

Clinical guidelines for weight management in New Zealand adults, children and young people

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This paper summarises the treatment algorithms (Figures 1 and 2) and key messages from the *Clinical Guidelines for Weight Management in New Zealand Adults, Children and Young People* prepared for the Ministry of Health. The guidelines aim to provide support to weight management providers in primary care and the community. The full guidelines and methods can be downloaded from the Ministry website (<http://www.moh.govt.nz>).

Weight management in adults (Figure 1)

- Overweight and obesity increase the risk of mortality and morbidity, particularly from cardiovascular disease, some cancers, type 2 diabetes as well as other comorbidities.
- Reducing the risks of excess weight is about changing lifestyle and behaviour.

STEP 1: Engage and raise awareness

- Engage with the person. Measure body mass index (BMI) as part of routine practice for estimate of risk (use Table 1 below).

STEP 2: Identify need and context for action

If the person is in a high-risk category, assess the person's lived realities and clinical need.

- Consider the person's:
 - family/whanau, culture, work, community, beliefs and values
 - weight-related concerns and previous experiences with weight loss
 - nutrition and activities of choice
 - age, sex, and ethnicity (Maori, Pacific and South Asian population groups)
 - family history of cardiovascular disease
 - smoking status

Table 1. Body mass index and estimate of risk

Classification	Body mass index kg/m ²	Disease risk	
		Waist ♂ 94–102 cm ♀ 80–88 cm	Waist ♂ > 102 cm ♀ > 88 cm
Normal	18.5–24.9	–	–
Overweight	25.0–29.9	+	++
Obese I	30.0–34.9	++	+++
Obese II	35.0–39.9	+++	+++
Obese III	40.0+	++++	++++

+ Increased risk; ++ High risk; +++ Very high risk; ++++Extremely high risk.

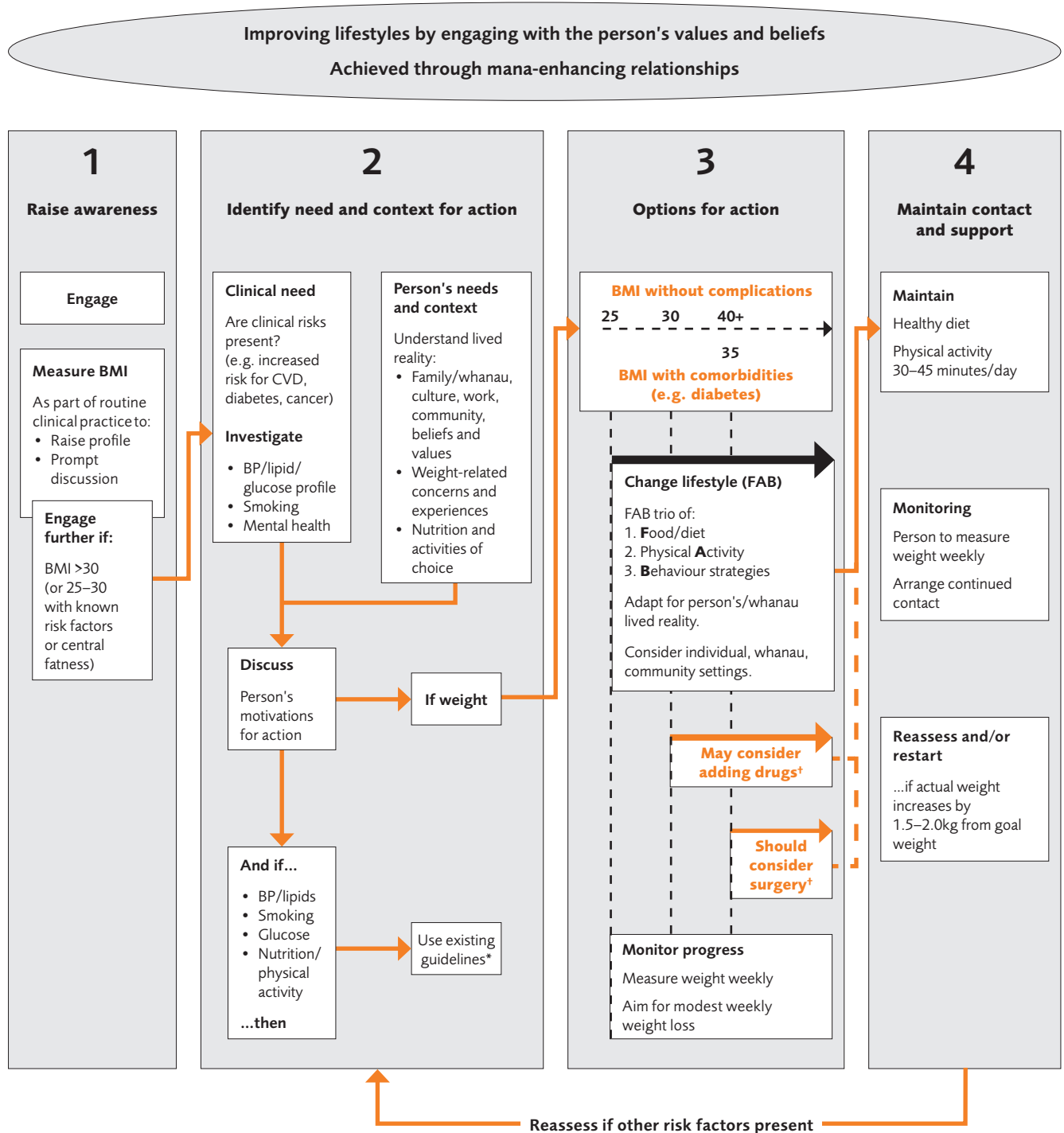
Note: BMI may not be as accurate in highly muscular people or in ethnic groups with smaller body stature. (Therefore, in South Asians, for example, consider lowering the treatment threshold in the presence of central fatness or additional risk factors.)

