Types of Shrimp

*By Chefs-Resources.com*

What is the Difference between Shrimp and Prawns?

Are you serving shrimp or prawns? Is there a difference? How do you know which one you are serving? Does it matter? The answer is both simple and complicated. The simple answer is that from a culinary perspective, there is very little difference between the two. Yes, there is a physiological difference between shrimp and prawns. However, both terms are used interchangeably in the US. The assumption is that “shrimp” refers to smaller sizes, while “prawn” refers to larger specimens. Also, in the US the term “shrimp” is more often used, while in the UK and Australia “prawn” is the more common name used.

There are over 300 separate species of shrimp and prawns found all over the world. Both can be found in salt water and fresh water, as well as warm or cold bodies of water. They have an average age of about 5 years or less, both shrimp and prawns begin their lives as a male, then at about age 2-3 they become females for the remainder of their lives.

So, what exactly is the difference between a shrimp and a prawn? Prawns are of the sub-family Dendrobranchiata, they tend to be larger, have a branching gill structure, longer front legs, the second set of pincers are usually larger than the front set, they carry their eggs inside their bodies near the tail, and their eggs are longer than shrimp.

Shrimp are of the sub-family Pleocyemata, tend to be smaller, have a lamellar gill structure, somewhat shorter front legs, the front pincers are larger, carry their eggs outside their bodies under their tail, and have eggs which are smaller.

What about taste? There is no definitive flavor which differentiates a shrimp from a prawn. Both shrimp and prawns are similar in regards to their basic flavor profile, with the primary differences in taste and texture being due to diet, habitat, and region rather than if it’s a shrimp or a prawn. However, most chefs agree that like lobster, a cold water shrimp or prawn is better than their warm water cousins. Cold water shrimp & prawns tend to be sweeter, more tender and succulent. And, as a general rule, wild shrimp/prawns tend to have a richer flavor than farmed shrimp/prawns when compared to same species.

What about Langoustine or Langostino? They are neither a shrimp nor a prawn, but are instead a member of the lobster family. They are also (wrongly) referred to as Dublin Bay Prawns.

Types of Shrimp and Prawns

There is a distinct disadvantage for the Chef who is looking for a specific type of shrimp or prawn. If you are looking for Tiger Prawns or Alaskan Spot Prawns you are in luck because these market names refer to specific species. But many of the other shrimp species are simply grouped into general categories such as "Gulf Shrimp", "White Shrimp", "Pink Shrimp", etc. For instance, if I order a Pacific White Shrimp from my vendor they arrive in a box labeled "white shrimp" with no wording anywhere on the packaging to indicate which species of white shrimp it is (I would love to see the Latin name listed!). Instead, it appears that the specific
species Pacific White Shrimp (or any other shrimp listed as a generic name) is available only if your vendor knows which shrimp companies harvest and package that specific species. Some species are available as a branded name rather than a species name, meaning that if you buy this particular brand then you will get this particular species.

**Brown Shrimp Varieties**

Most of the domestic U.S. shrimp are brown shrimp. They have a firmer texture than other shrimp with meat which, when cooked, is slightly redder than white shrimp. Brown Shrimp have a rather diverse flavor profile which is very dependent upon their diet. They can be bland, have an earthy or robust flavor, have a mild sweetness, or they can have a mild to pronounced iodine-like flavor. It turns out that this flavor is usually due to Bromine (which apparently has a similar flavor), not iodine. And the source of bromine is a diet of polychaete sea worms, especially from areas with muddy sea floors.

These organisms are naturally high in bromine and impart this flavor to shrimp which feed on them. However, the flavor dissipates between feedings, meaning that if the shrimp has just finished feeding when caught then this iodine-like flavor will be more prevalent, which can also explain variations in flavor with shrimp from the same batch or catch (Read more... see pg 7). This iodine flavor characteristic is common in some U.S. Gulf Coast brown shrimp. (Farfantepenaeus aztecus), but not for brown shrimp from the Pacific Coast of Mexico (Litopenaeus californiensis).

