



Culinary Institute
of America

Round & Flat Fish

Day 3



Learning Objectives

- Identify key quality indicators when purchasing and receiving fresh and frozen fin fish.
- Explain how to properly gut and scale fin fish.
- Differentiate between round fish and flat fish based on anatomy and yield.
- Demonstrate fabrication techniques for both round and flat fish, including “straight” and “up and over” methods.
- Describe suitable cooking methods for lean and oily fish based on texture, fat content, and activity level.

Purchasing Fish

What sellers should know before purchasing:

- Origin, catch method, and species traits
- Flavor profile, ideal cooking methods, and nutrition
- Whether it's wild-caught or farm-raised
- Ask about recent deliveries—what just came in?
- Buy from reputable sources
- Check for quality indicators



High Quality Characteristics

- Clear eyes
- Red gills
- Fresh aroma
- Firm flesh
- Moist and shiny fillets with tight flake
- No belly burn
- Scales adhere tightly to the body
- **Frozen:** tight seals, no ice



Low Quality Characteristics

- Fishy, stale or "off" aroma
- Mushy flesh, open-flaked fillets
- Discoloration
- Dark gills
- Belly burn



Gutting

- Removes internal organs to ensure freshness and food safety
- Historically done immediately after catching fish
- Prevents spoilage and improves flavor/texture
- Proper technique avoids damaging edible flesh



Gutting Process

1. Insert knife at anal opening, cut shallowly toward gills to avoid organs.
2. Open cavity, cut behind head and at tail to remove organs.
3. Use spoon to clean out dark veins or leftover tissue.
4. Rinse cavity thoroughly.



This must be done quickly to avoid spoilage!

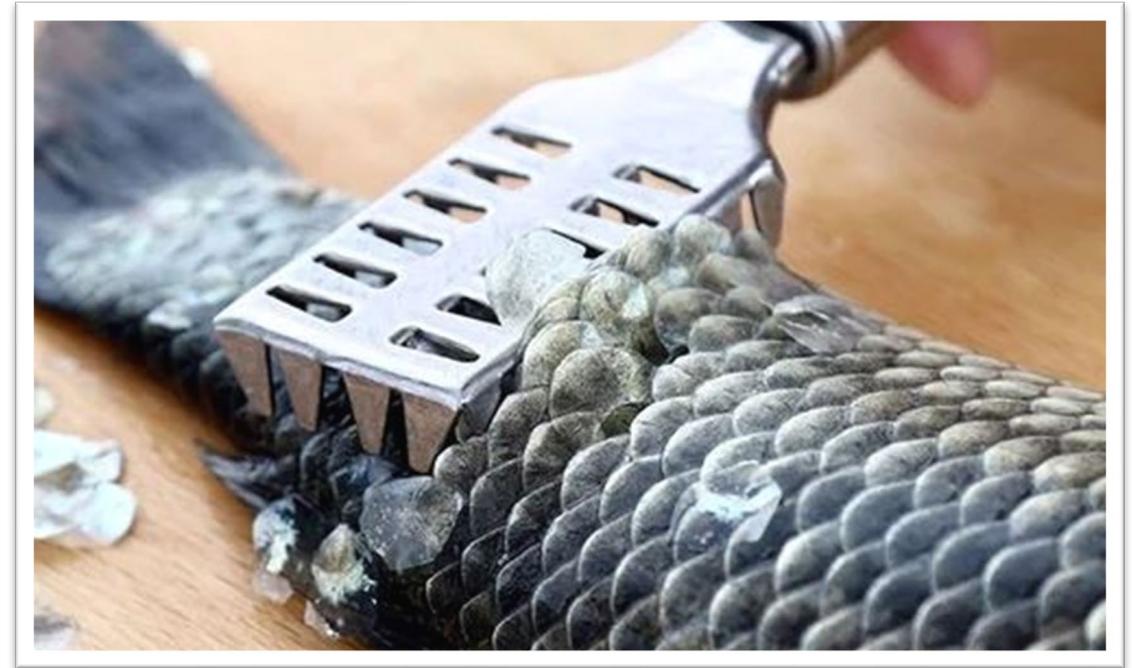
Scaling

- Most fish must be scaled before fabrication
- Scales protect fish from predators, parasites, and the environment
- Scale size, shape, and type vary by species
- Use a scaler, fillet knife, table knife, or spoon



Scaling Process

1. Place fish in a perforated hotel pan under running water.
2. Hold the fish by the tail.
3. Brush from tail to head using firm, even pressure to remove scales without damaging flesh.
4. Repeat on both sides.
5. Rinse thoroughly.



