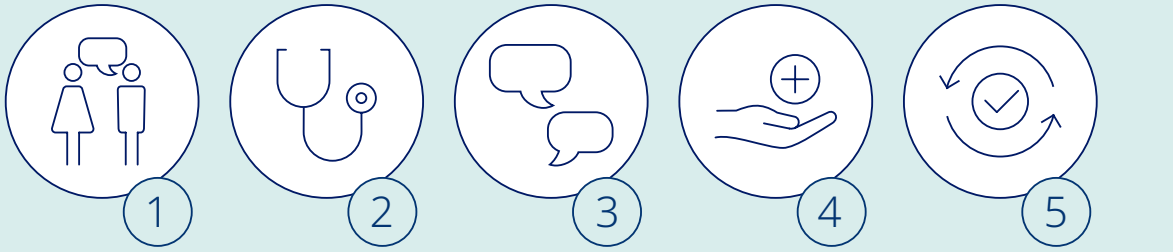
5 steps on childhood obesity

A guide to discussing weight with children and their families



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5 steps on childhood obesity

The prevalence of paediatric obesity has risen more than **10-fold** over the past 40 years.[1] Globally, over 157 million children and adolescents are living with obesity.[2] Childhood obesity has been recognised as a disease and we need to be aware of the seriousness of this health issue.[3,4]

Children and adolescents with obesity experience weight-related complications, which may include increased risk of insulin resistance, premature death, early markers of cardiovascular disease, disability, as well as psychological effects.[2,5]

We know that **75–80%** of children and adolescents who live with obesity are likely to have obesity as an adult.[6] However, data from four longitudinal cohort studies showed that individuals who were overweight or suffered from obesity in childhood but normalised their weight before adulthood had a cardiovascular risk-profile similar to that of individuals with normal weight during childhood.[7]

Weight is a sensitive issue. Talking about obesity with any patient can pose challenges, and when it comes to children, the dialogue also needs to include their family.[8]

1. Initiate

1.A Ask permission
1.B Start the conversation

2. Diagnose

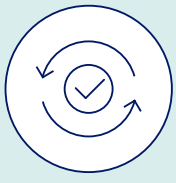
2.A Weigh the patient
2.B Calculate Body Mass Index (BMI)

3. Discuss

3.A Start the conversation
3.B Take weight history
3.C Set realistic and attainable goals

4. Treat

4.A Lifestyle modification
4.B Pharmacotherapy
4.C Bariatric surgery



5. Follow up

5.A Assess progress
5.B Modify treatment
5.C Make a new appointment

1 Initiate

1.A Ask permission
1.B Start the conversation

1.A Ask permission

Research has found that family physicians and internal medicine physicians reported less experience with young adults, because this population seeks regular care less often than the older population and thus, physicians may be uncertain about what to discuss with young adults in consultations.[9] Weight-related challenges such as bullying among children and adolescents with obesity are of ongoing concern worldwide.[10] Healthcare professionals who adequately acknowledge and are trained about the psychological correlates of obesity would be able to give support to young outpatients who are upset about negative peer relationships.[10]

Below are some tips to keep in mind during your consultation:[11–13]

- Use active listening techniques
- Always be sure to ask open questions and consider the questions and concerns of the child and family
- Try to avoid talking about weight and obesity, but tailor conversations towards growth and health
- Try to develop an understanding of the aspects of health that are of most importance to the child and family

When opening the conversation it's important to confirm permission with the child and their caregiver that they are happy to discuss weight.[14]

Developing a good therapeutic alliance is key to engaging children and families in any healthcare discussion, but especially when communicating about weight-related issues.[11]

1.B Start the conversation

Once you have permission to discuss weight, ensure that you use positive, motivational and patient-first language at all times.[15] Obesity in children is often correlated to obesity within the family, which means you have an opportunity to encourage the whole family to undergo a sustainable lifestyle change which will lead to positive health outcomes for all family members.[8]

Below are some example phrases to help you get started if you see a child has overweight or obesity:[11–13]

I see more children these days who are overweight, but there are now lots of options to help us to manage this – could we talk through these and set up a plan?

Thank you for allowing us to talk about [child's] weight – can I discuss the different options for addressing this with you?

