



# MAKING AN INFORMED DECISION

## Your guide to the National Child Measurement Programme



An information pack for  
schools, parents &  
caregivers

## What is the NCMP?

The National Child Measurement Program (NCMP) began in 2006 with the aim to collect data on the height and weight of children in the UK for National Statistics Reporting and Public Health England (PHE).

Children in reception and year 6 are measured in state-funded schools for their height and weight. Their BMI is calculated and the data is then used for the government to monitor trends in children's weight and to inform their policies on body size in children.

A secondary outcome of the NCMP is a letter sent to parents, informing them of their child's individual BMI category. Some local authorities will also offer a referral to a weight management programme or a general follow-up with parents; however, this is not consistent across the country.



**I work for school nursing and as part of my role I have to deliver the NCMP. My own daughter is in reception so would have been weighed if I hadn't opted her out.**

**We get so many calls from parents and schools with the repercussions of the results that are being sent home. Countless year 6's starving themselves and changing their eating habits.**

**I was recently told by a school that one of their pupils was now being picked on by his own family, they were calling him fat and stopping him from eating the same food as the rest of the family. The child was coming into school with a very small packed lunch. The school was subsidising him and giving him breakfast.**

~ School nurse, anonymous



## Things to consider: why should we care about the NCMP?

1. It can, and does, cause harm for many children.
2. There is compelling evidence to suggest that perceived "overweight" is associated with disordered eating and predictive weight gain over time.
3. It can encourage parents to put their children on calorie-controlled diets (or encourage the children to do this themselves).
4. It can perpetuate anti-fat bias and weight stigma in children, shown to be independently bad for health.
5. It does not lead to a change in BMI of children, and may increase dissatisfaction with their bodies/weight which can detrimentally impact overall health and wellbeing, as well as engagement and learning outcomes. Self-identification of being "overweight" is also prospectively predictive of greater weight gain and can damage mental health.
6. It can lead children to think their weight is all within their control and is a personal choice or responsibility, when there are actually many factors which affect weight, most of which are beyond our own individual control.
7. Weight does not equal health (and weight loss can be bad for health). The impact of under-nutrition can be particularly harmful for children whose bodies are growing and changing.
8. It uses BMI which is ineffective (particularly for Black children, and children of South Asian heritage).

**See the Endnotes to this pack for more information on all of the above, including citations of relevant studies.**





**Weighing kids in schools is not innocuous; kids need to know that their growing bodies are always worthy of love and respect, and that there aren't any conditions on that.**

**When children receive the message that, at a certain point, their bodies are deemed 'unacceptable', we risk shattering their body esteem into adolescence and beyond. This can set them up for a lifetime of disordered eating, and distress about their body, thereby limiting their capacity for living a fulfilling life.**

**Can we instead instill our kids with a sense of safety and trust in their bodies, and provide our unconditional acceptance when their bodies inevitably change?**

~ Laura Thomas, PhD, RNutr

**Having worked for children and adolescent eating disorder services in the NHS for the last 8 years, I have seen the impact the National Child Measurement Program has had on young people, who are labelled as "healthy" or otherwise based on their weight in a snapshot of time.**

**What the NCMP does not take into consideration is an individual child's development, rate of growth, social circumstances or current health needs. The results in isolation of other determinants of health contributes to the cultural idea that health is determined by a person's weight. This is a particularly damaging idea which is hard to reconcile for those individuals who are already vulnerable to low body confidence and eating difficulties.**

**What is more problematic, is that the advice that follows an outcome of being any other weight than "healthy", is not tailored to that individual's needs and is often a one-size-fits-all solution which, when it comes to diet and exercise, does not exist.**

~ Aya Wingate, dietitian & Body Happy Org workshop facilitator



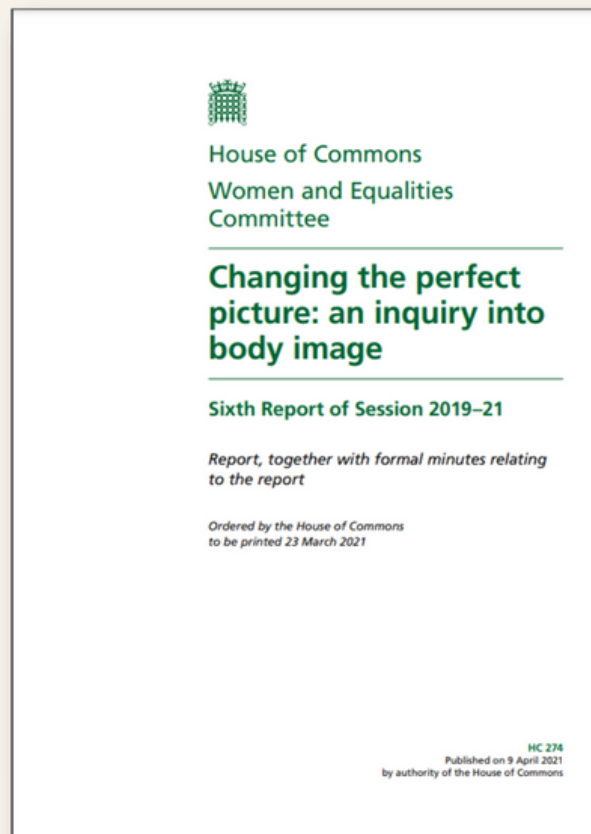


## In 2021, an inquiry ordered by the House of Commons recommended an urgent review of the NCMP:

**We recommend that the Government urgently reviews the National Child Measurement Programme to ensure it is not creating undue body image pressures in children. The Government should urgently assess the need for the programme and seek other ways to collect this data.**