Fish Fabrication

Fish fall into two main categories for fabrication:

Round fish

- Cylindrical bodies
- Eyes on both sides of the head
- Yield two fillets—one fillet on each side of the backbone
- Vary in oil level, flavor



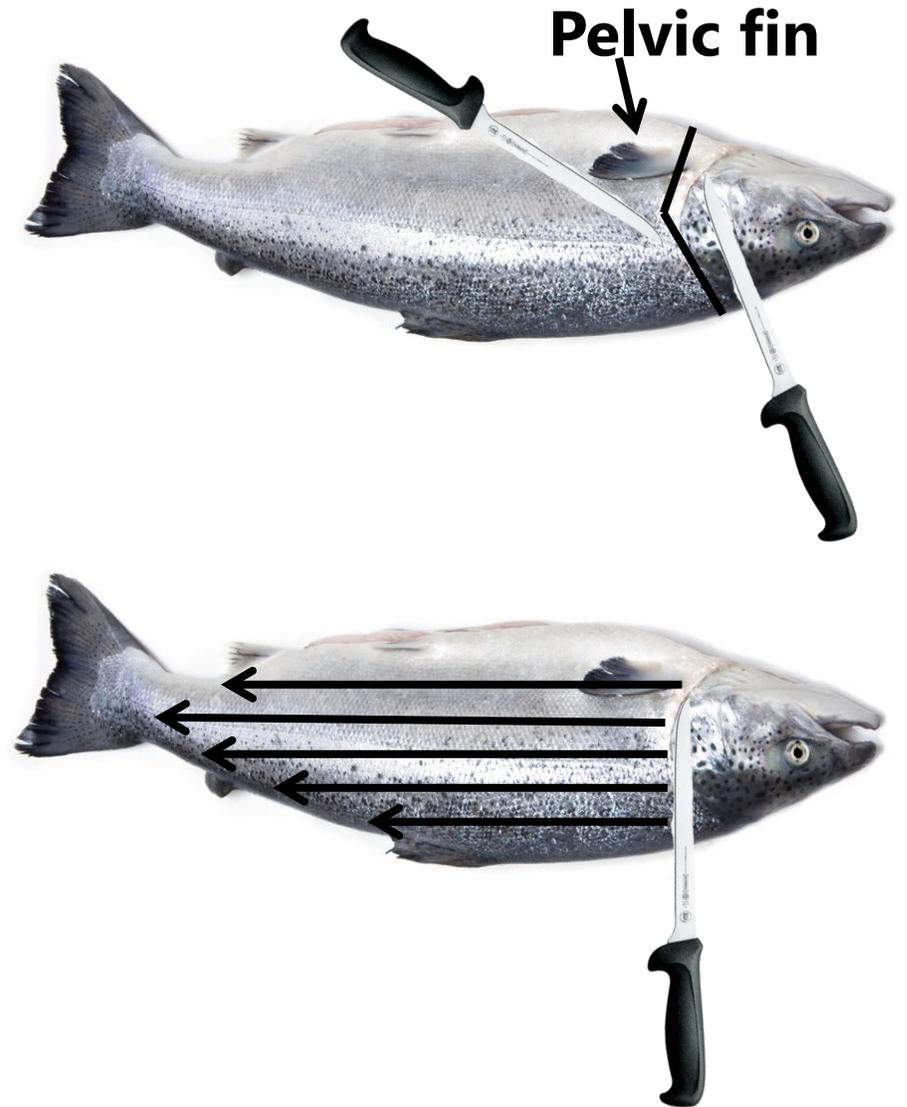
Flat fish

- Flat, compressed bodies
- Eyes on one side of the head,
- Yield four fillets—two on each side of the spine
- Delicate texture, flavor



Round Fish Fabrication: Straight

1. Make an angled cut behind the head, under the gills, down to the table.
2. Lift pelvic fin, turn knife, cut behind it to release fillet.
3. Rotate wrist so blade rests on backbone, facing the tail.
4. Cut from head to tail with a sawing, pulling motion. You'll hear pin bones snapping.
5. Steady fish with opposite hand, check under belly flap. Use Chef's knife if more control is needed.



