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ALL ABOUT FISH SAUCE

Fish sauce, a liquid condiment born from the marriage of fish coated in salt and a patient fermentation period that can extend up to two years, stands as a culinary staple in many Asian cuisines. It holds a special place in the heart of East Asian and Southeast Asian cuisines, often found in the kitchens of chefs and home cooks in Myanmar, Cambodia, Laos, the Philippines, Thailand, and Vietnam.

As trade routes expanded and cultural exchanges occurred, fish sauce transcended its regional origins, spreading its influence on other parts of Asia and eventually reaching global shores. Today, it is not only a cornerstone of traditional Southeast Asian cooking but also a versatile ingredient embraced by chefs and home cooks worldwide.

Fish sauce production, an ancient and artful process, begins with the careful selection of small, flavorful fish like anchovies or krill. The chosen fish undergo a thorough cleaning to eliminate impurities, after which they are layered in large fermentation containers, often crafted from wood. Sea salt, a crucial component, is generously applied to the fish layers, initiating the fermentation process by extracting moisture and setting the stage for the development of distinctive flavors.

Over several months, the fish undergo a natural fermentation, where enzymes and microorganisms break down proteins, resulting in the creation of the unique fish sauce essence. Following fermentation, the mixture is pressed to extract the liquid, and filtration ensures a clear and smooth final product. Some producers may opt for an additional aging process, allowing the fish sauce to mature and acquire a more complex flavor profile. The finished fish sauce is then bottled and sealed, ready to embark on its culinary journey as an indispensable condiment.

While traditional methods embrace natural fermentation, modern approaches may incorporate controlled fermentation and pasteurization to ensure consistency and safety. The nuances of production vary across regions and producers, contributing to the diverse array of fish sauce flavors available in the current culinary landscape.

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HEALTHY INGREDIENT CONTRIBUTION

Fish sauce, a staple condiment in many Southeast Asian cuisines, offers some health benefits when used in moderation due to its high sodium content. This umami-rich sauce is low in calories and fat, making it a flavorful option for those looking to enhance the taste of their dishes without significantly increasing their caloric intake or fat consumption. Incorporating fish sauce mindfully can add depth and complexity to dishes while contributing to a balanced and flavorful diet.

B Vitamins: Fish sauce is high in B vitamins including thiamin (B1), riboflavin (B2), niacin (B3), pyridoxine (B6), folate (B9), and cobalamin (B12). These B vitamins are crucial to the body for producing energy, boosting metabolism, and enhancing brain function. A one-tablespoon serving of fish sauce provides up to 4% of the recommended daily value (DV) of each of these B vitamins.

Calcium: A one-tablespoon serving of fish sauce contains approximately 7mg of calcium. Including this source of calcium in your regular diet can help build, maintain and strengthen bones in addition to helping with muscle contractions, preventing blood clots, and maintaining blood pressure.

Amino Acids: While the amino acid composition of fish sauce can vary between brands due to production processes, many amino acids can still be found in smaller quantities. Common amino acids found in fish sauce have been linked to energy production, glucose breakdown, collagen formation & skin health, protein synthesis, and proper heart & liver function.

Sodium: Although sodium is necessary in the body to aid in fluid balance, pH regulation, nutrient transportation and nerve function, a diet including too much sodium can have harmful cardiovascular effects such as high blood pressure. A one-tablespoon serving of fish sauce contains approximately 1250mg of sodium, or 55% of the DV, so moderation is key.

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TYPES AND VARIETIES

Fish sauce comes in several types and varieties and has distinct characteristics influenced by factors such as the choice of fish, the intricacies of the production process, and the specific region of origin. It's important to check the ingredient list and quality of fish sauce when purchasing, as some commercial varieties may include additional ingredients such as preservatives or flavor enhancers. The spectrum of fish sauce flavor profiles can range from mild to intense, and preferences may vary depending on regional traditions and personal taste preferences.

Varieties of Fish Sauce by Region:

- **Nam Pla (Thai):** Can be saltier than other varieties
- **Nuoc Mam (Vietnamese):** Often aged to develop a more complex flavor than other varieties
- **Patis (Filipino):** Heavier and more assertive than other varieties
- **Kecap Ikan (Indonesian):** Sweeter, syrupy, and more soy-like than other varieties
- **Ngan Pya Ye (Burmese):** Salty and higher in umami flavor than other varieties
- **Yulu (Chinese):** Depending on region produced, flavor more likely to vary than other varieties
- **Shottsuru (Japanese):** Milder in flavor and smell than other varieties
- **Tuk Trey (Cambodian):** Much more pepper forward and spicier than other varieties



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SELECTING AND STORING

Selecting Fish Sauce:

- **Ingredients:** A fish sauce with minimal ingredients, usually just fish and salt, will be of much higher quality than one with added preservatives, artificial colors, or excessive additives.
- **Brand Reputation:** Selecting your favorite fish sauce is often a matter of trial and error but brands with better reputations are a good place to start as high quality brands tend to produce fish sauces with better flavor and fewer additives.
- **Color:** Darker fish sauces tend to have a stronger flavor while those with a lighter color are usually less potent. Color can also be related to the aging process with darker colors being associated with a longer fermentation.
- **Scent:** A quality fish sauce should have a strong, savory aroma. Avoid fish sauce with scents that are off-putting or smell of rancidity.
- **Price:** Although not an absolute indicator of quality, brands with higher priced fish sauces often use more fish to produce the quality flavor they're known for and can justify the higher price.
- **Country of Origin:** Different countries produce fish sauces with unique characteristics. Explore different flavors by trying sauces produced by various countries.

Storing Fish Sauce:

- **Location:** Fish sauce should be stored in a cool, dark place, away from direct sunlight as exposure to light and heat can degrade the sauce quality over time. Temperatures between 50° F and 70° F are ideal.
- **Bottle:** Oxygen can affect the flavor and quality of fish sauce. Select brands that are packaged in glass bottles and have tight sealing lids to prevent air from entering.
- **Refrigeration:** Fish sauce, both opened or unopened, are stable at room temperature but refrigerating after opening, especially in warmer climates, can slow down potential deterioration. Unopened bottles, when stored properly, can be stored outside of refrigeration for several years.
- **Contamination:** Use a clean spoon or pour small amounts into a separate dish to prevent contaminating the bottle with other food particles.
- **Spoilage:** If your bottle of fish sauce emits an off smell, has an unusual color, or shows signs of mold, it may be spoiled and should be discarded.



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CULINARY USES

Fish sauce is a versatile condiment that brings forth a sense of depth, umami, and savory notes to elevate a myriad of dishes. When using fish sauce, it's essential to start with a small amount and adjust according to your taste preferences. Its potency means that a little can go a long way, and it often serves as a background flavor enhancer rather than a dominant taste in a dish.

Some uses of fish sauce include:

- **Salt Replacement:** Substituting fish sauce for salt in vinaigrettes, marinades, sauces, and soups can add an extra layer of flavors.
- **Broth:** Fish sauce is commonly added to the broths used to make Asian inspired soups such as pho and ramen.
- **Dipping Sauce:** Use fish sauce as an ingredient to create dipping sauces for spring rolls, dumplings, and grilled meats.
- **Pickling:** Utilizing fish sauce when pickling can add a depth of richness that vinegar is unable to add on its own. Be sure the final flavor profile of the desired pickle warrants the addition of fish sauce.
- **Cocktails & Drinks:** Chefs and mixologists can sparingly use fish sauce in certain cocktails, i.e., the Bloody Mary, to add a unique savory and salty element.
- **Glaze:** Using fish sauce as a glaze for grilled and roasted meats adds a savory element and helps caramelize the meat's exterior.
- **Fried Rice & Noodles:** Adding a few dashes of fish sauce to these dishes can elevate the overall flavor and provide a boost in umami flavor.
- **Non-Asian Dishes:** Flavorful foods such as chili, meatloaf, stews, and bolognese can be enhanced from the richness that fish sauce adds without the obvious fish flavor being noticed.



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FUN FACTS



- The concept of fish sauce originated in Ancient Rome as "Garum", a golden-brown sauce made from fermented fish intestines, blood, and other parts.
- With demands for sustainability, some fish sauce producers now use bycatch or fish waste in production to reduce waste and pressure on wild fisheries.
- Fish sauce stands out for its highly concentrated umami, one of five flavors the human tongue can detect. Umami is described as a savory or meaty taste that enhances the flavor of food and provides depth and richness.
- The mission of the IFSA, International Fish Sauce Association, aims to maintain quality and authenticity of fish sauce produced around the world.
- Southeast Asian fish sauce plants may use up to 20 different species of small fish depending on availability and cost.
- Top quality producers make their fish sauce with only two ingredients, fish and salt, and bypass additives like MSG, sugar, preservatives and thickeners.
- It is estimated that Vietnamese consumers consume an average of 1 gallon of fish sauce per year and Vietnam produced nearly 418 million liters (=110.5 million gallons) of the sauce in 2021.

