



Your  
Better Choice  
in  
*Seafood*<sup>TM</sup>



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# SUSTAINABLE SEAFOOD PROGRAM



*The Sustainable Seafood initiative is part of our organization's Better Tomorrow Plan, our global roadmap for sustainability. The commitment to source 100% sustainable seafood is one of 14 Better Tomorrow commitments to the environment, health, and local communities. Incorporating industry leading best practices, our goal is to have 100% of all contracted seafood certified as sustainable, either by the Marine Stewardship Council (MSC) for wild caught seafood, or the Best Aquaculture Practices (BAP) standards developed by the Global Aquaculture Alliance (GAA) for farm raised seafood, by 2015. MSC and GAA have committed to working with our suppliers to meet this goal, monitoring program utilization and educating clients about seafood sustainability.*

## THE MARINE STEWARDSHIP COUNCIL

The Marine Stewardship Council is an international, non-profit organization that works with fisheries, seafood companies, scientists, conservation groups and the public to help preserve the world's fish stocks and reduce the impact of fishing on the ocean environment. [www.msc.org](http://www.msc.org)

The MSC operates the world's most rigorous and widely recognized sustainability certification program for wild-capture fisheries. Certification to the MSC standard is conducted through third-party, on-site fishery assessments using objective scientific evidence. MSC certified products can be traced through the entire supply chain to a source that has been certified to the MSC's global standard for sustainable, well managed fisheries.

## THE BEST AGRICULTURE PRACTICES CERTIFICATION MANAGEMENT

The Best Agriculture Practices Certification Management certifies compliance with the Best Aquaculture Practices (BAP) standards developed by the Global Aquaculture Alliance. These comprehensive standards are developed under the oversight of a balanced stakeholder committee consisting of four Environmental Non-Governmental Organizations (NGO's), four academic representatives, and four industry representatives. BAP standards encompass social justice, the environment, food safety and traceability. BAP Certification Management works with International Organization for Standardization (ISO)-65 inspectorates to monitor farms, hatcheries, feed mills, and processing plants throughout the world. The ISO inspectorates, under the direction of the BAP Certification Management, conduct rigorous site inspections, including wastewater sampling, the protection of sensitive habitats, the use of therapeutants, and the conformation with food safety rules, including the use of online traceability. In addition, inspectors collect samples of final products for analysis of pathogens and veterinary drug contaminants by certified laboratories. [www.aquaculturecertification.org](http://www.aquaculturecertification.org)

The MSC and GAA will assist the seafood procurement team in reviewing all wild caught and farm raised seafood purchases to help identify the sustainability of their seafood supply. Short, medium and long term goals will be set with contracted seafood vendors to source and sell certified sustainable seafood to meet the 2015 goal.

# SEAFOOD TODAY

## NEW AND EMERGING SPECIES

There are tens of thousands of species of fish; however, only a small number of those are consumed by humans. Certain fish populations have suffered from overfishing, and there is the challenge of fish and shellfish being highly perishable. Today, technological advancements have allowed the fishing industry to deliver both a broad selection and a safe product.

Aquaculture, or fish farming, has made species once rare now regularly available. New and emerging species coming from aquaculture include cobia, barramundi, pangasius and abalone. Capensis, another emerging species of fish, also known as hake or whiting in commercial application, is becoming more main stream in the United States.

The fish management and monitoring of wild caught fish has brought back once underpopulated fish such as haddock. Enforced quotas by Alaska have resulted in pollock having a strong biomass. Quotas are also enforced for salmon, halibut, snow crab and king crab. Today, fishing vessels have complete processing facilities with the ability to deliver wild caught fish both quick frozen and appropriately chilled to the dock.

## SUSTAINABLE SEAFOOD

Our oceans have proven to be greatly overfished, and there is a lot of controversy around aquaculture. The controversy includes the destruction of mangroves,<sup>1</sup> social issues that result from low wages for workers at the aquaculture farms and pollution through the use of inappropriate chemicals. Certifying agencies, such as the Aquaculture Certification Council (ACC) applying the Best Aquaculture Practices (BAP) Standard developed by the Global Aquaculture Alliance, are working to address all of these issues.

We have made a strong commitment, through our partnership with the ACC to contract for seafood that comes from BAP certified sustainable sources. In addition to the Marine Stewardship Council (MSC) and the ACC, there are many other seafood certifying organizations. We will continue to monitor the developments and activities of these organizations and to actively participate in the global community as it pertains to sustainability.





## FARMED AND WILD SEAFOOD

Primary differences between wild and farmed seafood are their food source and habitat, factors that affect the taste and nutritional profiles.

Farmed seafood is fed a controlled diet that is designed to yield the best quality product. Wild species depend on their ability to hunt and eat within their native habitat.

Salmon, which is both farmed and wild caught, has a taste and nutritional profile dependent on where it has lived. Wild salmon is primarily native to the North Pacific. While these salmon do live in the ocean, each fish returns to the river in which it was born. Fishing season is during the migratory run upstream. The fish have stored up fat prior to the migration so the fish is fatty, but wild salmon have higher protein and about twice the fat of farmed fish. They also have a stronger flavor.

Farmed salmon are raised in floating pens and are typically Atlantic salmon. While this species is native to the North Atlantic, it is the most widely farmed species on earth. Atlantic salmon is farm raised in Norway, Scotland, Canada, Chile and the United States. While the fish are naturally fatty, farmed salmon have about half the fat of the wild salmon.

Shrimp is another product that is both wild caught and farmed. Wild shrimp comes from salt water and is typically a much heartier species. The farm raised has a milder taste. Both are widely used in the market.



## AQUACULTURE GROWTH

More than 50% of the world's seafood consumption comes from the wild, and the balance from fish farms. Due to many depleted wild fish populations, aquaculture has become a major worldwide industry and continues to grow.

In the future, aquaculture will continue to play a big part in feeding the world. Despite much activity around wild resource sustainability, many scientists believe the oceans may never recover from overfishing, industrial development and pollution.

Today, aquaculture is a resource that provides a worldwide viable source of protein. Collectively with our contracted seafood partners, we will continue to navigate through this topic and work toward continual improvement by using Global Aquaculture Alliance (GAA)/Best Aquaculture Practices Certified products and attaining our goal of 100% contracted certified product by 2015. The GAA is a nonprofit organization with a mission to further environmentally responsible aquaculture to meet the world's food needs.



## FRESH VERSUS FROZEN

Typically, frozen fish is perceived as a lesser quality product than fresh. However, with the advances in at-sea processing, fish is frozen within hours of coming out of the water, preserving the natural flavor and fresh characteristics. Frozen seafood enables higher quality and year-round availability. Most fresh species are caught on boats that are out for 6-10 days. The fish is gutted, packed with ice and stored in the hold of the vessel until it returns to the dock. The “top of the catch” (meaning the last product caught) often gets a premium at the auction. Fresh fish is auctioned off, picked up by the processor, then cut into marketable forms and shipped by either air or truck to distribution points around the country. With many of the local fishing grounds being over fished, vessels are forced to travel further to catch product. This added distance adds cost to the trip (fuel and wages for crew members for extended fishing time) and compromises the quality of the fish. Time and temperature are the two greatest enemies of fresh fish. The longer fish is out of the water, the more prone it

is to decay. If the temperature of fresh fish is not kept between 30 and 34 degrees, bacteria will grow and break down the fish.

Frozen fish can be fresher than fresh fish. Fish that is caught, processed and frozen within hours of coming out of the water preserves the integrity of the fish so the quality remains in a suspended state. Fresh fish is often 3-5 days old before it gets to a local distributor and then must be used within a couple days. This freezing at the peak of freshness gives frozen fish (when thawed properly under refrigeration) the same quality attributes as fresh but without the added age that time and temperature can add.





