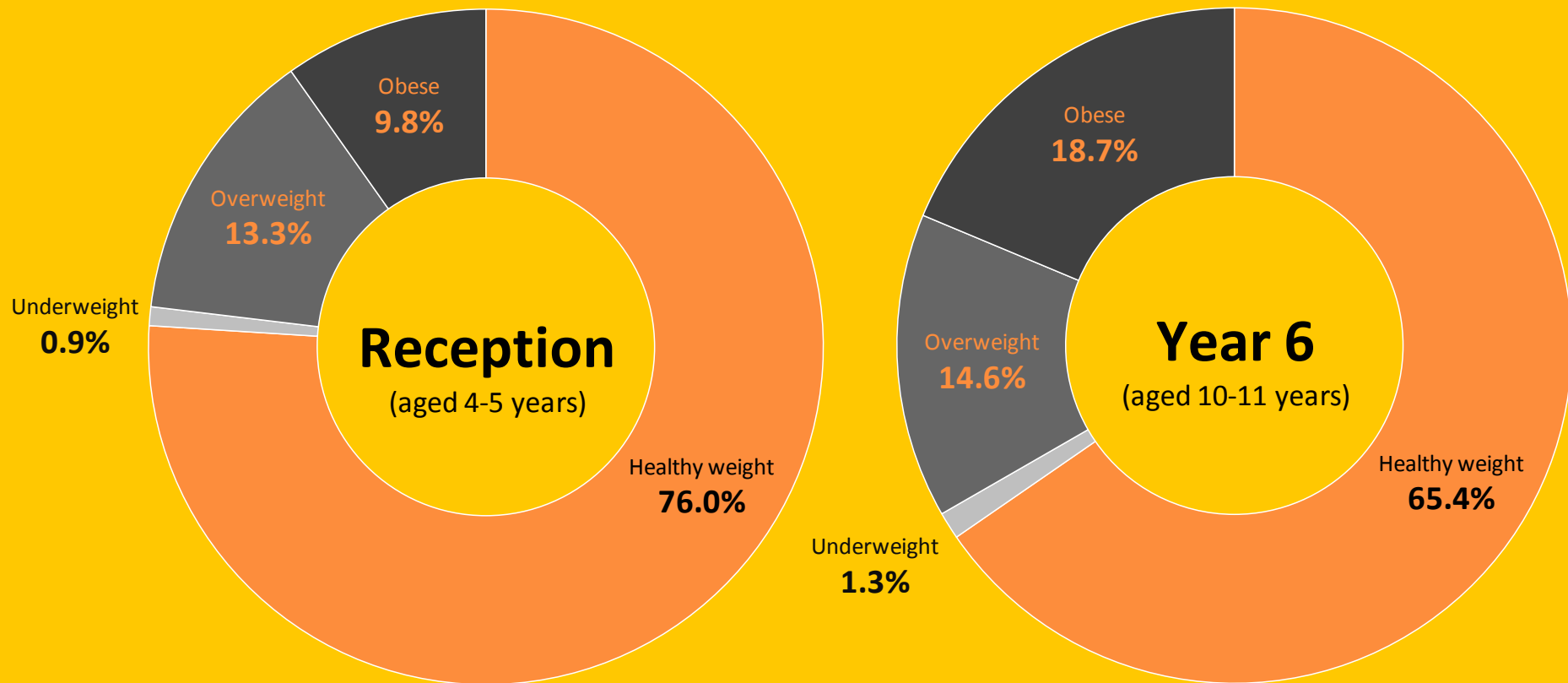
- Good indicator of body fat
- Too low or too high associated with an increased risk of ill health during childhood & later life.
- Quick and easy to calculate (used for population surveys & by health professionals).
- Most frequently used measure for assessing weight status



