

## Health

### 5.NPA.3.3

Summarize normal weight gain and body changes during puberty.

[It is suggested that the lesson is scheduled after height and weight is measured for all fifth graders. Allow students to keep their results confidential. The school nurse or physical education teacher may be helpful in completing the measuring. Please note: Caution should be taken so that results are not shared with other students. Young people are often self-conscious about their weight and height.]

### **Materials Needed:**

Link to CDC, Child BMI tables:

[https://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/about\\_childrens\\_bmi.html](https://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html)

Appendix 1 – Body Mass Index Report (2 per page, cut apart)

PowerPoint presentation: Weight Gain and Body Changes During Puberty

Appendix 2 – Body Changes during Puberty

### **Statement of Objectives:**

In another curriculum strand, we talked about puberty and the physical, emotional, and social changes that everyone goes through. Today we are discussing weight gain during puberty. By the end of the lesson, you will be able to determine the body changes that are normal during this period of your life. You will also decide what health habits will result in being the healthiest you can be.

### **Focus:**

Following the measurement of height and weight for fifth graders, provide each child with their Body Mass Index (BMI), indicating whether they are of healthy weight, underweight, or overweight. The teacher (or school nurse or physical education teacher) will need to compute the BMI using this formula.

A BMI calculator can be found at CDC's BMI Tool for Schools:

[http://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/tool\\_for\\_schools.html](http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/tool_for_schools.html).

Or the following formula may be used:

Formula:  $\text{weight (lb)} / [\text{height (in)}]^2 \times 703$

Calculate BMI by dividing weight in pounds (lbs) by height in inches (in) squared and multiplying by a conversion factor of 703.

Example: Weight = 150 lbs, Height = 5'5" (65")<sub>SEP</sub> Calculation:  $[150 \div (65)^2] \times 703 = 24.96$

Using the Body Mass Index for Boys and the Body Mass Index for Girls

[https://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/about\\_childrens\\_bmi.html](https://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html)

prepare individual reports on Appendix 3, Body Mass Index Report.

Weight Status Category	Percentile Range
Underweight	Less than the 5th percentile
Healthy weight	5th percentile to less than the 85th percentile
Overweight	85th to less than the 95th percentile
Obese	Equal to or greater than the 95th percentile

Share with students: This is a measurement of health having to do with height and weight. It is called your Body Mass Index. Several factors determine your results: the traits inherited from your parents, the structure of your bones, how much exercise you get, the foods you eat (and how much), and whether you have experienced puberty as yet.

### Teacher Input:

Show the 10 slides of the PowerPoint, Weight Gain and Body Changes during Puberty. Cover the material on the slides and ask these questions.

1. What is the definition of puberty?
2. What are changes that happen in girls? What are changes that happen in boys?
3. What is reproductive capacity?
4. Why is weight gain normal during puberty?
5. What three things need to be in the right proportion for weight gain to be healthy?
6. List reasons for there to be individual differences in weight gain.
7. How are emotions and self-esteem affected by puberty, weight, and images in the media?
8. Play the link for Dove, Reversal Selfie (1:00) <https://www.youtube.com/watch?v=z2T-Rh838GA>
9. What are two health practices that help fifth graders achieve healthy weight?
10. What is meant by the word **be-YOU-tiful**?

### Assessment:

Provide each student (or pair of students) with a copy of Body Changes during Puberty (Appendix 1). Have them read the quotes from the boy and girl. Ask if they think boys and girls their age worry about their size and shape.

For the first graphic, ask, What do you think the doctor will say to the boy? For the second graphic, ask, If you were friends with this girl, what would you say to her about healthy eating, exercise, and to reassure her about weight gain?

**Closure:**

Today we studied weight gain and body changes during puberty. I hope you feel reassured that changes are normal during this period of your life. Some body changes you cannot control, but others you can. Eating nutrient-dense foods and getting 60 minutes of exercise each day are the best ways to look good and feel good.

## Body Mass Index (BMI)

Your Body Mass Index tells you if you are at a healthy weight for your height.

Name:	Height:
Weight:	Healthy Weight, Underweight? Overweight?

### Habits for Healthy Weight from *KidsHealth*

- Be active every day. Kids should get 60 minutes or more of physical activity daily.
  - Eat fruits and vegetables at meals and snacks (five or more servings a day).
  - Eat the right portion sizes.
  - Avoid sugar-sweetened beverages and drink low-fat milk or water instead.
  - Limit time spent in front of a screen, including TV and computers, to less than 2 hours a day.
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## Body Changes during Puberty



<https://openclipart.org/detail/263170/young-female-doctor>



<https://pixabay.com/vectors/boy-black-child-happy-laughing-160017/>

*Hey, Dr. Wise:  
When will I get  
bigger and stronger?  
Everyone is passing  
me by.*

*I wish I didn't care  
what my friends  
think. They are  
slimming down and I  
still have this muffin  
top.*



<https://pixabay.com/vectors/girl-sad-lonely-alone-frustrated-6810779/>