Fish is a nutritious, low-fat, high quality protein that is a great source of vitamins D and B2 and contains the minerals calcium, iron, zinc, magnesium and potassium. Many fish are also important sources of omega-3 fatty acids, which have health benefits that include lower blood pressure, reduced risk of heart attack and stroke, lower triglyceride levels, and help with inflammation. They promote healthy brain and eye function, especially in children and young adults. The best choices for omega-3 fatty acids in fish include salmon, herring, mackerel, light tuna, sardines, trout and anchovies. The American Heart Association recommends eating fish at least twice per week as part of a healthy diet. Below are guidelines for preparing fish and 3 easy recipes you can try.

**Selecting:** Use all of your senses to ensure you are getting a fresh fish. Scent should be noticeable but not overpowering. The flesh should look milky and vibrant, not dull, and it should spring back into place after it’s pressed. Looking for budget friendly fish choices? Your store’s freezer section may offer a selection of individually wrapped fish in many varieties such as salmon and tilapia. Don’t forget canned fish! Several options are also available (like salmon, herring, mackerel, and tuna). Look for lower sodium and/or packed in water options.

**Storing:** After purchasing, immediately place on the bottom shelf of the fridge in a leak-proof container and use within 2 days. Fish purchased frozen should be put in the home freezer and thawed the day it will be cooked.

**Cooking:** Fish should be cooked to a minimum internal temperature of 145°F, or until the meat is opaque and separates easily with a fork. The general cooking time for baking, poaching, broiling or grilling fish is about 10 minutes for every inch of thickness. To prevent overcooked/dry seafood, try using a marinade or cooking it at a lower temp for a longer time.

**Marinating:** For more flavor and moistness, marinate fish in a zip-lock plastic bag in the fridge for 30 to 60 minutes prior to cooking. Be careful of some store-bought marinades that may be high in sodium. Use about 3 Tbsp of marinade per pound of fish. Once ready to cook, discard the marinade. An easy home-made recipe with only 200 mg sodium per serving is from bettycrocker.com: Combine ½ Tbsp each of packed brown sugar, melted butter, olive oil, honey, soy sauce, and 1 minced garlic clove. Pour over 1 pound of salmon and put in fridge for 30-60 minutes. Then discard the marinade and grill, bake, broil, or microwave the fish until fully cooked.

**What is “En Papillote”?** This refers to a simple technique of cooking food in parchment paper and works well for seafood. Each serving is wrapped and sealed in paper along with oil, lemon juice or white wine, seasonings, and often chopped vegetables. Then it is baked on a tray in the oven and steamed to perfection, ensuring a moist, flaky and flavorful dish. (See nutrition.gov.kidscook video).

**Don’t be caught by these fish!** Fried fish like fish and chips or deep fried fish sandwiches really add calories, fat, and sodium to your diet. (McDonald’s Filet-O-Fish + small fries has 620 calories, 30 gm fat and 750 mg sodium. Long John Silvers Fish and Chips have 860 calories, 40 gm fat and 1790 mg sodium!) Opt for healthier choices like “baked or broiled” instead.

**Fish with Mustard and Yogurt Sauce**

*Source: American Institute for Cancer Research*

- **Cooking Spray**
- **1 Tbsp olive oil**
- **4 (6oz) filets tilapia or any white fish, fresh or frozen**
- **Salt and pepper to taste**
- **¼ c low-fat or fat-free plain Greek-style yogurt**

1 tsp Dijon mustard

½ c lemon juice

2 Tbsp fresh chives (or green onions), chopped

Nutrition Facts: Calories 200, Fat 6 gm, Sodium 169 mg, Carbohydrate 2 gm, Fiber 0 gm, Protein 34 gm

**Directions:** If using frozen fish, thaw in refrigerator according to package directions. Turn on broiler. Spray baking dish. Sprinkle olive oil on both sides of filets. Gently brush to coat well. Season with salt and pepper. Arrange fillets in baking dish. Do not overlap. Broil until fish flakes easily, about 8 minutes. Set aside. In small bowl combine yogurt, mustard, lemon juice, and chives. Whisk to combine well. Transfer fillets to serving dish. Drizzle with sauce and serve.

