

Managing obesity

What can be achieved in Primary Care?

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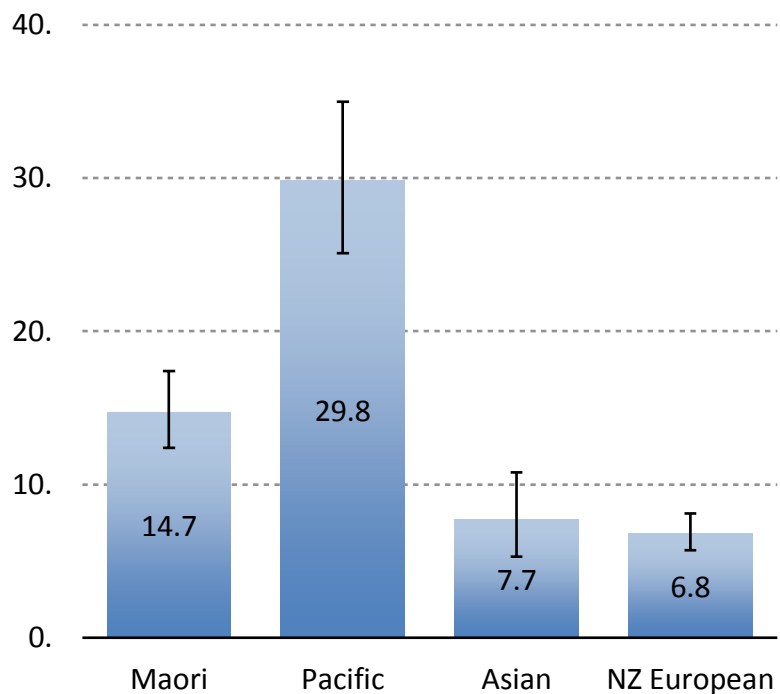
The causes of obesity are complex

- Behaviour
- Genes
- Environment

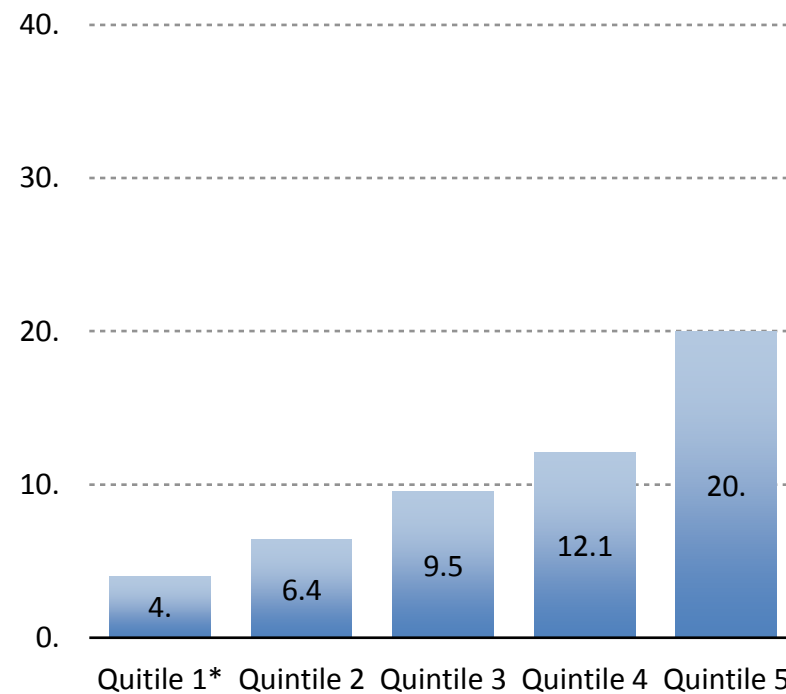


Childhood obesity in New Zealand

% children who are obese by ethnicity



% children who are obese by deprivation

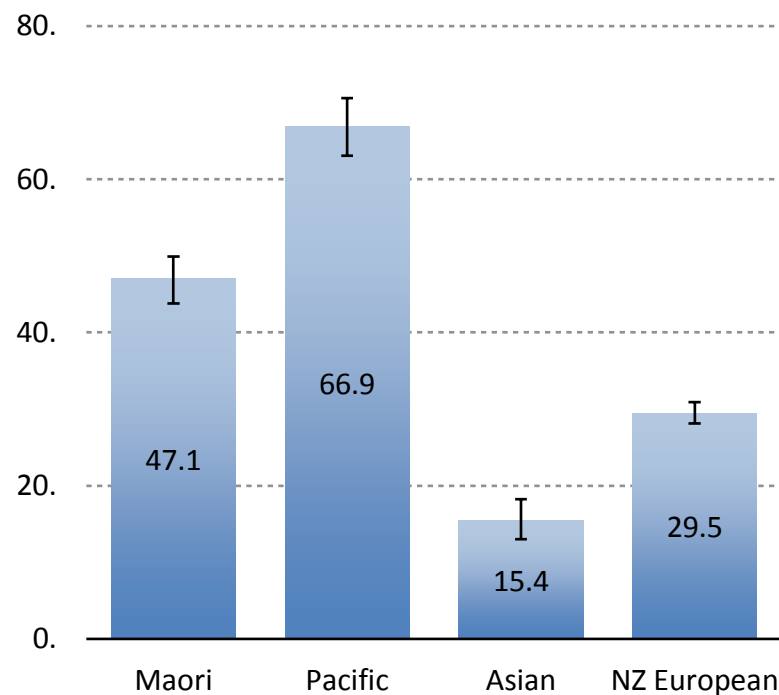


Maori vs. non-Maori: aRR=1.59 (1.25-2.02)
Pacific vs. non-Pacific: aRR=3.87 (3.17-4.74)
Most deprived vs. least deprived: aRR=3.02 (1.90-4.81)

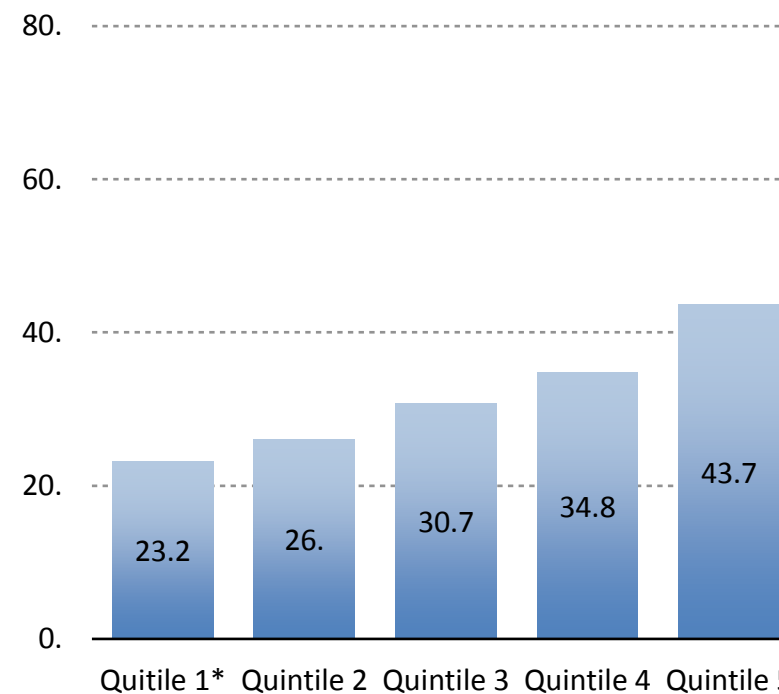
*least deprived
aRR= adjusted rate ratio