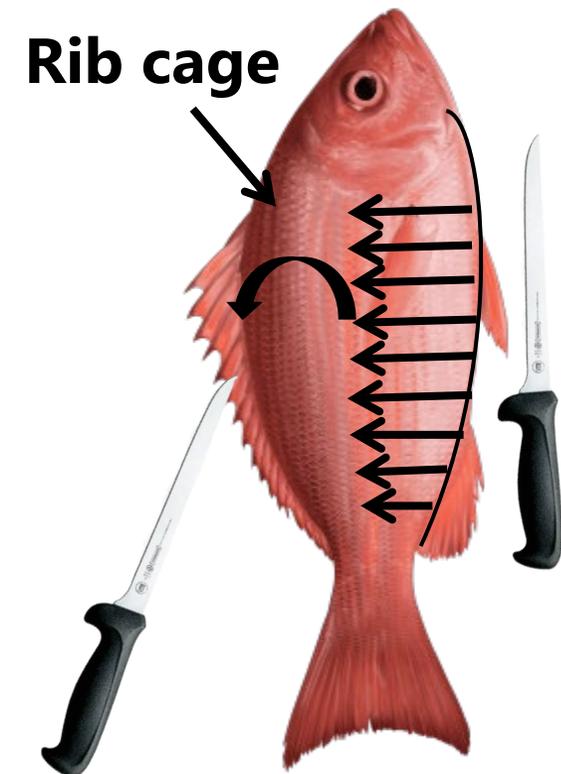
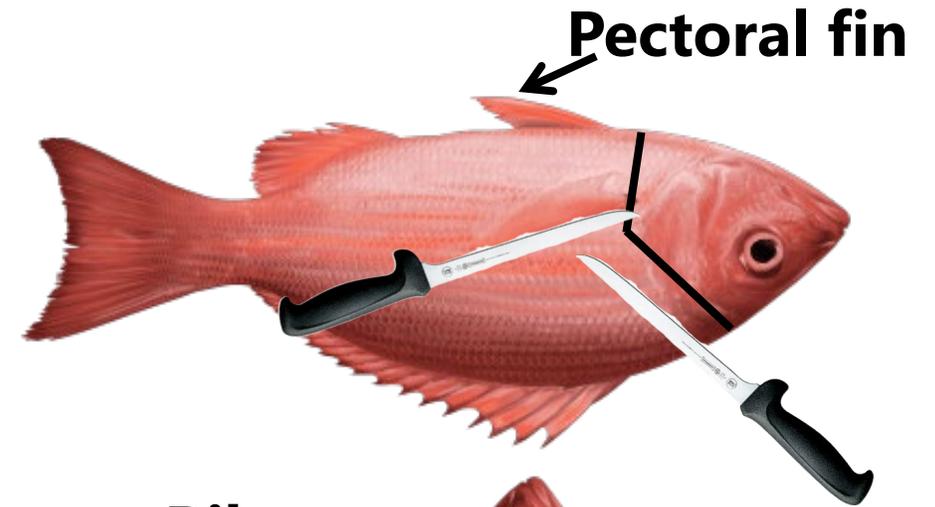
Round Fish Fabrication: Straight

6. Trim belly bones with flexible fillet knife.
7. Pull pin bones with pliers, toward the head.
8. Slice fillet into angled tranches, or cut straight down for rectangular portions.



