It is a lovely Saturday afternoon and you decide to run down to the fish market to pick up fresh fish for dinner. There are a number of fish vendors that have a reputation when it comes to poor business practices, so you avoid their stands. You notice a new vendor in the market and decide to try them. Your young child is allergic to a specific protein in Cod so you avoid it and purchase 2 lbs. of Tilapia. That evening at the dinner table, while everyone is enjoying your well thought out meal an obvious success, your young child starts to show symptoms of an allergic reaction. The child is swelling up and is having difficulty breathing. Yes, your child is having an allergic reaction to the food so you rush the child to the hospital. You, of course, are a biology student at UNT and work for one of the labs on campus. When you get back home from the hospital that evening, you place some of the fish that you cooked into a Ziploc bag to take to school. On the way to the university, you stop by Kroger’s to pick up some tilapia to use as a control. You will be testing the samples to see if there is one more disreputable vendor at the market.

Control (Tilapia)

Fish Sample (?)

You have been planning on going to a friend’s house for Thanksgiving. Your friend is a butcher and usually cuts all of his own meat, makes his own sausages and grows much of his own herbs in the back yard. When you get to his house, you smell the faint aroma of Brats grilling in the back yard. Unknown to you, your friend had been on a hunt the week before and brought home some wild game. He had prepared sausages from the harvested meat and was serving it for Thanksgiving. You have lunch with him and find that the sausages are wonderful. You ask him what type of meat it is and he tells you pork. You know how mentally tweaked your friend is and decide to find out what type of meat he actually used to make the sausages. You collected small samples from two of the sausages and took them home with you. You, being the budding Biologist you are, take the samples to the lab the next day to find out what was in those sausages.

Sample 1

Sample 2
You are a buyer for a small wholesale food supply company in the Denton area not to mention a perceptive fisheries biologist. In a meeting, you find out that you will be working with an Italian company that will be supplying you with Flounder and Tilapia by the end of the week. Your first shipment of frozen fish comes in the following Friday. The labels read Flounder fillet and Tilapia fillet. You sell the fish to a number of local restaurants. Within a week, you are receiving complaints from your customers. The fish has a funny smell when it is cooked, bad texture, it tough, and doesn't taste like good flounder or Tilapia. You decide to run over to a friend’s lab at the university and test the samples. You pull a sample from both the Flounder and Tilapia packs, place them in Ziploc bags and head to the lab.

Sample 1
Sample 2

You and a friend are on a road trip to San Angelo Texas. As you drive down scenic Hwy 206 in Colman County, you and your friend notice that there is a lot of flattened fauna on the road. There was quite a massacre of creatures on a small 2-mile stretch of road just outside of Colman. Both you and your friend are Biology students at UNT and work in the molecular biology lab. Being sick and twisted and a little on the macabre side, you stop the car and decide to collect some of the fresh road kill. It just so happens that you have a few 2ml flip cap microfuge tubes in the car. You take a small piece of tissue from an unknown creature and put it in a tube, cap it and place it in a cooler of beer you have in the back of your car. You get back in the car and drive down the road to another unrecognizable mass of flesh on the road, get out of the car and collect another sample. You and your friend have a deep seeded need to know what type of creature that grease spot came from.

Sample 1
Sample 2

You and your family decide to go out for Sushi one evening for dinner. You order a Sushi Boat with everything on the menu. As you plow into the boat of fish, you notice that some of the albacore tuna tastes a little strange. You, being a sushi coinsure not to mention a biologist; decide to look into the matter. You slide a couple pieces of tuna into a napkin and take it home. The next day you take the tuna samples to the lab for testing. Remembering that Albacore Tuna is about $8.50 per lb., you want to be sure you are not being ripped off.

Sample 1
Sample 2
You and your soul mate head out to one of the newest Sushi bars in Denton. The chain is well known for having some of the finest sushi in the world. You order a number of pieces to start. Quail eggs, Mackerel, Sea Urchin, Flounder, Tuna, Salmon, Crab, and Spicy Crab. You order the Spicy Crab because the menu says it is real crabmeat mixed with a spicy sauce. It looks good so you give it a shot. Not at all, what you were expecting from the crabmeat or spicy crabmeat. You collect a sample from both the crabmeat dishes, take them home and freeze them. You will be taking them to your lab on Monday to see what they were feeding you.

Sample 1

Sample 2