Adult obesity in New Zealand

% adults (15+) who are obese by
ethnicity



% adults (15+) who are obese by
deprivation



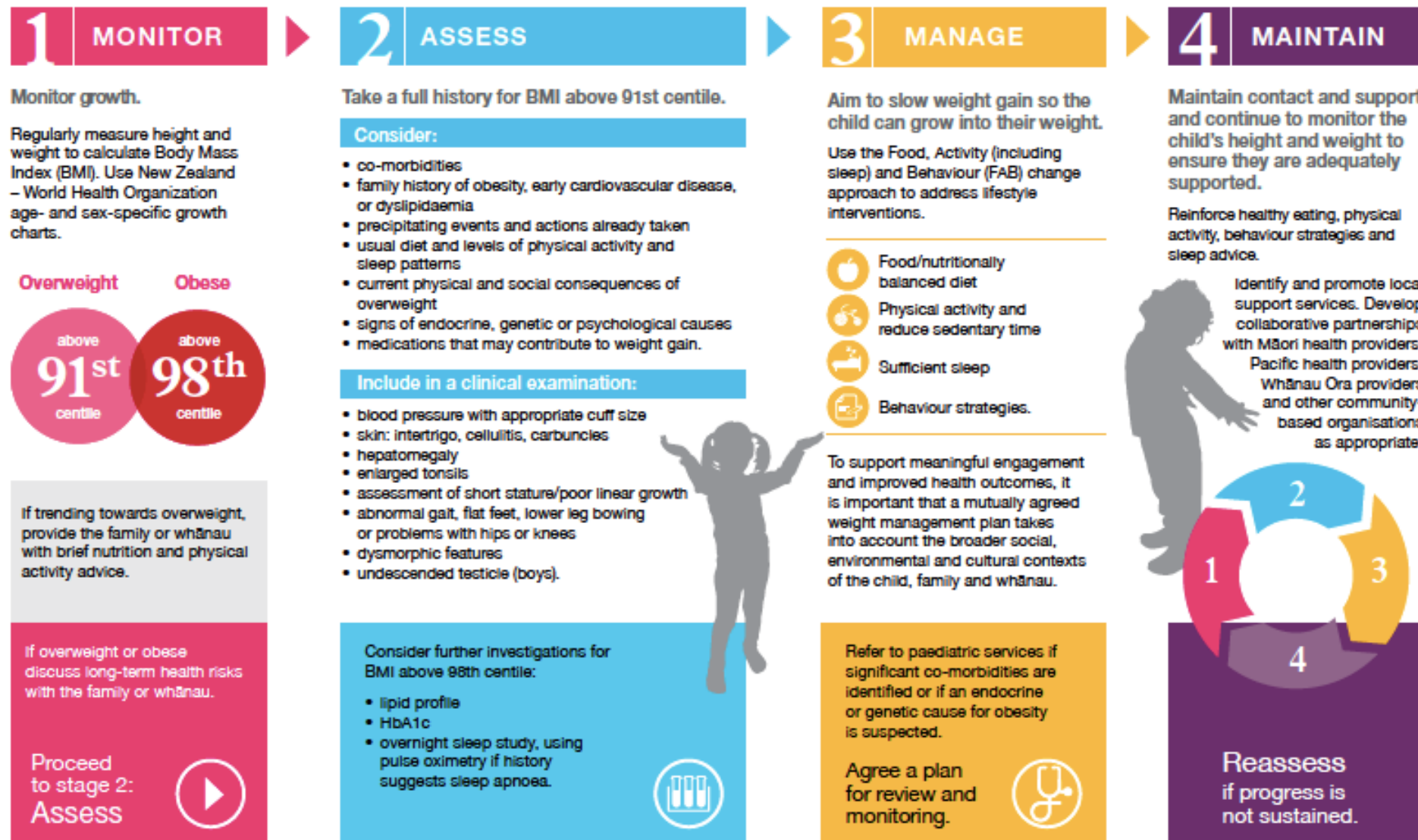
Maori vs. non-Maori: aRR=1.69 (1.58-1.82)
Pacific vs. non-Pacific: aRR=2.38 (2.21-2.56)
Most deprived vs. least deprived: aRR=1.70 (1.50-1.94)

*least deprived
aRR= adjusted rate ratio



What to do?

Weight management IN 2-5 YEAR OLDS



The process for adults

Weight Management
FAB *

1 Monitor

Engage

Measure BMI as part of a routine clinical practice to:

- raise profile
- prompt discussion

$$\text{BMI} = \frac{\text{weight (kg)}}{\text{height (m)}^2}$$

Engage further if BMI ≥30 (or 25–30 with known risk factors or central fatness)

2 Assess

Clinical need

Are clinical risks present? (eg. increased risk for CVD, diabetes, cancer)

Investigate:

- BP/lipid/glucose
- Smoking
- Mental health

Person's needs and context

Understand lived reality:

- Family/whānau, culture, work, community, beliefs and values
- Weight-related concerns and experiences
- Nutrition and activities of choice

Discuss person's motivation for action. If BMI is...

Use existing guidelines¹ if:

- BP/lipid/glucose
- Smoking
- Nutrition/physical activity

3 Manage

BMI without complications

25 30 35 40+

BMI with co-morbidities (eg. diabetes)

25 30 35 40+

Change lifestyle (FAB)

- Food/diet
- physical Activity
- Behaviour strategies

Adapt for person's/whānau lived reality
Consider individual, whānau, and community settings

30 35 40+

May consider adding drugs²

40+

Should consider surgery²

4 Maintain

Monitor progress

- Measure weight weekly
- Aim for modest weekly weight loss
- Arrange continued contact

Maintain

- Healthy diet
- Physical activity 30–40 minutes daily

Reassess and/or restart

- if actual weight increases by 1.5–2kg from goal weight
- if other risk factors are present

¹ New Zealand Cardiovascular Guidelines Handbook: A summary resource for primary care practitioners, Food and Nutrition Guidelines for Healthy Adults, Physical Activity Guidelines.

² Drugs and surgery only used in addition to lifestyle changes when other attempts have failed. They are not a substitute for lifestyle change.

STEP 1 - Monitor



- **Growth** in children
- Regularly measure height and weight to calculate BMI using age- and sex-specific growth charts

- **Weight** in adults
- Regular weight measurements (and a height, if this is not already known)

You might hear...



‘My child exercises every day of the week with horse riding and running and as you should know muscle weighs heavier than fat.’

You might hear...

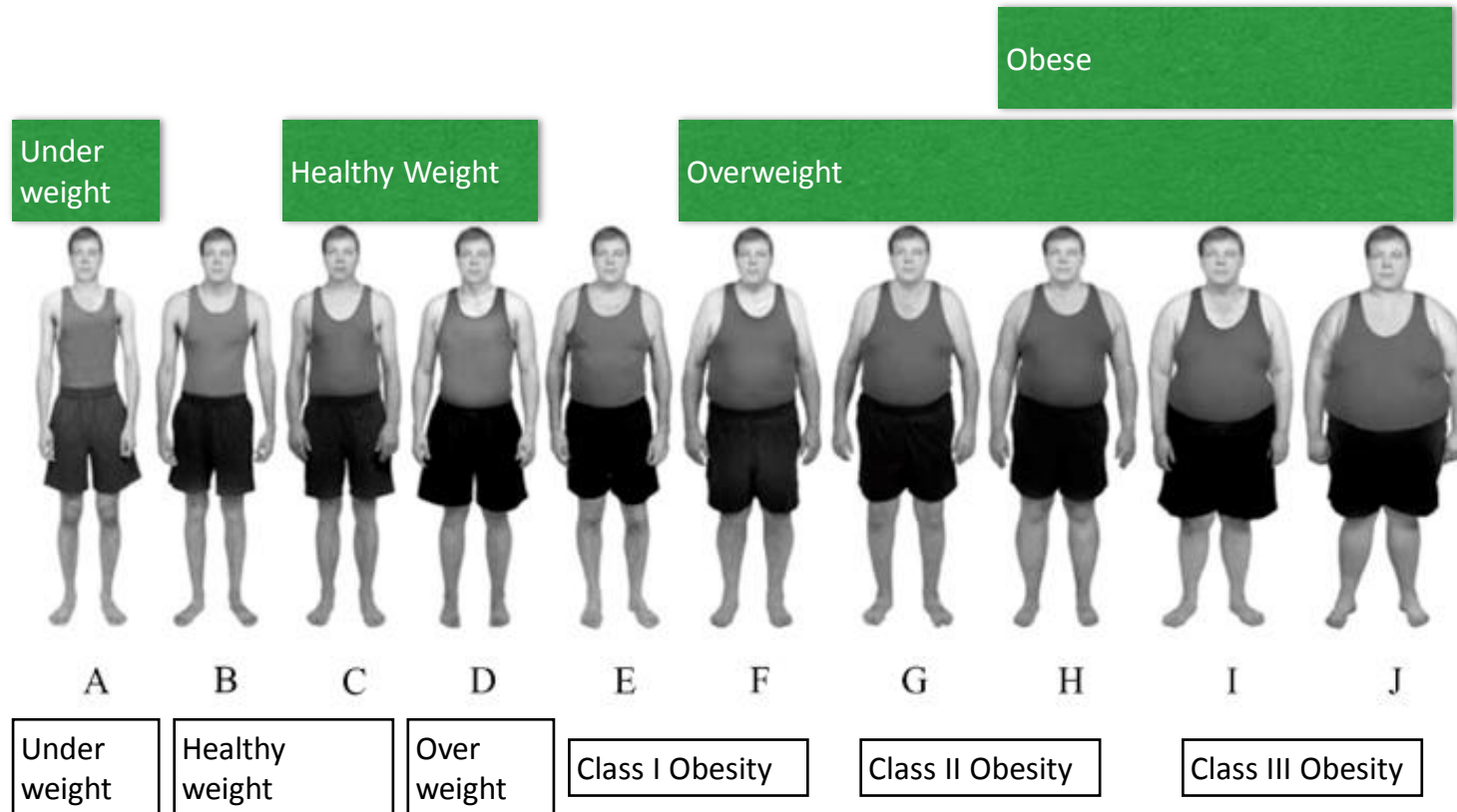


‘There are much fatter children out there and my son isn’t that bad!’