I've also read that a diet containing iodine rich foods such as kelp or algae may contribute to an iodine flavor in shrimp, but I haven't been able to verify that.

- **Mexican Brown Shrimp** (*Litopenaeus californiensis, formerly Penaeus californiensis*)
  Alternate Names: Brown Shrimp, Yellowleg Shrimp
  **Species Recognition**: Common
  Mexican Brown Shrimp inhabit the Eastern Pacific from Baja, California to northern Peru. They have a firm texture and a milder, slightly sweeter flavor than Northern Brown Shrimp and do not have the iodine flavor which is more common in Northern Browns.
  **Common Pack Sizes**: U10, U12, U15, 16/20, 21/25, 26/30, 31/40, 41/50, 51/60
  **Availability**: Frozen: Available Year Around

- **Northern Brown Shrimp** (*Farfantepenaeus aztecus*)
  Alternate Names: Brown Shrimp, Warm Water Shrimp, Texas Brown Shrimp, Brazil Shrimp, Spring Shrimp, Northern Browns, Redtails, Golden Shrimp, Red Shrimp
  **Species Recognition**: Common
  Northern Brown Shrimp are found from Massachusetts southward through the Gulf to Campeche, Mexico. They can reach a size of up to 9 inches long (whole), but average size is 70 – 80 per pound. Northern Brown Shrimp have a firm texture with a mildly sweet flavor, may be bland compared to other shrimp, and may tend to have an iodine flavor which has been variously associated with a diet of kelp, certain sea worms, or algae.
  **Common Pack Sizes**: 16/20, 21/25, 26/30, 31/40, 41/50, 51/60
  **Availability**: Frozen: Available Year Around

**Coonstripe Shrimp** (*Pandalus hypsinotis*)
Alternate Names: Spot Prawn, Spot Shrimp (but it is not a true Spot Prawn)
**Species Recognition**: Uncommon, Regional
Coonstripe Shrimp inhabit the Alaskan waters from the Bering Sea to the Strait of Juan de Fuca, and in the
Western Pacific from the Sea of Okhotsk southward to the Korea Strait. They can grow to about 7 1/2 inches long, but average catch size is 4 - 6 inches.

Giant Freshwater Prawn (*Macrobachium rosenbergii*)
Alternate Names: Giant River Prawn, Malaysian Prawn, Freshwater Prawn, Freshwater Scampi, Hawaiian Blue Prawn
Species Recognition: Fairly Common
Giant River Prawns are native to the fresh waters of Southeast Asia, Pakistan, India, the Western Pacific Islands, and northern Australia. They are also widely cultivated throughout the world including in North Carolina, Tennessee, and Hawaii in the US. They can reach a maximum length of 12 ½ inches (320 mm), but average harvest length is 6 – 7 inches. Although wild stock is available, farmed product is much more prevalent. They are scientifically speaking a shrimp, not a prawn. Freshwater Shrimp have a delicate, sweet flavor, similar to lobster, and a firm texture. Some say they prefer the flavor and texture of the saltwater shrimp species over freshwater shrimp.

Common Pack Sizes:  
Live (rare): 8/12, 12/16, 16/20, 21/25, 26/30, 31/35  
Tails: 16/20, 21/25, 26/30, 31/35
Availability: Fresh: Very limited availability year around;  Frozen: Available Year Around

Gulf Shrimp Varieties

Gulf Shrimp is a generic name given to a variety of shrimp caught in the Gulf. There are actually three different species which are sold as "gulf shrimp"...Gulf Brown Shrimp (*Farfantepenaeus aztecus*), Gulf Pink Shrimp (*Litopanaeus duorarum*), and Gulf White Shrimp (*Litopanaeus setiferus*).

Humpy Shrimp (*Pandalus goniurus*)
Species Recognition: Uncommon, Regional
Humpy Shrimp are a cold-water shrimp inhabiting the northern Pacific regions of Japan, Siberia, the Bering Sea, Alaska, and Washington's Puget Sound. Although a few fisheries target this species, they are primarily a by catch associated with Northern Shrimp (*Pandalus borealis*). Due to their small size they are typically marketed as salad shrimp or cocktail shrimp.

