Affordable, Nutritious Fish Year-Round? Can Do!

You know you should eat more fish. The American Heart Association recommends at least two servings a week, especially fish high in heart-healthy omega-3 fats. But fresh fish can be expensive and spoils quickly. Maybe it's time to rediscover canned fish.

Happily, many of the varieties most often canned or preserved in handy pouches are the same fish highest in omega-3s. Canned salmon puts omega-3s just a can-opener away, with about 1.0-1.3 grams of EPA plus DHA (the two most important omega-3s) in a three-ounce serving. Omega-3 amounts don't differ much by type of salmon, so pick based on taste and texture—and don't differ much by type of salmon, so pick based on taste and texture—and of course price! And don't overlook canned anchovies (1.75 grams/3 oz.) and mackerel, with a little over a gram with about 0.8 grams in three ounces, of course price! And don't overlook canned anchovies or herring (1.8 grams/3 oz.), but their downsides may outweigh the omega-3 benefits: Salty anchovies pack one and a half times your recommended daily sodium total in just three ounces, while herring are typically canned "kippered" (salted and smoked), which also makes them high in sodium. Try rinsing and soaking anchovies or herring in water for 30 minutes before using to remove some of the salt.

America's favorite canned fish, tuna, is not naturally as high in omega-3s, but the amount differs sharply by variety. A three-ounce serving of the most common canned tuna, skipjack (often sold as "light"), packed in water and then drained, delivers a little over a quarter-gram of EPA/DHA. But albacore tuna ("white") has nearly three-quarters of a gram in the same size serving—putting it not so far behind salmon.

Omega-3s aren't destroyed in the canning process, so you're not sacrificing heart health for convenience. If fish are canned in oil, however, some of the omega-3 fats can migrate into the surrounding oil, to be lost when the fish are drained. Albacore tuna canned in oil loses three-fourths of its omega-3s compared to water-packed—while gaining half again as many calories plus saturated fat.

Although canning does damage fragile nutrients such as vitamin C, most of the healthy ingredients in fish come through unscathed. Canned fish is an excellent source of low-calorie protein: Three ounces of canned salmon contain 21 grams of protein and 177 calories; a similar serving of water-packed tuna has almost 22 grams of protein and 100 calories.

Some types of canned fish—notably salmon and mackerel, but not tuna—actually outdo the fresh or frozen alternatives in calcium. They're canned with the bones, which the heat of cooking and canning makes soft enough to eat. So three ounces of canned salmon contain 325 milligrams of calcium (about the same as a cup of milk), compared to almost none in fresh salmon fillets.

Studies have also shown that canned fish can be added to dishes such as:

Recipe Card

THREE SIMPLE SARDINE DISHES

There are plenty of good reasons for eating sardines. They are one of the best sources of heart-healthy omega-3s. Sardines also supply calcium and are one of the few foods that are naturally high in vitamin D. They are considered one of the most sustainable seafood choices, and you can't beat inexpensive canned sardines for convenience. Here are three ways to embellish a humble can of sardines:

Scandinavian Sardine Crispbreads: Soak 1 thin slice of red onion in ice water for a few minutes. Mix 2 teaspoons low-fat mayonnaise with 1 tsp chopped fresh dill (or 1/4 tsp dried dill weed) in small bowl. Drain 1 (3.75-oz) cans sardines. Drain onion slice and separate into rings; pat dry. Spread mayonnaise over 2 whole-grain crispbread crackers, such as Ry Crisp, Ryvita, Wasa or Kavli. Arrange onion slices over crispbreads. Top with sardines. Scatter 1 tsp rinsed, drained capers over top. Finish with a squeeze of lemon juice and a grinding of pepper. Garnish with a fresh dill sprig, if desired. Yield: 1 serving—the perfect lunch for one! Per serving: 280 calories, 23 grams protein, 17 grams carbohydrates, 3 grams fiber, 13 grams total fat, 2 grams saturated fat, 2 grams omega-3 fatty acids, 124 milligrams cholesterol, 356 milligrams calcium, 634 milligrams sodium.

Crispy Broiled Sardines (pictured above): Preheat broiler. Line a small baking sheet with foil and coat with cooking spray. Mix 3 Tbsp panko (Japanese-style bread crumbs), 1 tsp olive oil and a pinch of cayenne pepper in small bowl. Drain 2 (3.75-oz) cans sardines. Arrange on prepared baking sheet. Using basting brush, brush 2 Tbsp Dijon mustard over top of sardines. Sprinkle bread-crummixture over sardines; press crumbs into fish. Broil sardines, about 4 inches from heat source, until topping is golden and crisp, 2 to 3 minutes. Serve with lemon wedges. Yield: 2 servings. Per serving: 226 calories, 22 grams protein, 6 grams carbohydrates, 0 grams fiber, 12 grams total fat, 2 grams saturated fat, 2 grams omega-3 fatty acids, 121 milligrams cholesterol, 325 milligrams calcium, 636 milligrams sodium.