~ Women & Equalities Commission, cross parliamentary inquiry into body image, 2021

Recommendation 8, paragraph 59, in Changing The Perfect Picture: an inquiry into body image, House of Commons, Women and Equalities Committee



# FAQs: parents & caregivers

## ? How do I opt out?

At some point in the school year, parents and caregivers of children in Foundation Stage and Year 6 in state-funded schools will receive a letter from their school nursing team via the school.

**Included will be a form or option to opt your child out of the programme. You must complete this in order for your child to not be weighed.**

Changes in GDPR rules in 2018 mean that nursing teams do not need to have consent to weigh children. But if a parent or carer wishes to opt out, they must still be given this option.

## ? Should I still tell my child's school?

**The NCMP is run by an external team. It is not your child's teachers who will be weighing them.**

However, the programme is run in collaboration with schools (as this is the easiest way for the data to be obtained). With this in mind, it is a good idea to inform both your school's headteacher, administrator and class teacher that you are opting them out of the programme. This means that, on the day when children are being lined up to be weighed your child will not be accidentally put in line.

## ? How should I communicate this with my child?

**This is a fantastic opportunity to have an age-appropriate conversation with your child about health, body boundaries, and consent.**

For older children, it can also be an empowering act to include them in the decision. This is also a chance for children to be able to advocate for themselves, if there is a mistake on the day and they are accidentally put in line to be weighed.

You might find it helpful to use a three-step process when having this conversation:

Step 1: Explain the process (e.g., A lot of children will be lined up and will leave the class. When children leave the class they will be weighed by a nurse. It doesn't hurt and they won't be told their weight. They may tell you about it when they return to the class. They may have a sticker.)

Step 2: Explain why they will not be included (e.g., For some children this process can lead them to be sad and question their body. A person's health or worth can't be measured by the number on the scale though, and the best way to stay Body Happy is to focus on what our bodies can do, not what they look like. Our bodies are our own, and it's up to us if we want to take part. This programme can make people sad, so we are saying "no". Some people will say "yes", and that's OK too, it is their choice.)

Step 3: Empower with action (e.g., We have told your teacher that you won't be taking part, but remember – your body, your rules! If your teacher forgets and lines you up on the day, you are allowed to tell them that you are not taking part. It is your body.)

## ? But what if my child feels left out?

Many parents and caregivers worry about their children feeling left out, isolated, or highlighted if they are opted out of the NCMP. This is understandable, and it can be a challenging decision to say no to something that is largely considered innocuous or "normal". The process of consent now (opting out rather than opting in) can add to these feelings. You have to make that bit more effort to opt out, and your decision may even be questioned (even though it shouldn't be).

It might be useful to remember that the reason some adults are likely not opting their children out of the programme is due to not having all the information to make an informed decision.

**Opting your child out of the NCMP could be an opportunity to both nurture their own body esteem, and perform an act of advocacy for other children in the class who may also be harmed by the programme.**

It can also be an opportunity to have an important conversation with your child about health, body diversity and consent. And remember, the more children who are opted out of the programme, the less the issue of feeling left out will be. If you feel comfortable, you could even share this pack with other parents in your school community, to help raise awareness about the potential harms of the NCMP, and allow others to make an informed decision about it too.

## ? What should I do if I opted my child out, but they were weighed anyway?

Mistakes can happen, and unfortunately we have heard of multiple times when children have been opted out but have been weighed anyway. If this happens you should firstly raise this with your school's headteacher as they are ultimately responsible for the care of children, including respecting consent. If there is no accountability at this point and your complaint is not acknowledged you may consider accelerating it through to your school's governing body, trustees or the local authority or leadership of the multi-academy trust. You can also simultaneously issue a complaint to the department that the nursing team (screeners) work for, in which case it should be dealt with by the senior NHS team.



**My children had to speak up to tell their teachers they were opted out. Some of their friends were weighed when they shouldn't have been because the child didn't speak up.**

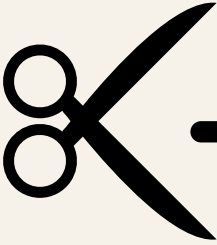
~ Parent, anonymous



**Template letter: use this to inform your child's school of your decision to opt out of the NCMP.**



**Remember, you must also complete the opt-out form you receive from your school nursing team.**



Date .....