Pink Shrimp Varieties

There are at least three species of commercially caught pink shrimp marketed in the US, two are cold-water pink shrimp and one is a warm-water pink shrimp which is also called a gulf pink. With the exception of gulf pinks, they are all smaller than other shrimp and are often marketed as “salad shrimp” due to their diminutive size. The cold water pinks have a more profound flavor than the gulf pinks.

- Gulf Pink Shrimp (*Litopanaeus duorarum, formerly Penaeus duorarum*)
  Alternate Names: Northern Pinks, Hoppers, Skippers
  Species Recognition: Common
  Gulf Pink Shrimp are a warm-water pink shrimp. Unlike the other two common species of pink shrimp, these babies can compete in size with other common shrimp, reaching a maximum length of about 11 inches. Average commercial sizes range from 16-20 to 51-60 head-off per pound. They have a plump, firm texture and a milder flavor than other pink shrimp. When cooked they are white with accents of pink on their sides. They range from Chesapeake Bay southward through the Gulf of Mexico down to the tip of the Yucatan Peninsula but they are caught primarily off the Gulf Coast of Florida.
  Common Pack Sizes: 41/50, 51/60, 61/70
  Availability: Frozen: Available Year Around
• **Maine Shrimp** (*Pandalus borealis*)
  Maine Shrimp are actually a regional name for Northern Shrimp (*Pandalus borealis*) which are commercially caught and marketed off the coast of Maine.

• **Northern Shrimp, Northern Prawn** (*Pandalus borealis*)
  Alternate Names: Maine Shrimp (regional name), Northern Pink Shrimp, Pink Shrimp, Deepwater Prawn, Great Northern Prawn
  **Species Recognition:** Common
  They have a sweet, delicate flavor and are very similar to Oregon Pink Shrimp. They inhabit the northern cold waters of the Atlantic and Pacific Oceans worldwide.
  **Availability:** Frozen: Available Year Around

• **Oregon Pink Shrimp** (*Pandalus jordani*)
  Alternate Names: Northern Shrimp, Pacific Pink Shrimp, Salad Shrimp
  **Species Recognition:** Common
  Oregon Pink shrimp are MSC certified as sustainable, they are available fresh from April – October, and available frozen year around. Of the many shrimp species found off the Oregon Coast, they are the only one found in quantities large enough to be commercially fished. Like other Pink Shrimp, they are a small shrimp and are often marketed as “cocktail shrimp” or as “salad shrimp” due to their petite size. They can grow to 5 ½ inches in total length but the average commercially caught size is 4 inches. Oregon Pink Shrimp are wild caught (not farmed) and have a sweet flavor, delicate texture, and classic shrimp taste. They range from the Aleutian Islands in Alaska to San Diego, California.
  **Common Pack Sizes:** 250/350, 350/500
  **Availability:** Frozen: Available Year Around

• **Southern Pink Shrimp** (*Litopanaeus notialis, formerly Penaeus notialis*)
  Alternate Names: Brazilian Pinks
  Southern Pink Shrimp are found from Cuba to Brazil.
  **Common Pack Sizes:** 41/50, 51/60, 61/70

**Rock Shrimp** (*Sicyonia Brevirostris*)
Alternate Names: Brown Rock Shrimp
**Species Recognition:** Common
These babies are the armadillo of the shrimp world! Rock Shrimp earned their name because their shells are "hard as a rock", being more like a lobster shell than the typical shrimp shell. They inhabit the Atlantic waters from Virginia southward through the Gulf of Mexico to the Yucatan Peninsula in Mexico. Rock Shrimp are considered a cold-water shrimp because of the depths at which they dwell. They are a small shrimp reaching a maximum size of up to 6 inches. Rock Shrimp have a flavor similar to spiny lobster...firm textured and sweet.
**Common Pack Sizes:** 21/25, 26/30, 31/40, 41/50, 51/60, 61/70, 71/80, 110/130
**Availability:** Fresh: Limited availability year around; Frozen: Available Year Around