## FISH FACTS IN THE UNITED STATES

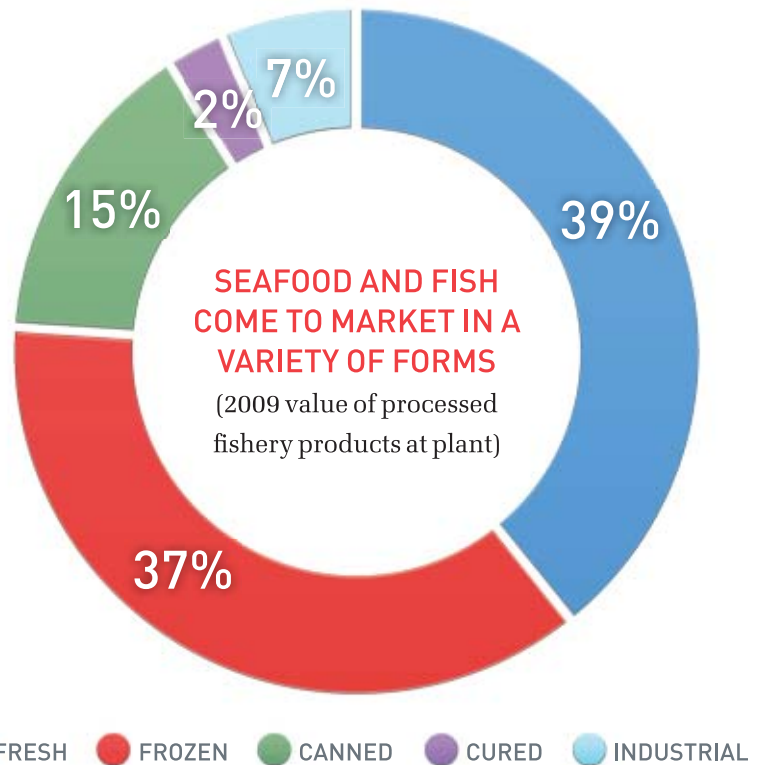
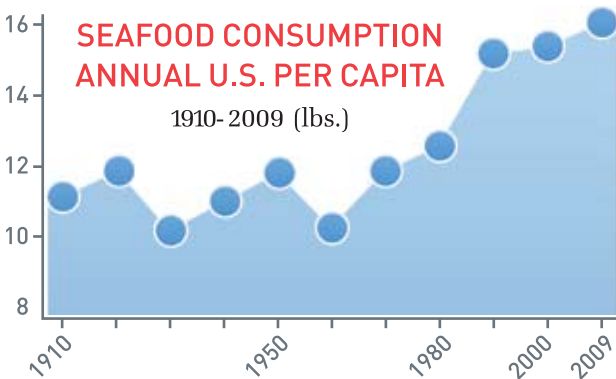
### CONSUMER EXPENDITURES

United States consumers spent an estimated \$75.5 billion for fishery products in 2009. The 2009 total includes \$50.3 billion in expenditures at food service establishments (restaurants, carry-outs, caterers, etc.); \$23.8 billion in retail sales for home consumption; and \$1.4 billion for industrial fish

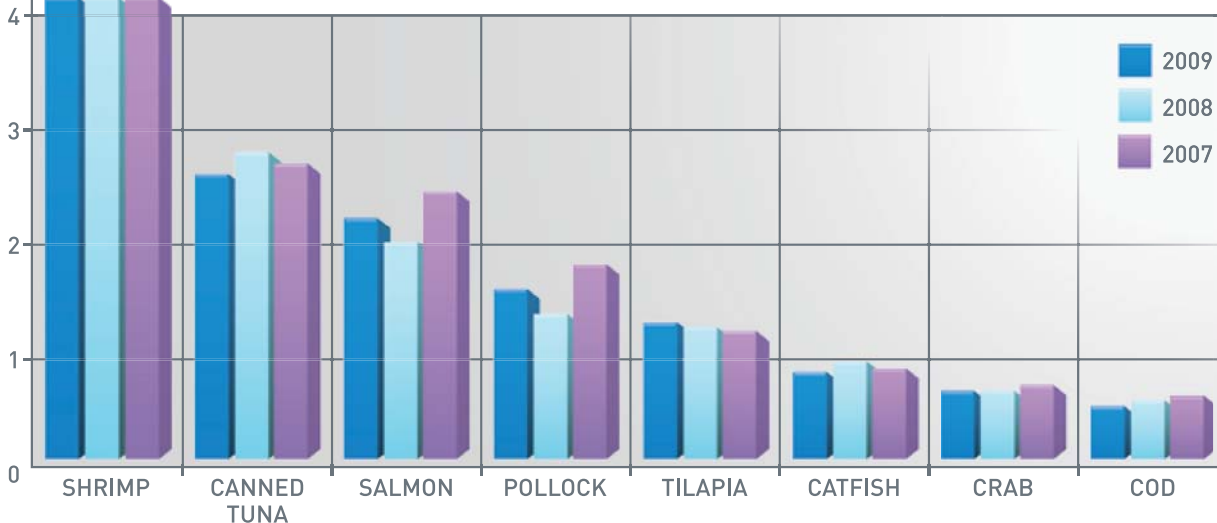
products. By producing and marketing a variety of fishery products for domestic and foreign markets, the commercial marine fishing industry contributed \$38.4 billion (in value added) to the United States Gross National Product.

### PER CAPITA CONSUMPTION

Per capita consumption of seafood has increased 26.4% since 1980 to 15.8 pounds per person. Despite this increase in domestic annual per capita consumption, the United States still trails many other regions of the world. For example, Europeans consume over 70 pounds per person annually and Asians 110 pounds per person.



### U.S. PER CAPITA CONSUMPTION BY SPECIES (IN LBS.)



# SEAFOOD NUTRITION

Seafood is considered one of the healthier proteins. It is a good source of protein and unlike some meat products does not have high levels of saturated fat. Another health benefit is the fish oil which is a source of Omega-3 fatty acids. Omega-3s are essential fatty acids and cannot be manufactured by the human body; they must be obtained by food or supplements. Omega-3s play a role in brain function, and the American Heart Association recommends eating at least two servings of fish weekly (particularly fatty fish such as mackerel, lake trout, herring, sardines, albacore tuna and salmon).

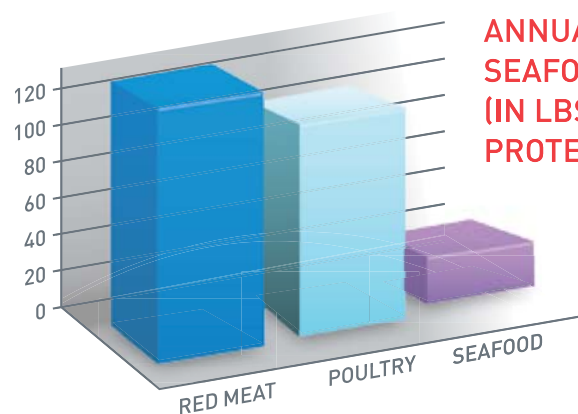
## PROTEIN COMPARISON

SEAFOOD (100 GRAMS)	CALORIES	PROTEIN GRAMS	TOTAL FAT GRAMS	SATURATED FAT GRAMS
SHRIMP	84	18	1	0
CANNED WHITE TUNA	109	20	2.5	1
CANNED LIGHT TUNA	99	22	1	0
FARMED SALMON	175	19	11	2
WILD SALMON	155	22	7	1
POLLOCK	100	21	1	0
TILAPIA	109	22	2	0
CATFISH	129	16	7	2
CRAB	87	17	2	1
COD	89	19	1	0
CLAMS	126	22	2	0
SCALLOPS	95	20	1	0
<b>CHICKEN BREAST (100 GRAMS)</b>	<b>231</b>	<b>43</b>	<b>5</b>	<b>1</b>
<b>80/20 BEEF PATTY (100 GRAMS)</b>	<b>230</b>	<b>23</b>	<b>15</b>	<b>6</b>
<b>TOP SIRLOIN STEAK (100 GRAMS)</b>	<b>243</b>	<b>27</b>	<b>14</b>	<b>6</b>
<b>PORK LOIN CHOP (100 GRAMS)</b>	<b>142</b>	<b>24</b>	<b>5</b>	<b>2</b>

## OMEGA-3 LEVELS:

The American Heart Association recommends eating fish, particularly fatty fish, at least two times per week.

SEAFOOD TYPE	OMEGA-3s PER 3 oz. SERVING (in grams)
SHRIMP	0.27
CANNED TUNA	0.26 – 0.73
SALMON	0.68 – 1.83
POLLOCK	0.46
CATFISH	0.15 – 0.2
TILAPIA	0.14
CRAB	0.14
COD	0.13 – 0.24
CLAMS	0.24
FLATFISH	0.43



ANNUAL PER CAPITA SEAFOOD CONSUMPTION (IN LBS.) WITH OTHER PROTEINS IN 2008



## **Q: WHY IS IT IMPORTANT TO MAKE LEAN OR LOW-FAT PROTEIN CHOICES LIKE FISH WHEN PLANNING YOUR MENU?**

According to the USDA, many people do not make varied choices from the meat and beans group in the food pyramid, selecting meat or poultry everyday as their main dishes. Varying choices and including fish, nuts, and seeds in meals can boost intake of monounsaturated fatty acids (MUFAs) and polyunsaturated fatty acids (PUFAs). Most fat in the diet should come from MUFAs and PUFAs. Some of the PUFAs are essential for health – the body cannot create them from other fats.

