

If You Can't Stand the Heat, Get Out of the Kitchen



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I love hot sauce. I have loved it since I was eight years old. I love hot sauce on chicken. I love hot sauce on potatoes. I love hot sauce on hamburgers. I love hot sauce on burritos. I love hot sauce in chili. I love hot sauce on steak. I love hot sauce on eggs. I love hot sauce on chocolate. I am often seen chugging entire bottles of hot sauce during lunchtime at school. I have tried Louisiana hot sauce, Mexican hot sauce, Thai hot sauce and many more. I liked all of the sauces but noticed they were all different. This led me to ask the question, "How is hot sauce different throughout the world?" After researching this question I found out that hot sauce is very, very different throughout the world and that these differences include many things, such as types of peppers, techniques to make it, spices, and other ingredients. In this essay I will describe how "heat" is measured and then describe hot sauce in the Americas, Asia, Africa, Europe, and Oceania.

Heat and the Scoville Scale

The "heat" in peppers is caused by chemical structures called capsaicinoids. The main capsaicinoids in chili peppers that cause heat are capsaicin and dihydrocapsaicin. To measure the seemingly subjective "heat" of substances, the Scoville Scale is used. The heat of a substance is measured in Scoville Units. The number of Scoville Units indicates how many times something must be diluted with an equal amount of water as the amount of the substance until the capsaicin is no longer noticeable to people. The Scoville Scale ranges from zero to 16 million Scoville Units (Wikipedia). This list will help you understand some sauces/peppers and where they stand on the Scoville Scale:

- Pure capsaicin extract has 16 million Scoville Units.
- Blair's 16 Million Reserve Sauce can have up to 16 million Scoville Units.
- The Trinidad Moruga Scorpion, according to New Mexico State University Chile Institute can get as hot as 2,009,231 Scoville Units making it the hottest pepper in the whole world. In 2011 it was certified as being the hottest pepper by The Guinness World Record Book and is 50 percent hotter than the ghost pepper.
- The Naga Bhut Jolokia (also known as the Bhut Jolokia, and ghost pepper) was the hottest pepper on 2007, surpassed by the Trinidad Moruga Scorpion and has over a 1 million Scoville Units.
- The Habañero pepper has between 100,000 and 350,000 Scoville Units.
- The Scotch Bonnet pepper has 100,000 to 325,000 Scoville Units.
- The piri piri pepper (also known as peri peri, pili pili, and African Birdseye) has about 175,000 Scoville Units. The pepper is most commonly used in very light, citrusy, and herbal hot sauces with many spices.
- The Jamaican hot pepper is between 100,000 and 200,000 Scoville Units.
- The Thai pepper has 50,000 to 100,000 Scoville Units.
- The Cayenne and Tabasco peppers are between 30,000 and 50,000 Scoville Units.
- The Chile de Arbol is a Mexican Chili between 15,000 and 30,000 Scoville Units.

- The Serrano pepper is between 6,000 and 23,000 Scoville Units.
- The Chipotle pepper is between 5,000 and 10,000 Scoville Units.
- Tabasco Sauce is between 2,500 and 5,000 Scoville Units.
- The Jalapeño pepper is between 2,500 and 5,000 Scoville Units.
- Frank's Red Hot XTRA Hot Sauce has 2,085 Scoville Units.
- The Poblano pepper is between 1,000 and 2,000 Scoville Units.
- The Ancho pepper has between 1,000 and 2,000 Scoville Units.
- Frank's Red Hot original has 450 Scoville Units (Chili World).

Mexico

Mexican hot sauce is one of the distinct styles of hot sauce from the Americas. Mexican hot sauce in general focuses on the flavor more than the heat and has little or no vinegar. One of the most popular peppers used in Mexican hot sauces is the chipotle pepper. The individual flavors of the peppers are more pronounced in Mexican hot sauce than other kinds of hot sauce (Wikipedia). Mexico has a distinct style of hot sauce.