**Royal Red Shrimp** (*Pleoticus Robustus*)
Alternate Names: Royal Reds
**Species Recognition:** Fairly Common
Royal Reds have vibrant pink shells and are among the most tender, sweetest, delicate shrimp available. They inhabit the depths between 1,200 feet and half-a-mile deep along the continental shelf from Pensacola southward to the Dry Tortugas in the Florida Keys. Although this region is considered to be warm, the depths they dwell at make them a cold-water shrimp.
**Common Pack Sizes:** 21/25, 26/30, 31/40, 41/50, 51/60
**Availability:** Fresh: Limited availability year around; Frozen: Available Year Around
Sidestripe Shrimp (*Pandalopsis dispar*)
Alternate Names: Alaskan Side-stripe Shrimp, Sidestriped Shrimp, Spot Prawn (not a true Spot Prawn)

**Species Recognition:** Uncommon, Regional

Sidestripe Shrimp are a cold-water shrimp found in the northeastern Pacific ocean from northern Oregon to the Bering Sea. They can reach sizes up to about 8 inches (208 mm). Similar to Spot Prawns, Sidestripe Shrimp are tender with an excellent, sweet flavor. They may have eggs under the tail when you purchase them. The eggs are delicious added to a butter sauce, or lightly brined and smoked.

**Common Pack Sizes:** 21/25, 26/30, 31/40

**Availability:**
- **Fresh:** January - October;
- **Frozen:** Limited availability

Spot Prawns (*Pandalus platyceros*)
Alternate Names: Alaskan Spot Prawn, California Spot Prawn

**Species Recognition:** Fairly Common

Spot Prawns are biologically speaking a shrimp. They range Pacific Ocean from Southern California to the Alaskan Aleutian Islands, and from the Sea of Japan to the Korea Strait. They can reach a length of up to 12 inches. They are often called "the lobster of Alaska" due to their superior flavor and sweetness. These are truly the most flavorful, sweetest, most tender shrimp available. Of all the shrimp I have eaten, these are by far the BEST shrimp I've ever had. Care must be taken when peeling Spot Prawns in part because they have small spikes which can be painful, but they are also more tender than the average shrimp so it is easy to tear them in half while peeling the shell if you are not careful.

**Common Pack Sizes:** U15, 16/20, 21/25, 26/30

**Availability:**
- **Fresh:** Limited availability January - October;
- **Frozen:** Limited availability

Tiger Prawns (*Litopenaeus monodon, formerly Penaeus monodon*)
Alternate Names: Black Tiger Prawn, Giant Tiger Prawn, Jumbo Tiger Shrimp

**Species Recognition:** Common

Tiger Prawns are the largest of commercially marketed shrimp with an average harvest size of 9 to 11 inches long but can grow to about 13 inches. They are a warm-water shrimp and are available both as wild and farmed product from the Indo-Pacific region including Thailand, India, Vietnam and the Philippines, as well as farmed product from Madagascar. Black Tigers have a milder, almost bland flavor compared to US Gulf shrimp. Their texture is firmer than Pink Shrimp but less firm than Gulf Shrimp. Compared to other shrimp from the Indo-Pacific region, they are generally better than Chinese White Shrimp in terms of quality and consistency, although a quality Chinese White Shrimp will have a little more flavor and a somewhat softer texture.

**Common Pack Sizes:** 4/6, 6/8, 8/10, U10, 10/12, 13/15, 16/20, 21/25, 26/30, 31/40, 41/50, 51/60, 61/70, 71/90, 91/120, 121/200, 200/300, 300/500

**Availability:**
- **Frozen:** Available Year Around

Read about shrimp farming.

White Shrimp Varieties

There are several species of White Shrimp: the Chinese White Shrimp (*Litopenaeus chinensis*), Gulf White Shrimp (*Litopenaeus setiferus*), and Pacific White Shrimp (*Litopenaeus vannamei, Litopenaeus stylirostris*). White shrimp are preferred by many Chefs because they have a clean, sweet taste with a classic shrimp flavor and firm texture. White shrimp are bluish-gray or greenish-gray when raw but turn pink when cooked.