Some fish (such as salmon, trout, and herring) are high in a type of PUFA called “omega-3 fatty acids.” The omega-3 fatty acids in fish are commonly called “EPA” and “DHA.” There is some limited evidence that suggests eating fish rich in EPA and DHA may reduce the risk for mortality from cardiovascular disease. (EPA is eicosapentaenoic acid and DHA is docosahexaenoic acid.)<sup>1</sup>

## **Q: WHAT ARE OMEGA-3 FATTY ACIDS, AND WHY ARE THEY GOOD FOR YOUR HEART?**

Omega-3 fatty acids are a type of unsaturated fatty acid that's thought to reduce inflammation throughout the body. Inflammation in the body can damage your blood vessels and lead to heart disease. Omega-3 fatty acids may decrease triglycerides, lower blood pressure, reduce blood clotting, boost immunity and improve arthritis symptoms, and in children may improve learning ability. Eating one to two servings a week of fish, particularly fish that's rich in omega-3 fatty acids, appears to reduce the risk of heart disease, particularly sudden cardiac death.<sup>2</sup>

## **Q: ISN'T FISH HIGH IN CHOLESTEROL?**

Shellfish are very low in saturated fat, which is the major contributor to blood cholesterol. The majority of other fish are low in dietary cholesterol. Research has shown that the low total fat combined with the high percentage of good fats – like omega-3s – in seafood reduces the amount of blood cholesterol produced in the body after eating a meal of fish.<sup>4</sup>

## **Q: WHY ARE THERE CONCERNS ABOUT MERCURY IN FISH?**

Mercury occurs naturally in the environment. It is also an industry byproduct. Mercury can get into oceans and rivers and fish can absorb small amounts as they feed in these waters. What they absorb is often methylmercury, an organic compound of mercury. Species of fish that are high on the food chain and live a long time tend to contain higher concentrations of mercury – this is because they eat other fish that also contain mercury, and the mercury collects in fish tissue increasing over time. Fish high on the food chain include shark, swordfish, king mackerel and albacore tuna.

## **Q: WHO SHOULD BE CONCERNED ABOUT EATING FISH?**

The benefits and risks of eating fish vary depending on a person's stage of life. Children and pregnant women are advised by the U.S. Food and Drug Administration to avoid eating those fish with the potential for the highest level of mercury contamination (e.g., shark, swordfish, king mackerel or tilefish); to eat up to 12 ounces (two average meals) per week of a variety of fish and shellfish that are lower in mercury (e.g., canned light tuna, salmon, pollock, catfish); and check local advisories about the safety of fish caught by family and friends in local lakes, rivers and coastal areas. For more information visit [www.fda.gov/Food/ResourcesForYou/Consumers](http://www.fda.gov/Food/ResourcesForYou/Consumers).<sup>3</sup>

## **Q: WHY DO THE BENEFITS OF EATING FISH AT LEAST TWICE A WEEK OUTWEIGH THE RISKS OF EXPOSURE TO MERCURY OR OTHER CONTAMINANTS?**

Published in the November 2005 issue of the American Journal of Preventive Medicine, a study from the Harvard Center for Risk Analysis shows that the benefits of consuming fish far outweigh the risk calculable from minimal exposure to mercury.<sup>5</sup> The study's risk and benefit analysis found that consumers who eliminate fish from their diet risk a higher incidence of stroke and heart disease. In addition, the babies of expectant moms who stop consuming fish lose the benefits omega-3s have on brain and nervous system development. Instead, researchers suggested consumers should follow government advice to eat fish weekly, choosing from a variety of fish low in mercury.

<sup>1</sup> <http://www.mypyramid.gov>

<sup>4</sup> <http://www.aboutseafood.com>

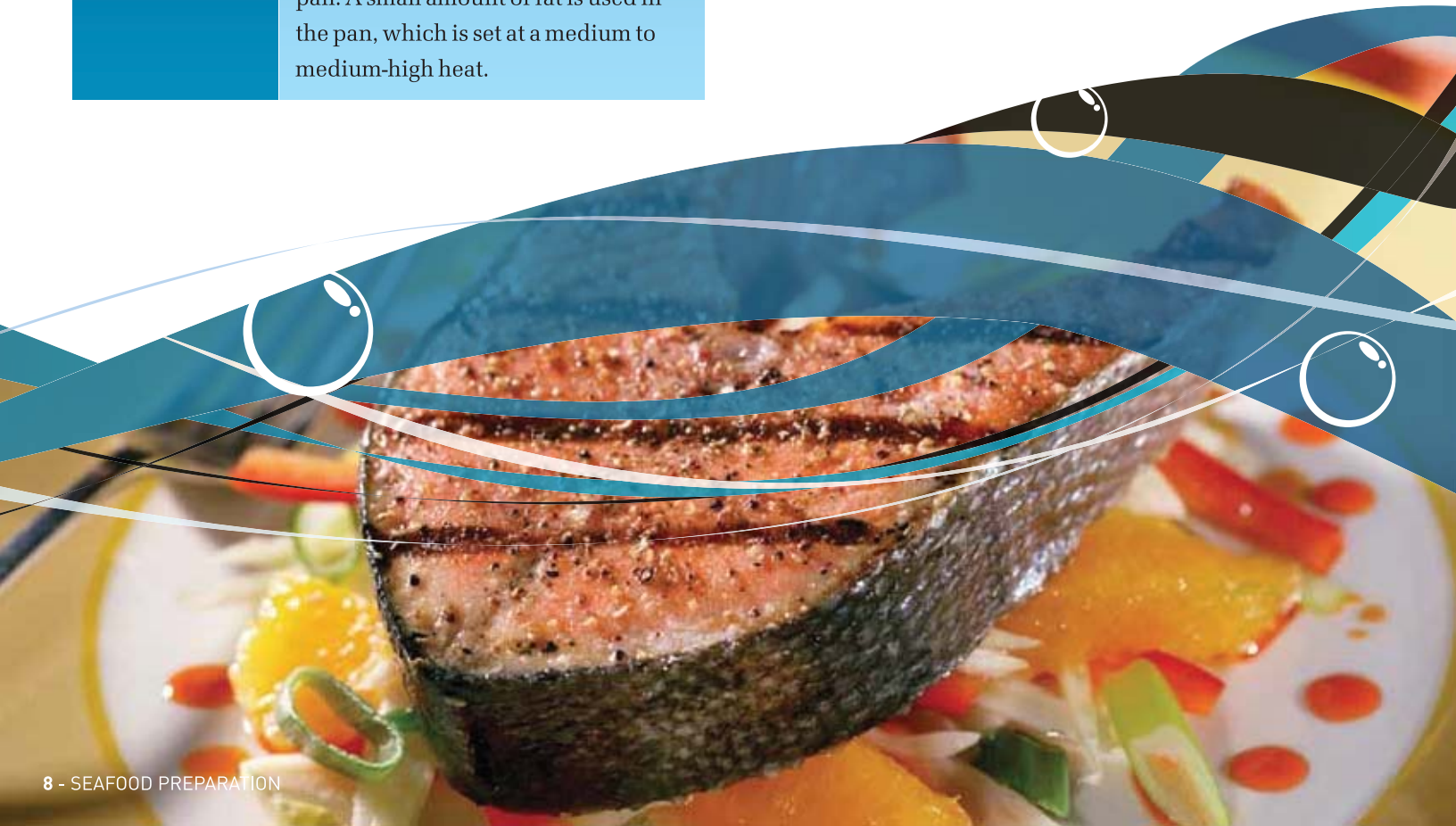
<sup>2,3</sup> <http://www.heart.org>

<sup>5</sup> <http://www.ajpm-online.net>

# SEAFOOD PREPARATION

Seafood is a versatile protein and because of the many forms it comes in, a wide variety of preparation methods can be applied. Here are the most popular methods of cooking seafood.

<b>BAKE, ROAST</b>	To cook food by surrounding it with hot, dry air, usually in an oven. This technique is very similar to roasting.	<b>SMOKING</b>	Hot smoking exposes food to high heat and smoke in a controlled environment.  Smoke roasting is sometimes referred to as “barbecuing or pit roasting” and the food is roasted and smoked at the same time.  Cold smoking exposes food to smoke in a low-medium heat (below 100F) smokehouse.
<b>BROIL</b>	To cook in an oven, directly under the gas or electric heat source.	<b>STEAM</b>	Food is placed on a rack or in a special steamer basket over boiling or simmering liquid in a covered pan. Steaming does a better job of retaining a food’s flavor, shape, texture and many of the vitamins and minerals than broiling or poaching.
<b>FRY</b>	To cook food in hot fat over moderate to high heat. Fried food is typically breaded or battered.	<b>OTHER</b>	Curing, marinating.
<b>GRILL</b>	To cook food on an open grid over a heat source such as charcoal or an electrically charged or a gas heated element.		
<b>POACH</b>	To cook food gently in liquid just below the boiling point.		
<b>SAUTÉ</b>	A traditional French cooking technique literally meaning “to jump.” It is a quick cooking method using a sauté pan. A small amount of fat is used in the pan, which is set at a medium to medium-high heat.		