However, there are some safety issues with some Mexican hot sauce. After analyzing 25 bottles of hot sauce from Mexico and South America, the University of Nevada, Las Vegas found lead. Four out of the 25 bottles examined had more than the amount of lead allowed by the FDA. All of the hot sauces that had lead, Salsa Picante de Chili habaño, El Pato, Salsa Habanera, and Bufalo Salsa Clasica were from Mexico (Lincoff).

I made my own twist on Mexican hot sauce/salsa verde. I used tomatillos, jalapeños, garlic, onions, and spices as I was supposed to. However, I blended it too much so that it has a consistency similar to guacamole. When, I tried it, it tasted very strongly of onions. It had less heat than I usually like, but an appropriate amount for young children. I would describe the type of heat as very light, and fresh. It had a light green color.

The United States

The United States has an interesting history with hot sauce. One of the first ever commercially available bottled hot sauces came out in Massachusetts in the year 1807. Tabasco is, however, the earliest ever recognizable brand in the hot sauce industry that is still around today. Tabasco appeared in 1868 and is known for being made on Avery Island in Louisiana. In the year 2010, Tabasco was the thirteenth best-selling condiment. Frank's Red Hot, which is known to be the main ingredient in buffalo wing sauce, was the twelfth best-selling condiment. Some other notable sauces from the United States include Blair's 16 Million Reserve which holds the world record for the hottest product available at 16 million Scoville Units, hence the name. Another notable hot sauce from the United States is Dave's Insanity Sauce, which is the only sauce ever banned from the National Fiery Foods Show for being too hot (Wikipedia).

American Manufacturers do many things to chili peppers such as aging, pureeing, and cooking their peppers to add different flavors. Some manufacturers add pure capsaicin oil or mustard oil. All hot sauce has chili peppers in it and some other very common ingredients are spices and vinegar. Vinegar is used mainly as a preservative but manufacturers can also achieve different flavors with different kinds of vinegars. Most hot sauces in the United States are typically made with chili peppers, vinegar and salt. The peppers that are mainly used in the U.S. are cayenne, chipotle, haba ero, and jalape o. Some famous hot sauces from the United States, such as Tabasco, are aged in wooden barrels or cases in a similar way to wine or vinegar. In the United States, to thicken the sauce and cool the heat of the chili peppers, raspberries, mangoes, carrots, chayote squash and many other fruits and vegetables are added to the hot sauce (Wikipedia).

One of the most notable types of sauces from the United States is Louisiana style hot sauce. Louisiana hot sauce is one of the simplest styles of hot sauce. Louisiana style hot sauce has red chili peppers (like tabasco and cayenne) and is made by blending the red chili peppers together with vinegar and salt (Wikipedia). Some companies make variations on Louisiana hot sauce that contain chipotle peppers that are slowly smoked for added flavor. Occasionally, xanthan gum or other thickeners are added to the hot sauce, although hardly any other ingredients are added to Louisiana hot sauces, as that would obscure the heat and flavor of the peppers. The sauce is often aged for up to three years and the vinegar and salt act as natural preservatives. The aging adds a small flavor of fermentation to the hot sauce. The final result is a thin, bright red sauce with a medium level of heat. Although all Louisiana hot sauce is similar in ingredients, different companies use different recipes that have unique levels of heat and different flavors. Louisiana hot sauce is a key feature in the cocktail, Bloody Mary. This cocktail consists of tomato juice, clam juice, vodka, hot sauce, and a stalk of celery. Louisiana style hot sauces that are made with tabasco peppers in general have a higher level of heat than sauces made with cayenne peppers. Many producers take pride in the fact that their hot sauce is hot, but not too hot. Some producers still make their sauces in Louisiana, like Tabasco, who make their sauces on Avery Island (Wisegeek). Louisiana style hot sauce is one of the best-recognized types of hot sauces in the United States.