Perception of adults weight

Adult perception

Perception of weight was influenced by the respondents' weight status and gender



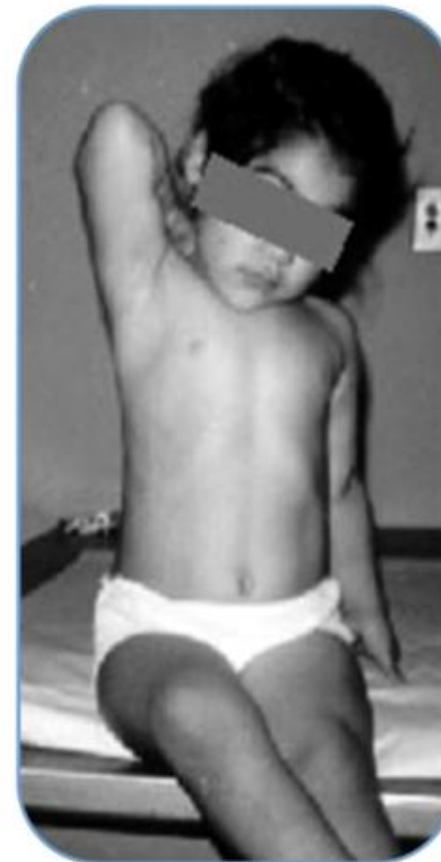
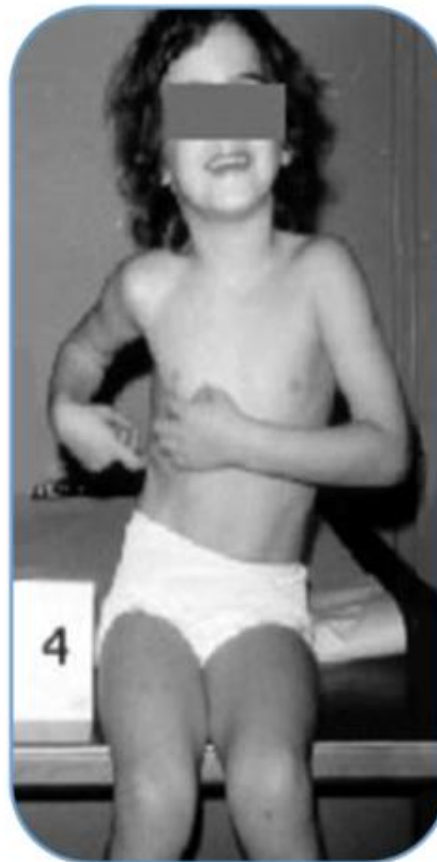
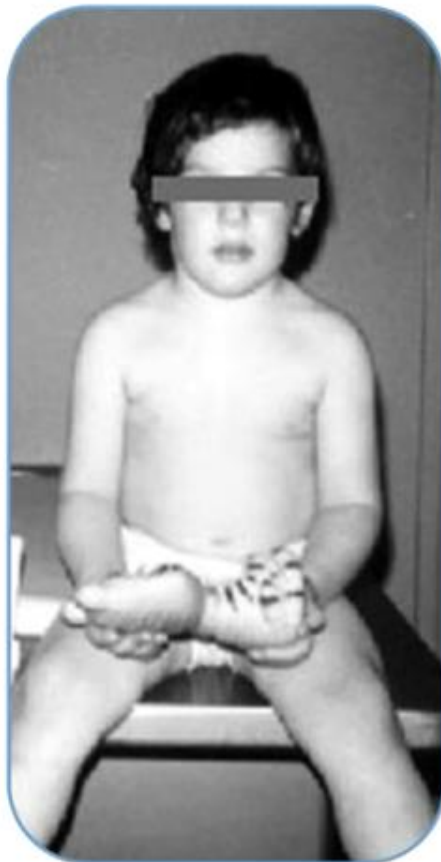
Perceptions of Children's Weight

Under weight

Healthy weight

Unhealthy
weight

Very unhealthy
weight



Growth Chart - BMI

Toi Te Ora
Public Health Service
 BAY OF PLENTY DISTRICT HEALTH BOARD
Serving Bay of Plenty and Lakes Districts

Boy's BMI Growth Chart 2-5 Years

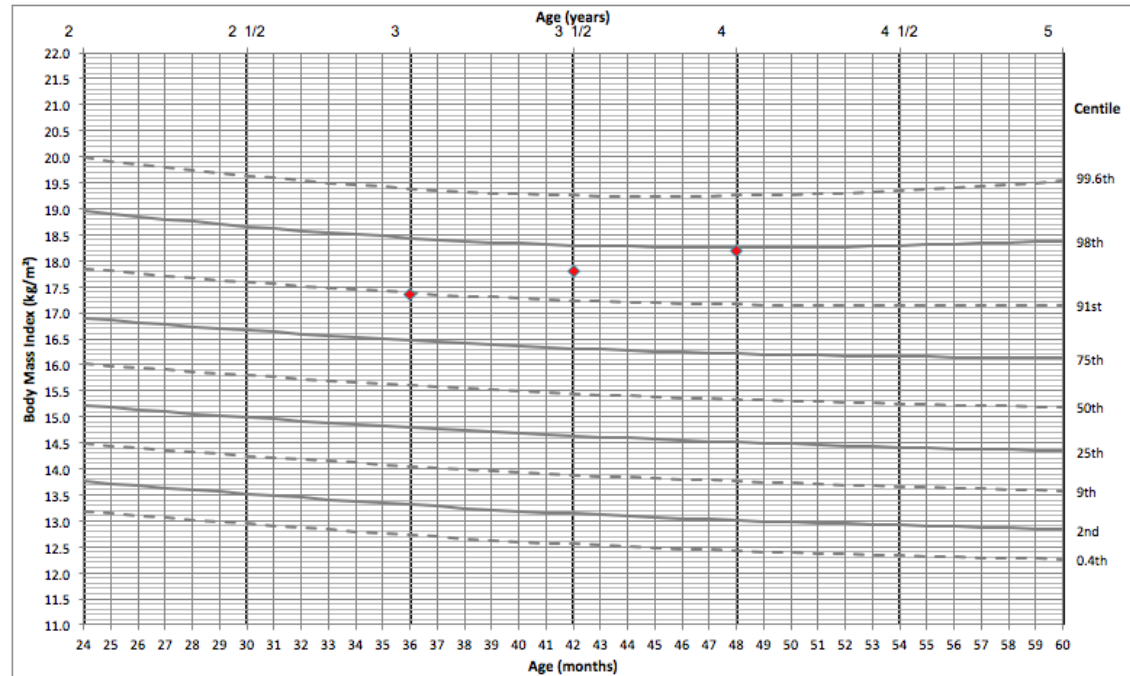
All fields highlighted in yellow are automatically calculated from the entered values.

Enter the child's birthdate in the blank cell below:

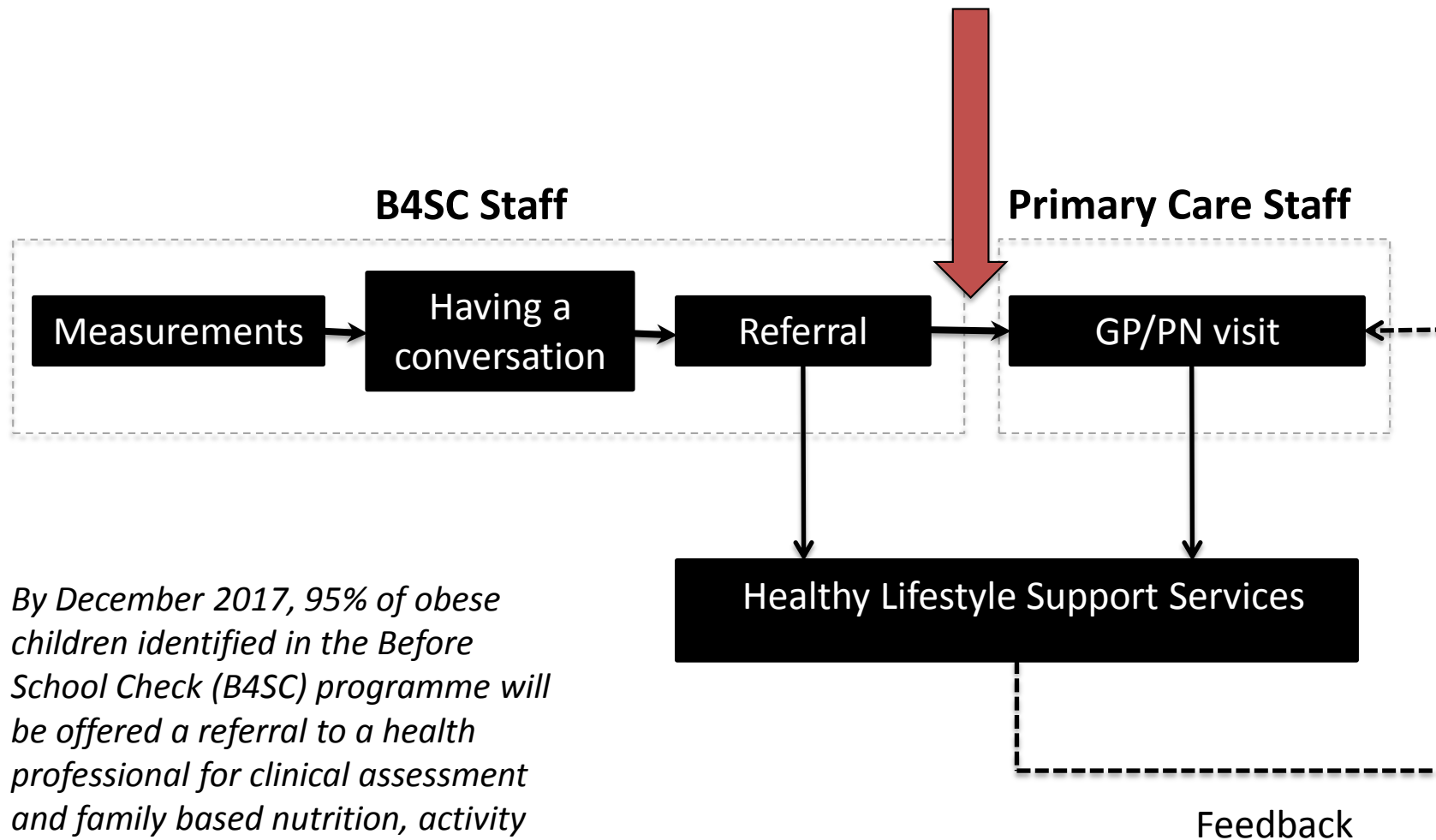
Birth date (dd/mm/yyyy)	3/04/13
----------------------------	---------