Food safety is a primary concern for us and our contracted seafood vendors. Seafood safety is monitored at all levels in fishing, production, storage and transportation. For farm raised products, quality and safety measures begin with the ponds, lakes, rivers or reservoirs that are utilized by testing the water quality before the species is introduced. Once the species is in the water, the feed is monitored for antibiotics and bacteria.

Seafood is highly perishable. Once product is harvested, time and temperature are key factors in controlling the safety and quality of the fish or shellfish. Bacteria begins to grow if fish becomes 34 degrees or higher; bacteria growth will break down the flesh and ultimately compromise the quality. Controlling the temperature throughout the processing is critical.

We partner only with manufacturers that maintain proper quality control and provide a safe product.

## SEAFOOD REGULATION

Unlike all other proteins, the regulations and standards for the seafood industry are not as clearly defined as they are in beef, pork or poultry. Seafood is not as regulated so it is the responsibility of the processor to take the steps to ensure they are producing a safe product. The governing agencies that affect the seafood industry include:

- **National Fisheries Institute (NFI)** is the strongest and largest seafood lobbying group in the country. NFI is also the official “voice” of the industry and supports good business practices within the industry.
- **United States Department of Commerce (USDC)** ensures the processing facilities meet standards that have been established to produce a wholesome product.
- **Food and Drug Administration (FDA)** inspects imported products, as needed, to assure the products are free from any harmful entities.
- **United States Customs** is the governing body for all imported goods to the United States including seafood. However, customs is not a barometer of quality.

The Office of Sustainable Fisheries (OSF) is a headquarters program of the National Marine Fisheries Service (NMFS), or National Oceanic and Atmospheric Administration (NOAA) service. OSF works to manage fish stocks important to commercial, recreational and subsistence fisheries by providing guidance to their regional offices and regional fishery management councils. OSF also facilitates effective communication between and among constituents and supports safe seafood. OSF helps to implement the requirements of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, which:

- mandates the use of annual catch limits and accountability measures to end overfishing,
- provides for widespread market-based fishery management through limited access programs, and
- calls for increased international cooperation.

In addition, OSF coordinates the NMFS’ annual report to Congress on the Status of United States Fisheries, and the Bycatch Reduction Engineering Program. OSF also directly manages fisheries for Atlantic Highly Migratory Species.



# SEAFOOD SAFETY

## INTERNAL PRODUCT QUALITY ASSURANCE REQUIREMENTS

All contracted seafood vendors must provide proof they have a proactive food safety and a food security program in place that meets or exceeds our Product Quality Assurance requirements. Individual vendor requirements are based on the food product(s) risk level determined by our Product Quality Assurance Department.

All contracted seafood manufacturers and distributors are required to pass an annual third party food safety and security audit according to our scoring criteria. Additionally we require that suppliers have microbiological test results available for all products.

Microbiological tests are required by the FDA, and include microbe load testing, testing for antibiotics, adulterants or other contaminants. This is particularly important for imported seafood. Chemicals and /or antibiotics such as fluoroquinolones, chloramphenicol, nitrofurans and malachite green are not permitted.

Test results for these and other attributes (including microbiological results) must be made available to us upon request.

Upon entry into the country, all imported seafood must pass federal inspection before being further distributed. Seafood suppliers are required to maintain compliance with all federal, state and local regulations.

We have a policy of reviewing all products for quality on a regular basis by pulling product from our distributors and testing the same food our customers purchase.

## THIRD PARTY PARTNERSHIPS

Our suppliers actively engage with the Marine Stewardship Council and the Global Aquaculture Alliance, with their Best Aquaculture Practices (BAP) Standards. We contract with supply partners who share our commitment and focus on sustainability.





Seafood 101 includes most of our high volume contracted seafood categories and several other popular species. This section is factual and does NOT indicate any degree of sustainability for products shown. In many instances, a species may be raised or fished in a non-sustainable manner as well as by a certified sustainable fishery. You can be assured that all contracted seafood is certified, is in the process of being certified, or has been determined as potentially being certified by 2015. We will NOT source seafood that is currently overfished or mismanaged.



## ALASKA POLLOCK

**MARKET NAME:** Pollock, Alaska Pollock

**SCIENTIFIC NAME:** *Theragra chalcogramma*

**FISH IN ALASKA POLLOCK FAMILY:** Alaska Pollock is a North Pacific species of the Cod family. Alaska Pollock has recently gained respect as a global commodity and has become a popular menu item around the world.

**LOCATION OF ALASKA POLLOCK:** More than 3 million tons of Alaska Pollock are caught each year, in the North Pacific from Alaska to northern Japan, with the majority coming into the United States from the Bering Sea.

### CHARACTERISTICS:

- Alaska Pollock, once cooked, has a lean, moist meat with a nice flake.
- High-quality Alaska Pollock fillets are deep frozen to produce fish blocks as the raw material for high quality breaded and battered fish products.

**FLAVOR & TEXTURE:** Alaska Pollock has a slightly coarse texture and a mild, delicate taste. Compared with Cod or Haddock, Alaska Pollock has a milder taste, whiter color and lower oil content and is generally considered to be more flavorful.

**COOKING METHODS:** Alaska Pollock is best prepared by baking, broiling, frying, sautéing and steaming.

**GLOBAL SUPPLY:** In the United States, Alaska Pollock is harvested and processed at sea on factory trawlers and later delivered to processors on shore. Peak seasons include December through April, and July through September.

## ATLANTIC SALMON

**MARKET NAME:** Salmon, Atlantic Salmon

**SCIENTIFIC NAME:** *Salmo salar*

**FISH IN ATLANTIC SALMON FAMILY:** Atlantic Salmon is a species of fish in the Salimonde family of ray-finned fish, which includes Salmon, Trout and Freshwater Whitefish.

**LOCATION OF ATLANTIC SALMON:** Found in the northern Atlantic Ocean and in rivers that flow into the Atlantic and the Pacific, Atlantic Salmon is one of the great success stories of modern aquaculture. Since the 1980s, Atlantic Salmon has been farmed in more than a dozen countries around the world.

**FLAVOR & TEXTURE:** The meat of the Atlantic Salmon is moderately firm and oily, with a flavor that is milder than the wild species.

### CHARACTERISTICS:

- Atlantic Salmon has a flavor that is milder than the wild Salmon species.
- The fatty meat of the Atlantic Salmon is marbled when raw, and when cooked, has a large, moist flake.

**COOKING METHODS:** The delicate flavor of Atlantic Salmon is best prepared by baking, broiling, grilling, poaching or smoking.

**GLOBAL SUPPLY:** Wild fish make up only 0.5% of the Atlantic Salmon available in world fish markets. The rest are farmed, predominantly from aquaculture in Chile, Canada, Norway, Russia, the UK and Tasmania (Australia). The fish is available fresh and frozen year-round.

# SEAFOOD 101

## FINFISH

### BASA/SWAI

**MARKET NAME:** Basa, Bocourti, Bocourti fish, Swai

**SCIENTIFIC NAME:** *Pangasius bocourti*; *P. hypophthalmus*

**FISH IN BASA FAMILY:** There are 21 species of Basa in the Pagasiidae family of Catfish spread throughout Southeast Asia.

**LOCATION OF BASA/SWAI:** Vietnam

**FLAVOR & TEXTURE:** The Basa has a mild flavor and delicate texture.

#### CHARACTERISTICS:

- Basa farm raised along the Vietnamese Mekong River is a fresh and clean-flavored fish.
- True Basa is easily distinguished from its close cousin, the Tra—Basa. True Basa fillets are thicker and whiter in appearance than Tra.

**COOKING METHODS:** Basa's delicate texture and clean flavor are best prepared by baking, broiling, frying or sautéing.

**GLOBAL SUPPLY:** The Basa is farm raised primarily in Vietnam; it is available year-round and shipped both fresh and frozen.



### CATFISH

**MARKET NAME:** Catfish

**SCIENTIFIC NAME:** *Ictalurus punctatus*

**FISH IN CATFISH FAMILY:** The Channel Catfish, or Farm raised Catfish, is the fastest growing Catfish species in the world. The Channel Catfish should not be confused with its distant cousin, the Ocean Catfish or Wolfish.

**LOCATION OF CATFISH:** Catfish farming first began in the 1960s in Arkansas and rapidly expanded along the Mississippi Delta and into Alabama and Louisiana.

**FLAVOR & TEXTURE:** Catfish has a mild, sweet flavor with a firm texture.

#### CHARACTERISTICS:

- Fresh Catfish meat is white to pinkish, translucent and iridescent in appearance.
- Because it is grain fed and farm raised, Catfish doesn't have the "fishy" smell of oceanic fish.
- The meat is firm, dense and has fewer flakes.

