



Little Red Riding Hood #2

The wolf swallowed the grandmother and Little Red Riding Hood.

How big is the average stomach? How much can it stretch?

Science Spark How much food can your stomach hold?

Make a hypothesis: Make a statement that explains how far you think your stomach could stretch. How flexible is it?



My hypothesis:

Your stomach is a muscular sac shaped like the letter J. It is very flexible. In this activity you will try to see just how much a stomach can stretch each time you eat!

An adult stomach is about 25 cm long. Your stomach is probably a third of that size, or about 8–10 cm long. When the stomach is empty, the space inside is about 0.08 liters. Your teacher will give you and a partner a balloon. Measure the balloon's width. Is it 8–10 cm? It's just like your empty stomach! How far do you think your stomach will stretch? Let's see!

1. Stretch the end of the balloon over the end of the funnel.
2. Hold the neck of the balloon where it meets the funnel. Hold the funnel upright.



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3. Spoon sand into the funnel a little bit at a time. With a free hand, stretch the balloon and move the sand around so more can fit in (but don't let go of the balloon's neck.)
4. Keep adding sand until you think you have stretched the balloon as far as your stomach could actually stretch. When you decide to stop, ask your teacher to tie the top of the balloon in a knot.

Measure your balloon's width. **We think our stomach would stretch to _____ cm.**

Listen as your classmates share how far they stretched their balloons. Record some of their measurements:

Group member names

length of balloon in cm
amount of sand in cups



Watch as your teacher shows you just how far the stomach **can** actually stretch.

Report and reflect on your findings. Was your hypothesis correct? Were you surprised by how much a stomach can stretch? Describe your conclusions on another sheet of paper.