Enter the measurement date, standing height in cm, and weight in kg in the table below. The Age in months, BMI and exact BMI centile will be automatically calculated.

Measurement Date (dd/mm/yyyy)	Standing height in cm	Weight in kg	Age in months	BMI (kg/m ²)	Exact BMI Centile
4/04/16	96	16	36	17.4	90.78
4/10/16	106	20	42	17.8	95.79
3/04/17	110	22	48	18.2	97.76



Raising Healthy Kids Target



By December 2017, 95% of obese children identified in the Before School Check (B4SC) programme will be offered a referral to a health professional for clinical assessment and family based nutrition, activity and lifestyle interventions.

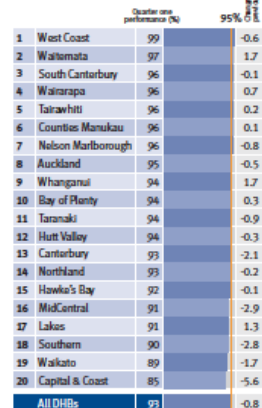
How is My DHB performing?

2016/17 QUARTER ONE (JULY-SEPTEMBER 2016) RESULTS

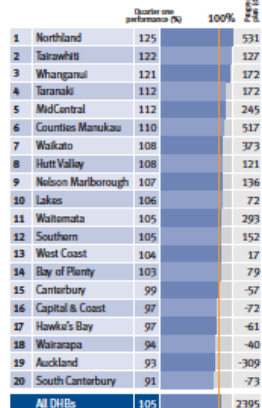
www.health.govt.nz/healthtargets



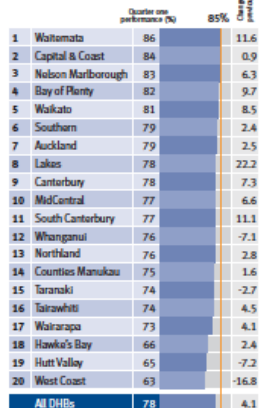
This is the first time Raising Healthy Kids has been reported as a health target.



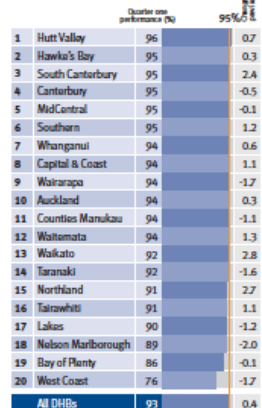
Shorter stays in Emergency Departments
The target is 95 percent of patients will be admitted, discharged, or transferred from an Emergency Department (ED) within six hours. The target is a measure of the efficiency of flow of acute (urgent) patients through public hospitals, and home again.



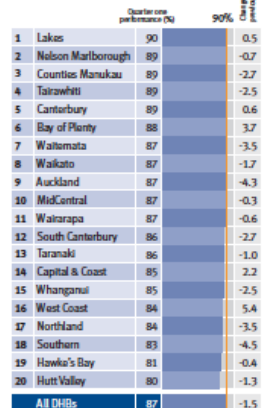
Improved access to elective surgery
The target is an increase in the volume of elective surgery by an average of 4,000 discharges per year. DHBs planned to deliver 49,227 discharges for the year to date, and have delivered 2,395 more.



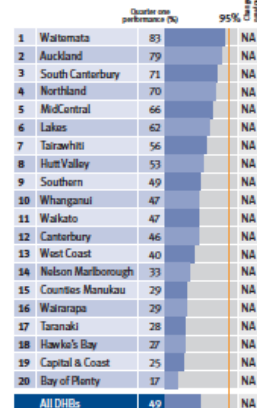
Faster cancer treatment
The target is 85 percent of patients receive their first cancer treatment (or other management) within 62 days of being referred with a high suspicion of cancer and a need to be seen within two weeks, increasing to 90 percent by June 2017. Results cover those patients who received their first cancer treatment between 1 April 2016 and 30 September 2016.



Increased immunisation
The national immunisation target is 95 percent of eight-month-olds have their primary course of immunisation at six weeks, three months and five months on time. This quarterly progress result includes children who turned eight-months between July and September 2016 and who were fully immunised at that stage.

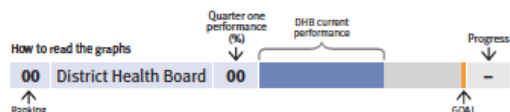


Better help for smokers to quit
The target is 90 percent of PHO enrolled patients who smoke have been offered help to quit smoking by a health care practitioner in the last 15 months. The hospital target is no longer a health target, results will continue to be reported on the Ministry's website along with the maternity target results.



Raising healthy kids
The target is that by December 2017, 95 percent of obese children identified in the Before School Check programme will be offered a referral to a health professional for clinical assessment and family based nutrition, activity and lifestyle interventions. Data is based on all acknowledged referrals for obese children up to the end of the quarter from Before School Checks occurring in the six months between 1 March and 31 August 2016.

*As this is the first time these results are being reported there is no comparison with the previous quarter.



Health target results are sourced from individual DHB reports, national collections systems and information provided by primary care organisations.

This information should be read in conjunction with the details on the website www.health.govt.nz/healthtargets

Quarter 1 Quarter 2 Quarter 3

		Quarter one performance (%)	95% Change previo	
1	Waitemata	83		NA
2	Auckland	79		NA
3	South Canterbury	71		NA
4	Northland	70		NA
5	MidCentral	66		NA
6	Lakes	62		NA
7	Tairāwhiti	56		NA
8	Hutt Valley	53		NA
9	Southern	49		NA
10	Whanganui	47		NA
11	Waikato	47		NA
12	Canterbury	46		NA
13	West Coast	40		NA
14	Nelson Marlborough	33		NA
15	Counties Manukau	29		NA
16	Wairarapa	29		NA
17	Taranaki	28		NA
18	Hawke's Bay	27		NA
19	Capital & Coast	25		NA
20	Bay of Plenty	17		NA
All DHBs		49		NA

		Quarter two performance (%)	95% Change previo	
1	Waitemata	100	16.3	
2	Auckland	97	18.6	
3	Hutt Valley	91	37.4	
4	MidCentral	89	22.4	
5	South Canterbury	87	15.4	
6	Waikato	79	32.9	
7	Canterbury	78	31.8	
8	Wairarapa	76	47.9	
9	Lakes	76	14.3	
10	Whanganui	75	27.1	
11	Northland	73	2.6	
12	Tairāwhiti	66	10.1	
13	Southern	64	14.3	
14	Counties Manukau	62	33.3	
15	Capital & Coast	47	22.5	
16	Hawke's Bay	40	12.5	
17	Nelson Marlborough	39	5.9	
18	Taranaki	36	7.8	
19	Bay of Plenty	33	15.8	
20	West Coast *	0	-40.0	
All DHBs		72	22.9	

		Quarter three performance (%)	95% Change previo	
1	Waitemata	100	0.4	
2	Whanganui	100	25.5	
3	Auckland	99	2.0	
4	Canterbury	93	15.1	
5	Hutt Valley	91	0.3	
6	Counties Manukau	91	28.4	
7	MidCentral	89	0.0	
8	Wairarapa	88	11.0	
9	Waikato	84	4.2	
10	Northland	83	10.2	
11	Hawke's Bay	81	41.7	
12	Lakes	79	3.5	
13	South Canterbury	79	-8.1	
14	Southern	78	14.2	
15	Capital & Coast	73	25.1	
16	Tairāwhiti	70	4.3	
17	Nelson Marlborough	67	27.5	
18	Taranaki	61	25.4	
19	Bay of Plenty	55	21.9	
20	West Coast	17	16.7	
All DHBs		86	13.8	

You might hear....