Dear .....

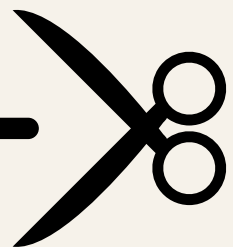
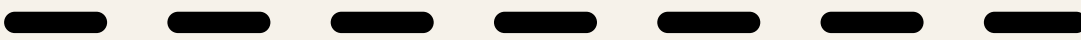
I am writing to let you know that my child  
(.....) has been opted out of the National  
Child Measurement Programme.

I have completed the opt out form but also wanted to make you  
aware, so that you can ensure our wishes are honoured on the  
day.

To be clear, we do not give consent for ..... to be  
weighed or measured as part of the NCMP and request they are  
not included on the day.

Many thanks for your help with this,

.....



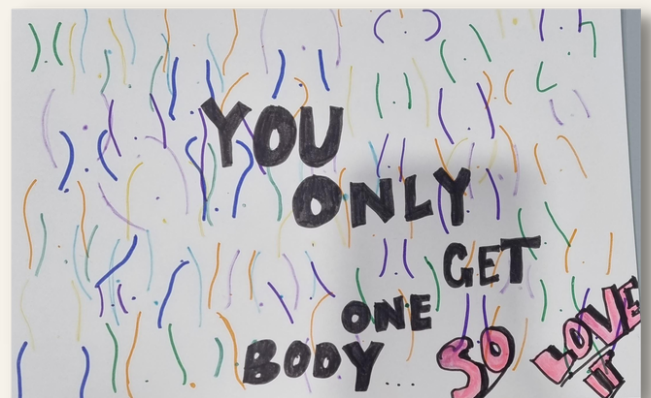
# Making an informed decision about the NCMP

## Pros

- ✓ If you don't opt out, your child will not risk feeling left out on the day if other class members are being weighed.

