

Managing an Underweight Toddler

An evidence-based guide to toddler nutrition for healthcare professionals

Healthcare professionals play an important part in helping parents of toddlers (1-3 years) understand what a healthy weight is, and how best to achieve it.

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Key Learnings

- 1.** Growth in infancy is rapid. After 12 months it slows down, and toddlers take on a leaner physique as they become more active¹.
- 2.** A toddler's growth may falter due to illness, or if the toddler is a fussy or restrictive eater.
- 3.** The goal of intervention is to identify any underlying medical conditions and to provide the toddler with adequate nutrition so they can 'catch up' to a normal weight.

What is 'normal' weight gain?

Post-infancy, the growth rate slows. Toddlers will gain an average of 2-3kg and will grow between 4-6 cms each year².

Poor weight gain: The causes

There are many reasons for inadequate weight gain. Healthcare professionals should consider the possibility that inadequate or poor weight gain is not a standalone diagnosis, but rather an observed symptom due to an

underlying cause which needs to be addressed before moving on to any intervention. Key contributory factors to poor weight gain include³:

- Inadequate energy (caloric) consumption.
- Inadequate intake of macronutrients (carbohydrate, protein and fats).
- Inadequate intake of micronutrients (vitamins and minerals).
- Specific individual nutritional needs that are not being met.
- Underdeveloped eating skills.
- Fussy eating or food refusal.
- Medical illness or condition.
- Psychological disorders.
- Allergies and intolerances.

It is important to consider that any issues which arose during the prenatal, neonatal, and infancy stages may be affecting a toddler's weight gain.

Assessing toddler growth using BMI

For toddlers aged two and older, poor weight gain or faltering growth can be assessed using body mass index (BMI).

BMI is calculated by dividing weight (in kg) by the square of height (in metres)*.

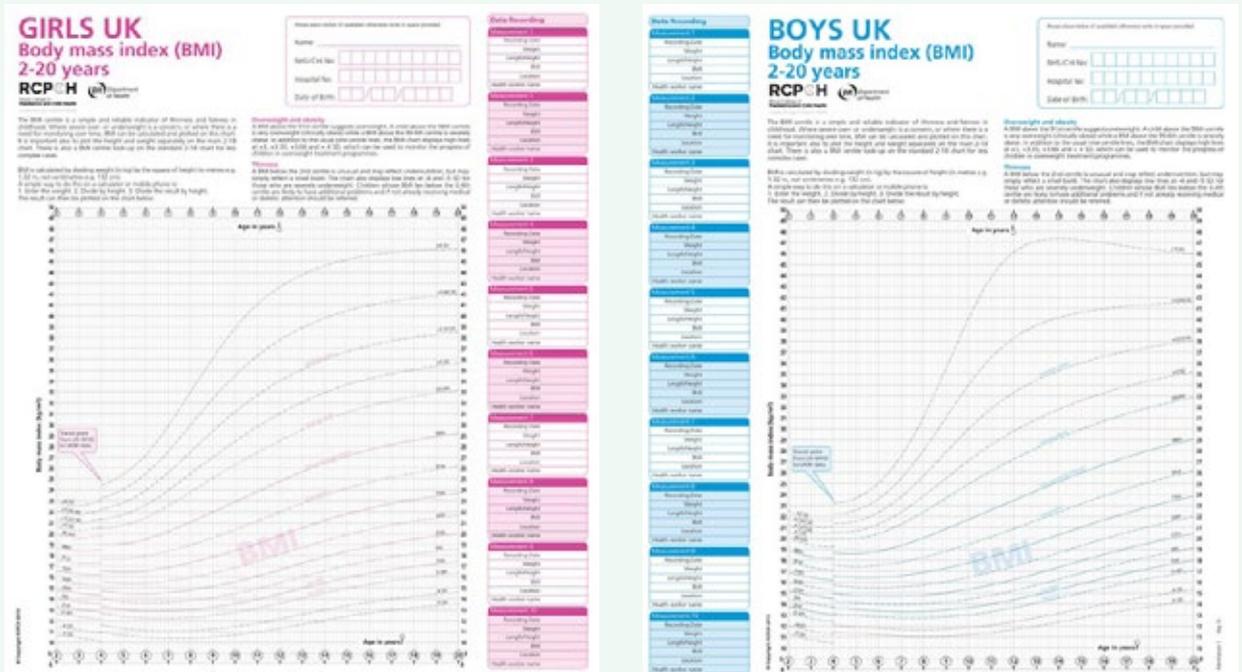
A simple way to do this on a calculator or mobile phone is:

- 1) **Enter the weight.**
- 2) **Divide by height.**
- 3) **Divide the result by height.**

The result can then be plotted on the gender-specific BMI charts below.

*Toddlers should be weighed and measured accurately using only calibrated equipment. Try to use the same weighing scales for consistency.

Body mass index (BMI) charts (Girls and Boys, 2-20 years)⁴



A BMI below the 2nd centile is unusual. It may reflect under-nutrition, but may also simply reflect a small build. The chart also displays low lines at -4 and -5 SD for those who are severely underweight. Toddlers whose BMI lies below the 0.4th centile are likely to have additional problems and if not already receiving medical or dietetic attention should be referred to a paediatric dietician for further dietary advice and monitoring^{4,5}.

Managing underweight and faltering growth

The goal.

The goal of intervention is to provide the toddler with adequate nutrition so they can ‘catch up’ to a normal weight.

Making a change.

Catch-up growth may require changes to the toddler’s diet, feeding schedule, or feeding environment.

A combined effort.

The parents and healthcare professional should work together to develop a plan that meets the needs of both the toddler and the family.

Working with parents to promote weight gain

Once there is no underlying medical condition that contributes to weight loss, advise parents to:

1. Offer three meals and two or three snacks every day.
2. Aim to provide meals regularly, and try not to leave long gaps between meals.
3. A toddler's stomach is small, therefore they may not eat a lot of food at one meal. It may be better to offer little and often.
4. Avoid giving a toddler too much fluid, especially before and during meals, as this can be filling.

Adding more energy (calories) to foods at home: Five tips to share with parents⁵

1. Use full fat rather than low fat milk on breakfast cereal.
2. For a quick snack, spread full fat butter or smooth peanut butter onto plain crackers.
3. Add full fat milk, cream or cheese to soups and sauces.
4. Add butter, grated cheese, milk or cream to mashed potatoes.
5. Grate cheese onto plain pasta, or add some cream to pasta dishes.

QUICK TIP FOR PARENTS

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Adding cream, butter and cheese may seem to contradict healthy eating advice for toddlers, but if the main priority is weight gain, don't worry about fat & sugar⁵.

When this advice is insufficient to promote the desired catch up weight gain, or when food for special medical purposes (FSMP) is indicated, toddlers may need to be referred onto local community or hospital dietetic department.

Suitable articles for parents on this topic are available at www.toddlebox.ie/nutrition

References

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