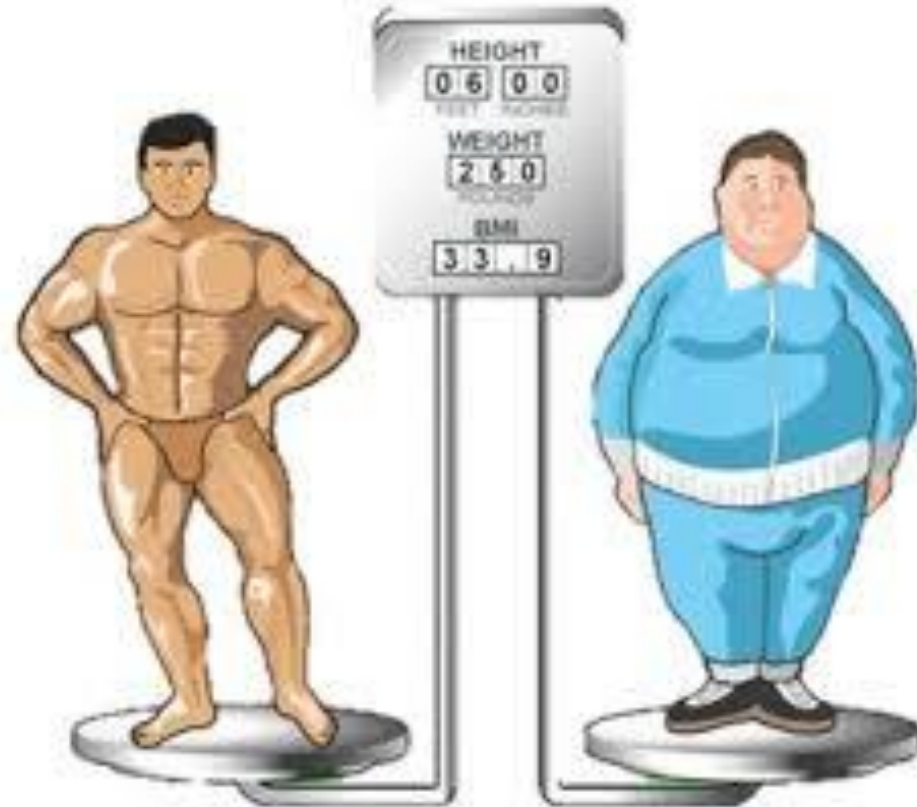
BMI is a flawed
measure!



Limitations of BMI

BMI is an indicator of risk. It **does not**:

- distinguish between fat and lean mass
- account for ethnic differences
- measure actual body fat or provide information about distribution of body fat
- account for people with smaller stature and with a BMI < 25, but with a large waist



STEP 2 - Assess

Children

History

- Pregnancy (obesity, diabetes, birth weight)
- Feeding (breast, bottle weaning)
- Early weight trajectory
- Current eating habits
- Developmental milestones
- Physical activity (& screen time)
- Sleep (enough of it, snoring)
- Medications (steroids)
- Family

Examination

- Watch the child walk into the room
- Talk to the child
- Growth chart (height, weight, BMI)
- Dysmorphic features
- Blood pressure

Adults

History

- Current eating habits
- Physical activity
- Sleep
- Medications
- Family history of obesity
- Early cardiovascular disease or dyslipidaemia
- Weight loss history
- Dietary patterns
- Current physical and social consequences of an unhealthy weight

Examination

- Weight & height
- Waist circumference
- Blood pressure

STEP 3: Manage

Behavioural changes are pivotal

F

Food

A

Activity
& Sleep

B

Behavioural
Strategies

3

MANAGE

Aim to slow weight gain so the child can grow into their weight.

Use the Food, Activity (including sleep) and Behaviour (FAB) change approach to address lifestyle interventions.



Food/nutritionally balanced diet



Physical activity and reduce sedentary time



Sufficient sleep



Behaviour strategies.

To support meaningful engagement and improved health outcomes, it is important that a mutually agreed weight management plan takes into account the broader social, environmental and cultural contexts of the child, family and whānau.

Refer to paediatric services if significant co-morbidities are identified or if an endocrine or genetic cause for obesity is suspected.

Agree a plan for review and monitoring.



For kids

Food

- Nutritionally balanced diet
- Appropriate portion sizes
- Family meals
- Slower eating
- Avoid snacking

Activity and sleep

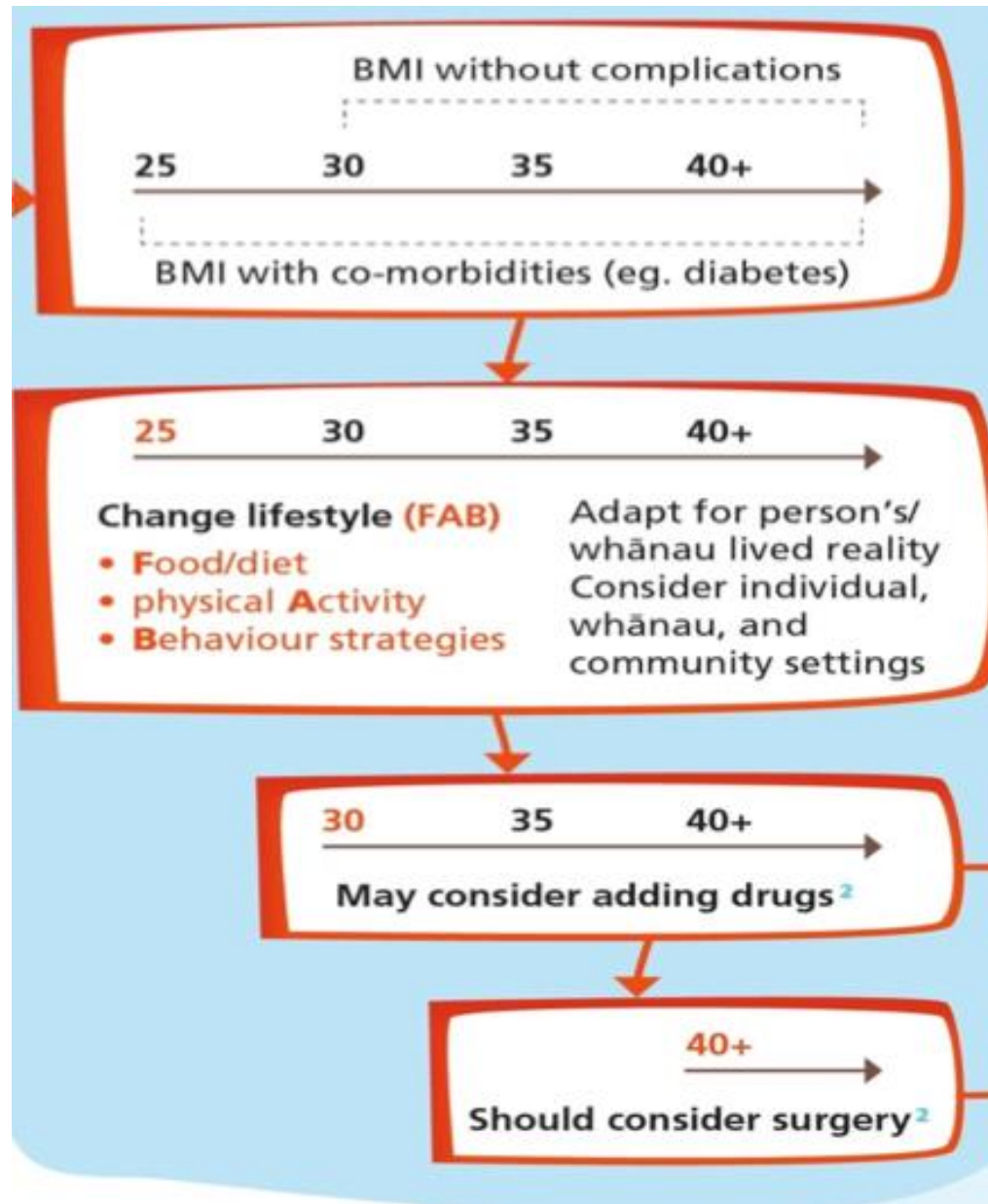
- Play and physical activity
- Reduce screen time (esp TV)
- Sleep time
 - Infants 12-15
 - Toddlers 11-14
 - Preschoolers 10-13

Behavioural strategies

- Change what is available at home
- Keep 'treats' out of site
- Increase easy accessibility to healthy options

For adults - FAB

- There is huge individual variation with diets - **so it's perhaps more about stick-ability!**
- Chose an option that can be implemented and sustained
- If one approach does not succeed try another
- Encourage exercise as well as dietary changes, but manage expectations (i.e. exercise does not have a huge impact on weight loss, but has numerous other health benefits)