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Figure 1. Algorithm for weight management in adults

ADULTS



* New Zealand cardiovascular guidelines: a summary resource for primary care practitioners; Food and nutrition guidelines for healthy adults; Physical activity guidelines

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

- blood pressure and lipid profile
- common comorbidities (e.g. diabetes)
- psychiatric history and use of anti-psychotics or mood stabilisers.
- Discuss risks and motivations for action and use other guidelines as indicated by person's priorities.

STEP 3: Determine options for action

- The most effective approach to weight loss uses three key interventions in combination:
 - changes to **F**ood/diet,
 - increased physical **A**ctivity, and
 - **B**ehavioural strategies (called 'the **FAB** approach').
- The only effective approach to weight management is a permanent change to how people live their lives.
- A realistic target for weight loss varies by individual. Benefits start to accrue when 5–10% of initial body weight is lost. Aim for a modest weekly weight loss.
- Consider referral to professional and community providers to provide ongoing support.

Diet

- Low energy, low glycaemic index/load, and modified macronutrient approaches (i.e. low carbohydrate, low fat, high protein or high carbohydrate diets) are all similarly effective for weight loss providing the diet results in some energy restriction. Consider sustainability of the diet and the person's (and family/whanau's) preference for choice of diet. As lifelong changes are recommended, it is important to take a healthy, balanced approach to dietary changes. Fad diets, such as those including only one food type, should not be considered. Very low energy diets require close medical supervision.

Physical activity

- Aim to increase periods of physical activity to at least 60 minutes every day for weight loss. Start with small achievable goals (e.g. 5–10 minutes per day) and build up to target.
- Reduce overall screen time (e.g. watching television, DVDs, using the computer).

Behavioural strategies

- Include the person's partner and family/whanau in the weight management plan.
- Identify the changes the person/whanau wishes to work on first. Use problem-solving and goal-setting strategies to achieve changes.

Pharmaceuticals

- Consider anti-obesity drugs when BMI ≥ 30 kg/m². Note that any anti-obesity drug must be used in conjunction with lifestyle changes. Counsel a low-fat diet when considering orlistat.

Surgery

- Consider referral for bariatric surgery when BMI ≥ 40 kg/m² or ≥ 35 kg/m² with significant comorbidities.

STEP 4: Arrange ongoing contact and support (once goal weight reached)

- Make arrangements to reinforce life-style change through regular brief contact (e.g. ongoing clinical, family/whanau or community contact).
- Encourage person to weigh themselves regularly (e.g. weekly) and have strategies to manage weight regain.
- Encourage person to maintain healthy diet and to do at least 30–45 minutes' physical activity every day for weight maintenance.
- Restart weight management programme if person's weight regain increases 1.5–2.0 kg over goal weight.
- Consider anti-obesity drugs for weight-loss maintenance.

