



**U.S. Farm-Raised Fish Fillets Meunière** (cont'd)  
Place fish in skillet, and cook fish according to the ten minute rule.  
Turn once during the cooking process.  
Remove fish from skillet and drain on paper towels.  
Melt remaining 1/4 cup butter in skillet. Stir in chopped parsley, lemon juice and Worcestershire sauce. Spoon sauce over fish and enjoy.  
Makes four servings.

## Super Simple U.S. Farm-Raised Fish Fillets

*This recipe can also be prepared in the microwave. Cook on high for approximately 3 minutes per pound of boneless fillets. Remember that oven power varies so adjust the time for your particular appliance.*

4 U.S. farm-raised fish fillets ( salmon works really well or try trout, tilapia, catfish, or hybrid striped bass)  
1/4 cup low fat mayonnaise  
1 Tbsp lemon juice  
Salt and pepper  
1 Tbsp dill, chopped

Preheat oven to 425°.  
Arrange fillets on baking pan lined with foil and sprayed with cooking spray to prevent sticking. Drizzle the fish with lemon juice. Spread fish fillets with low fat mayonnaise, then season with salt and pepper. Sprinkle with chopped dill or any other herb of your choosing.  
Bake at 425° following the ten minute rule.  
Makes four servings.



## Pasta with U.S. Farm-Raised Clams

1 pound spaghetti  
Salt  
1/4 cup extra-virgin olive oil  
4 garlic cloves, minced  
1/2 teaspoon crushed red pepper

2 dozen littleneck clams, scrubbed  
1/4 cup water  
1/4 cup finely chopped parsley  
Freshly ground black pepper

Cook the spaghetti accordingly to package directions until just al dente, then drain the pasta well. Meanwhile, in a large, deep skillet, heat the olive oil.



Add the minced garlic and crushed red pepper and cook over moderately high heat, stirring occasionally, until the garlic is lightly browned, about 1 1/2 minutes.  
Add the clams and water, cover and simmer until the clams open and are just cooked through, 5 to 8 minutes. Discard any clams that don't open.  
Add the spaghetti and the chopped parsley to the clams in the skillet and season with pepper.  
Toss over moderately high heat just until the spaghetti absorbs some of the juices, about 1 minute.  
Makes four servings

### Visit these websites for more information:

The National Aquaculture Association  
[www.thenaa.net](http://www.thenaa.net)  
Seafood Health Facts  
<http://seafoodhealthfacts.org>  
National Oceanic and Atmospheric Administration  
[www.fishwatch.gov](http://www.fishwatch.gov)

### NATIONAL AQUACULTURE ASSOCIATION

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# Fabulous U.S. Farm-Raised Fish and Shellfish

## Learning Objectives

1. To gain confidence in buying seafood
2. To gain confidence in preparing seafood
3. To understand the important health benefits of including more seafood in the diet

## U.S. Farm-Raised Finfish and Shellfish

Aquaculture or fish farming is the production of marine and freshwater organisms under controlled conditions. This includes finfish, shellfish, and aquatic plants for human consumption, for stocking in sport fishing ponds, and to enhance wild populations. It also includes ornamental fish and plants for fish tanks and backyard ponds. In the United States, there are strict rules and regulations governing aquaculture practices. These regulations help ensure the sustainability and safety of our farm-raised fish, shellfish, and aquatic plants.

## Buying U.S. Farm-Raised Seafood

Plan your menu in advance but wait until you are in the store to actually decide which type of seafood to prepare. This lets you pick the freshest and best priced product. Avoid any fish that smells fishy or



unpleasant. Fresh fish should have a mild sea breeze odor. Look for bright, bulging eyes, and red gills in whole fish. Fish fillets and steaks should look moist and shiny. They should be firm. Check to make sure that there are no discolorations or papery edges.  
The shells of clams, oysters and mussels should be tightly closed. If the shells are open, they should close when tapped.  
Frozen fish should be solidly frozen with no ice crystals in the package. There should be no discoloration or dark spots and no fading of dark fleshed fish. There should be no evidence of liquid, either frozen or thawed, in the package.

### Goal

To improve the health of Americans through the development of better dietary habits including meeting the USDA/DHHS recommendation of two seafood meals per week.

**Avoid Cross Contamination**

Keep raw fish away from other foods. Make sure to use a clean cutting board when cutting fish and make sure to wash cutting boards, counters, knives, and other utensils carefully after use. Wash hands after handling raw fish.



