Seafood at its best
Seafood at Its Best

Lesson 1

What Is Seafood?
LESSON 1

GOALS

• Provide a brief introduction to the U.S. seafood industry

• Participants will gain a better understanding of the large variety of seafood products available.
Lesson 1

Objectives

Increase knowledge of the following:

• What is seafood?

• Where does our seafood come from?

• Consumer preferences

• Future seafood supply and demand
DEFINITION OF SEAFOOD

• Seafood includes freshwater and saltwater:
  ♦ Fish
  ♦ Molluscan shellfish
  ♦ Crustaceans

• Commercially caught or farm raised
Aquatic vertebrates that have gills, fins, and usually an elongated body covered with scales

Rainbow trout, catfish, tilapia, flatfish, pollock, salmon, tuna
MOLLUSCAN SHELLFISH

- Aquatic invertebrates characterized by a shell (sometimes lacking) of one or more pieces that wholly or partly enclose the soft, unsegmented body
- Oysters, clams, mussels, scallops
Crustaceans

- Arthropod animals characterized by a hard, close-fitting shell that is shed periodically
- Crabs, lobsters, shrimp, crayfish
Imported Seafood

- About 5.3 billion pounds of edible seafood is imported annually, which results in a $10.4 billion trade deficit
- About 90% of seafood is imported
- Imports are mostly from China, Thailand, Canada, Indonesia, and Vietnam
- Leading seafood imports by value: shrimp, lobster, salmon, canned tuna
Aquaculture (fish farming) — production of aquatic animals and plants under controlled conditions for all or part of the life cycle

Approximately 48% of world seafood supply comes from aquaculture

Common aquaculture species include: rainbow trout, catfish, salmon, shrimp, clams and oysters
ADVANTAGES OF AQUACULTURE

- Steady supply
- Consistent quality
- Moderating prices
- Uniform product size
U.S. AQUACULTURE

• High-quality, safe, wholesome, and affordable seafood

• Farm-gate value of over $1 billion

• Provides employment in rural areas
Catfish represents the largest domestic aquaculture industry in the U.S.

Approximately 300 million pounds produced in 2012

Leading catfish-producing states include Mississippi, Alabama, Arkansas, and Louisiana

Catfish are grown in earthen ponds and fed grain-based feeds
Rainbow trout are grown both for the table and for stocking ponds
- Produced in flow-through raceways
- Rainbow trout are grown in numerous states
- In 2012, 47.7 million ponds of market-size trout produced
U.S. AQUACULTURE

Other Species

Other species grown for food include salmon, hybrid striped bass, tilapia, sturgeon, crayfish, shrimp, oysters, clams and mussels.
U.S. Per Capita

Seafood Consumption (lbs.)
# Top 10 Species Consumed

## U.S. Per Capita (lbs.)

<table>
<thead>
<tr>
<th>Species</th>
<th>2001</th>
<th>2011</th>
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<tbody>
<tr>
<td>Shrimp</td>
<td>3.40</td>
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<tr>
<td>Canned Tuna</td>
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<td>Salmon</td>
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<td>Catfish</td>
<td>1.15</td>
<td>Tilapia</td>
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<tr>
<td>Scallops</td>
<td>0.35</td>
<td>Clams</td>
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</table>
PREFERRED PRODUCT TYPE

2011

Fresh/frozen 72%
Canned 26%
Cured 2%
WHERE DO WE EAT SEAFOOD?

- Americans eat most seafood away from home at food service establishments such as restaurants.
- Significant amounts of low-cost, familiar, or easily prepared items such as canned tuna, salmon, tilapia, and shrimp are consumed at home.

"Fisherman’s Wharf" by Katharine Shilcutt
"Smoked Wild Canned Fish (The Fishery) by Renee S. Suen"
In 2011 – $57.7 billion at food service establishments (restaurants, carry-outs, caterers, etc.)

In 2011 – $27.6 billion in retail sales for home consumption

Average household spending for in-home seafood purchases in 2011 was $117

Asian, African & Hispanic Americans; higher income; and older households spend more on seafood
Future U.S. Seafood Demand

- USDA predicted per capita consumption would be 16 pounds by 2020
- There is a potential need by 2020 of an additional 4 to 5 billion pounds (round weight) to satisfy demand
By 2020, 84 million Americans will be over the age of 60

They will eat more seafood, dine out more often, and prefer prepared meals for in-home consumption

Continued growth of minority population

Minorities eat more seafood than the national average
FUTURE SEAFOOD MARKETS

• Organic seafood: small volume, high value

• “Functional” seafood with FDA-approved health claims and/or added nutrients

• Greater convenience: heat-and-eat entrees, “ready to cook” meals
WHERE WILL OUR SEAFOOD COME FROM?
Production from capture fisheries has leveled off, and most fishing areas have reached maximum potential.

Estimate: at current consumption levels, global seafood supplies will need to increase by ~ 30 million tons by 2030.

Aquaculture will continue to be an important source of seafood.
Seafood includes freshwater & saltwater fish, molluscan shellfish, and crustaceans

Almost all of our seafood is imported

Aquaculture supplies about 48% of all seafood worldwide

Americans consume around 15 \( \frac{1}{2} \) pounds of seafood each per year
SUMMARY

• The three most popular sea foods are:
  ◦ Shrimp, canned tuna, and salmon
  ◦ They comprised 58% by weight of the seafood we consumed in 2011
  ◦ Aquaculture supplies a significant amount of shrimp and salmon

• Majority of seafood products (72%) are fresh and frozen and the balance canned or cured
Most seafood is consumed away from home, where two-thirds of our seafood dollars are spent.

Population demographics will impact seafood demand.

Aquaculture will be a major supplier of seafood in the future.