collaboration
is everything

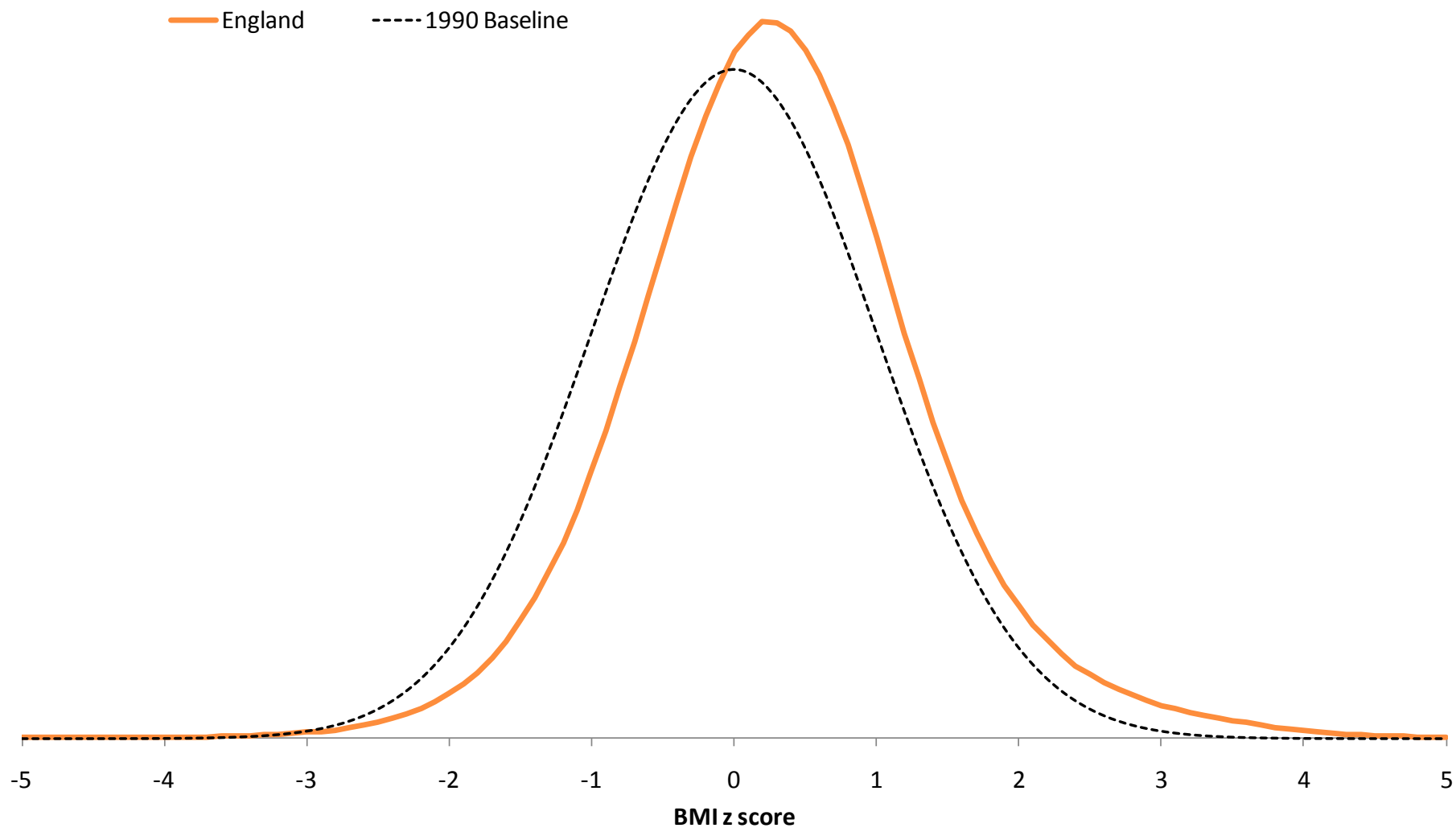
Child prevalence by BMI status

National Child Measurement Programme 2009/10



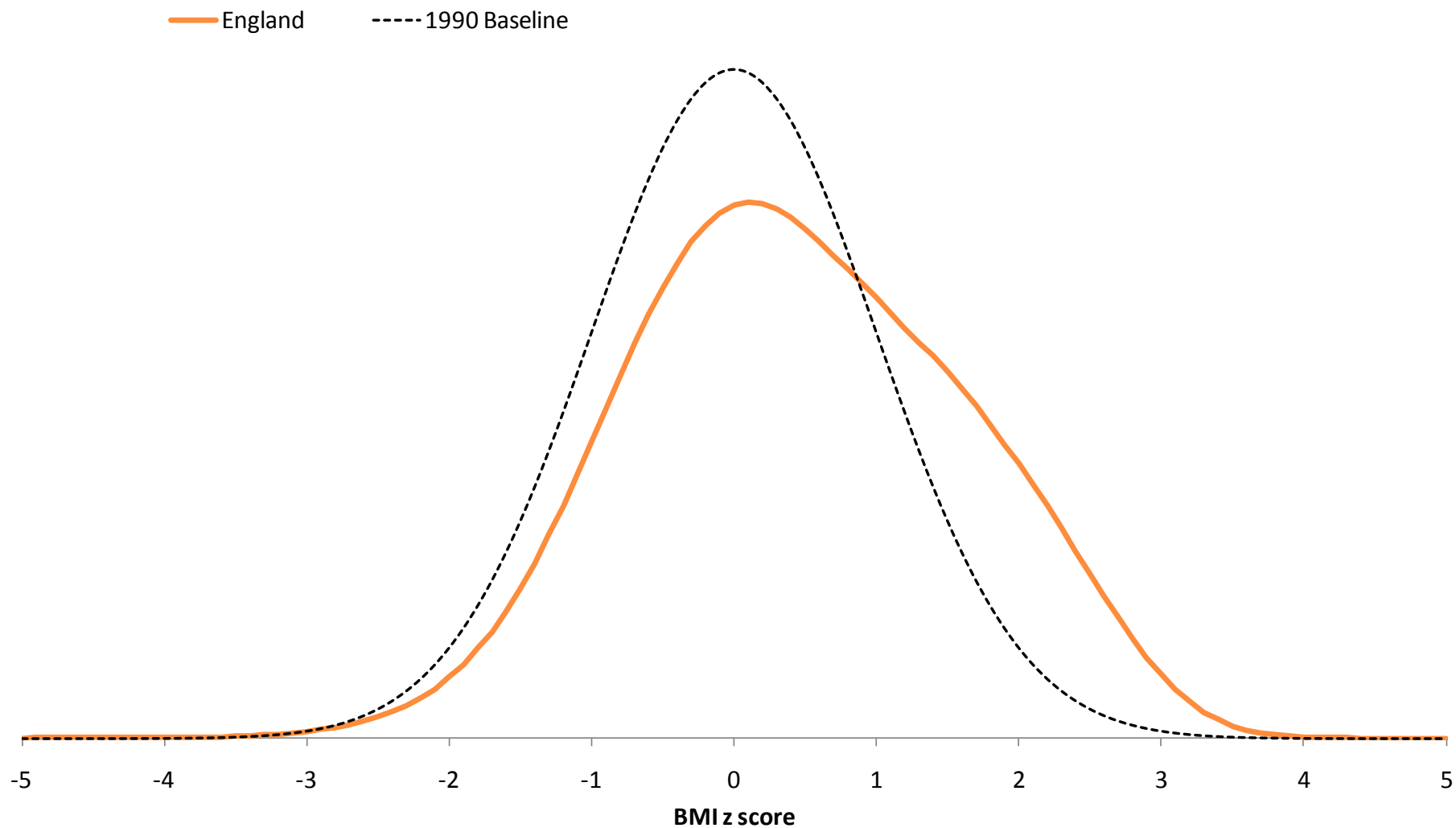
BMI distribution: Reception children

National Child Measurement Programme 2007/08 to 2009/10 (pooled)



BMI distribution: Year 6 children

National Child Measurement Programme 2007/08 to 2009/10 (pooled)