Approved Medicines

- Orlistat
- Phentermine

Not approved in NZ

- Liraglutide
- Naltrexone/bupropion

There are a number of other criteria for publicly funded bariatric surgery

- BMI <55kg/m²
- weigh less than 160kg
- acceptance of long term follow-up

STEP 4 - Maintain

- Review opportunistically
- Address comorbidities
- Accept setbacks – maintain positivity
- Encourage family activities and sport
- Encourage cultural initiatives
- Support communities
 - Healthy Families NZ
 - Iron Māori
 - Community gardens/Kai Atua

Brief interventions – Adult obesity

- **Motivate a weight loss attempt**
- Healthcare professional advice to lose weight was associated with increased odds of weight loss attempts (OR=3.53; 95% CI: 2.44-5.10)



Making an offer of support

Intervention (n=940)

- Physician offered referral to a weight management group
- 72% agreed to attend
- 40% attended
- Mean weight change at 12 months: **2.43 kg**

Control (n=942)

- Physician advised the patient that their health would benefit from weight loss.
- 9% attended weight management group
- Mean weight change at 12 months: **1.04 kg**

adjusted difference = 1.43 kg (95% CI 0.89-1.97)

Importance of systems



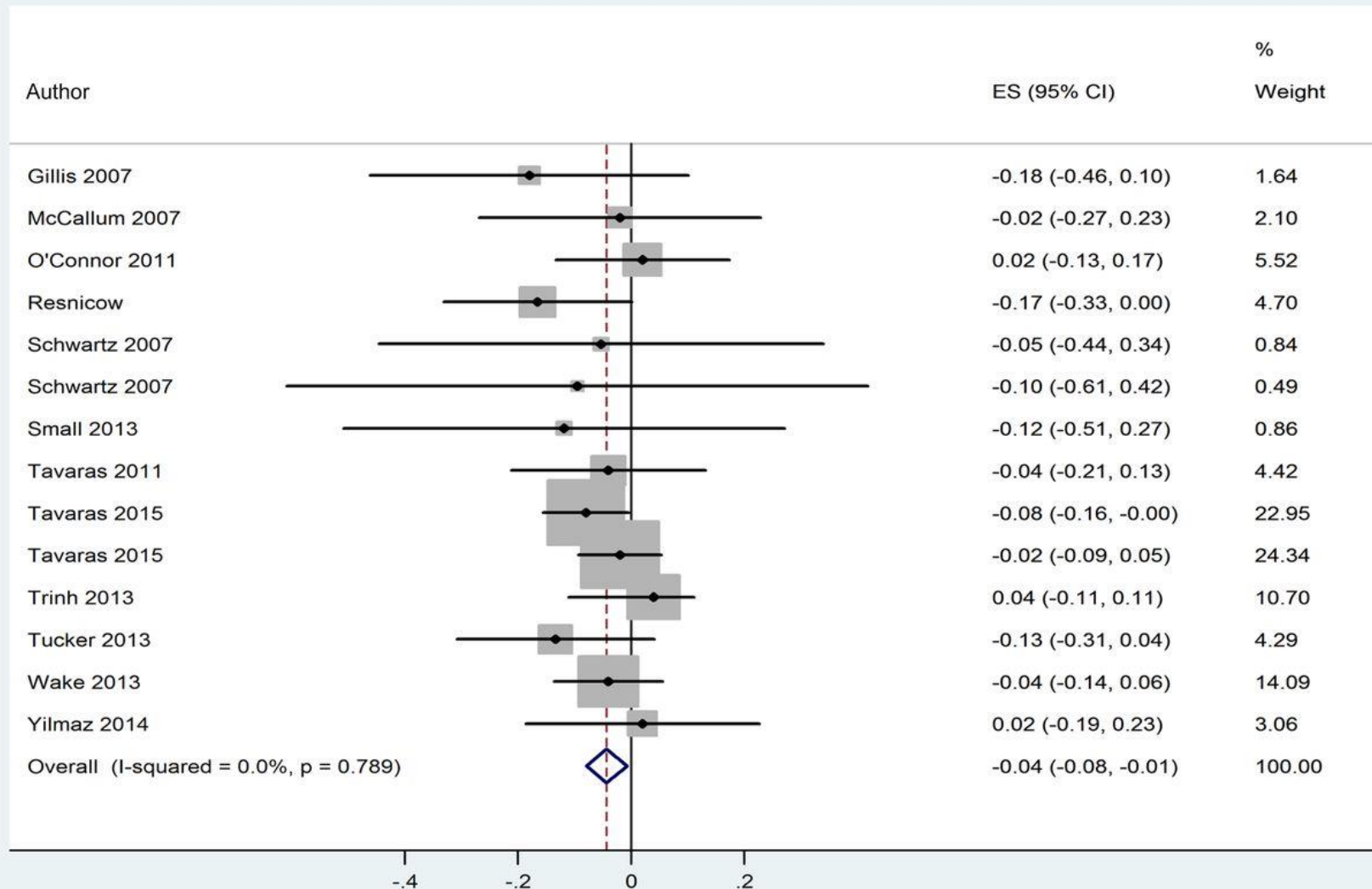
Tasks can be shared

- Measurements
 - Who takes these?
 - Where/when?
- Conversation
- Next steps
 - Referral
 - Follow-up

Brief interventions – childhood obesity

Marginal effect for primary care–based early interventions for paediatric obesity with regard to BMI reduction

Random effect meta-analysis (the effect of brief primary care interventions vs usual care or active control on z-BMI).



So why is having
the conversation
so hard?



Do you remember this campaign?



*“Our findings highlight a **mismatch** between health professionals perceptions of how difficult these discussions are and reality, in that **most parents are receptive** to the information if delivered well.”*

Having the conversation....

The most important aspect of these conversations is to make the experience **positive** and **non-judgmental**

The style in which this feedback is provided appears to be less important.

Dawson et al. Pediatr Obesity, 2016

Keep it simple, but if you have more time you can go further utilising 'change talk'



Change Talk: Childhood Obesity

Kognito Health & Fitness

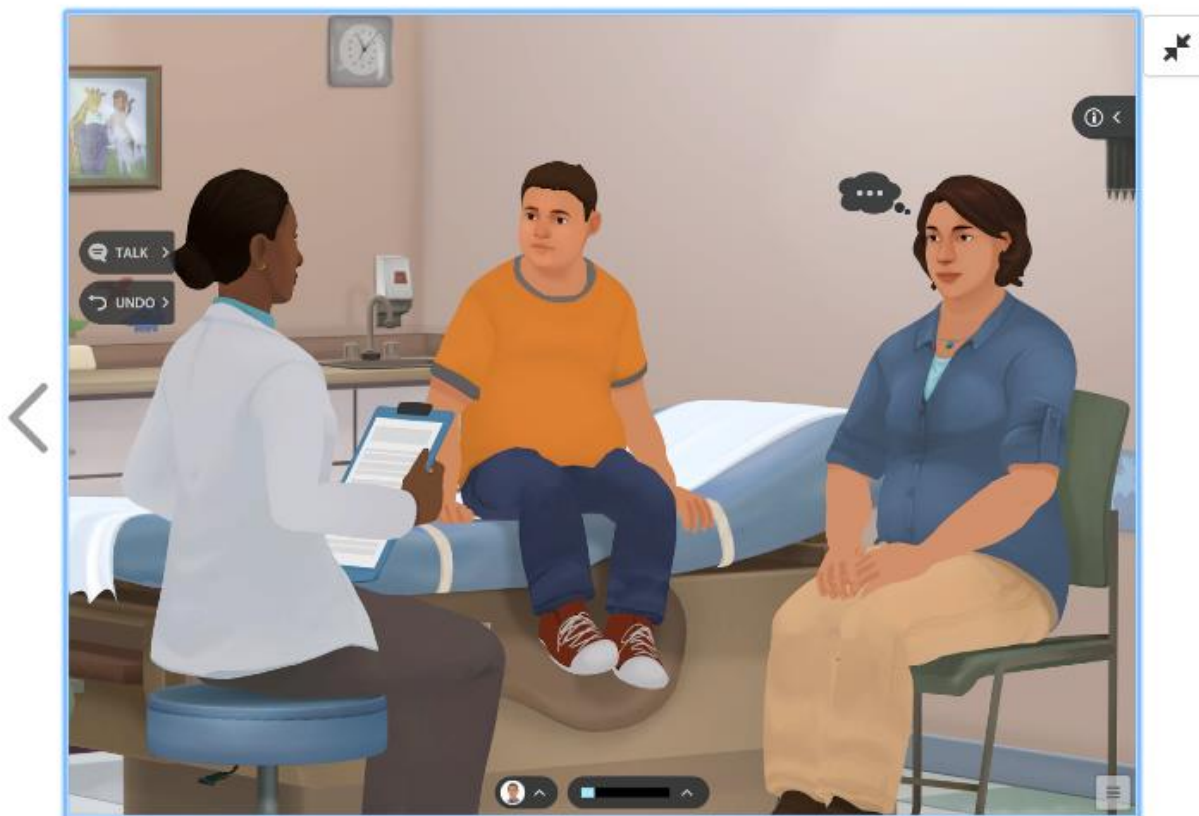
★★★★★ 29

3+


⚠ You don't have any devices

+ Add to Wishlist

Install







Tools to help



PATIENT NAME: _____
 DATE: _____

I recommend the following:

- ☐

Enjoy - FIVE or more vegetables & fruits every day
- ☐

Power down - no more than **TWO** hours of screen time a day
- ☐

Play actively - at least **ONE** hour each day
- ☐

Choose healthy - **ZERO** sugar-sweetened drinks

<http://www.live5210.ca/resources/downloads/>





	Not yet	Sometimes	Mostly	Always
b reakfast every day				
e at 5+ a day				
s leep 10-12 hours				
m atch servings to hand size				
a ctivity 60 minutes daily				
r educe sugary drinks				
t akeaways less than once a week				
e at together as a family				
r educe screen time < 2 hours				

Name _____ Date _____
 Goal _____

Tick your goals here:

	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Week 1							
Week 2							
Week 3							
Week 4							




bodywise@waikatodhb.health.nz

Today you were seen by: _____

<http://www.waikatodhb.health.nz/directory-of-our-services/waikids/bodywise/>

Tips

Healthy eating tips for 2–5 year olds

Eating a wide variety of healthy foods is essential for normal growth and development.

Weight is a sensitive issue, even for small children. It is important your child does not feel they are being punished. The best way to do this is for the whole family/whānau to eat the same meals. It's easier to eat healthy meals and snacks if healthier foods are in your house. Here are some ideas to help you.

- Eat meals together as a family. Make sure the television and other screens are turned off.
- Make sure your child eats breakfast every day. It's a great way to start the day. Good breakfast choices include grain cereals, such as wheat biscuits and porridge, whole-grain toast, fruit and reduced-fat milk.
- Think about the size of meals. Could they be smaller? Reduce the amount you put on the plate over several nights so the whole family gets used to eating smaller meals.
- Children are smaller than adults so don't need adult portions. Try using a smaller plate.
- 2–5 year olds should aim for at least 2 servings of vegetables and 2 servings of fruit each day. Children over 5 years should try to have at least 3 servings of vegetables and 2 servings of fruit each day.

- Choose whole-grain breads instead of white breads.
- Use margarine instead of butter and spread thinly.
- Encourage your family to drink water or reduced-fat milk rather than soft drinks, cordials or sports drinks.
- Choose reduced-fat milk and yoghurt for everyone in the family aged 2 years or older.
- Reward your child with attention and hugs instead of food treats such as sweets.
- Avoid cakes, biscuits, sweet muffins, lollies and chocolate.
- Replace sour cream or coconut cream with reduced-fat unsweetened yoghurt, lite coconut cream, coconut milk or light evaporated milk.
- Choose sandwiches, filled rolls or savoury bread cases instead of pies, pastries, potato chips and sausage rolls.
- Fresh fruit, popcorn, a glass of reduced-fat milk or a small sandwich make great snacks.
- Choose home-made burgers and oven wedges instead of commercial burgers, pizzas and fried foods.

For more advice on the types of food children need to eat to be healthy, see *Eating for Healthy Children: From 2 to 12 years*, available from health.govt.nz

For more tasty, easy (and healthy) meal ideas and recipes, go to myfamily.kiwi/foods

Sleep tips for young children

Why is sleep important?

Sleep is important for restoring energy and for growth and development.

There is increasing evidence that not enough, or poor quality, sleep can negatively affect children's behaviour, learning, health, wellbeing and weight.

How much sleep does my child need in 24 hours?

The table below shows the recommended total hours of sleep (including naps) per day for children from birth to 5 years. Some children naturally sleep slightly less or more than the recommended time.

Age	Recommended (hours)
Newborn (0–3 months)	14–17
Infant (4–11 months)	12–15
Toddler (1–2 years)	11–14
Preschool (3–4 years)	10–13
5 year olds	9–11

Adapted from the National Sleep Foundation: How much sleep do we really need?

For more details, go to Sleep Tips for Young Children at health.govt.nz

It is not just the amount of sleep that is important but also the quality of that sleep. The following tips may be helpful.

How can I improve my child's sleep?

- Have a regular bedtime routine. This might include a bath, brushing their teeth, a story then bed. Quiet activities are good before bed. Avoid active games, playing outside and screen use (eg, TV, internet, computer games) in the hour before bedtime.
- Have a regular bedtime and wake up time. It helps your child to understand when it is time to sleep.
- Have a comfortable sleep environment. The place where they sleep should be quiet, warm and dark (though a night light is okay).
- Have no distractions in the place where children sleep, including TV, computer screens and portable devices.
- A meal within 1 to 2 hours of going to sleep is not recommended. However, a light snack may help some children.
- Avoid giving your child food and drinks containing caffeine as this can affect their sleep.
- It is normal for young children to have naps during the day. As they get older, they will need less sleep and fewer naps. If your child has a nap after 4 pm (except for newborns and infants), it may be harder for them to get to sleep at night.
- It is important for children to be active throughout the day. Activity can also help your child to sleep. Time spent in bright sunlight, such as being active outside, can also help children to sleep, but don't forget to be sunsmart! Avoid lots of activity in the hour before bedtime.
- Being unwell can also affect your child's sleep. If your child snores a lot or stops breathing for short periods while asleep, discuss this with your GP.

These tips were adapted from the Australian Sleep Health Foundation's Sleep Tips for Children.

Tips to help 2–5 year olds be more active

Being active will help your child achieve and maintain a healthy body weight. Being active has many other health benefits and can be fun for the whole family.

- Walk, run and play with your child. By being physically active yourself, you are setting a good example.
- If your child is not usually active, start with something fun like a trip to the local playground. Walking there adds extra steps into the day.
- Instead of short car trips, try walking, biking or scooting with your child. Start by doing this once a week and add more trips over time.
- Encourage your child to play outside as much as possible.
- Try to do something fun and active as a family each week. Some ideas are walk along the beach, roll down a grass bank, play tag, fly a kite at the park or take a trip to the local swimming pool.
- Limit the amount of time your child spends watching TV or in front of a screen to less than 1 hour a day.

For more low- or no-cost family activity ideas, visit the myfamily.kiwi/activities webpage or Activities for under 5s on our health.govt.nz website.

Find out more from the Ministry

Food and Nutrition Guidelines for Healthy Children and Young People (Aged 2–18 years): A background paper

<http://www.health.govt.nz/your-health/healthy-living/food-and-physical-activity/obesity>

Commonly selected goals

- Increase in fruit and vegetables
- Less junk food, more healthy snacks
- Decrease sugary drinks
- Drink more water
- Proportionate hand-based portion sizes
- Active play at least 60 minutes each day