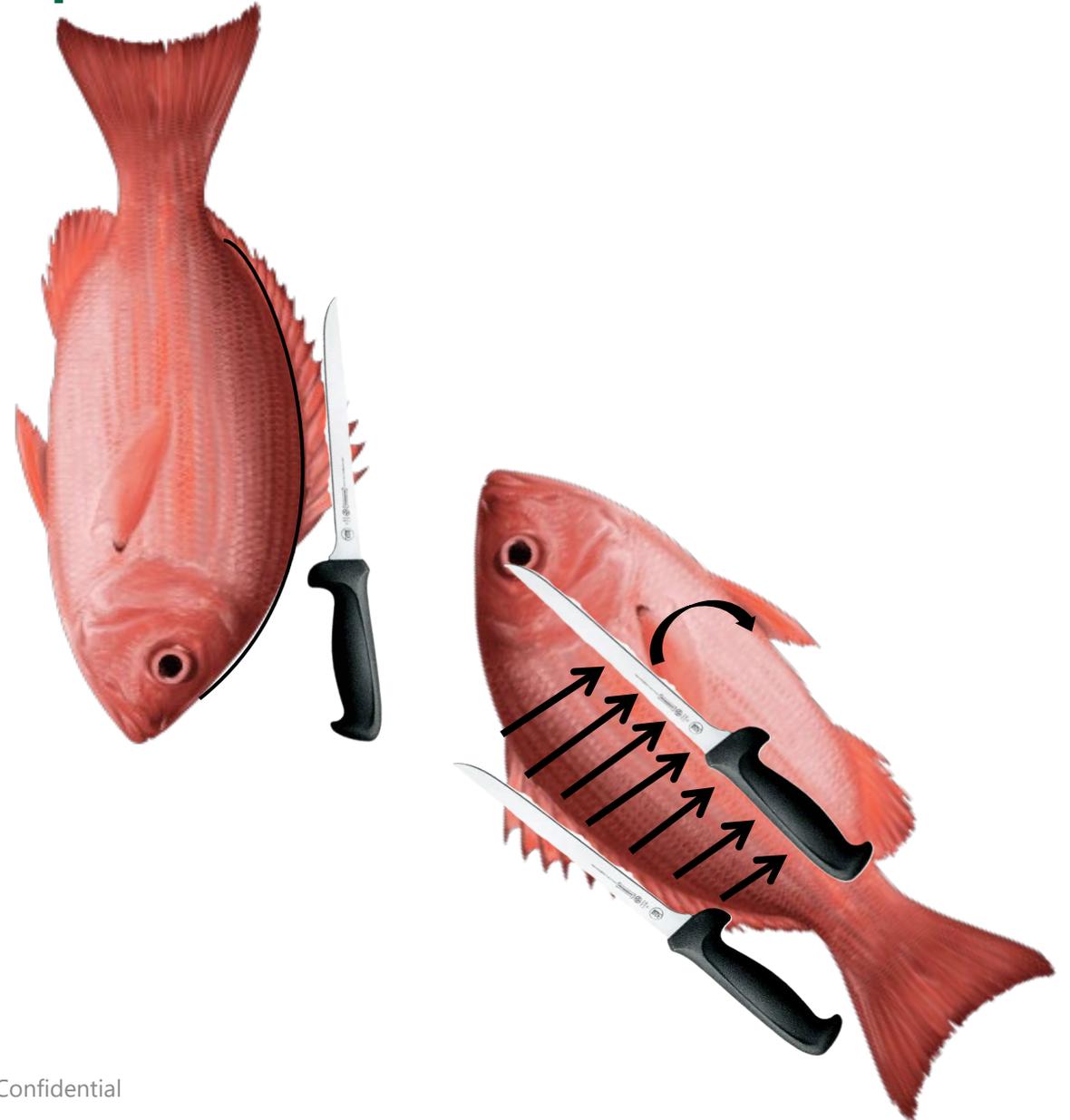
Round Fish Fabrication: Up and Over

1. Angle knife behind head and pectoral fin, cut down to backbone.
2. Turn knife, cut behind pelvic fins to release fillet.
3. Place fish facing away from you.
4. Slice along backbone toward tail, above pelvic fin.
5. Keep knife tip against bone, remove fillet over center bone.
6. Stay flat to bones, go up and over rib cage.



