Sweet Chorizo Meatballs with a Side of Asparagus

For this dish, we created chorizo meatballs accompanied by asparagus combined with feta cheese and a creamy peach puree. Our dish was inspired by latin cultures, the laws of cooking and experimentation.Having never cooked anything like this before, we took on the adventure.

Conduction heating happens when heat is directly transferred from one thing to another. In regards to the asparagus, heat spreads across the bottom of the pan and is conducted up the sides of the pan from the heat source. This means that only the surface of the pan is sufficiently hot enough to cook anything and the food must be turned in order for it to cook properly. So as we are cooking the asparagus, we must turn it to make sure it cooks evenly.

When you put the peach puree over the meatballs, it meets the cooking law "sweet meets savory." The peach is sweet and the meatballs are savory. Since the meatballs are very savory, the sweetness from the peach helps round out the savory flavor. The sweet balances out the savory and the savory enhances the sweet. The chorizo in the meatballs have a very bold flavor which will need a bit of a sweet zing from the added peaches to create a flavor that complements and balances each other out.

Convection is when a liquid or gas transfers heat through the movement of its molecules away from a heat source. Convection starts from the bottom of the oven and heats up the cold air. Once the air is heated up, it goes to the top of the oven. The cold air goes to the bottom and the cycle repeats. Because the air of the oven is warmed inside to a desired temperature, the meatball cooks from all directions. This is how the outer sides of the meatball will cook.

The Maillard reaction is a chemical reaction occurring between amino acids and reducing sugars that produces browning. The reaction takes place at 285° degrees fahrenheit or higher. The reaction is impossible if meat is boiled because the Maillard reaction can never reach 285°in water that is 215°F. The Maillard reaction produces hundred of new flavors within the meat. When cooking the meat the water molecules on the surface of the food evaporates quickly, leaving the sizzling sound of the food. Once all the moisture has evaporated, the dehydrated exterior of the food becomes hot enough to trigger the Maillard reaction in just a few minutes.

The meatballs continue cooking when you take them out of the oven. If you let the meat rest, the meat will continue cooking.The heat retained in the meat will be used to cook the food. How much it cooks depends on the size of the meat. Since a bigger piece absorbs more heat than a smaller piece it will cook more than a smaller piece. It is best to remove meat from heat when the center comes within 10 degrees of desired temperature.

Eggs can be used to bind a lot of ingredients together. Ingredients such as flour, breadcrumbs, and meat absorb water to make a structure; and egg yolks have 50% water. When there is heat, the protein molecules collide with each other more frequently because the molecules move faster. When the different molecules combine to each other, they become like glue and stick together. So when making the meatballs, we need egg to structure the shape of the meatballs.

Photosynthesis is the process used by organisms to convert light energy into chemical energy that can later be used by other orgasims. It starts with decayed matter. then a plant grows, which takes in sunlight and water, and that plant is eaten by a cow The cow is turned into meat and is eaten by human beings. Food gives humans energy that is needed for all parts of the body. The body digests food, and the food breaks down into glucose. The stomach and small intestines absorbs the glucose and releases it into the bloodstream. Once the glucose is in the bloodstream, it can be used for energy immediately or it gets stored in the body to be used later.

When you add sugar to the peaches, a chemical change is created. There will be more juice when you add the sugar to the fruit because the sugar draws out all the moisture. A lot of sugar on the outside of the fruit cells will cause water from within those cells to flow out to where the sugar is.

A physical change is any change that does not change the chemical's identity. When we were cutting the peaches, we were breaking up the molecules into smaller pieces. It still remains a peach, just smaller pieces. You can tell it's a physical change rather than a chemical change because neither color nor the taste has changed.

Fermentation is the process in which a substance is broken down into simpler substances. Cheese is one thing that is fermented. The bacteria in milk, digests the sugar lactose and produces lactic acids. Lactic acids act with the added enzyme to separate the milk. The whey drains off and compacts the curds.