**Turn page over for more tips and recipes!**
Sweet and Sour Sesame Tilapia

4 servings

Source: Nutrition Action Healthletter 2013

Directions: Make the sauce: In a small pot, boil the apple juice until reduced by half. In a small bowl, mix the soy sauce, vinegar, and cornstarch, then stir into the apple juice. Simmer until thickened, about 1 minute. Whisk in sesame oil. Set aside. Next, gently press 1 Tbsp of sesame seeds onto one side of each filet. Heat the canola oil in a large sauté pan over medium heat. When oil is hot enough so the tilapia sizzles when it goes into the pan, sauté the fish, seed-side down, until the fish flakes easily, 1 to 3 minutes. Pour the sauce over the fish and serve.

Nutrition Facts: Calories 310, Fat 16 gm, Sodium 350 mg, Carbohydrate 10 gm, Fiber 1 gm, Protein 31 gm

* Note: Almost any white fish will work. But remember: overcooked fish will be dry no matter what type you are using.

Penne Pasta with Tuna Marinara Sauce

5 servings

Source: Meals in Minutes by the American Heart Association

Directions: Prepare pasta according to package directions; drain well. Meanwhile, heat a large skillet over medium-high heat. Add oil and swirl to coat bottom of skillet. Cook garlic for 2 minutes. Add tuna and cook for 1 minute, stirring to break tuna chunks apart. Stir in remaining ingredients. Cook for 10 minutes or until sauce is hot. Stir in pasta and heat for 1 minute. For a complete balanced meal, add a cup of cooked vegetables, a tossed salad, or a combination plate with pepper strips, grape tomatoes, cucumbers, baby carrots, celery, raw zucchini sticks, or broccoli flowerettes.

Nutrition Facts: Calories 357, Fat 8 gm, Sodium 337 mg, Carbohydrate 45 gm, Fiber 4 gm, Protein 24 gm

Seafood Sustainability

Roughly 30 percent of the world’s fish stocks are “over exploited” — in danger of collapse. Another 57 percent are “fully exploited” — at or close to their sustainable limits. The threat from climate change and pollution threaten our oceans. Many people wonder how they can enjoy seafood but still be environmentally conscious. Here are some tips:

- Ask for the freshest fish, not a species of fish. For example, instead of saying “I’d like cod”, choose a white fish that may be similar but is more fresh and environmentally friendly. This could also help save you money.
- Become familiar with “Best, OK, and Worst Choices” fish selections. Go to: seafoodwatch.org and download a pocket guide that describes which types of fish are the most eco-friendly and sustainable next time you shop.
- Limit your red meat consumption. Consuming a diet rich in vegetables, fruits, nuts, whole grains, seeds, beans, and other plant based selections helps not only with disease prevention, but also promotes sustainable eating and less pollution.

The Facts about Mercury

Nearly all seafood contains traces of mercury. Mercury occurs naturally in the environment and can accumulate in streams and oceans and is turned into methylmercury in the water. Certain fish build up higher levels of methylmercury as they feed in these waters. For most people, the risk from mercury in seafood is not a health concern. Yet, mercury is a neurotoxin which may harm an unborn baby or young child’s developing brain and nervous system. Current EPA guidelines suggest that pregnant women and children and women trying to become pregnant should not eat any swordfish, shark, king mackerel, or tilefish, but can safely consume up to 12 ounces a week of seafood low in mercury such as salmon, tilapia, pollock, catfish, sardines, canned light tuna, scallops, and shrimp. Note: Albacore (white) tuna has higher mercury than light. For the general adult population: Limit intake of the higher mercury fish to 1 per week, but eat other types of low mercury fish as desired.

Source: Nutrition Action Health Letter May 2008 and July/August 2013 and epi.publichealth.nc.gov website