Obese kids in the UK in 2011

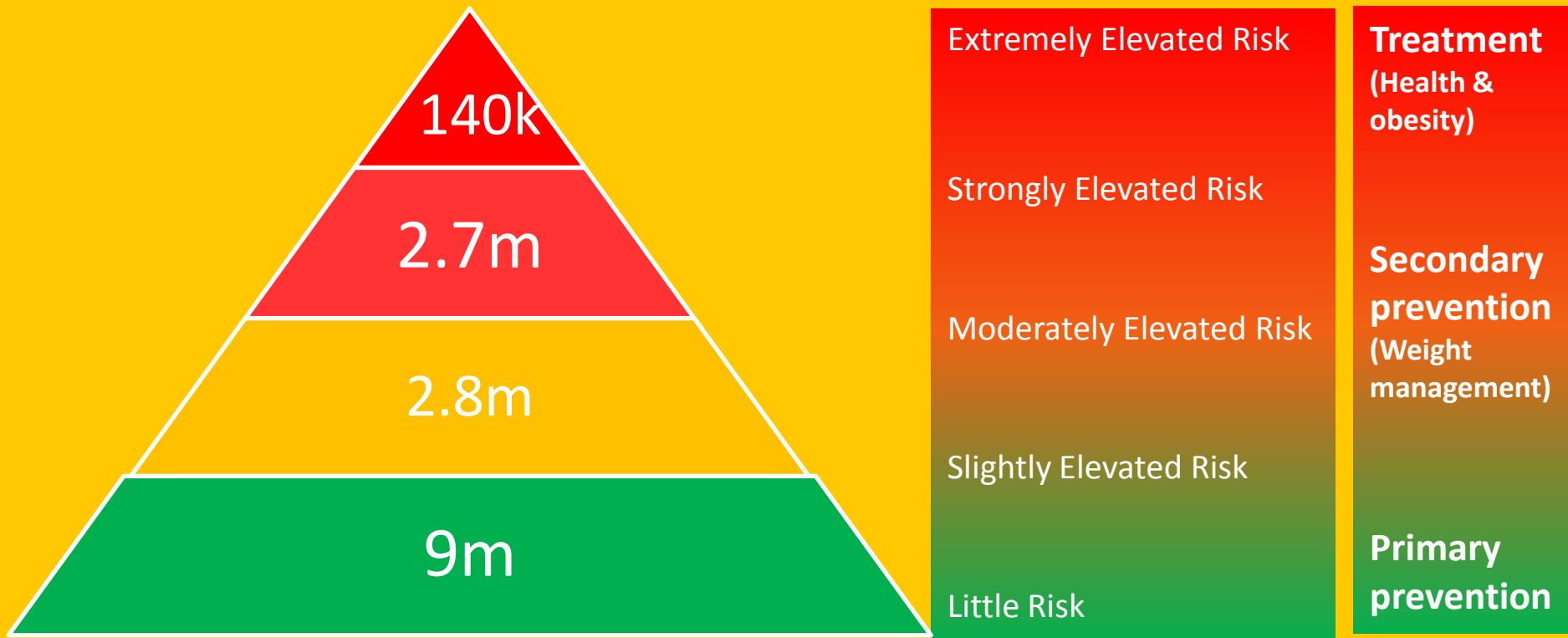
there are
13 MILLION
KIDS IN THE UK



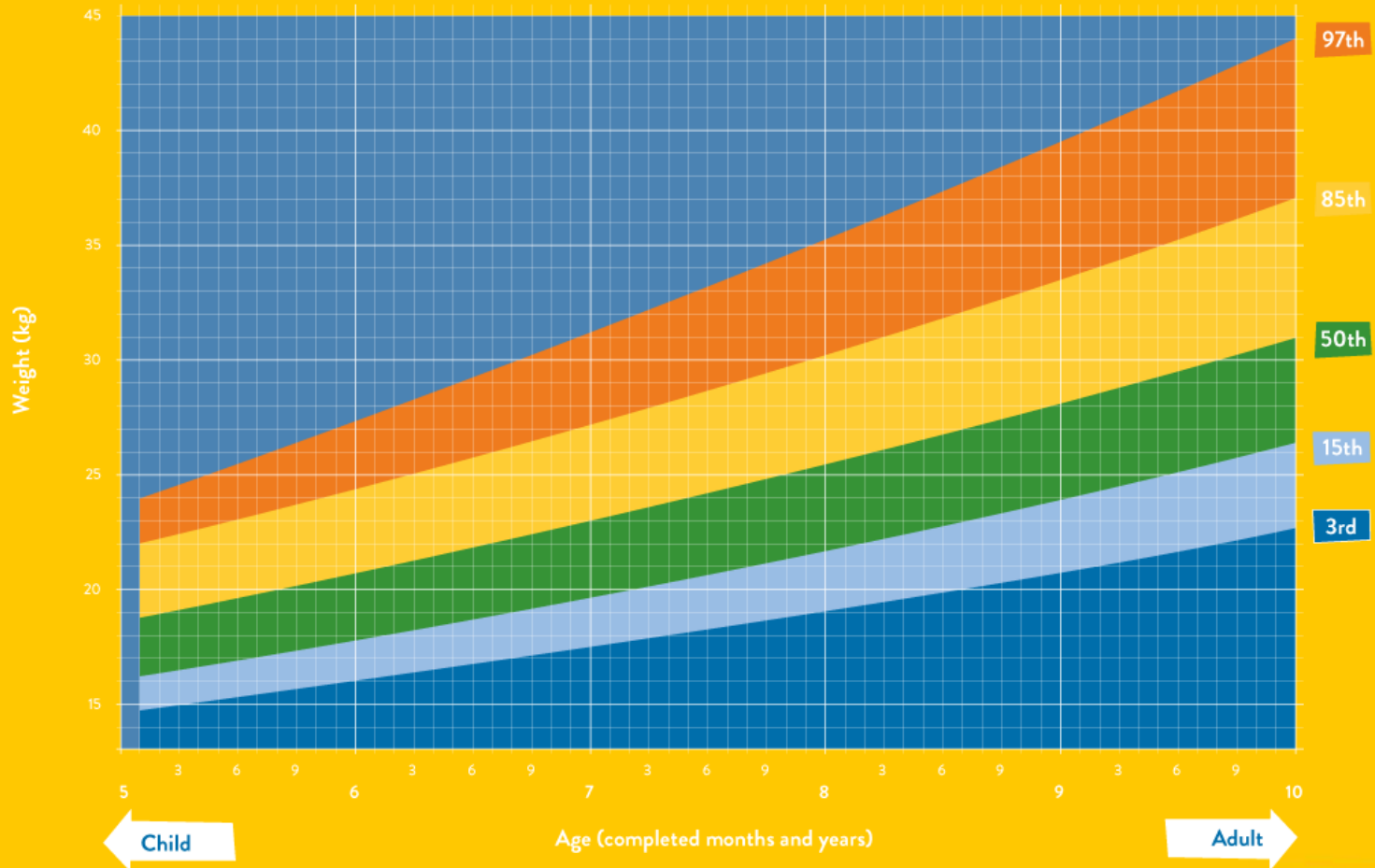
33.4%
are overweight and obese
(4.3 million kids)

Out of this number:
13.4% (1.76 million) are overweight
19% (2.5 million) are obese
1% (140,000) are severely obese