Ensure questions are open ended and try to summarise back to the patient and/or their caregiver what you have understood from the discussion to ensure you are aligned. This may be the first time that weight has been raised with the family. It is time to be reassuring and supportive.[11–13]

By taking action now, we have a chance to improve [child's] health in the future.[16]

Now is a great time to take action – weight loss is more effective when [child] is still growing.[16]

Most children are still growing in height and our goal is to slow [child's] weight gain or maintain his/her weight.[16]

If a child or their caregiver does not give permission and does not want to have a discussion about their weight, do not push it further and inform them that you will be available to discuss in the future if they change their mind.[17]

2 Diagnose

2.A Weigh the patient
2.B Calculate Body Mass Index (BMI)

2.A Weigh the patient

BMI is an important measure for evaluating obesity-related health risks. The first step will always be to weigh your patient,[14] and there are several things that you as a healthcare provider can do in order to make this experience as comfortable for your patient as possible:[18]

Ensure the weighing scales are located in a private location

Refrain from announcing your patient's weight in a non-private area

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2.B Calculate Body Mass Index (BMI)

As with adults, BMI is a simple measurement of your patient's weight in kg divided by the square of their height in metres.[18,19]

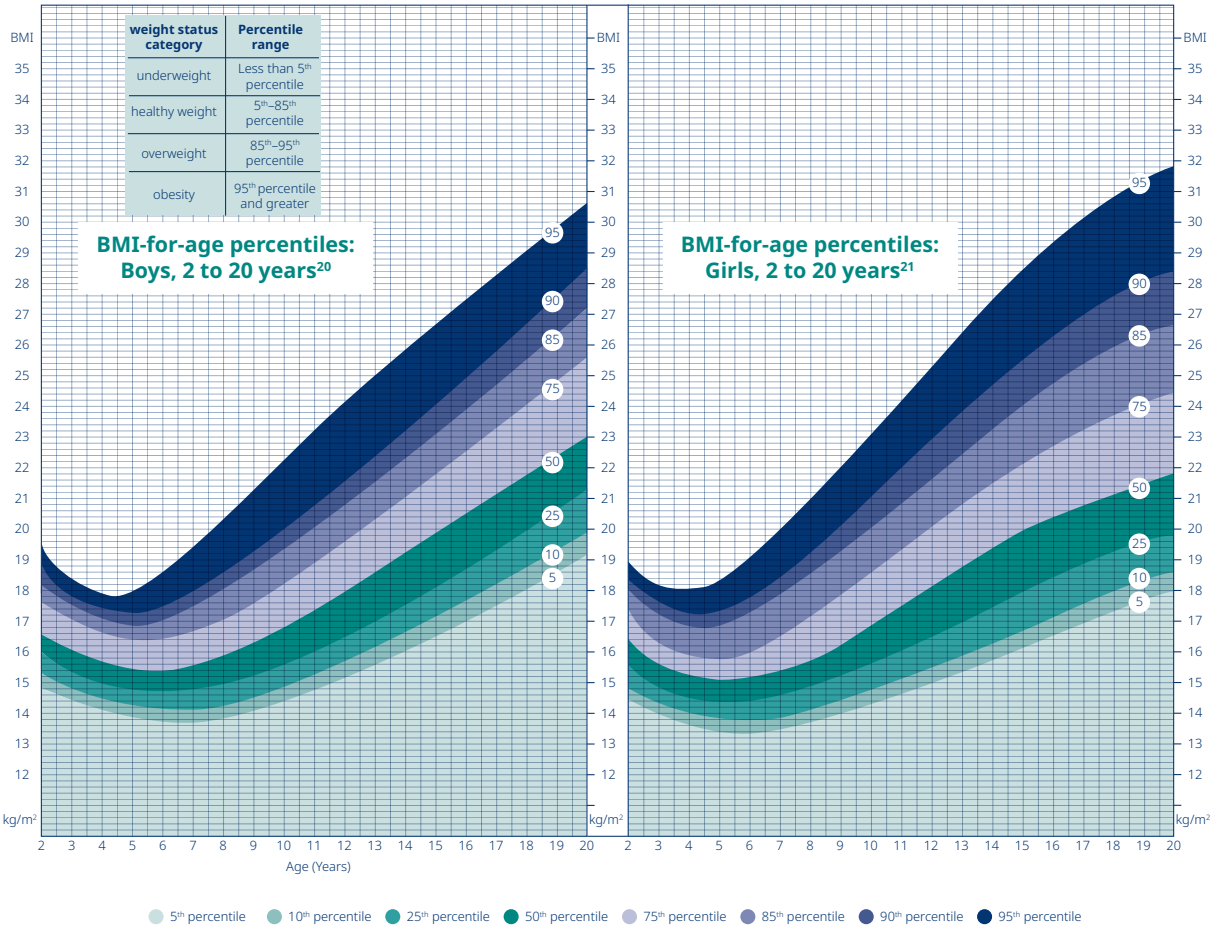
$$\text{BMI (kg/m}^2\text{)} = \frac{\text{Weight (kg)}}{\text{[Height (m)]}^2}$$

Remember that assessing the BMI of children is more complicated than for adults because it changes as they grow and mature. In addition, growth patterns differ between boys and girls. Therefore, BMI must always be considered in the context of sex and age percentiles.[19–21] First, you must calculate the BMI of the child and then plot it on the gender specific, BMI-for-age percentile graph, to find the child's weight status.