I made my own Louisiana hot sauce. It was a little bit thicker than commercial Louisiana hot sauce because the strainer I used to get rid of the pulp had bigger holes the ideal size. I couldn't get my hands on cayenne peppers so I had to use chile de arbol peppers. Even though, I didn't use cayenne, my hot sauce tasted very similar to commercial Louisiana hot sauce. It had more flavor than some hot sauce because of the pulp in it. However, because it hadn't fermented for a long time, it lacked the sourness and fermented flavor of some Louisiana hot sauce. Overall, it was a very good imitation.

As one might guess, New Mexican style hot sauce is very similar to Mexican style hot sauce. Hot sauce is a very key component in New Mexican cuisine. New Mexican style hot sauce contains no vinegar at all. Almost every traditional New Mexican dish is served with either red or green chili sauce. In New Mexico, their hot sauce is added to meat, eggs, vegetables, bread, etc. Some

traditional New Mexican dishes are mainly hot sauce with a little bit of pork, beans, and rice (Wikipedia).

New Mexican green chili hot sauces are prepared with fire-roasted green chilies that have been diced and had their skin removed. Onions fried in lard and roux are prepared then broth and green chilies are added. The consistency of the green chili sauce is similar to gravy and the sauce is used similarly as well. Some common varieties of New Mexican style green chili hot sauces are Hatch, Santa Fe, Albuquerque Tortilla, Bueno, and Big Jim (Wikipedia).

New Mexican red chili hot sauces are prepared using a roux made from lard and flour. Then dried, ground, red chilies are added. Then water is added (Wikipedia).

Middle America

In the West Indies, hot sauce is referred to as “hot pepper sauce.” Hot sauces from the West Indies are made with chili, peppers, vinegars, fruits and vegetables. The most common peppers used in these sauces are habañeros and scotch bonnets. Over years each island has developed its own distinct recipes. Most hot sauces eaten in the West Indies are homemade. In Barbados, they make Bajan pepper sauce, mustard and scotch bonnet-based sauce. In Haiti they make sauce ti-malice, typically made with habañero, shallots, lime juice, garlic, and sometimes tomatoes. In Puerto Rico, they eat sofritos, which are small piquins (“bird peppers”) with annatto seeds, coriander leaves, onions, garlic, and tomatoes. In Jamaica, the most common type of pepper used is scotch bonnets. They are often pounded with fruits, such as mango, papaya and tamarind. Pickapeppa sauce is a well-known brand from Jamaica (Wikipedia).

In Panama, Picante Chombo D’Elidas is a popular brand. Picante Chombo D’Elidas has three major types of hot sauces: yellow, green and red. The yellow sauce is made from mustard and habañero peppers. The red and green have more vinegar than the yellow, no mustard and are made with red and green chilies (Wikipedia).

Asia

China has very distinct varieties of hot sauce. Chinese chili sauces usually come as a thick paste and are for dipping or stir-fries. Dou Ban sauce comes from the Szechuan cuisine where chilies are used liberally. Doosan sauce is made from broad bean or soybean paste and a lot of chili. Pao la jiao, also know as dipped fish or fish chili is made by pickling whole fresh chilies in brine. Pao la jiao is the key ingredient in the Sichuan dish Yuxiang Rousi, which is julienned pork in fish fragrance sauce. They add a live crucian carp to the pickling pot along with the chilies. Chile oil, la Jiao you, is a Sichuan flavoring found mainly in cold dishes. Chile oil is made by pouring hot oil into a bowl of dry chilies. After steeping in the oil for a few hours, the oil takes on the fragrance of the chilies. Guilin chili sauce is made of fresh garlic and fermented soybeans. Guilin chili sauce is also marketed as chili soy sauce. Duo Jiao sauce is from the Hunan cuisine and is made of chopped red chilies pickled in brine to give it a salty taste. Hunan cuisine is reputed to be spicier

than Sichuan cuisine. Duo jiao is an important ingredient in the Hunan dish duo jiao yu tou. Duo jiao yu tou is steamed fish head with chopped chilies, known as duo Jiao (Wikipedia). Hot sauce and peppers are very important to Chinese food.