**COOKING METHODS:** The firm-fleshed Catfish is best prepared by baking, broiling, frying, grilling or sautéing.

**GLOBAL SUPPLY:** Located mainly along the Mississippi Delta and bordering southern states, Catfish farming is a United States seafood industry success story. Catfish are harvested and transported live in tank trucks to processing plants and immediately processed with the bulk of the harvesting done from late summer to early autumn. Catfish are shipped both fresh and frozen.





### CHILEAN SEA BASS

**MARKET NAME:** Patagonian Toothfish

**SCIENTIFIC NAME:** *Dissostichus eleginoides*

**FISH IN CHILEAN SEA BASS FAMILY:** This fish is a member of the Nototheniidae family found deep along the continental shelf.

**LOCATION OF CHILEAN SEA BASS:** First found off the southern coast of Chile, Chilean Sea Bass is found along most of the Southern Hemisphere.

**FLAVOR & TEXTURE:** The Chilean Sea Bass has a moderate to moderate/full flavor and a medium to medium/firm texture.

**CHARACTERISTICS:**

- Chilean Sea Bass is a rich fish with a flavor that melts in the mouth like butter. The meat has an oily texture with large, moist flakes.
- Once thawed, frozen fillets should remain shiny and supple.

**COOKING METHODS:** The tender moist meat of the Chilean Sea Bass is best prepared by broiling, grilling, poaching or sautéing.

**GLOBAL SUPPLY:** The Chilean Sea Bass is available year-round. However, the supply drops off from March to July due to many fishing vessels changing their catch that time of the year to Swordfish. The fish is caught in the wild off the coasts of South Africa, Chile and Argentina and shipped frozen.

### CHUM SALMON

**MARKET NAME:** Dog Salmon, Keta Salmon

**SCIENTIFIC NAME:** *Oncorhynchus keta*

**FISH IN CHUM SALMON FAMILY:** Chum Salmon is one of the most wide-ranging species of five Pacific salmon.

**LOCATION OF CHUM SALMON:** The Chum Salmon is found in the north Pacific in the waters of Korea, Japan, Bering Sea, British Columbia in Canada, and from Alaska to Oregon in the United States.

**FLAVOR & TEXTURE:** The meat of the Chum Salmon is the firmest of the wild species, with a lower oil content and mild flavor.

**CHARACTERISTICS:**

- Commercially caught Chum Salmon range from 6 to 12 pounds.
- Chum Salmon is graded in several stages, and is at times shunned for its inconsistent quality.

**COOKING METHODS:** The leaner meat of the Chum Salmon should be kept in mind when cooking the fish, choosing recipes that help it to retain moisture. The fish is best prepared by baking, broiling, grilling, sautéing and poaching.

**GLOBAL SUPPLY:** Wild Chum Salmon are found in the eastern North Pacific to Japan. Fresh fish are available only in late summer; frozen chum salmon are available year-round.



# SEAFOOD 101

## FINFISH



### COD

**MARKET NAME:** Cod, Alaskan Cod

**SCIENTIFIC NAME:** *Gadus morhus*; *G. macrocephalus*

**FISH IN COD FAMILY:** Cod belongs to the Gadidae family, which is made up of 24 species including Haddock, Whiting and Pollock. The Atlantic Cod and Pacific Cod are often offered simply as “Cod” in the marketplace.

**LOCATION OF COD:** Although this species of fish is found in different forms around the globe, major producers of Atlantic Cod include Canada and Norway. Pacific Cod is found mainly along the continental shelf and around the rim of the North Pacific Ocean to the Bering Strait.

**FLAVOR & TEXTURE:** Cod has a mild flavor, low fat content and a dense white flesh that flakes easily.

**CHARACTERISTICS:**

- Atlantic Cod has a silvery layer that differentiates it from Pacific Cod.
- Atlantic Cod is sweeter than its Pacific counterpart.
- Pacific Cod has a higher moisture content and is subsequently less firm than its Atlantic cousin.

**COOKING METHODS:** Both species of Cod are best prepared by baking, broiling, frying, steaming or sautéing.

**GLOBAL SUPPLY:** The Northeast Atlantic has the world’s largest population of Cod. Having been overfished for years, it is now being regulated by conservationists. The majority of Cod in the market is now coming from the North Pacific Ocean.

### DRUM

**MARKET NAME:** Drum or Redfish

**SCIENTIFIC NAME:** *Sciaenops ocellatus*; *Pogonias cromis*

**FISH IN DRUM FAMILY:** The two primary species of Drum are the Red Drum and Black Drum which are found in the wild in tropical waters of the Atlantic and Pacific. They were given the name Drum because of the loud drumming noise they make by contracting the muscles around their air bladder. Because of demand, most commercial Drum today is farm raised.

**LOCATION OF DRUM:** Red Drum are found in the Atlantic Ocean, from Massachusetts to Florida, and in the Gulf of Mexico from Florida to Northern Mexico. However, many Drum species are found worldwide in the temperate waters of the Pacific, Atlantic and Gulf of Mexico.

**FLAVOR & TEXTURE:** Both the Red and Black Drum fish have a mild flavor and firm, moist flesh. The Black Drum meat is coarser than the red variety.

**CHARACTERISTICS:**

- The Drum fish are named for the repetitive drumming sounds they make, produced by the beating of abdominal muscles against the air bladder.
- The flesh of the Red Drum is white with a reddish tint. The Black Drum’s flesh is whiter; although when cooked, the flesh of both species is snow white.

**COOKING METHODS:** Both species of Drum are best prepared by baking, broiling, grilling or sautéing.

**GLOBAL SUPPLY:** Although Drum fish numbers have since rebounded due to fish farming here in the United States and Taiwan, it is also imported from Mexico, Central America Argentina and Ecuador and commands high prices.





## FLOUNDER

**MARKET NAME:** Flounder

**SCIENTIFIC NAME:** *Pleuronectidae*

**FISH IN FOUNDER FAMILY:** Flounder is one of more than 500 flatfish species belonging to the Pleuronectiformes or “side-swimmer” family of fish.

**LOCATION OF FLOUNDER:** Flounder is found mainly in the ocean waters of the Northern Atlantic, as well as the waters along the east coast of the United States and Canada, and the Pacific Ocean.

**FLAVOR & TEXTURE:** Flounder is renowned for its fine, tender, yet firm texture that cooks to a flaky white. The taste is very mild, often described as sweet and nutty.

### CHARACTERISTICS:

- The taste and texture of Flounder can vary depending on the species, but all cooked meat is lean, white, flaky and boneless.
- Flounder is a very low-fat fish – care must be taken not to overcook.

**COOKING METHODS:** Flounder’s somewhat delicate flesh is best prepared by baking, broiling, frying or sautéing.

**GLOBAL SUPPLY:** The Flounder’s peak fresh season varies by species. The most common are fished in the winter months (Winter Flounder) or summer months (Summer Flounder). The most commercially important variety is concentrated in northern waters of the United States, Canada, Iceland, Netherlands and Russia.

# SEAFOOD 101

## FINFISH

### MAHI

**MARKET NAME:** Mahi, Mahimahi

**SCIENTIFIC NAME:** *Coryphaena hippurus*

**FISH IN MAHI FAMILY:** Mahi is also known as dolphinfish. They are distinguished by dazzling colors: golden on the sides, bright blues and greens on the sides and back. Once removed from the water, Mahi often change color. Mahi are carnivorous and are among the fastest growing fish. They can grow to an average of 15 to 30 pounds.

**LOCATION OF MAHI:** Although often associated with Hawaii, Mahi is found in tropical and subtropical waters worldwide.

**FLAVOR & TEXTURE:** Mahi's sweet, mildly pronounced flavor tastes similar to any other Whitefish, with a lean, firm texture and large, moist flakes.

**CHARACTERISTICS:**

- Mahi's mild-to-moderate flavor is similar to Swordfish.
- The raw flesh is pinkish to grayish; darker portions of the meat can be trimmed for a milder flavor. The fish becomes white when cooked.

**COOKING METHODS:** The fairly firm texture of Mahi makes it an excellent grilling fish; other preparations include baking, broiling, frying and sautéing.

**GLOBAL SUPPLY:** Mahi is a wild fish and available fresh or frozen year-round. Catches peak in the spring and fall, with supplies dropping off only a short time in December.

### OCEAN PERCH

**MARKET NAME:** Ocean Perch, Rose Fish

**SCIENTIFIC NAME:** *Sebastes marinus*

**FISH IN OCEAN PERCH FAMILY:** Despite its common name, the Ocean Perch is not actually a Perch at all. It is the only one of its kind in the Sebastes species in the Atlantic Ocean.