The child's weight can be classified as follows:[20–23]

- Overweight: BMI in the 85th to 95th percentile for sex and age
- Obesity: BMI ≥95th percentile for sex and age
- Severe obesity: BMI ≥120% of 95th percentile for sex and age or BMI ≥35 kg/m²

weight status category	Percentile range
underweight	Less than 5th percentile
healthy weight	5th–85th percentile
overweight	85th–95th percentile
obesity	95th percentile and greater



3 Discuss

3.A Start the conversation

Try to find a clear and understandable communication style, without the use of medical jargon when communicating with adolescents and caregivers in consultations.[9]

Below are some examples of how your weight management conversations could start:[12]

Would you be willing to spend a few minutes talking about ways to stay healthy and energised?

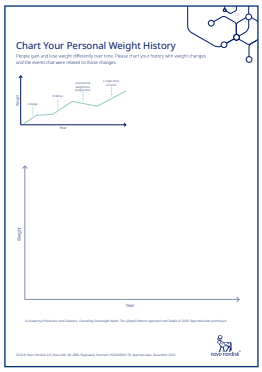
Are you interested in knowing more about ways to stay healthy? How can I help?

Can we take a few minutes to discuss your health and weight?

3.B Take weight history

Try to gain a comprehensive weight history from your patient and/or caregiver – medical, surgical, social, and family history; medication review; and physical examination.[14] This will ensure you have a full understanding of the root causes that influence eating and activity behaviours, and thus lead to a more patient-centric approach.

In addition, try to gain an understanding of what motivates the patient/caregiver. Children and adolescents living with overweight or obesity, is one of the most common reasons that they are teased or bullied at school. Weight-based teasing in children and adolescents with overweight or obesity may contribute to academic failure, peer rejection, negative emotional consequences and the risk of depression and low self-esteem.[10]



Take weight history

Depending on the child's family history, taking waist circumference measurements is recommended to be used to determine obesity-related health risk, including type 2 diabetes and cardiovascular disease.[24–26] A waist-to-height ratio of ≥0.5 may be useful in predicting cardiovascular risk.[26] However, waist circumference is not recommended as a routine measure.[26]

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3.C Set realistic and attainable goals

Once you have a good understanding of the patient's individual nature and needs, you're ready to work with them and their caregiver to discuss and set realistic goals. Consider both clinical (weight and BMI) goals as well as lifestyle ones.[17]

Clinical goals

Consider whether maintaining the growing child's existing weight in the short term would be appropriate. Described as 'growing into their weight', this can often be an appropriate short-term aim because it will result in a significantly lower BMI over time.[26] Remember that the treatment approach chosen will impact the extent of weight loss, and thus help to determine clinical goals.

Lifestyle goals

For children, short-term goals related to lifestyle changes may have more of an impact as they can be seen as obtainable in the short term.[26]

Remember that family factors such as family habits and food preferences have also been associated with the increase of cases of childhood obesity. When treating children with obesity it is recommended to implement lifestyle modifications that include family involvement in order to achieve significant effect on obesity.[8,27] Therefore, ensure that any goals set are achievable and gain buy-in from the whole family.

As part of the goal-setting process it's important for you to educate around what is a realistic and healthy level of weight loss – both patients and caregivers often overestimate what is deemed a healthy level of weight loss.[27]

- BMI decrease of 1.5 kg/m^2 may seem small, but if maintained for the long term with lifestyle modification, children and adolescents with overweight or obesity may benefit as they grow by reducing fat mass and increasing lean body mass.[27] A 7% weight loss may be a more realistic goal for adolescents with severe obesity (BMI ≥35 kg/m^2)[27]


Goal Setting for Weight Management

Goal settings and tips to obtain goals

Some phrases you could use, or encourage the child's parents to use when talking to their children about goal setting include:[13]

Your mother/father and I think we should focus on eating more healthy foods and doing more active things together as a family.

There are small things we can do every day like eating more vegetables or drinking less sugary drinks. Get them to highlight the changes that they feel are realistic for their family.

We as a family.