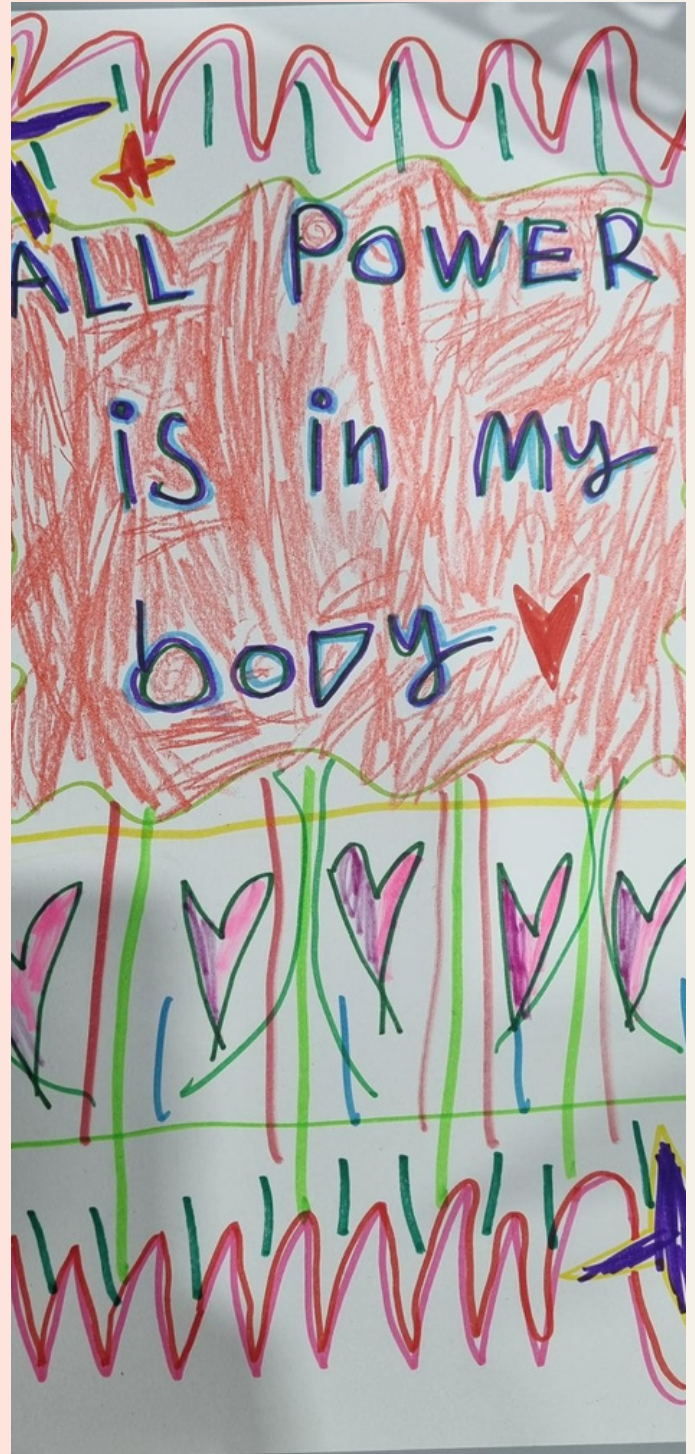
## Cons

- ✗ The programme won't tell you anything you don't already know about your child's health.
- ✗ The programme is an exercise in gathering statistics for government policy planning, and has little to do with actual concern for our children's health.
- ✗ Focusing on weight in childhood can cause children to feel negatively about themselves and their bodies. Poor body image and a preoccupation with weight, increases the risks of food restriction and developing eating disorders later on, as well as other mental health concerns such as body dysmorphia, low self-esteem, food anxiety, and body anxiety.
- ✗ Some children are referred to NHS weight management programmes as a result of the NCMP. These programmes are not evidence-based and have potential to cause more harm; see above for detrimental effects of focusing on weight. Diets, (i.e., weight management programmes), do not work but do lead to increased food anxiety, food restriction, and weight cycling (losing weight and increasing weight).
- ✗ Negative body image is also linked to low academic attainment, meaning children who worry about how they look, may do less well in school as a result.
- ✗ The programme increases the risk of weight stigma, which can lead to all of the above and bullying from peers.
- ✗ The programme is not carried out consistently by schools. When AnyBody UK surveyed parents, they found that the way schools carried out NCMP varied greatly. Some children were even told what their weight and BMI was following the measurement. Some schools were able to deal with the programme in a sensitive manner, others less so.
- ✗ The BMI calculation used to determine what is healthy is not based on your child's body. This means that a child who is not white is at a disadvantage from receiving an assessment that does not take into account race and ethnicity.
- ✗ It doesn't do the job it's intended to do; programmes like these have shown that they do not help children lose weight but often will contribute to children increasing their weight, through restricted eating and poor body image.
- ✗ The programme is particularly stigmatising toward children in lower-income areas. Children in this socioeconomic group are more likely to be in higher-weight categories, which leads to increased weight stigma and poor body image, both of which can lead to worse health outcomes. Furthermore, the healthy eating advice offered to these families as part of an intervention may not be attainable or relevant due to higher rates of food insecurity.



## Reminders for parents & caregivers:

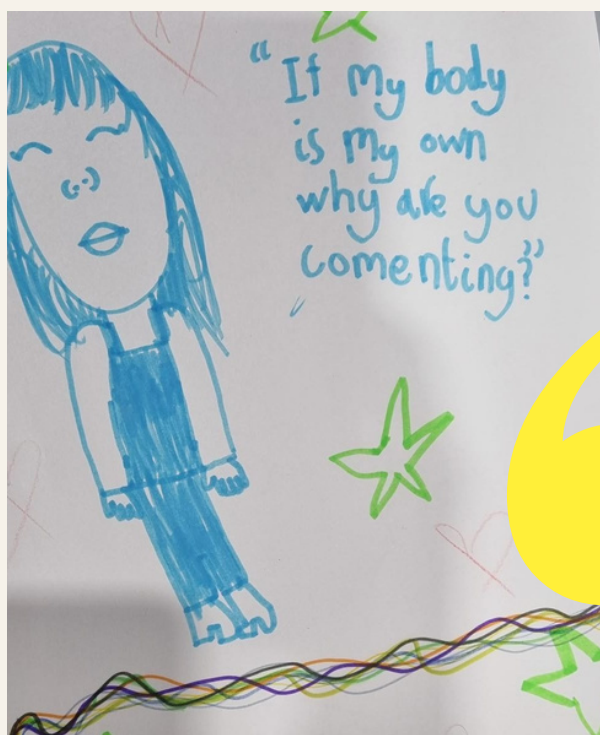
1. If you don't want your child to be weighed you need to actively opt out of the NCMP. It's not enough just to not give consent.
2. If you decide to opt out, you should also inform your child's school so they're aware of your decision.
3. If you opt out and your child is weighed anyway, you can complain via your school nursing team and also the school itself.





## Information for schools

The NCMP is generally delivered in state-funded schools for ease of data collection. However, while local authorities are mandated to collect the data for Public Health England, schools are not mandated to provide access for this data collection. This means that it is not obligatory for schools to take part (i.e., they can opt out if they desire).