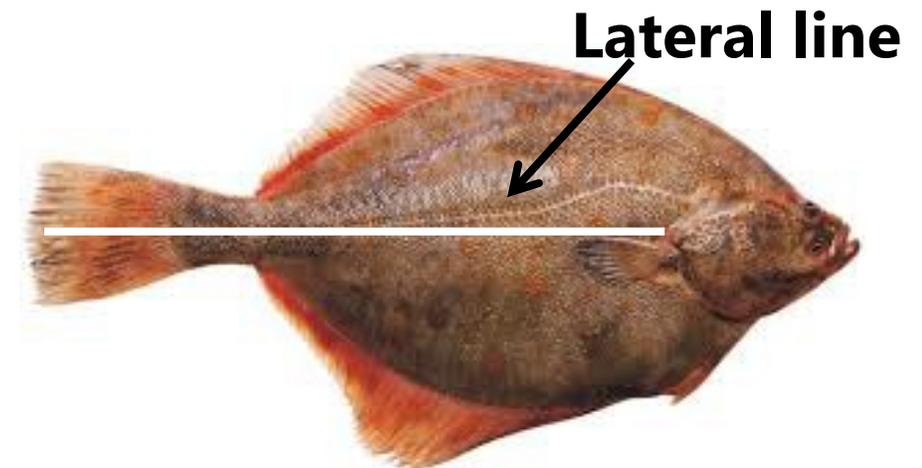
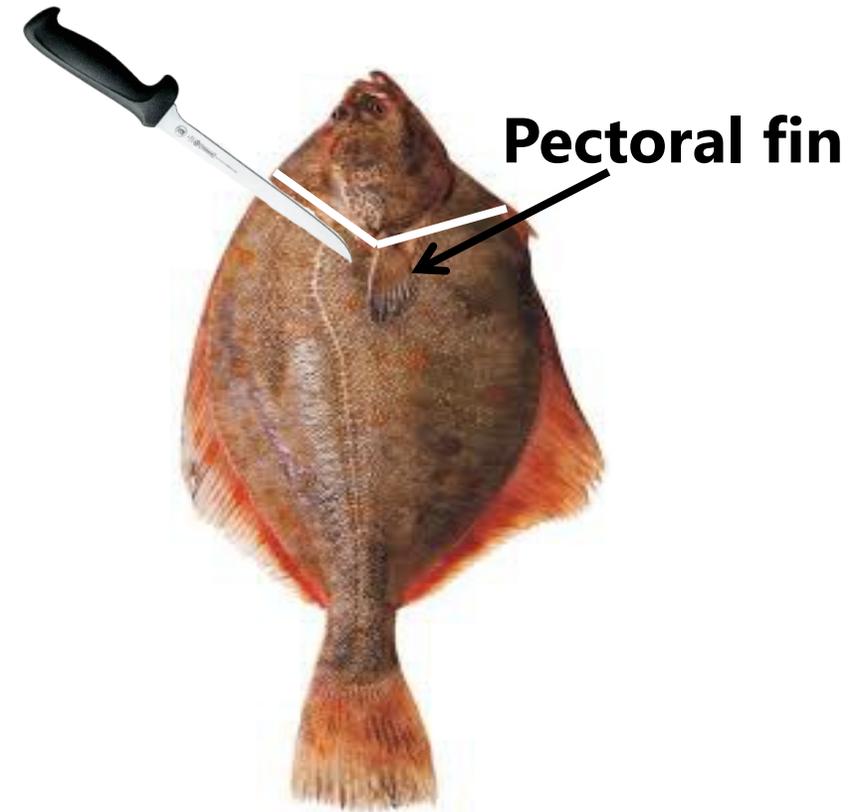
Round Fish Fabrication: Up and Over

7. Flip fish and place facing you.
8. Angle knife around pectoral fin and slice along backbone.
9. Use hand to steady, keep knife flat (bend if needed).
10. Rotate fish, head at 10 o'clock.
11. Remove fillet from bones and lift fillet over center bone.
12. Insert knife at head, go up and over rib bones in one motion.