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RECIPE

Crunchy Cabbage Salad w/ Fish Sauce Dressing
Yield: 4 Servings



Ingredients:
½ C. Roasted & Salted Peanuts, Shelled
¼ C. Granulated Sugar
3 T. Water, Divided
1/2 C. Palm Sugar
¼ C. Fish Sauce
1 T. Tamarind Concentrate
1 Fresh Red Thai Chile, Thinly Sliced
1/2 C. Palm Sugar
¼ C. Fish Sauce
1 T. Tamarind Concentrate
1 Fresh Red Thai Chile, Thinly Sliced
1/8 t. Dried Thai Chiles, Ground
Grapeseed Oil
1 Small Onion, Thinly Sliced
¼ t. Kosher Salt
¼ C. Cornstarch
4 C. Green Cabbage, Shredded
2 C. Red Cabbage, Shredded
1 C. Thai Basil Leaves, Loosely Packed
¼ C. Mint Leaves, Loosely Packed
¼ C. Cilantro Leaves, Loosely Packed
1 Lime, Cut into Wedges

Directions:
1. Combine peanuts, granulated sugar, and two tablespoons water into a small saucepan. Cook over medium heat, stirring often, until peanuts are lightly toasted and golden and syrup is bubbly and thick, about 5-7 minutes.
2. Spread peanut mixture in an even layer on a parchment paper lined baking sheet. Let cool completely, about 30 minutes, then break apart into small pieces.
3. In a small saucepan, combine the palm sugar, fish sauce, one tablespoon water, tamarind, and chiles. Cook over medium heat, stirring occasionally until sugar is dissolved, about 2-3 minutes. Remove from heat and let cool completely.
4. Heat 1.5 inches of oil in a Dutch oven over medium heat to 300° F. Season onion slices with salt and toss with the cornstarch, shaking off any excess.
5. Fry onions in hot oil in 2 batches, stirring occasionally, until lightly browned and crisp, about 3-4 minutes. Transfer fried onions to a lined baking sheet to drain. Season with additional salt to taste and let cool.
6. In a large bowl, toss the cabbage, herbs, candied peanuts, and half of the fried onions to combine. Add dressing and toss again to coat. Top with remaining fried onions and garnish with lime wedges and additional herbs if desired.

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QUIZ



After you read through this month's Ingredient of the Month, take this quiz to test your knowledge. In order to earn continuing education hours (CEHs) from the American Culinary Federation (ACF), the test must be completed through the ACF's Online Learning Center. Seventy-five percent accuracy is required to earn one hour of continuing education credits toward professional certification.

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QUIZ

Question #1



Following the fermentation of fish sauce, the mixture is pressed to extract the liquid, and filtration is used to ensure a clear and smooth product.


A. True
B. False

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QUIZ

Question #2



Which B vitamin is NOT found in fish sauce?


A. Thiamin (B1)
B. Riboflavin (B2)
C. Niacin (B3)
D. Pantothenic Acid (B4)

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QUIZ

Question #3



How much sodium does a one tablespoon serving of fish sauce contain, and what percentage of the daily value does it represent?

A. 750mg; 35%
B. 1000mg; 45%
C. 1250mg; 55%
D. 1500mg; 65%

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QUIZ

Question #4

_____, a variety of fish sauce from _____ is described as milder in taste and smell than other varieties.

A. Tuk Trey; Cambodia
 B. Shottsuru; Japan
 C. Yulu; China
 D. Patis; the Philippines



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QUIZ

Question #5

What is the main differentiator of Nuoc Mam from other varieties of fish sauce?

A. Aged to develop more complex flavors
 B. Sweeter, syrupy, and more soy-like
 C. Milder in flavor and smell
 D. More pepper forward and spicier



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QUIZ

Question #6

When purchasing fish sauce, how is the color related to the flavor of the product?

A. Lighter color indicates a stronger flavor
 B. Darker color indicates a longer fermentation
 C. Darker color indicates a shorter aging process
 D. Color has no impact on flavor



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QUIZ

Question #7

Storing fish sauce in temperatures exceeding 70° F is ideal for enhancing the flavor of fish sauce over time.

A. True
B. False



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QUIZ

Question #8

What does using fish sauce as a glaze for grilled and roasted meats contribute to the overall dish?

A. Adds a sweet flavor
B. Adds a spicy kick
C. Adds a bitter taste
D. Adds a savory, caramelized element



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QUIZ

Question #9

The original version of fish sauce, known as "Garum", originated from _____.

A. Southeast Asia
B. Vietnam
C. Ancient Rome
D. China



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QUIZ

Question #10

What motivates some fish sauce producers to use bycatch fish products in their production?

A. To increase the cost of the final product
B. To reduce waste and pressure on fisheries
C. To enhance the flavor profile
D. To meet demand for vegetarian options




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JOIN US NEXT MONTH!

Stay tuned for the next ACF Ingredient of the Month! Be sure to visit the Online Learning Center (OLC) to download a copy of each month's ingredient presentation. Don't forget to take the official IOTM quiz through the OLC to earn one hour of continuing education credits toward professional certification.

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