### **A response from NHS Digital (21 June 22) to our Freedom of Information request regarding the number of schools opting out of the NCMP:**

**A school is defined as having opted out if the local authority (LA) has checked the "Opted Out" box on the edit schools screen in the National Child Measurement Programme (NCMP) system.**

**It is not mandatory for LAs to check this box when schools have opted out and sometimes LAs may simply not return data for opted-out schools.**

**NHS Digital monitors numbers of mandated NCMP schools (mainstream state-funded schools) with nil returns but does not request further information on the reason for a nil return (i.e., school opted-out or LA was unable to visit school).**

**Data on schools which have the "Opted Out" box checked is not validated and numbers are very low (only 10 in 2018/19).**



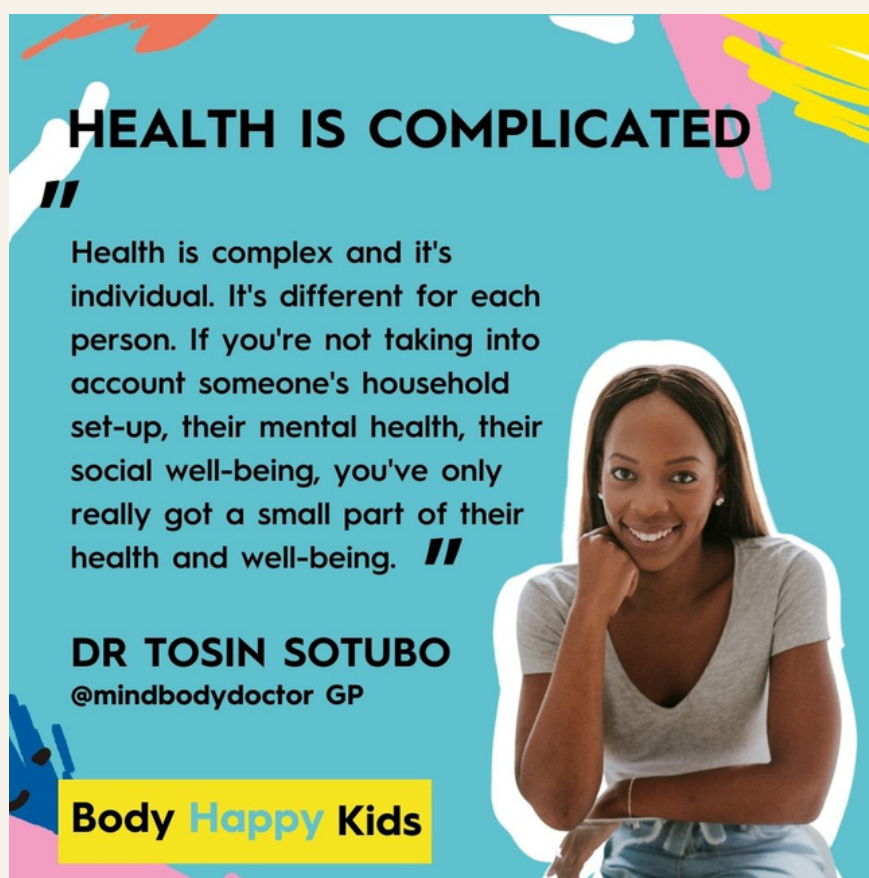
# FAQs: schools

## Will opting out of the NCMP impact the health and wellbeing of the children in my school?

There is compelling evidence that weighing children in school causes adverse health and wellbeing outcomes for children (see the End Notes for links to research on this subject). So yes, opting out of the NCMP could impact the health and wellbeing of your students – but in a positive way.

The NCMP is a data collection tool, which can determine public health policy on a population level. It should not be confused with individual health interventions or check-ups.

If you are concerned about the health or wellbeing of any of the children in your care you should continue to follow the safeguarding protocols you have in place at your setting. The NCMP is not a substitute for these protocols and should not be confused as such.



**HEALTH IS COMPLICATED**

//

Health is complex and it's individual. It's different for each person. If you're not taking into account someone's household set-up, their mental health, their social well-being, you've only really got a small part of their health and well-being. //






**DR TOSIN SOTUBO**  
@mindbodydoctor GP

**Body Happy Kids**



## How can we guarantee minimum harm from this programme, if we continue to allow the data to be collected in our setting?

The best way to guarantee minimum harm would be to opt the whole school out of the programme. However, if this is not possible, there are certain things that a school can do to support parents and caregivers to make an informed decision about whether to opt out themselves, and to support children who are opted out. These include:

-  Ensuring parents and carers have all the information about the programme (including the potential harms) to help them come to their own informed decision. This may include directing them to this document, including a link to it in an email to parents or sending it out along with the Public Health England NCMP leaflets and letter from your local authority.
-  Keeping note of children who are opted out, so they are not accidentally lined up to be weighed on the day.
-  Remaining neutral about the programme in front of students - ie. not praising or rewarding children who are weighed (particularly in front of students who are opted out). This may include speaking to the nursing team ahead of schedule to find out if stickers will be handed out to children who are weighed, and then ensuring you also have stickers for students who are not weighed, so they do not feel isolated or left out.
-  Planning a body affirming activity or lesson with children before and after the programme is administered in your setting. (You can find a multitude of lesson plans and teaching resources at [www.bodyhappyorg.com](http://www.bodyhappyorg.com))
-  Evaluating your policies and teaching resources to ensure they offer positive, evidence based messages about health, food and bodies, and support children's overall body esteem and wellbeing. This includes ensuring body diversity is entrenched in a setting's culture of kindness manifesto, school values, anti-bullying policies and school ethos.