**Storing Your U.S. Farm-Raised Seafood**

You should get your fresh fish purchases home and into the refrigerator as soon as possible. Keep your fish as close to 32° as possible. Place fish in its original wrapper in a freezer bag and store on the coldest shelf in your refrigerator. This is usually right above the crisper on the lowest shelf and toward the back. Use fish within 48 hours of purchase or freeze. Shellfish, like clams, oysters and mussels, should be stored in a warmer zone. Place them in a bowl and cover loosely with a damp paper towel. Shellfish need to stay moist and need air circulation. Store frozen seafood at 0° F. Frozen seafood should be used within two months of purchase and even sooner if the freezer door is opened frequently.



**Cooking Seafood**

The simplest way to cook fish is to use the ten minute rule. Measure the fish at its thickest point. For every inch of thickness, cook the fish for ten minutes. If you are cooking in foil or in a sauce, add ten minutes per inch. If you cook unfrozen fish, double the cooking time. Many health authorities recommend that you cook frozen fish since you don't lose water-soluble vitamins and minerals in drip loss.

*Points for Discussion*

- 1. Have students visit a local supermarket. Notice how seafood is labeled (labeling should be by country of origin and method of production either farm-raised or wild caught). How many different types of seafood are in the case?
- 2. Discuss different types of fish and shellfish the students eat at home. What are their likes and dislikes?
- 3. Discuss any special ethnic seafood dishes that students enjoy at home. This might be the special meal of seven fishes enjoyed by Americans of Italian descent at Christmas. For Hispanic students, it may be paella. Explore seafood traditions.
- 4. Have students research seafood traditions in different cultures.



**Quick and Easy Recipes for U.S. Farm-Raised Seafood**

**U.S. Farm-Raised Fish Fillets in Foil**

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| 3 U.S. farm-raised fish fillets (try catfish, tilapia, trout, hybrid striped bass) | Vegetables of your choice (sliced). Some suggestions are bell peppers, zucchini, tomatoes, asparagus, pick what you like or what is available) |
| 2 cloves garlic, sliced thin   |  |
| 1/2 lemon, juiced  |  |
| 2 Tbsp extra virgin olive oil  | Herbs- Add chopped herbs of your choice (basil, thyme, dill, scallions, chose the flavors you like)  |
| 1 tsp dried oregano  |  |
| Salt and pepper to taste   |  |

Preheat oven to 425°. In a large bowl, combine the vegetables and herbs. Add olive oil, lemon juice, salt and pepper, and toss to coat. Cut a piece of aluminum foil large enough to make a closed packet containing the fish and vegetables. Place one fish fillet in the center and cover the fish with the vegetables. Sprinkle with salt and pepper. Repeat with the remaining fish fillets and then place the foil packets on a baking sheet and place in the oven for 15-20 minutes. Check the fish by unwrapping a corner of the foil. Makes three servings. Enjoy and there is no big clean-up!



**U.S. Farm-Raised Fish Fillets Topped with Panko Breadcrumbs**

*Everyone likes fried fish; here is a healthy alternative!*

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| 1 to 1 1/2 pounds U.S. farm-raised fish fillets, (catfish, hybrid striped bass, tilapia or trout are good choices) cut into 4-ounce to 6-ounce portions | 2 tablespoons finely chopped parsley   |
| Salt and pepper   | 1/4 cup flour                          |
| 1 cup Panko bread crumbs  | 2 large eggs or 1/2 cup egg substitute |
|   | 2 tablespoons low fat mayonnaise       |
|   | lemon wedges, for garnish              |



Preheat the oven to 425°. Line a rimmed baking sheet with aluminum foil; spray with nonstick cooking spray. Sprinkle the fish fillets all over with salt and pepper. In a wide bowl, combine the Panko crumbs and the parsley. Put the flour in a shallow, wide bowl. In another wide bowl, whisk the eggs or egg substitute with the low-fat mayonnaise. Dip a fillet in the flour, coating well. Dip in the egg mixture, then coat with the Panko crumb mixture, pressing lightly to help crumbs adhere to the fish. Repeat with the remaining fish. Arrange the fillets in the prepared baking pan. Bake your fish following the ten minute rule. The time in the oven depends on thickness, so adjust for very thin or thick fillets. Makes six servings.

**U.S. Farm-Raised Fish Fillets Meunière**

*A la meunière means in the style of the miller and refers to the flour that is used in this recipe.*

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| 4 U.S. farm-raised fish fillets (catfish, hybrid striped bass, tilapia or trout are good choices) | 1/2 cup flour seasoned with salt and pepper |
| 1/2 cup butter (you can substitute half butter and half low fat butter substitute if you like)    | 2 Tbsp. parsley, chopped                    |
|   | 2 Tbsp. lemon juice                         |
|   | 1/2 tsp. Worcestershire sauce               |

Combine flour, salt, and pepper in a shallow dish. Dredge fish fillets in flour mixture. Melt 1/4 cup butter in a large nonstick skillet over medium heat. (Continued on next page)