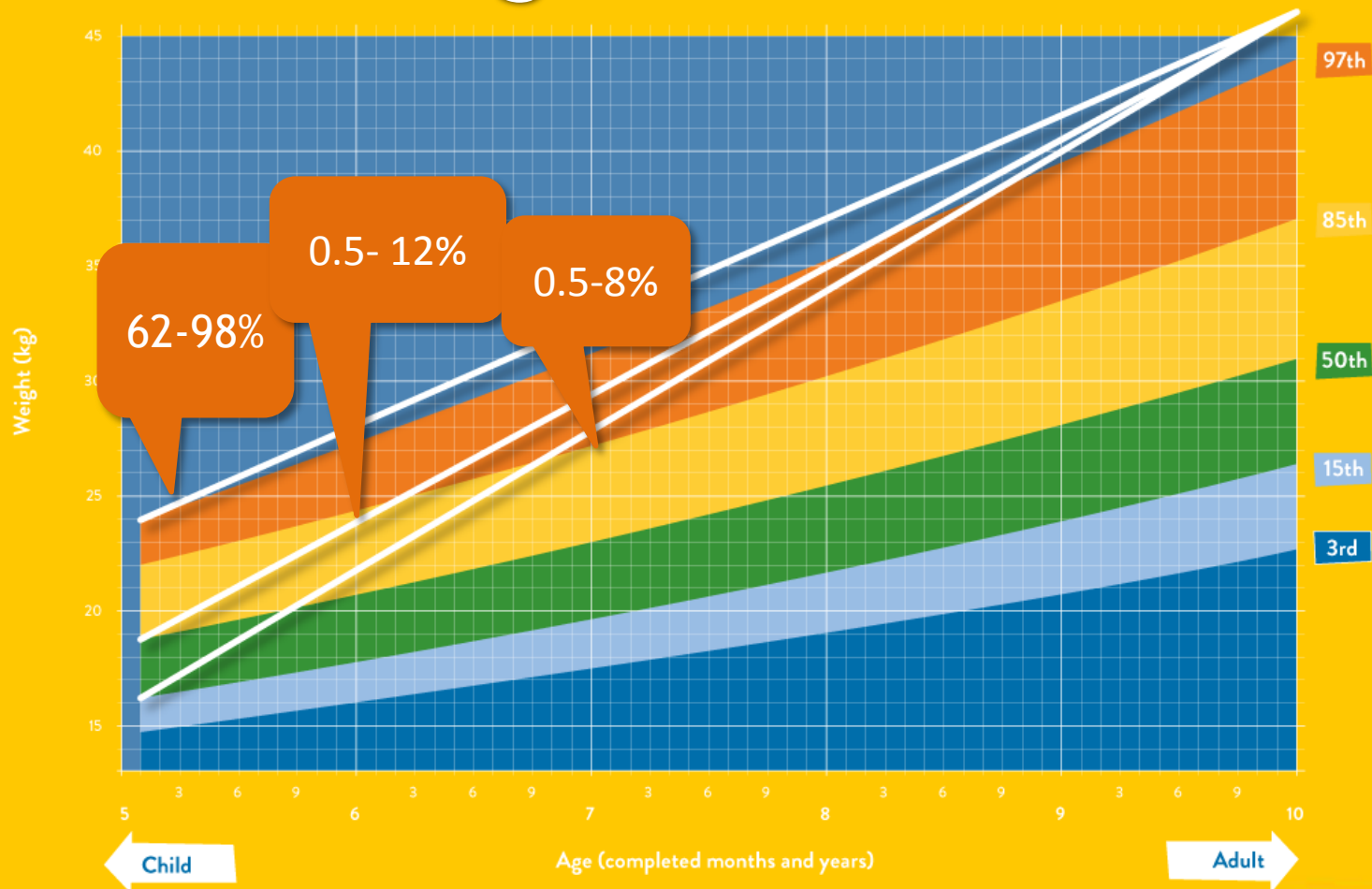
Preventing and/or treating what?



Tracking Children's BMI



Tracking Children's BMI



8 Risk factors for childhood obesity

1. Parental obesity (both parents)
2. Very early (by 43 mths) BMI or Adiposity rebound
3. >8 hrs TV watching per week at 3 years
4. Catch-up growth
5. Weight SDS at 8 months and 18 months
6. Weight gain in 1st year
7. Birth weight
8. Short (<10.5 hours) sleep duration at age 3 years

Early years prevention?

- Levine(2011) Obesity risk assessment tool.
 - Used 2 large scale cohorts
- Conclusion - the ORT does not provide acceptable levels of specificity and sensitivity for use in primary care.
 - To impact on 572 cases we would need to target 1653 infants (41% of total sample)!

Weight Management Practice

Focus for success

Where MoreLife Works

In 2011 we:

- Doubled turnover in one year
- Established northern & southern bases
- Gained seven new contracts



MoreLife delivery teams

We believe in recruiting, training and retaining the most engaging and effective delivery teams. To allow us to recruit accordingly we carefully consider the client groups we are working with and our service delivery objectives.



Physiotherapists



Lifestyle Coaches



Dieticians



Exercise Physiologists



LIVE HEALTHILY EVER AFTER



GP's

Teachers



Psychologists

Health Trainers



Our service delivery

A true lifecourse approach

Children Early years
Children
Adolescents
Community
Residential
Self care

Families Group
Community
Specialist
Residential

Adults Community
Specialist
MDT

Family options

Locations	Schools	Community			
Flexible Delivery	In school weight loss interventions	Residential camps	Day Camps	Community Clubs	Self Care
	Whole school approach	Summer & Easter	Holidays	Afterschool and weekend	Online, text, Skype and phone support 24 hour access
MoreLife - Systems	Expert led and Evidence based Approach (Diet, Physical Activity and Behaviour Change support)				
	Family Approach				
	Participant Resources				
	Staff Training and Resources				
	Account Management and Operational Systems				
	Marketing and Communications				
	Monitoring, Research and Evaluation				
Web					