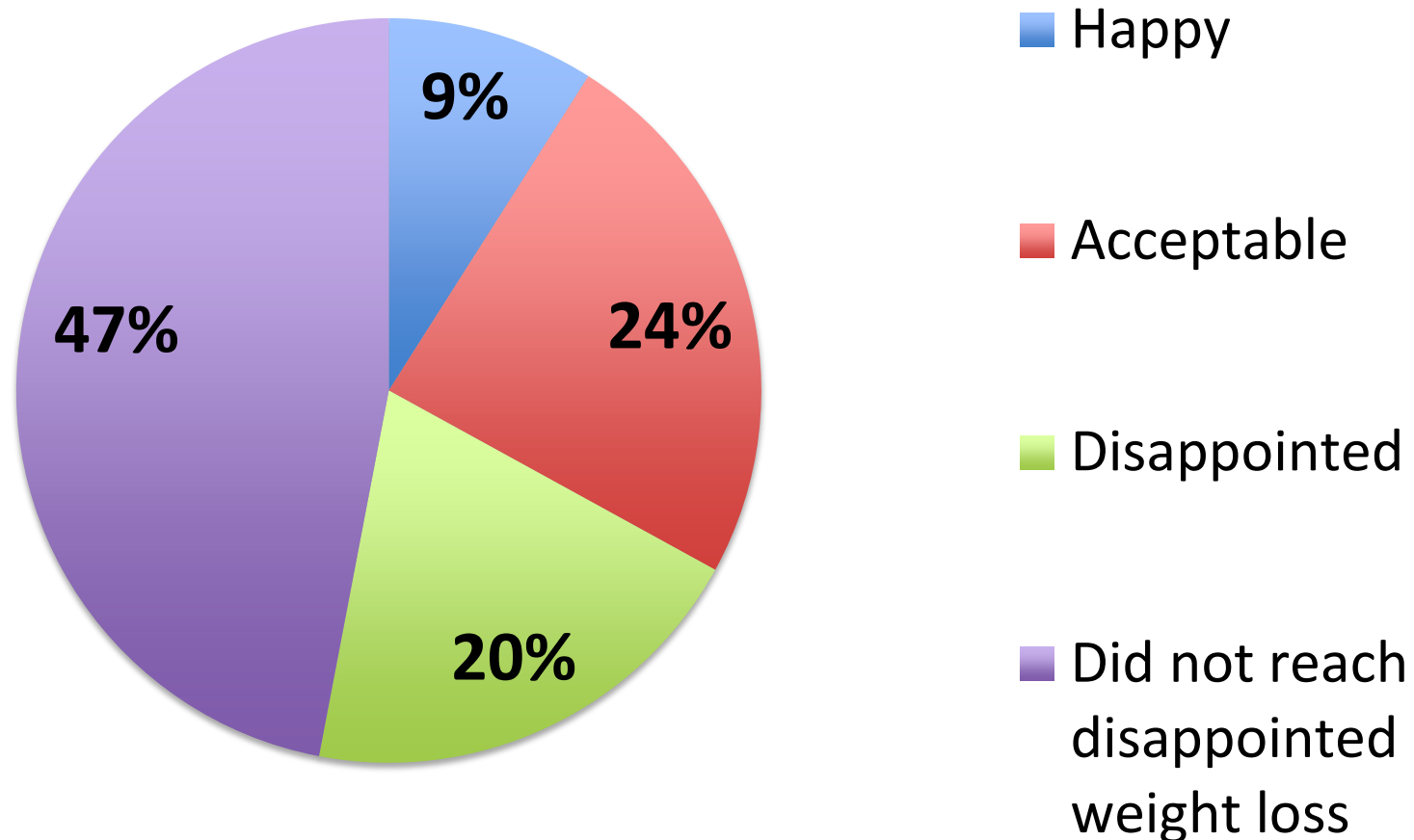
Expectations of weight loss



- Foster et al 1997
 - 60 middle aged obese women
 - BMI > 35
- Their goal weight loss
 - Dream weight
 - Happy weight
 - Acceptable weight
 - Disappointed weight

	Dream	Happy	Acceptable	Disappointed
% of baseline weight lost	38%	31%	25%	17%

Weight loss at 48 weeks



No one achieved their dream weight loss

Realistic expectations

- Most people cannot achieve their ideal weight, even with the most aggressive approaches
- Most cannot maintain losses $\geq 15\%$ of initial body weight without surgery
- Loss of 5% to 10% of body weight is realistic, and associated with significant health improvements

Success

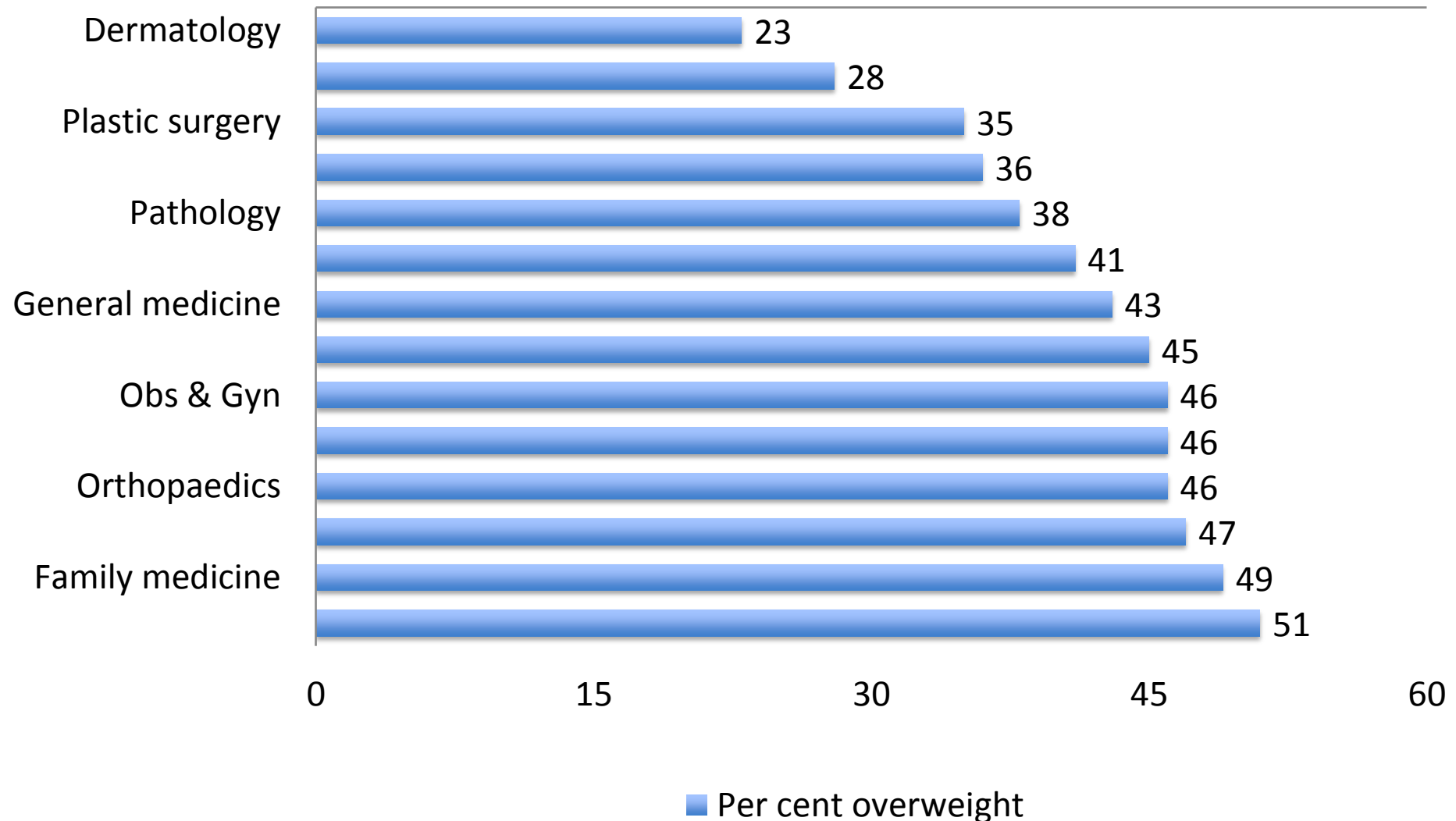


What people think
it should look like



What it really
looks like

Overweight healthcare professionals?



What do patients think?

- Survey of 600 overweight or obese adults

Patients estimation of doctors weight	Normal (n=118)	Overweight (n=312)	Obese (n=170)
Trust* advice on weight control	76%	85%	85%
Trust advice on diet	77%	87%**	82%
Trust advice on physical activity	79%	86%	80%

* Rated 'a great deal' or 'a good amount' of trust

**Significantly greater than normal weight (p=0.04)

Conclusion

- The solution to obesity is multi-faceted
- Health care professionals have an important role to play
- Although the conversations can be difficult, they are worthwhile

VALUE SMALL CHANGES
IN BEHAVIOUR

UNDERSTAND
PEOPLE'S
LIVED
REALITIES



ADDRESS STIGMA

POSITIVE

BE CONFIDENT AND CARING

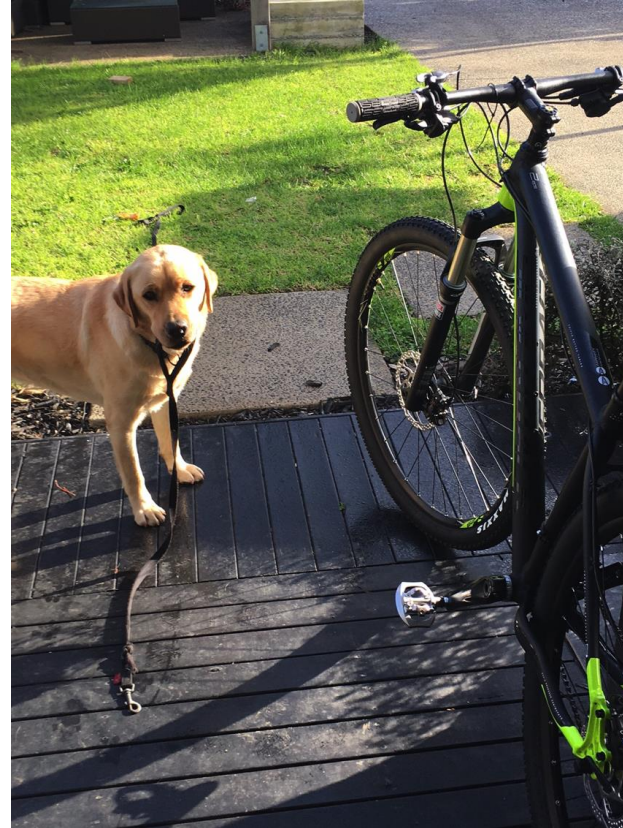
NON-JUDGEMENTAL

MOTIVATIONAL

RESPECT

Maintaining healthy behaviours

Can be hard...



and a little
help is
sometimes
needed!

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