Weight management in children and young people (Figure 2)

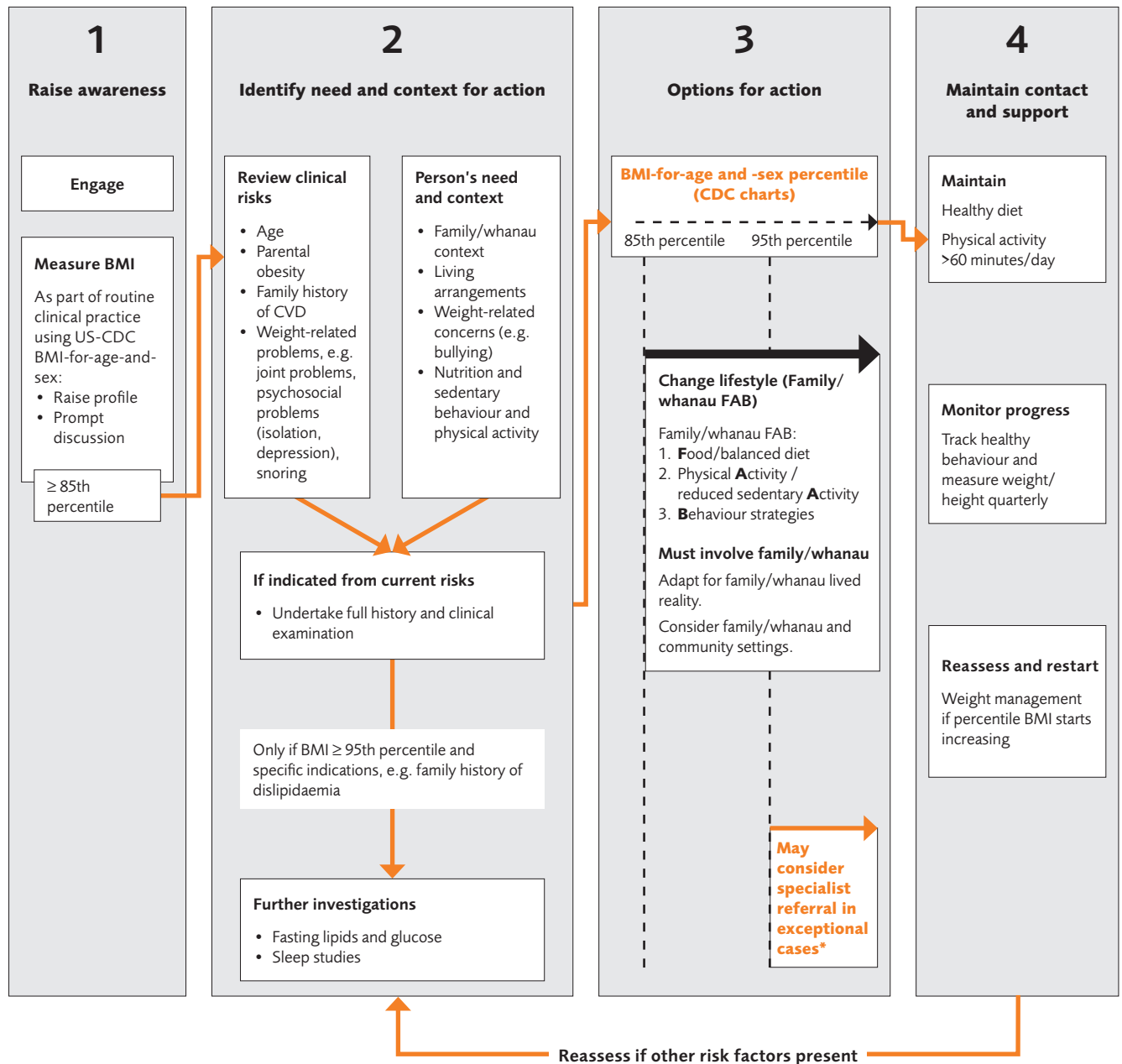
STEP 1: Engage and raise awareness

- Engage with child or young person and their family/whanau. Measure height and weight as part of routine clinical practice to calculate body mass index (BMI).
- Use the United States Centers for Disease Control and Prevention BMI-for-age and -sex

Figure 2. Algorithm for weight management in children and young people

CHILDREN, YOUTH (AND PARENTS/CAREGIVERS)

Improving lifestyles by engaging with the family/whanau values and beliefs
Achieved through mana-enhancing relationships with family/whanau



* When lifestyle interventions have failed and significant comorbidities or risk factors exist

percentile charts to monitor BMI. For abdominal obesity, the waist circumference of a young person aged over five years should be about half the young person's height.

- Note that a child or young person with a BMI-for-age and -sex in the 85th percentile or higher is overweight and in the 95th percentile or higher is obese.