Services aligned to need



<1.04
BMI SDS



>1.04
BMI SDS



>2.00
BMI SDS



>3.00
BMI SDS

Weight loss journey



Weight loss
15-20%

Residential Camp

Community Camp

Community Club

Self Care

Services & Outcomes

- Camp
- Clubs
- Pathway



Residential camp

- Since 1999
- Duration 2-8 weeks
12 weeks self care
- Aged 8-17
- Summer holidays
- Parents (27 hours)



Residential Camp Outcomes (n=1182)

	Pre	Post	Change
Body mass (kg)	89.6 ± 23.9	83.2 ± 21.7	-6.4**
BMI (kg.m ⁻²)	33.7 ± 6.2	31.4 ± 5.8	-2.3**
BMI SDS	3.03 ± 0.6	2.74 ± 0.7	-0.3**
% Body fat	47 ± 6	44 ± 7	-3*
Waist (cm)	96.4 ± 12.5	90.2 ± 10.4	-6.2**
VO ² Peak (l.min)	2.08 ± 0.60	2.3 ± 0.5	0.22**
Self Esteem	2.56 ± 0.6	2.77 ± 0.6	0.21**

Gately (Pediatrics 2005)

Cardio-metabolic risk variables

Boys	n	Pre (Mean ± SD)	Post (Mean ± SD)	Change (Mean ± SD)	p
SBP (mmHg)	26	125 ± 16	119 ± 11	-6 ± 14	p=0.032
DBP (mmHg)	26	74 ± 14	66 ± 9	-8 ± 12	p=0.004
TC (mmol·l ⁻¹)	27	4.17 ± 0.62	3.15 ± 0.42	-1.02 ± 0.41	p<0.0001
LDL-c (mmol·l ⁻¹)	27	2.47 ± 0.55	1.72 ± 0.37	-0.76 ± 0.35	p<0.0001
HDL-c (mmol·l ⁻¹)	27	1.15 ± 0.22	1.07 ± 0.22	-0.08 ± 0.15	p=0.015
TC:HDL-c	27	3.75 ± 0.87	3.02 ± 0.57	-0.73 ± 0.58	p<0.0001
TG (mmol·l ⁻¹)	27	1.25 ± 0.61	0.86 ± 0.31	-0.39 ± 0.53	p=0.001
Glucose (mmol·l ⁻¹)	26	4.85 ± 0.40	4.64 ± 0.22	-0.21 ± 0.40	p=0.011

Hobkirk and Gately (In press)

Selected Wellness variables



Kulendran and Gately (2011)

Community Club

- Since 2006
- Duration - 12 weeks & 12 weeks self care
- 3.5 hours per week

- Aged 2-17
- Delivery or training
- School term time
- Parents (42 hours)



Club Outcomes

Change	Children (n=1607)	Parents
Body mass (kg)	0.8 \pm 1.7	-1.7 \pm 2.2
BMI (kg.m ⁻²)	-0.98 \pm 0.9	-0.48 \pm 0.8
BMI SDS	-0.16 \pm 0.23	NA
Waist (cm)	-3.7 \pm 4.2	-4.9 \pm 4.2
% Body fat	-1.75 \pm 2.6	-1.2 \pm 5.3
VO ₂ Peak (l.min ⁻¹)	0.2 \pm 0.4	0.3 \pm 0.3

Gately (2010)

Outcomes 12 months (n=48)

Change	Pre	Post	Change
Body mass (kg)	76.6 ± 19.6	77.4 ± 20.5	0.8 ± 0.03
BMI (kg.m ⁻²)	32.3 ± 5.0	31.4 ± 5.5	-0.9 ± 1.0**
BMI SDS	3.2 ± 0.4	3.0 ± 0.6	-0.2 ± 0.2**
% Body fat	42.0 ± 7.2	40.8 ± 8.1	-1.2 ± 3.1*
Waist (cm)	100.78 ± 16.4	97.3 ± 15.7	-3.48 ± 6.57**
VO ² Peak (l.min)	2.64 ± 0.60	3.07 ± 0.36	0.43 ± 0.39**
Self Esteem	1.95 ± 0.75	2.10 ± 0.8	0.15 ± 0.6**

Self Care follow up support

Since 2008

- Web members sites
 - Children
 - Parents
- Duration - ongoing
- Text/ Phone / Skype
- Social networking
- Behaviour change
- Resources

The screenshot shows the MoreLife website homepage. At the top left is the logo 'MORE life' with the tagline 'LIVE HEALTHILY EVER AFTER'. To the right is a 'MEMBER LOGIN' section with fields for 'Username' and 'Password', a 'Login >' button, and links for 'Forgotten Password?' and 'Forgotten Username?'. Below the logo is a navigation menu with 'Home', 'Services', 'Research', 'Media', 'About', and 'Contact'. The main content area features a large photo of two women smiling. To the right of the photo are three orange buttons: 'Join a Club' (with subtext 'View our existing clubs'), 'Our Services' (with subtext 'What we deliver'), and 'Prof. Paul Gately' (with subtext 'Founder of MoreLife'). Below the photo is a blue banner with the text 'Welcome to a COMPANY THAT GIVES YOU LIFE MORE'. To the right of this banner is a blue box titled 'NHS Overview' with subtext: 'MoreLife works across the country in partnership with the NHS to deliver specialist weight management services.'