4 Treat

4.A Lifestyle modification
4.B Pharmacotherapy
4.C Bariatric surgery

Children and adolescents with obesity are at a higher risk for developing weight-related complications throughout their life.[6] It's therefore vital that overweight and obesity are managed before adulthood.

There is a need for multiple approaches to help children with obesity with long-term weight management.[14,28] Consistent with other adolescent chronic diseases, choice of treatment should be guided by the patient's age and pubertal status, severity of obesity, psychosocial factors and complications.[14,28] Lifestyle modifications should always be considered for weight management in children, but it might not always be enough to reach the desired goal.[14,28]

4.A Lifestyle modification

Research has shown that any combination of dietary/exercise or lifestyle interventions have a small but significant effect on BMI.[29] Once a diagnosis of overweight or obesity has been made, you should provide counselling to parents and caregivers on nutrition and physical activity.[28]

Diet

Ensure that you address both the quantity and quality of food:[14]

Decrease portions

Consume less ultra-processed foods, sugar-sweetened beverages and other added sugars

Eat more fruits, vegetables and fibre

Swap fizzy drinks for water, eat regular meals with the family

Physical activity

It is recommended that a child/adolescent should take 60 minutes of physical activity per day, 20 minutes of which should be moderate to vigorous and should include activities enjoyed by the child/adolescent to improve adherence.[14,27,30]

Below is an example of increased physical activity:

- Walking or cycling to school, rather than taking the car or public transport
- Suggesting to parents/caregivers that inactivity is reduced by limiting non-academic screen time and other sedentary activities to less than 2 hours per day

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Sleep

Healthy sleep patterns in children can decrease the likelihood of developing obesity due to changes in calorie intake and metabolism related to disordered sleep.[27] Talk to parents and caregivers about quantity of sleep required and good bedtime routines.

4.B Pharmacotherapy

Treatment should be started and monitored in a specialist paediatric setting by experienced multidisciplinary teams.[25,27]

Tailored clinical intervention, combined with lifestyle interventions should be considered for adolescents with a high BMI percentile and at least one significant obesity-related complication.[14]

Anti-obesity medications may play a role in weight management for adolescents and young adults with obesity and should be considered an important component of a multimodal approach to managing obesity.[25]

4.C Bariatric surgery

Bariatric surgery can be considered as a treatment option for adolescents with severe obesity, those with a BMI ≥140% of 95th percentile for age and sex or BMI ≥120% of 95th percentile with at least one significant obesity-related complication.[14,25,27,30]

Surgeons should have specific experience with adolescents, and have a dedicated and experienced multidisciplinary team with the necessary infrastructure for patient care to provide support before and after the surgical procedure.[27] This team should be capable of long-term follow-up of the metabolic and psychosocial needs of the patient and family.[27]

There is also a role for pharmacotherapy post bariatric surgery and medication review.[25]

Further information can be found in paediatric obesity management guidelines:

- Canadian Task Force on Preventive Health Care guideline 2015. http://www.cmaj.ca/content/cmaj/187/6/411.full.pdf
- Endocrine Society Clinical Practice Guideline on Paediatric Obesity 2017. https://www.endocrine.org/clinical-practice-guidelines/pediatric-obesity
- National Health and Medical Research Council Clinical Practice Guidelines 2013. https://nhmrc.gov.au/file/4916/download?token=KYKNOAH8
- NICE Obesity Clinical Guideline 2014. https://www.nice.org.uk/guidance/cg189/resources/obesity-identification-assessment-and-managementpdf-35109821097925
- WHO Primary Healthcare Guidelines 2017. https://www.who.int/publications/i/item/9789241550123

5 Follow up

5.A Assess progress
5.B Modify treatment
5.C Make a new appointment

5.A Assess progress

Ensure you calculate, plot and review a child's BMI percentile at least annually[27] – it is a good idea to schedule a follow-up meeting before your patient's initial appointment ends.

At the follow-up appointment, talk to your patient and their parent or caregiver about what has been working well and what challenges they have faced. Make it clear to your patients that measuring weight is not the only factor: recognise achievements other than weight loss, such as walking more or eating more healthy foods – always refer back to the goals you set with your patient.

5.B Modify treatment

We recommend clinicians prescribe and support intensive, age-appropriate, culturally sensitive, family-centred lifestyle modifications (dietary, physical activity, behavioural) to promote a decrease in BMI. Clinicians should focus on lifestyle changes as the basis of all efforts to treat childhood obesity.[27]

5.C Make a new appointment

Ensure to have frequent face-to-face visits with your patients to support them on their weight loss journey.

To learn more, visit **rethinkobesity.global** to download printable resources to best support your patients with obesity.

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