**LOCATION OF OCEAN PERCH:** The fish is located in the deep waters of the Atlantic Ocean, off the coasts of the United States, Canada, Greenland, Iceland, Norway and Denmark. In the United States Midwest, the Perch's association with being a "freshwater" fish makes it a leading retail product.

**FLAVOR & TEXTURE:** The Ocean Perch has a firm texture and mildly sweet flavor. The flesh is white and turns opaque white when cooked.

**CHARACTERISTICS:**

- Ocean Perch meat is lean, moist and flaky.
- Typical market weight is 1 to 2 pounds, with the larger fish growing up to 5 pounds. These larger fish have a texture that is coarser than their smaller counterpart.

**COOKING METHODS:** The firm texture of the Ocean Perch holds up well in a variety of recipes and may be prepared by baking, frying, poaching, sautéing and steaming.

**GLOBAL SUPPLY:** Ocean Perch is a wild fish and available globally, both fresh or frozen, year-round.





## RAINBOW TROUT

**MARKET NAME:** Rainbow Trout, Steelhead

**SCIENTIFIC NAME:** *Oncorhynchus mykiss*

**FISH IN RAINBOW TROUT FAMILY:** Rainbow Trout is in the same family as Salmon, or salmonid; also including Chars, Freshwater Whitefishes and Graylings.

**LOCATION OF RAINBOW TROUT:** All Rainbow Trout sold domestically are farmed, and Idaho accounts for 70 percent of the fish raised in the United States. Chile is the largest producer outside of the United States.

**FLAVOR & TEXTURE:** Rainbow Trout has tender, flaky meat and a mild, somewhat nutty flavor. The flesh of the farmed rainbow trout can vary by the addition of pigments to the feed. The resulting white, pink or orange flesh is marketed under different monikers like Ruby Red or Carolina Red. Steelhead Trout, a seagoing strain of rainbows, has meat that is pink like that of salmon.

### CHARACTERISTICS:

- Rainbow Trout fillets should be firm, resilient and have a fresh appearance. Avoid frozen fish that has gray flesh or appears dried out.
- The market size of farm raised rainbow trout is 8 to 10 ounces – the perfect size for an individual serving.

**COOKING METHODS:** Trout can be overpowered by strong sauces. It is an easy fish to prepare by almost any method, including baking, broiling, grilling, poaching, sautéing or smoking.

**GLOBAL SUPPLY:** Rainbow Trout growth is slower during the winter months; late spring and early summer are the best times to find fully grown fish. Thanks to its success in aquaculture, the Rainbow Trout can be found both fresh and frozen year-round.





## TILAPIA

**MARKET NAME:** Tilapia

**SCIENTIFIC NAME:** *Tilapia spp.*

**FISH IN TILAPIA FAMILY:** Tilapia is the common name for nearly a hundred species of cichlid fish, second to only Carp as the most cultured group of fish in the world.

**LOCATION OF TILAPIA:** Tilapia historically inhabits fresh water including shallow streams, ponds, rivers and lakes. Over recent years, Tilapia has become increasingly more important in aquaculture.

**FLAVOR & TEXTURE:** Tilapia's lean meat has a moderately firm, flaky texture and a mildly sweet taste.

### CHARACTERISTICS:

- Tilapia's mild taste is often compared to another farm raised fish, the Catfish.
- Tilapia is a fast growing fish and when farming, requires quality feed and water to produce premium Tilapia. If this standard is not met, the result can be fish with an off flavor taste much like that of wild-run Catfish.

**COOKING METHODS:** The delicate flavor of Tilapia can be easily overpowered by complicated cooking methods. It is a versatile fish that is best prepared by baking, broiling, sautéing or steaming.

**GLOBAL SUPPLY:** Tilapia is cultured domestically in the southern and western states; major frozen suppliers include Costa Rica and Columbia. It is available in both fresh and frozen states year-round due to the success of the fish in aquaculture.



## YELLOWFIN TUNA

**MARKET NAME:** Tuna, Yellowfin Tuna, Ahi

**SCIENTIFIC NAME:** *Thunnus albacares*

**FISH IN YELLOWFIN TUNA FAMILY:** There are several other species of Tuna, including Bluefin and Albacore. The Yellowfin is distinguished by its flashy markings and slender body.

**LOCATION OF YELLOWFIN TUNA:** The Yellowfin Tuna is abundant in the open waters of tropical and subtropical seas worldwide. It is the most tropical of the tuna species and high quality Yellowfin Tuna comes from Hawaii, Florida, Mexico and Southern California/Gulf of California.

**FLAVOR & TEXTURE:** Yellowfin Tuna has a mild, meaty flavor that is more flavorful than albacore and leaner than Bluefin. The fish has a high fat content with bright-red flesh in its raw state turning brown to grayish-tan, firm and moist when cooked.

### CHARACTERISTICS:

- Market size runs from 7 to 20 pounds.
- Yellowfin Tuna is also known by its Hawaiian name Ahi.
- Higher-grade Yellowfin Tuna is called “sashimi grade” and served raw as sashimi and in sushi.

**COOKING METHODS:** When cut into thick steaks, Yellowfin Tuna is excellent for grilling and needs little flavor enhancement. The fish is also easily prepared by baking, broiling, sautéing and smoking, or simply served raw.

**GLOBAL SUPPLY:** Abundant during the summer months, Yellowfin Tuna is available as fresh product year-round (in addition to frozen or canned). Thailand, the Philippines and Indonesia are top exporters of canned Tuna.

## PACIFIC WHITE SHRIMP

**MARKET NAME:** Shrimp, White Shrimp

**SCIENTIFIC NAME:** *Penaeus vannamei*

**SHELLFISH IN PACIFIC WHITE SHRIMP FAMILY:** The Pacific White Shrimp is in the penaeus family along with Tiger Shrimp.

**LOCATION OF PACIFIC WHITE SHRIMP:** Among the most widely cultivated shrimp in the world, the Pacific White Shrimp’s rapid growth rate and ease of cultivation make it the major species of farmed shrimp. Although harvested from the wild by trawlers from Mexico to Northern Peru, the farmed volume of Pacific Whites far exceeds the trawl-caught supplies. Ecuador is the main source for aquaculture.

**FLAVOR & TEXTURE:** Pacific White Shrimp have a sweet, mild flavor, and firm texture. Raw meat is white, turning pink when cooked.

### CHARACTERISTICS:

- The raw, peeled shrimp are often dipped in phosphates to minimize drip loss. If over soaked, thawed shrimp may feel soapy, indicating that the product has absorbed excess water.
- The Pacific White Shrimp is similar to Gulf White Shrimp in size and appearance. Upon close examination, the Gulf Whites have more of a grayish-white appearance when raw, when compared to the creamy white color of the Pacific Whites.

**COOKING METHODS:** Pacific White Shrimp are most commonly breaded. They are best prepared by boiling, broiling, grilling, steaming or sautéing.

**GLOBAL SUPPLY:** In the United States, Pacific Whites are farmed mainly in Texas. The majority of shrimp sold in the United States market however, comes primarily from Mexico and Ecuador. Pacific White Shrimp is available frozen year-round.



# SHELLFISH/SHRIMP

## PINK SHRIMP

**MARKET NAME:** Shrimp, Pink Shrimp

**SCIENTIFIC NAME:** *Pandalus spp.*

**SHELLFISH IN PINK SHRIMP FAMILY:** The Pink Shrimp is in the Pandalidae family. This species is commonly called pandalid shrimp and are edible with a high economic value.

**LOCATION OF PINK SHRIMP:** Found in most northern waters, the Pink Shrimp range from Greenland south to New England and from Iceland and south Greenland to east Britain. In the northeastern Pacific, they range from the Bering Sea to the North American coast of Oregon. In the western Pacific, they are found from Russia to Japan to South Korea.

**FLAVOR & TEXTURE:** Pink Shrimp have a very sweet, mild flavor that is more flavorful than warm water Shrimp. They have a firm, moist texture.

### CHARACTERISTICS:

- Pink Shrimp are smaller than many shrimp species and rarely exceed five inches. They are sold peeled, cooked and frozen and make excellent salad shrimp due to their size.
- The Pink Shrimp has the ability to change sex from male to female within the first year and a half of their lives, making them hermaphrodites.

**COOKING METHODS:** Pink Shrimp's flavorful meat and small size make them excellent mix-ins. They are best prepared by boiling, frying, steaming or sautéing.

**GLOBAL SUPPLY:** Pink Shrimp is available in both fresh and frozen states. However, the fresh product tends to be relatively perishable. The shrimp are available frozen year-round, and peak season is from April to October.

## TIGER SHRIMP

**MARKET NAME:** Shrimp, Black Tiger Shrimp, Jumbo Tiger Shrimp

**SCIENTIFIC NAME:** *Penaeus monodon*

**SHELLFISH IN TIGER SHRIMP FAMILY:** The Tiger Shrimp is in the penaeus family along with the Chinese White Shrimp and the Pacific White Shrimp.