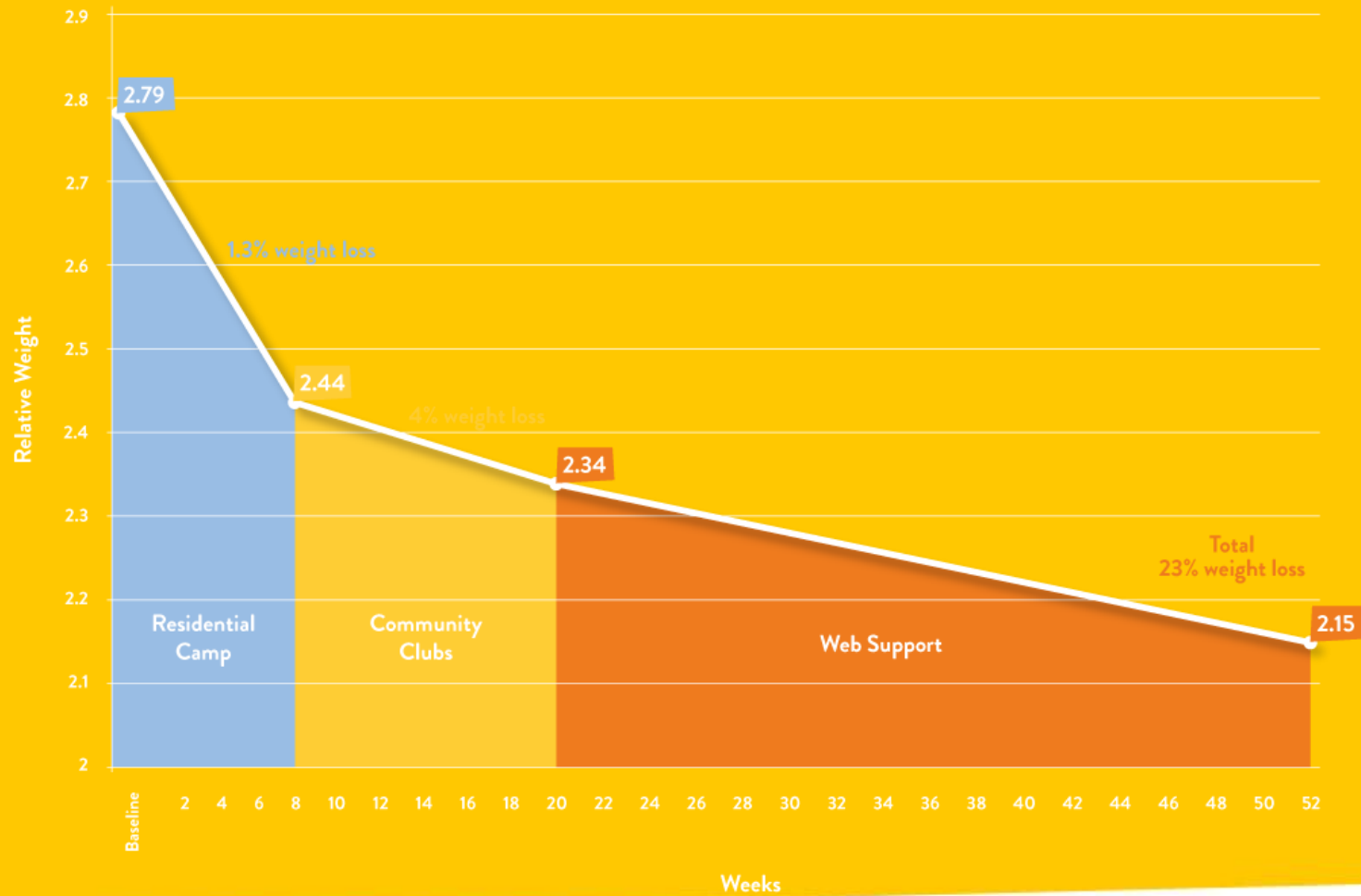
The screenshot shows a user's profile page. At the top, it says 'Welcome Back, SamBramald!'. Below this is a profile picture placeholder with a large black question mark and a 'Change Profile Picture' link. To the right is a blue box with the text 'What's Going On With You, SamBramald?' and a 'Share My Status' link. Below this is a blue box with a red rose icon and a 'Save Rose And Thorn' link. The main content area is titled 'Start Your Weight Loss Journey' and contains the text: 'Now you have finished your MoreLife programme, you are ready to put into practice everything you have learned. To help you along in your journey towards a healthier lifestyle, we have create this special web site. Here you can set Goals and record your progress in your journey.' Below this is a blue button with the text '>> Click Here To Start Your Journey! >'. At the bottom is an orange box titled 'Top 5 Recent Friends' Updates' with the text: 'There are no updates for you at this time. Please check back later!' and a blue button with the text 'Click here to see all of your Friends' updates! >'. At the bottom left is a blue box titled 'New Parents' Forum' with a speech bubble icon and a link to 'The Professor's Blog'.