STEP 2: Identify need and context for action

- Assess the child or young person's lived reality and clinical need. Consider their family/whanau, culture, community, beliefs and values.
- Conduct a full history and clinical examination. Advise the family/whanau (and the child or young person) if the child or young person's BMI is at the 85th percentile or higher and there is evidence of a current health risk.
- Consider further investigations only where there are specific indications, such as the child or young person has a BMI at the 95th percentile or higher and a positive family history of dyslipidaemia or premature cardiovascular disease.
- Include in a full history:
 - precipitating events and actions taken
 - drugs that may contribute to weight gain
 - usual diet (including sugary drinks and fatty foods)
 - usual physical activity and sedentary activity
 - a family history of obesity or cardiovascular disease
 - a history of snoring
 - current consequences (physical and social) of overweight.
- Include in the clinical examination:
 - blood pressure
 - waist circumference
 - abnormal gait, flat feet, problems with hips or knees
 - presence of striae, intertrigo, or hepatomegaly
 - presence of acanthosis nigricans, which suggests insulin resistance
 - assessment for short stature, low height velocity or bruising/purple striae (suggests endocrine cause for weight gain)
 - an examination of the nose and throat if the child or young person snores.

STEP 3: Determine options for action

- Use comprehensive lifestyle approaches involving family/whanau and combining a healthy diet, increased physical activity, decreased sedentary activity, and behavioural strategies (this approach is known as the family/whanau FAB approach). Aim of weight management is to slow weight gain and for child or young person to grow into their weight.
- Regularly monitor behavioural changes rather than monitoring weight.
- Parents and caregivers may be better agents of change than the child.

Diet

- Suggest a healthy diet low in saturated fats, sugar, and salt, with a variety of foods, including wholegrain cereals, lean proteins and increased fruit and vegetable intake, and lean proteins.
- Encourage drinking of water and low fat milk and avoidance of sugary drinks (e.g. fizzy drinks, flavoured milk, fruit juice, sports drinks, and cordials).
- Encourage the reduction or avoidance of energy-dense takeaway foods and snacks (e.g. snack bars, potato chips, cake, and ice cream).

Physical activity

- Encourage child or young person to increase regular moderate-intensity or vigorous physical activity to at least 60 minutes per day (perhaps start with 5–10 minutes per day to build up to goal of at least 60 minutes). Encourage parents/caregivers to be active with children.
- Encourage child or young person to decrease screen time to two hours or less per day.
- Consider referring the child or young person to existing physical activity programmes (e.g. the Green Prescription Active Families programme).
- Children aged under five years are active in different ways to older children (see the Sport and Recreation New Zealand website <http://www.sparc.org.nz> for ways to encourage physical activity in this age group).

Pharmaceuticals

- Consider orlistat only when the child or young person's BMI is in the 95th percentile or higher and lifestyle change has not controlled their weight gain.
- Note that orlistat is precautioned in children aged under 18 years. Ensure specialist services supervise the use of drugs.

Surgery

- Consider bariatric surgery for young people only in exceptional circumstances, such as when:
 - the young person has attained physiological maturity
 - the young person has a BMI of 50 kg/m² or more or 40 kg/m² or more with other significant disease persisting, despite lifestyle interventions (with or without anti-obesity drugs)
 - the young person and their family/whanau have shown they can adhere to healthy dietary and physical activity habits
 - a psychological evaluation is likely to confirm the stability and competence of the family/whanau unit.

STEP 4: Arrange ongoing contact and support (once goal weight reached)

- Focus on supporting healthy behaviours (with quarterly weight and height measurement for monitoring).

Application of these guidelines

Maori, Pacific and South Asian populations are priority populations for this guideline. Good practice reflects the rights, needs, culture and context of these populations. This guideline emphasises the importance of involving family/whanau and achieving mana-enhancing relationships. Mana-enhancing relationships are ones where there is genuine respect for the person with weight-related risks and a sense of collaboration to connect with those deeper values and beliefs to achieve behaviour change. The following practice points may improve service responsiveness and outcomes especially for Maori, Pacific and South Asian people.

- Develop mana-enhancing relationships that empower the family/whanau through respect, trust and mutual ownership by seeking to understand and acknowledge the person's 'lived realities' including social determinants, cultural imperatives and socioeconomic circumstances.
- Assess the clinical needs of the family/whanau.
- Identify opportunities with the family/whanau to address their clinical needs within the context of their lived realities.
- Identify with the family/whanau options for action that are realistic and aligned to their lived realities.
- Maintain contact and support with the family/whanau in a way that is consistent with their lived realities.

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COMPETING INTERESTS

None declared.