GOOEY gluten BALL

Why is gluten important? Without it, there would be nothing to hold the gas that allows the bread to rise.

MATERIALS
• 2 or more wheat-based flours (not gluten-free)
• water (about 1/2 to 3/4 cups for each flour you are using)
• bowls (one for each flour)

INSTRUCTIONS
1. Measure 1 cup of each flour into its own bowl. Label the bowls if you cannot tell them apart.
2. Slowly add your water to each bowl and knead mixture until it becomes soft, rubbery dough. Let sit for 10 minutes.
3. In the sink, run cold water over one of the balls of dough. Do not let the ball disintegrate, instead try cupping your hands and squeezing gently to help remove starch.
4. The water will be milky. Continue washing the starch away until the water turns clear and all you are left with are stretchy strands of GLUTEN!
5. Try this same process will all of your assorted flours. How does the texture of each one differ as the starch is being removed? Does it take the same amount of time? Are the gluten balls the same size?

What is GLUTEN?
When dough is kneaded, two proteins called gliadin and glutenin form what is called GLUTEN. Gluten is the stuff in bread that allows the dough to expand and trap gas while it is cooked, contributing to that fluffy texture! Dough is not entirely gluten, though. There are other components such as starches, lipids, sugars, and enzymes that contribute to the consistency and nutritional value of bread. If you run water over uncooked dough, you can wash away most of these other substances therefore isolating the gluten in the dough and allowing you to feel the gluten by itself.