



# Seafood Health Facts: Making Smart choices

## Balancing the Benefits and Risks of Seafood Consumption

### *Resources for Healthcare Providers and Consumers*

## **Seafood Preparation and Nutrition [1]**

The health benefits of seafood are becoming increasingly well known. Research scientists and health organizations worldwide, including the U.S. Dietary Guidelines Advisory Committee and the American Heart Association, recommend adding seafood to the diet as a good source of omega-3 fatty acids (EPA+DHA). Omega-3 fatty acids are compounds that have been shown to be beneficial to heart health and early neurological development. For more information on omega-3s click the following links:

[Consumers](#) [2]

[Practitioners](#) [3]

There are lots of ways to add the healthy benefits of seafood to your diet. The many types of seafood make it a versatile ingredient that can easily be added to your favorite dish. Seafood is low in fat and cholesterol and rich in protein, vitamins and minerals; although, some popular preparation methods for seafood can add unwanted fat, cholesterol, or sodium to the diet.

### **Fat and Fatty Acids**

The *2010 Dietary Guidelines for Americans* suggest reducing fat intake to 20-35% of your total daily calories with less than 10% coming from saturated fats. Seafood is naturally low in total fat, and the fat it does contain is healthy polyunsaturated fat. Breading and frying is a popular way of preparing seafood products, but the oil can be absorbed into the raw product causing an increase in total fat and calories. The chart below shows how breading and frying seafood can double the calories in a 3-ounce serving. Frying or deep-frying does not just increase total fat; it can change the amount of beneficial omega-3 fatty acids in each serving. Health organizations suggest eating seafood twice per week to get an average daily intake of 250 milligrams (mg) of omega-3 fatty acids in the diet. Frying can cause these beneficial omega-3 fatty acids to dissolve in the cooking oil. It can even change the amount of each omega-3 fatty acid present, creating a less healthy ratio. Instead of serving seafood fried, there are preparation methods that can maintain its healthy benefits, including: poaching, steaming, baking, broiling, stir-frying and microwaving. Seafood is a healthier choice when prepared in a low-fat recipe, and it is easy to learn how to prepare seafood and modify recipes to retain these healthy benefits. There are numerous sources of low-fat healthy recipes including those at the [National Fisheries Institute's website](#) [4].

### **Preparation of Seafood: Impact on Calories, 3 ounce serving**



### **Cholesterol**

As part of a healthy diet, the *2010 Dietary Guidelines for Americans* recommend that Americans limit the amount of cholesterol in their diet. Both finfish and shellfish are naturally low in cholesterol and can help keep your daily consumption of cholesterol below the recommended 300 mg per day. It is estimated that seafood only contributes 3.4% of the cholesterol in the American diet. One 3-ounce serving of finfish has between 30-90 mg of cholesterol and shellfish has between 80-160 mg. The major source of cholesterol in the U.S. is from egg yolks, dairy products and meats. To avoid adding unwanted cholesterol to seafood recipes, sauces using eggs and dairy can be substituted with wine or vegetable-based sauces. In the past it was thought shellfish were much higher in cholesterol, but recently new analytical techniques have identified most of what was thought to be cholesterol was actually other forms of sterols.

## Sodium

The U.S. FDA and the Institute of Medicine suggest lowering sodium intake in the diet for better health. The *2010 Dietary Guidelines for Americans* lowered the suggested daily intake of sodium from 2,300 mg per day to 1,500 mg per day. There is also evidence that lower sodium intakes are related to lower blood pressure. Sodium in raw seafood is relatively low, but can increase rapidly during processing and preparation. Processed seafood products that have higher levels of sodium include those that are: canned, smoked/dried, and kippered (see table). Sodium may also be added when some raw products are soaked in a solution or brine prior to freezing to reduce water loss upon thawing. For example, raw sockeye salmon has 114 mg of sodium in a 3-ounce serving, but sodium levels can increase to 306 mg when canned and 510 mg when smoked. Many canned and processed products have been reformulated and are now available in a low-sodium form. Sodium may also be added to seafood and other meat products that are injected with flavor enhancing agents, preservatives or marinades. It is important to check nutrition labels of products and consider how it will be served to assure you are gaining all the healthy advantages of seafood while maintaining suggested sodium levels. To season your fish and shellfish without adding sodium, consider using lemon, dill, fennel, and cilantro for fish fillets; and basil, chives, oregano, thyme, and rosemary for shellfish.

## Vitamins and Minerals

Seafood is a good source of important vitamins (A, B-complex, and D) and minerals (selenium, iodine, iron, and zinc) that have been linked to various health benefits. Cooking food can sometimes cause a breakdown of nutrients, but generally the greatest loss is water. With most cooking methods, vitamin retention in cooked seafood is greater than 85%, and retention of important minerals is 100%.

## Healthy Seafood Preparation

Nutrient	Healthy Preparation	Use in Limited Amounts
<b>Fat &amp; Fatty Acids</b>	Grilling, poaching, steaming, baking, broiling, and stir-frying	Breaded and fried/deep fried
<b>Cholesterol</b>	Use sauces that are wine or vegetable-based	Sauces using eggs or dairy
<b>Sodium</b>	Use lemon and other herbs, such as dill, fennel, cilantro for fish fillets; and basil, chives, oregano, thyme, and rosemary for shellfish	Marinades or large amounts of smoked fish

## Seafood Nutrient Table

The table below contains nutrient information for popular raw, cooked and processed seafood products, including total fat, sodium, and fatty acid content. All values are presented in 3-ounce portions, but keep in mind that serving sizes can range from 3 to 8-ounces depending on the recipe and individual preferences. A

3-ounce serving of fish is the size of a deck of cards. Nutrient information for other seafood products can be found at this [USDA website](#) [5].