**A note for schools:**  
**Details of CPD training, student workshops, and**  
**teaching resources at**  
[www.bodyhappyorg.com/professionals](http://www.bodyhappyorg.com/professionals)





# Endnotes

NOTE: Many of these studies were conducted from a weight-normative approach to health, rather than a weight-inclusive perspective. For this reason, many of these studies use the terms "obese" and "overweight", which many find stigmatising as they are words used to pathologise bigger bodies, which can contribute to weight stigma itself. We only use these terms when directly quoting from another source.

## Why we should care about the NCMP

### 1 - It does/can cause harm

The government often cites two studies which it believes show that the NCMP causes no harm ([This study from 2008](#), and [this one from 2014](#), both highlighted in the government's reply to Changing the perfect picture: an inquiry into body image, linked [here](#)).

However, there are multiple studies which do show that children's perception of being overweight is harmful to them.

Some examples:

- [This](#) meta-analysis of 32 studies which found an association between perceived overweight and poorer mental health, irrespective of the participants age, gender, location, or their actual weight. These results suggest that making children aware of their overweight status, or them believing that they are overweight can have serious negative mental health impacts including increased suicidality and depression. Reference: Haynes, A. et al. (2019) 'Does perceived overweight increase risk of depressive symptoms and suicidality beyond objective weight status? A systematic review and meta-analysis', *Clinical Psychology Review*, 73, p. 101753. doi:10.1016/j.cpr.2019.101753.
- [This](#) report used data from two previous studies (involving over 12000 children) and found that parental identification of child overweight was associated with worse mental health of the children, again independent of their actual weight. Reference: Robinson E., Daly, M., & Sutin, A. (2020). Association of parental identification of child overweight and mental health problems during childhood. *International Journal of Obesity*, 44(9), 1928-1935.

### 2 - There is compelling evidence to suggest that perceived overweight is associated with disordered eating and predictive weight gain over time

- [This](#) review of 78 previous studies found that perceiving oneself as overweight was not reliably associated with either healthy eating or exercise, and in some groups was associated with greater levels of disordered eating. There was also 'consistent evidence' that perceived overweight was predictive of increased weight gain, despite a higher likelihood of attempting weight loss. The researchers note that 'Overall, the present review provided strong evidence to suggest that perceived overweight is associated with disordered eating.' Reference: Haynes, A., Kersbergen, I., Sutin, A., Daly, M., & Robinson, E. (2018). A systematic review of the relationship between weight status perceptions and weight loss attempts, strategies, behaviours and outcomes. *Obesity reviews : an official journal of the International Association for the Study of Obesity*, 19(3), 347-363.

### **3 - It can encourage parents to put their children on calorie-controlled diets (or encourage the children to do this themselves)**

- [This](#) article highlights that the only study examining the reaction of parents to a BMI report card found a significant number of parents put their children on calorie-controlled diets after being told they were in the "overweight" category. This can be dangerous if the child has not gone through puberty and may stunt their growth, which could lead to behavioural problems such as overeating, hiding or sneaking food. Additionally, self-reported dieting during adolescence has been shown to increase the likelihood of weight gain in this group, possibly due to weight cycling. Reference: Joanne P. Ikeda, Patricia B. Crawford, Gail Woodward-Lopez, BMI screening in schools: helpful or harmful, Health Education Research, Volume 21, Issue 6, December 2006, Pages 761-769.

Dieting is a common predictor of yo-yo dieting, weight cycling and disordered eating habits, all of which are dangerous.

- Evidence suggests that dieting is a consistent predictor for eating disorder onset as well as disordered eating behaviours. References: [Stice, E.](#) (2016) 'Interactive and Mediation Models of Eating Disorder Onset: Evidence from Prospective Studies', Annual Review of Clinical Psychology, 12(1), pp. 359-381. [Patton GC](#), Selzer R, Coffey C, Carlin JB, Wolfe R. Onset of adolescent eating disorders: population-based cohort study over 3 years. BMJ. 1999 Mar 20;318(7186):765-8. [Liechty, J.M.](#) and Lee, M.-J. (2013) 'Longitudinal predictors of dieting and disordered eating among young adults in the U.S.: Longitudinal Predictors of Disordered Eating', International Journal of Eating Disorders, 46(8), pp. 790-800.
- In July 2022, the [Guardian reports](#) on research from the University of Oxford revealing a notable and concerning increase of children in England trying to lose weight, in children of varying weight categories (i.e., not just those labelled 'obese'). Specifically, a marked increase occurred in 2011-2012, which "coincided with parents being given feedback on their child's weight as part of the National Child Measurement Programme". [Original study found here.](#)

### **4 - It can perpetuate anti-fat bias and weight stigma in children, shown to be independently bad for health**

- [This](#) 2022 review paper cites research of children and youth showing that weight stigma is associated with poor body image, binge eating and other disordered eating behaviours, substance use, lower levels of physical activity, and weight gain. Reference: Brown, A., Flint, S.W. and Batterham, R.L. (2022) 'Pervasiveness, impact and implications of weight stigma', eClinical Medicine, 47:101408.
- [This](#) 2020 review underscores how youth labelled as "obese" experience higher levels of weight stigma, which put them at risk for depression, low self-esteem, and suicide ideation. Reference: Puhl, R.M. and Lessard, L.M. (2020) 'Weight stigma in youth: Prevalence, consequences, and considerations for clinical practice', Current Obesity Reports, 9, pp. 402-411.