Care Pathway

- Since 2008
 - Camp
 - Clubs
 - Self care
- Duration - 1 year
- Aged 8-17
- Parents involved



Care pathway outcomes (n= 121)



General behaviours/activities we focus on



Control the environment

↓ Cues to eat excess calories and be inactive

↑ Cues to eat fewer calories & increase activity

- General principles

- Identify routines or things which cause increased calorie intake, inactivity, and sedentary behaviours.
- Identify alternative routines or things to reduce calories and inactivity and increase activity.
- Be realistic in your changes, set goals, plan & monitor.

Monitor behaviour

Have you achieved success?

- **General Principles**
 - Accurate records should be kept to assess changes.
 - Measures should match goals (short and long term)
 - Monitoring should be consistent and regular.
 - If off track start by monitoring.

Setting Goals

In order to win the race you have to know the course.

- **General Principles**

- Short-term goals for behaviour change (diet and exercise) & long-term goals for weight change

- To enhance motivation, goals should be challenging but achievable

- Limit new goals to one or two at a time

- Parents should set goals for own behaviours.

- Behavioural goals must be specific, attainable and subject to self-monitoring (i.e., “If you can’t count it, you can’t change it”)

Reward successful behaviours (praise, praise and more praise)

Reward is a powerful motivator.

General Principles

- It takes 5 positive comments to cancel out 1 negative.
- Both positive and negative responses (rewards and disapproval) should be linked to specific behaviours.
- Rewards given frequently at start.
- Small achievement small reward, large achievement large award.
- Frequent and specific use of praise.
- Parents reward children for achieving their goals and children reward parents for achieving theirs.

Problem solving

A problem shared is a problem solved

General Principles

- Identify the most challenging barriers and invent family strategies to overcome them
- They must be owned by the family!
- Talk with other families/ support staff to share strategies, successes, and lessons learned with other families facing similar challenges

The hard job of being a Parent

No one is perfect 100% of the time.

General Principles

- Parents should not negotiate with your children, no means no.
- Authoritative rather than authoritarian parenting
- Support the child's autonomy and self-sufficiency
- Be a role model
- Clear communication of expectations & consequences
- Consistent feedback that is dependant on prior agreements
- Use of praise, attention, and other rewards for achieving goals.
- Minimise attention to undesired behaviours
- Appropriate setting of limits

Preventing weight gain

Continued weight management is achieved through continued behaviour change.

General principles

- Everyone has lapses the trick is not to let a lapse turn into a relapse or a complete collapse.
- Within our goal setting sessions we talk about forgiving goals, this means that it is better to make plans that are flexible.

Thinking differently

Changing the way your children think about themselves can be a powerful support tool.

General principles

- Because of the bullying → they think they behaviour badly.
- If their negative views of themselves go unchallenged they will begin to believe them.
- Monitoring is important if you have evidence it is easier to change their view

Role modelling

Success breeds success

General principles

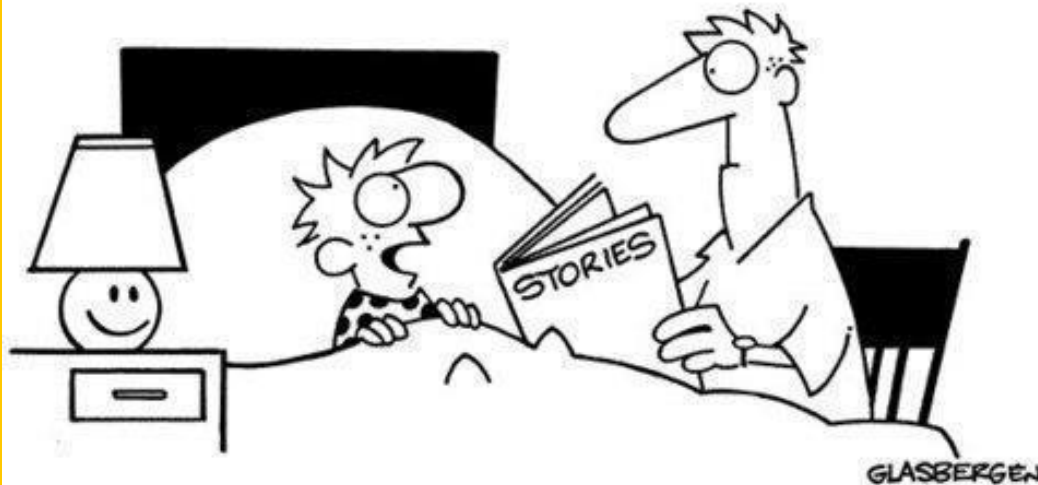
- Parents are the most powerful influencer of your child's behaviours.
- Good or bad behaviours are picked up by equally well from parents.
- While weight is important, healthy diets and being physically active are priorities.

Thank you

p.gately@leedsmet.ac.uk

www.more-life.co.uk

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**“Snow White was poisoned by an apple,
Jack found a giant in his beanstalk, and look
what happened to Alice when she ate the mushroom!
And you wonder why I won’t eat fruit and vegetables!?”**