Bread-Making

A couple times a month my family and I bake a homemade loaf of bread. Our last creation was a raspberry cream cheese braided bread and today we decided to make a simple white bread. Little did I ever stop to think about the more complex process involved in making such a tasteful thing! When mixing the gluten of the flour with water the two are combined through hydrogen and disulfide bonds. By kneading the dough the network is strengthened and the bread rises more uniformly when it is time for that process. Some important sugars that are utilized in bread making and contribute to both the flavor and browning of the crust are glucose and maltose. When yeast is introduced to the flour substance it helps in converting the sugars to carbon dioxide. The carbon dioxide bubbles that form from this reaction is what causes the bread to rise and takes a good portion of the day. While this process may take a while it is important not only important for converting the sugars and producing CO2, but contributes to the fluffiness and flavor that makes bread so delightful! After the rising process comes the delicious smelling baking process. When the bread is baking the process is endothermic as it is transformed into a fluffy treat. The baking powder contributes to the fluffiness by creating tiny gas bubbles, the heat causes the protein of the eggs to change into a more formed substance, and oil helps in keeping the bread moist. There are a ton more complex reactions and components of bread making, but overall the process above explains the main elements. The final product is a light, flavorful, and delicious loaf of bread!


Raspberry cream cheese braided bread

Rising process of the white bread

The final product!