### **5 - It does not lead to a change in BMI of children and may increase dissatisfaction with their bodies/weight which can detrimentally impact overall health and wellbeing as well as engagement and learning outcomes**

- [This](#) 2020 study of over 28,000 students found that BMI report cards being sent to parents did not change the weight status of the students and may have decreased the weight satisfaction of the students. Reference: Madsen, K. A., Thompson, H. R., Linchey, J., Ritchie, L. D., Gupta, S., Neumark-Sztainer, D., Crawford, P. B., McCulloch, C. E., & Ibarra-Castro, A. (2021). Effect of School-Based Body Mass Index Reporting in California Public Schools: A Randomized Clinical Trial. JAMA pediatrics, 175(3), 251-259.

- [This](#) article found that the children of parents who believed their child to be "overweight" tended to have a negative view of their weight, and were more likely to try dieting. 'Our results suggest that once parents recognize that their children are overweight, their children are more likely to perceive their body size as being larger than their peers. In a society that values thinness and stigmatizes adiposity, realizing that one is overweight is likely to be stressful and psychologically scarring ([Hunger, Major, Blodorn, & Miller, 2015](#)).' Reference: Robinson, E., & Sutin, A. R. (2017). Parents' Perceptions of Their Children as Overweight and Children's Weight Concerns and Weight Gain. *Psychological science*, 28(3), 320-329.

Self-identification of being "overweight" is also prospectively predictive of greater weight gain and can damage mental health.

- [This](#) article highlights evidence that shows children whose parents identify them as being "overweight" are most at risk of future weight gain, whilst parents and adolescents who do not identify themselves as "overweight" are less likely to gain further weight. It also notes that there is strong evidence to show that weight-based stigma among those of higher weight, results in increased mental health issues. Therefore, making children and parents aware of a child's perceived "overweight" may lead to further weight gain and mental health struggles. Reference: Robinson, E., Haynes, A., Sutin, A. R., & Daly, M. (2017). Telling people they are overweight: helpful, harmful or beside the point?. *International journal of obesity* (2005), 41(8), 1160-1161.

## **6 - It can lead children to think their weight is all within their control and is a personal choice or responsibility, when there are actually many factors which affect weight, most of which are beyond our own individual control**

- As noted by the [government](#), many factors which impact our weight are out of individual control, such as genetics, location, socioeconomic status, medicines and psychological health.
- In a [review](#) of 31 long term studies on dieting, it was found that "the majority of people regained all the weight, plus more. Sustained weight loss was found only in a small minority of participants, while complete weight regain was found in the majority." Reference: Mann, T. et al. (2007) 'Medicare's search for effective obesity treatments: Diets are not the answer.', *American Psychologist*, 62(3), pp. 220-233.

## **7 - Weight does not equal health (and weight loss can be bad for health). The impact of under-nutrition can be particularly harmful for children whose bodies are growing and changing.**

- [This](#) article highlights many studies which show evidence to the contrary of what we often believe about the links between weight and health, stating that 'Most epidemiological studies find that people who are overweight or moderately obese live at least as long as normal weight people, and often longer...It may be, therefore, that the association between weight and health risk can be better attributed to weight cycling than adiposity itself'
- It also noted increasing evidence that marginalisation and poverty are more strongly associated with type 2 diabetes than often stated risk factors such as weight or diet.
- Dieting is known to reduce bone mass, which increases the risk of osteoporosis and is associated with increased psychological stress. Reference: Bacon, L., Aphramor, L. *Weight Science: Evaluating the Evidence for a Paradigm Shift*. *Nutr J* 10, 9 (2011).
- [This](#) analysis of 21 papers found no clear relationship between weight loss and health outcomes when looking at diabetes, hypertension or cholesterol and questioned whether weight change had any causal part to play in the small number of results of the diets that were noted. Reference: Tomiyama, A.J., Ahlstrom, B. and Mann, T. (2013) 'Long-term Effects of Dieting: Is Weight Loss Related to Health?: Weight-loss Diets and Health', *Social and Personality Psychology Compass*, 7(12), pp. 861-877.



