Clams [1]

There are over 150 different edible species of clams in the world. All clams are bivalve (two shells) mollusks that obtain their food by pumping water through their system and filtering small organisms from surrounding waters. Clams bury themselves in bottom sand or sediments and differ from other bivalves like oysters that grow attached or clustered to hard surfaces and other shells, or scallops that can move about the bottom. The flavor and color of clams is influenced by the sand or sediment and the waters that they live in.

Types and Sources of Product

There are a variety of clam species in the United States that are harvested from the wild or farm raised. Some of the more common species from the Atlantic and Pacific coasts along with their market name, common name, scientific name, and harvest locations are provided below.

<table>
<thead>
<tr>
<th>Market Name</th>
<th>Common Name</th>
<th>Harvest Locations</th>
<th>Product Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surf Clam</td>
<td><em>Spisula solidissima</em></td>
<td>Atlantic and Gulf Coast Ocean waters</td>
<td>Chopped clam meat or strips</td>
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<tr>
<td>Hardshell Clam or Quahog</td>
<td><em>Mercenaria mercenaria</em> <em>Mercenaria campechiensis</em></td>
<td>Atlantic and Gulf Coast Near shore coastal waters</td>
<td>Live whole clams</td>
</tr>
<tr>
<td>Softshell Clam or Steamers</td>
<td><em>Mya arenaria</em></td>
<td>Atlantic and Gulf Coast Near shore coastal waters</td>
<td>Live whole clams</td>
</tr>
<tr>
<td>Ocean Quahogs or Mahogany Clams</td>
<td><em>Artica islandica</em></td>
<td>Atlantic and Gulf Coast Ocean waters</td>
<td>Chopped clam meat or strips</td>
</tr>
<tr>
<td>Manila Clams</td>
<td><em>Tapes philippinarum</em></td>
<td>Pacific Coast</td>
<td>Live whole clams</td>
</tr>
<tr>
<td>Butter Clams</td>
<td><em>Saxidomus giganteus</em></td>
<td>Pacific Coast</td>
<td>Live whole clams</td>
</tr>
<tr>
<td>Geoduck Clams (gooey duck)</td>
<td><em>Panopea abrupta</em></td>
<td>Pacific Coast</td>
<td>Live whole clams or meat strips or portions</td>
</tr>
<tr>
<td>Littleneck Clam</td>
<td><em>Protothaca staminea</em></td>
<td>Pacific Coast</td>
<td>Live whole clams</td>
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<tr>
<td>Razor Clam</td>
<td><em>Ensis directus</em></td>
<td>Atlantic Coast</td>
<td>Live whole clams</td>
</tr>
<tr>
<td></td>
<td><em>Siliqua patula</em></td>
<td>Pacific Coast</td>
<td></td>
</tr>
</tbody>
</table>

**Product Forms and Buyer Advice**

Knowledge of the type or name for clams is important to distinguish products in a particular region. Local nomenclature can include product names as well as size categories or other product features. A consumer ordering littleneck clams in Portland Maine will likely get a completely different species of clam than someone ordering littleneck clams in Portland, Oregon.

Clams come in many product forms. The whole form, known as **shellstock** (both shells intact), is available fresh and preferably alive or sometimes frozen. The form is eaten raw, steamed or added to various recipes that include the shells for appearance. The **half-shell** form (top shell removed) can be provided fresh or frozen and some come topped with flavorings or stuffing.

Different sizes of live whole clams are often given market names to describe size. The largest clams are called chowders followed by cherrystones, topnecks, middlenecks, and littlenecks, which are the smallest. These size designations are not standardized and may vary from one region to another. The price will also vary depending on the size, with the smallest littlenecks commanding the highest price because they are frequently the preferred product for the half shell market.

The **shucked** form (both shells removed) can be provided as whole, chopped, steaked or stripped portions that are fresh, frozen, canned or breaded. Popular processed clam products include juices, chowders and soups.

All varieties especially those harvested or grown in near shore and inland waters adjacent to coastal development must be from ‘approved’ waters as maintained and designated by state authorities. Site evaluations and water testing, is used to determine if waters are approved for harvesting. Clams harvesters, processors and shippers must also be licensed by their state regulatory agency. In addition, all containers of clams must be properly tagged so that the waters from which they are harvested can be identified along with those who have handled the product from the harvester to the retail store or restaurant.

When buying fresh whole clams, it is important to make sure that they are alive. The shells of live clams should be tightly closed or try to close when tapped or agitated. A tradition in the U.S. is to eat clams raw on the half shell. Although state and federal regulatory authorities have extensive programs in place to ensure that live bivalves are safe to eat, the system is not perfect and the risk of foodborne illness for these products is higher than for cooked foods. Health authorities have advised high risk individuals, including young children, elderly adults, pregnant women and any person with a compromised immune system (commonly associated with liver diseases, alcoholism, chemotherapy, steroid use, AIDS, diabetes and/or routine use of antacids) not to eat raw animal products like meat, poultry, shellfish like oysters and clams, and eggs which may contain potentially harmful viruses or bacteria for decades.

A special note of caution is necessary for consumers that plan to harvest their own clams rather than purchase them through established commercial sources. Any personal or recreational harvest must be from ‘approved’ waters and consumers should contact local authorities to identify the approved locations and resources.

**Nutrition Information**

Clams are a low fat, high protein seafood choice with an above average amount of healthful minerals such as selenium, zinc, iron and magnesium and B vitamins like niacin. The nutritional profile of clam products will be determined by the product form and any added ingredients. A nutrition label for a 3 ounce portion of clams
cooked by moist heat (steamed) is provided.

Management and Sustainability
Clams represent one of our nation’s most sustainable seafood resources. Natural production remains strong and exceeds demand, and farmed production is improving and expanding. The ocean based resource of surf and mahogany clams is managed under a Surf Clam–Ocean Quahog Management Plan and the resource is healthy. Other clam species are primarily harvested in state waters (up to 3 miles from shore) and are managed by state fishery management programs. Clams are a good example of a sustainable resource because they are dependent on clean and healthy waters, and are effectively managed at the local level. They are an important part of a healthy ecosystem because their active filtering can help improve or maintain water quality.

References
NOAA Fish Watch [3]

Sidebar Image:

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Nutrition Facts
Serving Size 3 oz (85g)
Clam, mixed species, cooked moist heat

Amount Per Serving
Calories 130  Calories from Fat 15
% Daily Value
Total Fat 1.7g   2%
  Saturated Fat 0g  0%
  Trans Fat 0g
Cholesterol 57mg 19%
Sodium 1,022mg 50%
Total Carbohydrate 4g 1%
  Dietary Fiber 0g 0%
  Sugars 0g
Protein 22g

Vitamin A 10%  •  Vitamin C 30%
Calcium 8%  •  Iron 130%
Selenium 80%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Calories: 2,000  2,500
Total Fat Less than 65g  80g
  Saturated Fat Less than 20g  25g
Cholesterol Less than 300mg  300mg
Sodium Less than 2,400mg  2,400mg
Total Carbohydrate 300g  375g
  Dietary Fiber 25g  30g

Calories per gram:
  Fat 9  •  Carbohydrate 4  •  Protein 4
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