**LOCATION OF TIGER SHRIMP:** Among Asia's major aquaculture products, most Tiger Shrimp are farmed but a significant amount are harvested. Natural distribution is Indo-West Pacific, ranging from the eastern coast of Africa, as far as Southeast Asia and the Sea of Japan. They can also be found in eastern Australia and the Philippines.

**FLAVOR & TEXTURE:** Tiger Shrimp have an extremely mild flavor and a medium-to-firm texture.

### CHARACTERISTICS:

- The cooked meat of the Tiger Shrimp is softer than other species. If the meat is tough, dry or fibrous, the shrimp have usually been improperly frozen or stored.
- Tiger Shrimp are named for their jungle counterparts, and have stripes on their shells penetrating through to the peeled meat.

**COOKING METHODS:** The large, moist tails of the Tiger Shrimp make for an excellent shrimp cocktail and are best prepared by boiling, broiling, grilling, steaming or sautéing.

**GLOBAL SUPPLY:** Tiger Shrimp are available frozen year-round, with heaviest harvests from June to November.



## BLUE CRABS

**MARKET NAME:** Blue Crab

**SCIENTIFIC NAME:** *Portunus pelagicus*

**THE CRAB FAMILY:** The Blue Swimming Crab is the smallest of the crab family marketed commercially. Other crab families include Dungeness Crab, Snow Crab and King Crab. Each has its own unique qualities and menu application.

**LOCATION OF CRABS:** Blue Swimming Crabs are best known in the United States as the crabs from the Chesapeake Bay. Blue Swimming Crabs flourish in the Atlantic from the Mid Atlantic to the northern coast of Brazil and throughout the Gulf of Mexico. Additionally, Blue Swimming Crabs are harvested in Southern Asia from China through the Phillipines to Indonesia. The majority of the pasturized canned meat that is sold in the United States comes from Indonesia, China, Thailand and the Phillipines.

### FLAVOR AND TEXTURE:

**Jumbo Lump** - Large lumps from the two largest muscles of the swimming fins; mild flavor.

**Backfin** - Broken pieces of Jumbo Lump and Special grade meat; mild flavor.

**Special** - Smaller flakes of meat from the body of the crab; mild flavor.

**Claw** - Meat from the swimming fins and claws of the crab; small, brown pieces; sweet, pronounced crab flavor.

### CHARACTERISTICS:

- Blue Swimming Crabs are marketed in three primary forms: live Hard Shell, Soft Shell and pasteurized canned meat.
- Canned crab meat is the pasteurized cooked meat picked from the Hard Shell crab.
- The grades of meat include:

**Jumbo Lump** - the largest unbroken pieces of white meat from the body.

**Lump, Backfin or Special** - White body meat containing smaller and broken pieces of lump and flake meat.

**Claw Meat** - The darker meat coming from the claw and legs of the crab.

**COOKING METHODS:** Live Hard Shell Crabs are best served steamed. Soft Shell Crabs are either breaded and pan fried or sautéed for more of the pure crab taste. Being soft shell, the entire crab is eaten. The canned crab meat is prepared using a variety of methods. Crab cakes are the most recognized utilization of the meat. The meat can also be an ingredient in stuffing or salad.

**GLOBAL SUPPLY:** Blue Swimming Crabs are shrinking in abundance globally. In the past few years the amount of product available for the market has been less than the demand. The result is a sharp increase in price but more importantly, a need for harvesting restrictions to allow the biomass to regenerate.



# SEAFOOD 101

## CLAMS



### CHOPPED INDIVIDUALLY QUICK FROZEN (IQF) CLAM MEAT

**MARKET NAME:** Sea Clam (Surf)

**SCIENTIFIC NAME:** *Spisula solidissima*

**CLAMS IN THE MOLLUSCS FAMILY:** The Atlantic Surf Clam, *Spisula solidissima*, is a bivalve mollusk that inhabits sandy continental shelf habitats from the southern Gulf of St. Lawrence to Cape Hatteras, North Carolina. Atlantic Surf Clams are managed under the Mid-Atlantic Fishery Management Council Atlantic Surf Clam and Ocean Quahog Fishery Management Plan.

**THE LOCATION OF CLAMS:** Wild caught off the North Atlantic in waters 20-80 feet deep.

**FLAVOR & TEXTURE:** White to light tan in color with some pieces having an orange case; it has a mild, sweet flavor. Of the shucked meat, 45% is a part commonly referred to as the “tongue” or “foot”. The remaining 55% includes the strap meat which runs around the edge of the shell, the adductor muscle which open and close the shell, and the snout where the clam feeds. There may be a small amount of sand present, but the quantity is not excessive.

#### **CHARACTERISTICS:**

- Individually quick frozen
- 1/2” grind meat of the foot
- Shucked strap and muscle
- Eviscerated surf clams

**COOKING METHODS:** Clams have a sweet, delicate flavor, and are appropriate for use in familiar recipes such as chowders, bisques, sauces, clam cakes, clam fritters and stuffed clams.

**GLOBAL SUPPLY:** Atlantic Surf Clams are distributed in western North Atlantic continental shelf waters from the southern Gulf of St. Lawrence to Cape Hatteras, North Carolina. In United States waters, major concentrations of Atlantic Surf Clams are found on Georges Bank, south of Cape Cod and off the coasts of Long Island, southern New Jersey, and the Delmarva Peninsula. Although Atlantic Surf Clams can inhabit waters from the surf zone to a depth of over 400 feet, most are found at depths of less than 240 feet. Along Long Island and New Jersey, the highest concentrations occur at above 60 feet, whereas off the Delmarva Peninsula, the greatest concentrations occur from 60 to 120 feet.





## BLUE MUSSELS

**MARKET NAME:** Blue Mussels, Black Mussels

**SCIENTIFIC NAME:** *Mytilus edulis*

**FARM RAISED MUSSELS:** Mussels grow naturally in clumps along the sea floor in generally shallow waters. However, most mussels are now farm raised. The most common technique of farming is to suspend the mussels on ropes attached to a float. The mussels attach themselves to the rope and each other by the byssal or “beard”, thread-like fibers that the mussel produces. Mussels are filter feeders and eat plankton and other microscopic life found in sea water.

**LOCATION OF MUSSELS:** Large farming operations are found in Canada, Spain, Chile, China and the United States.

**FLAVOR & TEXTURE:** Mussel meat is tender and sweet.

### CHARACTERISTICS:

- Called Blue or Black Mussels because of the shell color which is dark blue or black tone.
- The shell is delicate and visually appealing, making mussels served in the shell an attractive plate presentation.

**COOKING METHODS:** Mussels are most commonly served steamed or sautéed but they can be baked or added to a soup or stew.

**GLOBAL SUPPLY:** Mussels are farmed extensively in many parts of the world. Large farming operations are found in Canada, Spain, Chile, China and the United States. World production has kept pace with demand of these delicious bivalves. Consumption of mussels is growing rapidly worldwide as they are affordable, consistently available and a healthy choice.

# SEAFOOD DICTIONARY



**ADDITIVES:** Chemicals used in processing seafood to help retain moisture and improve appearance. They are also called Dips.

**AQUACULTURE:** The farming of freshwater and saltwater organisms including fish, molluscs, crustaceans and aquatic plants.

**BASKET SHRIMP:** Also called mini shrimp or mini-rounds. Small, undeveined, breaded shrimp ranging in size from 40 to over 100 count per pound.

**BATTERED:** Product covered in liquid mixture, usually egg and flour. This is usually partly cooked (pre-cooked) to set the batter in place before freezing.

**BLOCK:** Frozen, compressed slabs of fish fillets, usually without skin and bone. Usually range in weight 13 to 16 pounds and are used as raw material for value-added products. Typically rectangular in shape.

**BREADED:** Product covered in liquid dip, breadcrumbs and seasonings (components consisting of flour, bread crumbs, cracked meal or a blend of flour and other ingredients).

**BULK PACK:** Individually Quick Frozen (IQF) product that is packed in a single master poly bag.

**BUTTERFLY SHRIMP:** Peeled and deveined shrimp with the shell left on the last (tail) segment. Shrimp in this form is used for breading.

**CANDLING:** A process by which fillets are placed on a backlit, translucent table that reveals the presence of parasites in the flesh.

**CATCH WEIGHT:** Some species with large fillets, like grouper, are sold as catch fillets. For example, if you order a 10 pound fillet, what arrives could range from 9 to 11 pounds.

**CLEAN TAIL:** Breaded shrimp that has the tail portion and first joint cleaned or breading removed.

**CLUSTER:** A product form consisting of a group of legs and claw from one side of a crab, with the connecting shoulder area still attached (also known as a “section”).