Greens & Sardines: Soak 1/3 cup thinly sliced sweet onion, such as Vidalia, in ice water for a few minutes. In jar with tight-fitting lid or small bowl, shake or whisk together 3 Tbsp olive oil, 1 Tbsp sherry vinegar (or white-wine vinegar or lemon juice), 1/4 tsp salt and pepper to taste until blended. Place 3 cups washed, dried salad greens (torn, if large), 1 cup halved cherry tomatoes and 1/2 cup torn fresh flat-leaf parsley leaves in large bowl. Drain onions, pat dry and add to salad. Add 2 Tbsp dressing to salad and toss to coat. Divide salad among 2 plates. Drain 2 (3.75-oz) cans sardines; arrange over salad. Drizzle remaining dressing over sardines. Yield: 2 (2-cup) servings. Per serving: 403 calories, 24 grams protein, 10 grams carbohydrates, 4 grams fiber, 31 grams total fat, 4 grams saturated fat, 2 grams omega-3 fatty acids, 121 milligrams cholesterol, 405 milligrams calcium, 754 milligrams sodium.
Fishy Facts

- The US is the world's second-largest consumer of canned tuna, behind only the European Union, using 31% of the global supply—about 1 billion pounds a year.
- Canned tuna is the US' second most-popular seafood product, after shrimp.
- More than half of all canned tuna is used in sandwiches.
- In supermarkets, only coffee and sugar exceed canned tuna in sales per foot of shelf space.
- Endangered bluefin tuna is not used in commercial canned or pouched products.
- Americans eat the most tuna in the summer, the least in fall.

But what about unwanted extras in fish such as mercury and PCBs?

Most experts agree the health benefits of fish outweigh the risks of mercury; in any case, mercury contamination is primarily a concern for pregnant or nursing women or those planning to become pregnant. If you're worried about mercury nonetheless, avoid mackerel and look for US or Canadian albacore tuna. The Environmental Defense Fund also rates domestic albacore as well as canned salmon as "Eco-Best."

The FDA says PCB levels in fish are well below safety limits. Look for wild rather than farm-raised canned fish if you're concerned.

A bigger worry with canned fish is added salt. Check the label and look for cans boasting "low sodium" or "reduced salt." The difference in canned tuna can be as much as 250 milligrams of sodium versus just 35. Also avoid kippered and smoked fish, as these processes add salt.

(Also be careful when you're doing the adding. A tablespoon of full-fat mayonnaise has as many calories as three ounces of canned tuna, while "helper" products add processed carbs and sodium along with calories.)

When you do find a favorite, healthy brand and it's on sale, don't hesitate to stock up. Unopened canned tuna has a shelf life of up to four years, and canned fish lasts three years.

Ask Tufts Experts

Q I am living alone and very often make a little too much food for one meal. I am wondering if much nutrition is lost when I reheat a veggie for a second night, which I often do.

A Alice H. Lichtenstein, DSc, director of Tufts' HNRCA Cardiovascular Nutrition Laboratory, says that microwaving or gentle reheating in a pan shouldn't do much damage to the nutrients in previously cooked vegetables. (This is another good reason, though, not to overcook vegetables the first time—they'll stand up better to reheating.) Another option she suggests is to add cold cooked veggies to perk up a salad.

Q Are green bananas safe to eat? Are they as good for you as ripe bananas?

A Contrary to popular belief, eating green bananas won't make you sick (unless, of course, as with other foods, you eat too many of them), though they may be more difficult to digest than the ripe fruit. Fully ripened bananas may have developed slightly more antioxidants, but otherwise the nutritional profiles of green and ripe bananas are quite similar. In fact, green bananas might have a few advantages: As bananas ripen, they convert starches into sugars, so greener fruit are less sweet and affect your blood sugar less. Green bananas also contain more short-chain fatty acids (SCFAs), which are indigestible to humans but nourishing to the cells that line your intestines. Various studies have shown improvements in intestinal function from consuming SCFAs in general and green bananas in particular.

Q I have wondered why sea salt is so often touted in recipes. Considering that our sea waters are so contaminated now, is there no concern that their condensed form, salt, could be harmful to ingest?

A Unlike regular table salt, which is mined from rock salt, "sea salt" is produced by the evaporation of seawater. The concentrated brine precipitates the salt, which is then gathered by harvesting machines. Both types of salt (as well as "kosher salt," which can be mined or evaporated from seawater) consist of sodium chloride, although sea salt may also contain trace amounts of other minerals that—adherents say—give it a different taste. Sea salt typically does not contain added iodine, which helps prevent goiter. Some purveyors of "purity" or "synthetic" sea salt do warn that other brands could contain mercury and other contaminants; they point out that the waters off Brittany, in northwestern France, which produce much of the sea salt popularly sold as "natural," are badly polluted. The FDA has not issued any warnings about adverse health effects from contaminated sea salt, however, and in any case it's unlikely that you'd consume enough to ingest much pollutants. We also note that the Environmental Defense Fund, which among other things monitors and advocates for the purity of the world's oceans, doesn't hesitate to call for sea salt in recipes on its web site <www.edf.org>.

Sea salt can be either fine (similar to table salt) or coarse (like kosher salt). Because the larger grains don't pack as tightly together, a quarter-teaspoon of coarse sea salt contains 570 milligrams of sodium, compared to 590 milligrams in the same volume of table salt (and 480 milligrams in kosher salt).