- **Chinese White Shrimp** (*Litopenaeus chinensis, formerly Penaeus chinensis, Penaeus orientalis*)
  Alternate Names: China Whites, Fleshy Prawns
Species Recognition: Common
Chinese White Shrimp have three grades: "Seaswallow" is best, "Billow" is the second tier product, and the lowest quality is unbranded. Chinese Whites are farmed and wild-caught primarily in the Yellow Sea, East China Sea, and along the Korean coast. They can grow to about 7 inches long. Compared to other white shrimp, Chinese Whites have a milder flavor (some would say watery) and a more tender texture which is more like cold-water shrimp. Know and trust your vendor, as these shrimp can have quality issues, and have been repacked or substituted for domestic whites.

Common Pack Sizes: 31/40, 41/50, 51/60
Availability: Frozen: Available Year Around

- Gulf White Shrimp (*Litopenaeus setiferus*)
  Alternate Names: White Shrimp, Northern White Shrimp  
  Species Recognition: Common  
  Gulf White Shrimp are a warm water shrimp found along the Eastern Atlantic coastline from Fire Island, New York southward to Florida and extending throughout the Gulf of Mexico coastal region to Campeche, Mexico. They are the earliest known shrimp fishery in the US dating back to 1709. They can grow to a maximum length of about 7.9 inches (200 mm). They have a more tender texture and milder, sweeter flavor than Brown Shrimp, but not quite as tender or sweet as Gulf Pink Shrimp (Hoppers). However, Gulf Whites are the standard against which most other shrimp are compared, perhaps due to their long time heritage as a commercial presence.
  Domestic Common Pack Sizes: U12, 13/15, 16/20, 21/25, 26/30, 31/40, 41/50, 51/60, 61/70  
  Mexican Common Pack Sizes: ranges from U10 to over 80 count  
  Availability: Frozen: Available Year Around

- Pacific White Shrimp (*Litopenaeus stylirostris, formerly Panaeus stylirostris*)
  Alternate Names: Mexican White, Blue Shrimp, Western Blue Shrimp  
  Species Recognition: Common  
  Pacific Whites are a warm-water shrimp which range from Mexico to Peru. They used to be a popular cultivated species until the late 1980's when the IHHN virus attacked many farms. Now they are primarily a wild caught shrimp. They can grow to about 9 inches long. Wild Pacific White Shrimp from Mexico are available in two grades, No. 1's being the top grade. Pacific White Shrimp have a firm texture with a sweet, mild flavor.
  Common Pack Sizes: 4/6, 6/8, 8/10, 10/12, 13/15, U15, 16/20, 21/25  
  Availability: Frozen: Available Year Around

- Pacific White Shrimp (*Litopenaeus vannamei, formerly Penaeus vannamei*)
  Alternate Names: Mexican White, Ecuadoran White, White Leg Shrimp  
  Species Recognition: Common  
  Pacific Whites are a warm-water shrimp which range from Baja, California to Peru. They are also among the most widely cultivated shrimp in the world, with an estimated 90% of P. vannamei being farmed. They are cultivated in at least 27 countries including the US, Mexico, Brazil, Thailand, China, India, and Vietnam to name a few. They can grow to about 9 inches long. Pacific White Shrimp have a firm texture with a sweet, mild flavor.
  Common Pack Sizes: U15, 16/20, 21/25, 26/30, 31/40, 41/50  
  Availability: Frozen: Available Year Around

Additional Resources:
Shrimp Sizing Chart

Notes:
**Species Recognition:** designates how well known a particular species is as defined by consumer demand and supplier availability. It is not an indication of quality.

- Common - indicates a species which is commonly available from wholesale vendors nationwide.
- Fairly Common - indicates the species is fairly well known, but may be limited due to supply or seasonality.
- Uncommon - indicates a species which may be difficult to source.
- Regional - indicates that the species may be readily available in its native region but may be difficult to source nationally.

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