**COUNTS:** The number of shrimp per pound in a given package; i.e., 16/20 means each net weight pound consists of 16 to 20 shrimp.

**DEEP-SKINNED/DEFATTED:** Removing the fat layer underneath the skin on oily species for milder flavor and improved shelf life.

**DEVEINED:** The removal of the gastrointestinal tract of a shrimp, a common step in preparing them for eating. The digestive track is a dark band running from the head to the tail of the animal, where the spine would be if they were vertebrates. In females the reproductive canal is also in the same area.

**DRIP LOSS:** Weight loss that occurs as a seafood product gives up moisture. Also, loss of moisture during the thawing of frozen seafood.

**EASY PEEL:** Shrimp that is cooked in the shell and the shell is split.

**FAS:** Frozen at sea.

**FANTAIL:** A shrimp that has been peeled with the exception of the last tail section

**FAT LINE:** The fattiest part of a fish, mostly along the belly walls and lateral line. The fat line is often removed for milder flavor and improved shelf life.

**FILLET:** A portion of flesh taken from either side of a fish, cut parallel to the central bones. The main bones, fins and belly flaps are usually removed from finished fillets.

**FLETCH:** A fillet cut from a large flatfish like Halibut and then further divided into boneless portions.

**FREEZER BURN:** White, chalky surface dehydration, most common on corners or narrow edges of product. Excessive freezer burn indicates exposure to cold air and result in loss of natural juices, contamination and rapid oxidation or rancidity.

**GLAZED:** Indicates fish has been dipped in water after freezing. Ice forms a glaze around the fish or meat, protecting it from damage by freezer burn.

**GREEN HEADLESS:** Raw, heads-off, unshelled shrimp; does not indicate actual color.

**GULF SHRIMP:** Shrimp produced in the Gulf of Mexico region (Florida, Alabama, Mississippi, Louisiana and Texas).

**HACCP:** Hazard Analysis Critical Control Point; a mandatory food-safety program implemented by the seafood industry in December, 1997 to minimize risk to public health.

**H & G:** Headed & Guttled.

**IMITATION BREADED SHRIMP:** Shrimp that has 51% or more of its total weight comprised of breading.

**I.Q.F.:** Individually Quick Frozen.

**J-CUT:** A method of removing pin bones that also removes the nape.

**LAYER PACK:** A box of frozen fillets in which the layers are separated by sheets of plastic. Fillets in each layer may overlap and be frozen together.

**LIGHTLY BREADED:** 20% to 40% breaded shrimp or fish.

**LOIN:** The central, thick part of a fish fillet, above the belly. Loins may be cut into steaks.

**MACHINE BREADED:** Shrimp that is dusted, battered and breaded by a machine.

**NAPE:** The front and thinnest part of a fillet, around the belly.

**NATURAL FILLET:** A fish fillet as it comes from the fish (natural).

**NET WEIGHT:** Weight of product without packing material or glaze.

**OVEN READY:** Breaded shrimp/fish that has been “par fried.”

**P&D:** Peeled, deveined shrimp.

**PINK SHRIMP:** Species of wild harvested shrimp from Florida/Duararum, Mexico/Duararum and Thailand.

**PIN BONES:** A small line of secondary soft connective bones found in some fillets and removed by either cutting out the area or pulling them if large enough.





# SEAFOOD DICTIONARY

**POPCORN SHRIMP:** Breaded shrimp with counts from 60 to 100 pieces per pound.

**PORTION:** Usually square or rectangle, cut from a block of frozen fish. May be plain or breaded, raw or precooked.

**PRAWN:** In the United States, a marketing term sometimes used for large shrimp. However, the word is more correctly used for freshwater shrimp species.

**PTO:** Peeled, tail-on shrimp.

**PUD:** Peeled, deveined shrimp.

**ROUND:** Whole, ungutted fish; shrimp that has been peeled but not split or deveined.

**SASHIMI:** Japanese-style raw fish cut into various forms and served with dipping sauces.

**SHELF LIFE:** The expected amount of time a seafood product will remain in high-quality condition for consumption. In general, the higher the fat content, the more prone the product is to spoilage and flavor changes.

**SHRINK:** Natural weight loss of seafood due to seepage or fluids draining from product, also called drip or purge.

**STEAK:** A cross-sectional slice of fish, usually up to two inches thick and containing a section of the backbone.

**STP:** An additive, sodium tripolyphosphate, used on fish and shrimp to retain moisture.

**SURIMI:** An odorless, white fish paste made from minced fish meat (usually Pollock), which has been washed to remove fat, blood pigments and odorous substances and mixed with cryoprotectants (such as sugar and/or sorbitol) for a good frozen shelf life.

**UNDEVEINED:** Shrimp which has not had the intestinal tract removed.

**V-CUT:** A method of removing pin bones by making a V-shaped cut along both sides of the pin bone strip, leaving most of the nape.

**WESTERN CUT:** Shrimp that is split down the middle.

**WHITE SHRIMP:** Species of both wild and cultivated (farm raised). Species include; West Coast Mexican/Californiensis, Stylirostitis, Louisiana/Setiferus, Ecuador/Vannamei, Carolinas/Setiferus and Panama.

**YIELD:** The percent of meat recoverable from a fish or shellfish.



## **ACC: Aquaculture Certification Council**

Aquaculture Certification Council, Inc. is a nongovernmental body established to certify social, environmental and food safety standards at aquaculture facilities throughout the world. This nonprofit, nonmember public benefit corporation applies the Global Aquaculture Alliance Best Aquaculture Practices standards (BAP) in a certification system that combines site inspections and effluent sampling with sanitary controls, therapeutic controls and traceability.

[www.aquaculturecertification.org](http://www.aquaculturecertification.org)

## **GAA: The Global Aquaculture Alliance**

The Global Aquaculture Alliance is an international, non-profit trade association dedicated to advancing environmentally and socially responsible aquaculture. GAA recognizes that aquaculture is the only sustainable means of increasing seafood supply to meet the food needs of the world's growing population. Through the development of its Best Aquaculture Practices certification standards (BAP), GAA has become the leading standards-setting organization for aquaculture seafood.

[www.gaalliance.org](http://www.gaalliance.org)

## **MSC: Marine Stewardship Council**

The MSC's fishery certification program and seafood ecolabel recognize and reward sustainable fishing. They are a global organization working with fisheries, seafood companies, scientists, conservation groups and the public to promote the best environmental choice in seafood. [www.msc.org](http://www.msc.org)

## **Monterey Bay Aquarium**

The Monterey Bay Aquarium is designed to raise consumer awareness about the importance of buying seafood from sustainable sources. [www.montereybayaquarium.org](http://www.montereybayaquarium.org)

## **New England Aquarium**

Through conservation and research programs, NEA develops and implements new solutions to protect the oceans and balance the human impacts on them. [www.neaq.org](http://www.neaq.org)

## **NFI: National Fisheries Institute**

The National Fisheries Institute is a non-profit organization dedicated to education about seafood safety, sustainability and nutrition. NFI is the largest seafood lobbying groups in the country and works daily to preserve the integrity of the seafood industry in the United States and globally.

[www.aboutseafood.com](http://www.aboutseafood.com)

## **NMFS: National Marine Fisheries Service**

NOAA Fisheries Service is dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems.

[www.nmfs.noaa.gov](http://www.nmfs.noaa.gov)

## **NOAA: National Oceanic and Atmospheric Administration**

An informed society that uses a comprehensive understanding of the role of the oceans, coasts and atmosphere in the global ecosystem to make the best social and economic decisions. [www.noaa.gov](http://www.noaa.gov)

## **Seafood Choices Alliance**

Seafood Choices Alliance is an international program that provides leadership and creates opportunities for change across the seafood industry and ocean conservation community. [www.seafoodchoices.com](http://www.seafoodchoices.com)







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Sodexo's Sustainable Seafood Mission:

To provide our customers with the most comprehensive, highest quality, sustainable fresh and frozen seafood program in the industry. In assuming this leadership role, entegra is committed to delivering Your Better Choice in Seafood through:

- A flexible full line of great tasting products designed to meet evolving customer needs,
- Competitive industry pricing and fair market value,
- Unparalleled levels of customer service, support and education,
- Best in class processes to ensure the highest level of quality assurance and food safety and
- An allegiance to global standards of excellence for environmental responsibility and accountability in seafood.

Sodexo's Sustainable Seafood Initiative is unparalleled, incorporating industry leading best practices. Our commitment is to have 100% of our contracted seafood certified as sustainable by the MSC or BAP by 2015.



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Additional information on Sodexo's Sustainable Seafood Initiative, including details on current contracted frozen and fresh products, can be found at [sodexoPS.com](http://sodexoPS.com). (Navigation= [sodexoPS.com](http://sodexoPS.com)>Current Customers Click Here>Program Specifications>Protein Partners>Seafood).