

Family Member Height & Weight Lab

Do you think there's any difference in your weight between when you wake up and go to sleep? It makes sense that there would be a difference, since you eat all day. But you also consume food and eliminate waste during the day as well.

What about your height? During the night, you are horizontal, and gravity pulls on your body differently than it does when you are standing upright. Does this affect your height over the course of the day?

In this lab, we'll calculate your percent change over the course of the day for your weight *and* your height.

Steps:

In the morning:

1. Using the table on the next page, write down the names of each of your family members. You can print out additional pages if you need more space.
2. Now measure everyone as soon as they wake up, before they eat or drink anything. That's it! You're done until bedtime, so keep this handout in a good place where you'll be sure to see it and remember to do the next steps.
(Hint: How about next to your toothbrush?)

In the evening:

3. Time to measure everyone again right before bed. Make sure they've done everything they need to *before* you take those measurements.
4. It's time to calculate the *percent change* for each person. Here's the equation again in case you need it:

$$\frac{\text{difference}}{\text{morning measurement}} \times 100 = \text{percent change}$$

My Family Height & Weight Percent Change for One Day:

Family Member	AM Weight	PM Weight	% Change	AM Height	PM Height	% Change