- [This](#) article states that 'Limiting the caloric intake of children who have not gone through puberty is problematic in that it can result in stunting growth in height' and cites this study as evidence. References: Joanne P. Ikeda, Patricia B. Crawford, Gail Woodward-Lopez, BMI screening in schools: helpful or harmful, Health Education Research, Volume 21, Issue 6, December 2006, Pages 761-769 and Ebbeling, C.B. and Rodriguez, N.R. (1998) 'Effects of reduced energy intake on protein utilization in obese children', Metabolism, 47(12), pp. 1434-1439.
- [This](#) article highlights that during adolescence, children's brains are still going through a process of maturing and that nutritional intake impacts this, and the brain's functioning. 'Skipping meals, restrictive dieting, or the consequences of purging, lead to deficits in concentration, attention and memory.' Reference: Jeanine C. Cogan, Joslyn P. Smith & Margo D. Maine (2007) The Risks of a Quick Fix: A Case Against Mandatory Body Mass Index Reporting Laws, Eating Disorders, 16:1, 2-13.

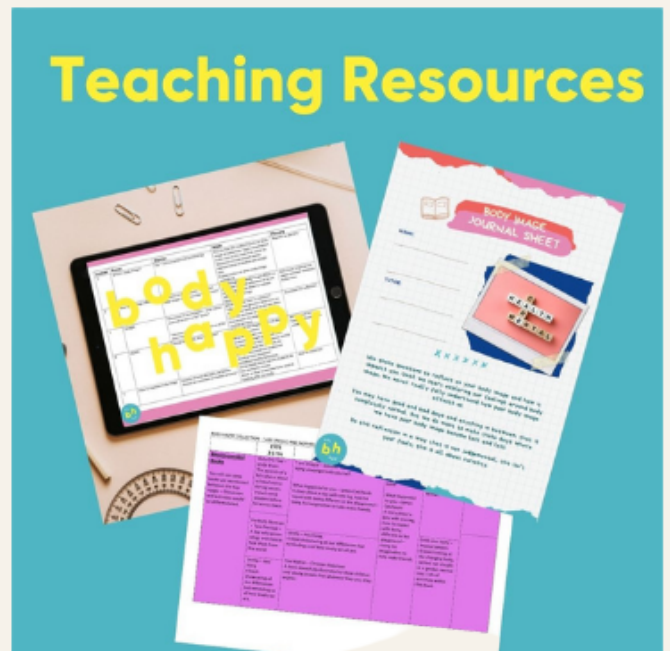
### **8 - It uses BMI which is ineffective (particularly for Black children, and children of South Asian heritage).**

- As the [Centers for Disease Control and Prevention](#) itself notes: 'BMI can be a screening tool, but it does not diagnose the body fatness or health of an individual'. Therefore, not only does measuring the BMI of children not assess the health of children, but it is also not a useful measure of trends in body fatness of them.
- [This](#) report notes a study in which BMI was found to correctly identify "obesity" in just over 50% of a racially mixed sample. Reference: Dale R Wagner, Vivian H Heyward, Measures of body composition in blacks and whites: a comparative review, The American Journal of Clinical Nutrition, Volume 71, Issue 6, June 2000, Pages 1392-1402.
- [This](#) cohort study recommends for BMI cutoffs to be lowered for non-white groups. Reference: Caleyachetty, Rishi, et al. 'Ethnicity-Specific BMI Cutoffs for Obesity Based on Type 2 Diabetes Risk in England: A Population-Based Cohort Study'. The Lancet Diabetes & Endocrinology, vol. 9, no. 7, 2021, pp. 419-26.
- As [Nuttall \(2015\)](#) notes, BMI was not developed as a means of measuring fatness in populations and should be recognised as having serious limitations when used to assess body fat mass. BMI is unable to consider the mass of fat in different body sites. Reference: Nuttall, F.Q. (2015) 'Body Mass Index: Obesity, BMI, and Health A Critical Review', Nutrition Today, 50(3), pp. 117-128.
- [Burkhauser and Cawley \(2008\)](#) highlight that the BMI cannot distinguish fat from other mass such as muscle and bone, leading to wide agreement in the medical literature that BMI is flawed.
  - 'We show that, relative to percent body fat, BMI misclassifies substantial fractions of individuals as obese or non-obese'
  - 'We find that obesity defined using BMI is only weakly correlated with obesity defined using more accurate measures of fatness, and that obesity defined using BMI results in substantial misclassification of individuals into weight classifications. African Americans are particularly likely to be misclassified by BMI.'
  - 'The percent of false positives associated with BMI varies by race and gender, with African Americans more likely than whites to be inaccurately classified as obese.'
  - 'An important reason that BMI generates different rates of misclassification by race and gender is because BMI does not distinguish between total body fat and fat-free mass.'
  - 'A particular problem with BMI as an index of obesity is that it does not differentiate between body lean mass and body fat mass; that is, a person can have a high BMI but still have a very low fat mass and vice versa.' Reference: Burkhauser, R.V. and Cawley, J. (2008) 'Beyond BMI: The value of more accurate measures of fatness and obesity in social science research', Journal of Health Economics, 27(2), pp. 519-529.

# Resources



[www.bodyhappy.org.com](http://www.bodyhappy.org.com)





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*Ends*