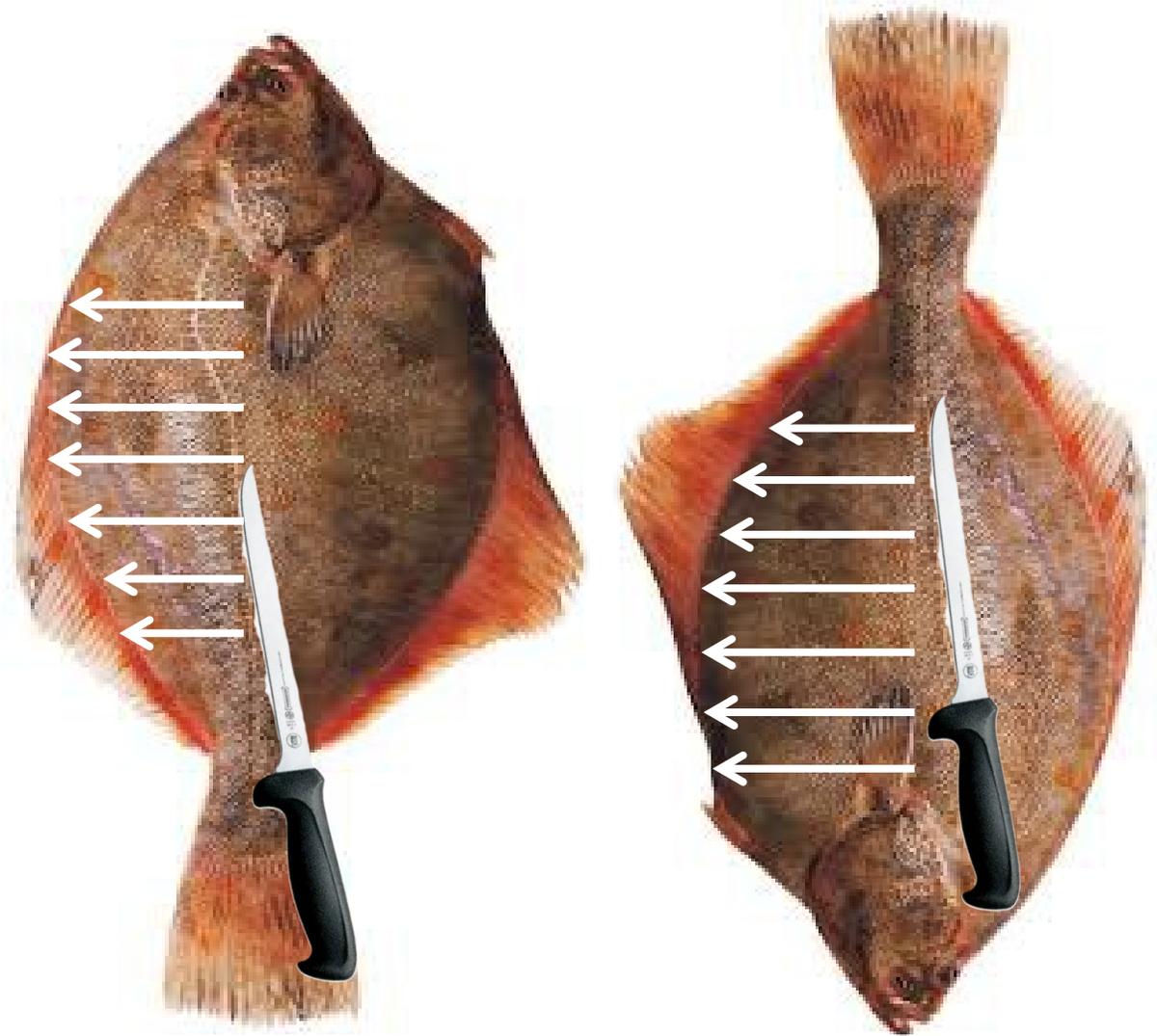
Flat Fish Fabrication

1. Lay fish pigment side up.
2. Remove the head if needed:
 - Angle knife under the gills, cut toward the head and down to the table.
 - Repeat on other side.
 - Cut around pectoral fin and twist off.
3. Use the lateral line as a guide to begin halving the fillets. Do not follow the curve.
4. Follow the backbone and lateral line, cut down to the bone from tail to head.
5. Cut through the tail.



Flat Fish Fabrication

6. Find spine bone, cut from tail to head to release fillet.
7. Use knife tip flat against bone, press palm gently on fillet.
8. Slice from center outward to remove fillet.
9. Flip and repeat on second top-side fillet.
10. Turn fish over, repeat both steps on underside.
11. Save trim for stock.



Flat Fish: Filleting & Skinning

To remove the whole fillet:

1. Place hand on top, cut near head.
2. Saw to the backbone, go up and over.
3. Angle knife tip down the other side.
4. Keep knife flat, swipe to release.

To skin:

1. Start at tail, slide knife under meat.
2. Pull skin tight, saw blade forward.



Choosing Cooking Methods

Match method to traits: size, fat, moisture, texture, flavor, color, activity level

Lean fish:

- White flesh
- Low fat content
- Mild flavor
- Delicate texture
- Examples: tilapia, flounder, sole

Fatty fish:

- Dark flesh
- High fat content
- Strong, bold flavor
- Firm texture
- Examples: salmon, tuna, mackerel

Cooking Methods for Lean Fish

Sautéing/Pan-Frying:

Quick heat with added fat creates golden crust and prevents drying

Baking (with fat):

Add butter, oil, or sauce to protect the flesh and enhance flavor

Steaming:

Keeps lean fish moist without extra fat; ideal for fillets or whole fish

Poaching:

Moist, gentle cooking in broth or butter preserves texture and flavor

Cooking Methods for Fatty Fish

Grilling/Broiling:

High heat enhances natural oils, adds smoky or charred flavor

Roasting/Baking:

Even dry heat develops rich flavor; good for whole fish or steaks

Smoking:

Ideal for oily fish (salmon, mackerel); enhances flavor and shelf life

Curing:

Works well with high-fat fish; salt/sugar draws moisture, intensifies taste



Opah



Hapu'uku'u



'Opakapaka



Kahala/Kampachi



Paki'i



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Any Questions?