Hot peppers are used very often in Thai cuisine. However, often instead of chili sauces, Thais put raw chilies in their food. Nam Phreak is a generic term for any kind of Thai chili dip or chili paste. Nam phrik phao is roasted chili paste. Nam phrik num is pounded grilled green chili paste. Nam phrik kapi is chili paste made with fermented shrimp paste. Phrik nam pla is fish sauce with chopped raw chilies, lime juice, and garlic. Phrik nam pla is served with nearly every meal in Thailand. Sriracha is a commercial brand of Thai hot sauce that is very popular in the United States. Sriracha is made from chilies, garlic, vinegar, sugar, and salt (Wikipedia). Hot peppers are very important to Thai cuisine.

Asia has lots of hot sauce outside of China and Thailand. Shichimi Togarashi is a spice mix with chili used on food and in soup in Japan. Okinawa is a popular condiment made of chilies infused in rice spirit from Japan. From Indonesia, Malaysia, Singapore and Brunei there is Sops Cili, made from tomato puree, chili juice, sugar, salt and is not very hot. Hot sauce is very popular in Vietnamese cuisine. Vietnamese hot sauce is made from sun ripened chili peppers, vinegar, garlic, salt and sugar. In Levant (the eastern most part of Asia bordering the Mediterranean Sea, Syria, Israel, Lebanon, and more) they eat shatta. Shatta is ground fresh chilies mixed with oil, vinegar, garlic, and spices. Shatta can be either red or green. Red shatta is made with tomatoes and piri piri peppers. Shatta is commonly used on falafel sandwiches, hummus dishes, or as a condiment (Wikipedia).

Africa

Africa has distinct styles of hot sauce. The African Birdseye, or piri piri pepper is the most important chili pepper in most types of African cuisine as Africa is where it grows. Harissa is a hot sauce made of ground red birdseye chilies, olive oil, garlic, cumin, and coriander. Harissa has a dark red color and a grainy texture. Harissa is used as a condiment as well as being spread on bread. Tunisian harissa is much hotter than the harissa in the surrounding countries. In South Africa, they eat peri peri sauce, which is a style of piri sauce, and is used by Nando's Chicken fast food restaurants. In Malawi they eat nali sauce, which is a style of piri piri sauce (Wikipedia). Africa has many types of hot sauce.

Europe

Hot sauce is not very big in Europe. Some of the hottest chilies in the world are from the United Kingdom, but for some reason, hot sauce is just not really that popular. This definitely goes with the stereotype that England has very boring food. The Naga Viper and Infinity Chili were developed in the United Kingdom and are available as sauces. The Naga Viper and Infinity Chili

are in the top five hottest chilies in the world, and they are commercially available. In Hungary, Erős Pista and Piros Arany hot pepper pastes made from minced paprika are popular. Piri piri sauce is very popular in Portugal (Wikipedia). Hot sauce in general is not very important in most countries in Europe.

Oceania

The Pacific Islands are influenced by Asian and European cuisine. Hot Chile Sauce is a thick Chinese-like hot sauce. Sweet Chili Sauce is a sweet dipping sauce similar to Thai hot sauce. Peri Peri sauce is similar to the Portuguese piri piri sauce (Wikipedia).

New Zealand has had many influences on its hot sauce because it is a very ethnically diverse country. New Zealand has the sweet Thai style dipping sauce, which is debatable about whether or not it can be called a hot sauce. Other types of their hot sauces are based off American types of hot sauces. They also have Malaysian chili sauces with Indian influence in New Zealand. Chinese sauces such as black bean chili sauces are popular in New Zealand along with peri peri sauces (Wikipedia). New Zealand has many influences on its hot sauce.

Conclusion

In conclusion, hot sauce flavors, heat, texture, consistency and many more qualities are very different throughout different regions of the world. Now, next time you are having a Super Bowl party and you want to make buffalo wings, you know when you go to the supermarket to buy Frank's RedHot sauce and not Tabasco Jalapeño sauce.

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