### Salmon Nutrient Content

Seafood (3 ounces)	Calories (kcal)	Total Fat (g)	Saturated Fat (g)	Omega-3's, EPA+DHA (mg)	Sodium (mg)	Cholesterol (mg)
<b>Raw Atlantic Salmon</b>	177	11.41	2.59	1671	50	47
<b>Baked Atlantic Salmon</b>	175	10.50	2.12	1825	52	54
<b>Raw Chinook Salmon</b>	152	8.87	2.63	1659	40	42
<b>Smoked Chinook Salmon</b>	99	3.67	0.79	383	666	20
<b>Kippered Chinook Salmon</b>	178	11.01	2.07	1062	740	57
<b>Raw Sockeye Salmon</b>	144	5.69	0.77	673	114	54
<b>Canned Sockeye Salmon</b>	141	6.21	1.33	1228	306	37
<b>Smoked Sockeye Salmon</b>	175	6.17	1.25	1335	510	79
<b>Salmon Nuggets or Burger</b>	180	9.96	1.33	422	147	22

### Catfish Nutrient Content

Seafood (3 ounces)	Calories (kcal)	Total Fat (g)	Saturated Fat (g)	Omega-3's, EPA+DHA (mg)	Sodium (mg)	Cholesterol (mg)
<b>Raw Catfish</b>	101	5.05	1.11	62	83	47
<b>Baked Catfish</b>	122	6.11	1.34	76	101	56
<b>Battered and Fried Catfish</b>	195	11.33	2.79	290	238	60

### Clam and Oyster Nutrient Content

Seafood (3 ounces)	Calories (kcal)	Total Fat (g)	Saturated Fat (g)	Omega-3's, EPA+DHA (mg)	Sodium (mg)	Cholesterol (mg)
<b>Raw Oysters</b>	50	1.32	0.37	333	151	21
<b>Baked/Grilled Oysters</b>	67	1.80	0.58	384	139	32
<b>Battered and Fried Oysters</b>	169	10.69	2.71	357	354	60
<b>Raw Clams</b>	73	0.82	0.15	91	511	26

<b>Canned Clams</b>	121	1.35	0.26	150	95	42
<b>Battered and Fried Clams</b>	333	19.52	4.88	N/A	616	65
<b>Clam chowder (1 cup)</b>	154	5.09	2.75	26	688	18

### Shrimp Nutrient Content

<b>Seafood (3 ounces)</b>	<b>Calories (kcal)</b>	<b>Total Fat (g)</b>	<b>Saturated Fat (g)</b>	<b>Omega-3's, EPA+DHA (mg)</b>	<b>Sodium (mg)</b>	<b>Cholesterol (mg)</b>
<b>Raw Shrimp</b>	60	0.86	0.09	51	481	107
<b>Steamed Shrimp</b>	101	1.45	0.16	87	805	179
<b>Battered and Fried Shrimp</b>	206	10.44	1.7	198	292	117

### Pollock Nutrient Content

<b>Seafood (3 ounces)</b>	<b>Calories (kcal)</b>	<b>Total Fat (g)</b>	<b>Saturated Fat (g)</b>	<b>Omega-3's, EPA+DHA (mg)</b>	<b>Sodium (mg)</b>	<b>Cholesterol (mg)</b>
<b>Raw Alaskan Pollock</b>	78	0.83	0.11	357	73	60
<b>Battered and Fried Fish Fillet</b>	197	10.45	2.39	N/A	452	29
<b>Battered and Fried Fish Sticks</b>	212	11.26	2.33	343	358	24
<b>Fish sandwich</b>	243	13.29	3.781	N/A	436	68

### Tuna Nutrient Content

<b>Seafood (3 ounces)</b>	<b>Calories (kcal)</b>	<b>Total Fat (g)</b>	<b>Saturated Fat (g)</b>	<b>Omega-3's, EPA+DHA (mg)</b>	<b>Sodium (mg)</b>	<b>Cholesterol (mg)</b>
<b>Raw Skipjack</b>	88	0.86	0.27	217	31	40
<b>Canned Light Tuna (oil)</b>	168	6.98	1.3	109	301	15
<b>Canned Light Tuna (water)</b>	99	0.70	0.19	230	287	26
<b>Canned White Tuna (oil)</b>	158	6.87	1.08	207	337	26
<b>Canned White Tuna (water)</b>	109	2.52	0.67	733	320	36
<b>Tuna salad</b>	159	7.87	1.3	59	342	11

## Crab Nutrient Content

Seafood (3 ounces)	Calories (kcal)	Total Fat (g)	Saturated Fat (g)	Omega-3' s, EPA+DHA (mg)	Sodium (mg)	Cholesterol (mg)
<b>Raw Blue Crab</b>	74	0.92	0.18	273	249	66
<b>Canned Blue Crab</b>	71	0.63	0.17	143	336	82
<b>Blue Crab cakes</b>	132	6.39	1.26	377	280	128
<b>Raw Alaskan King Crab</b>	71	0.51	0.07	N/A	711	36
<b>Steamed Alaskan King Crab</b>	82	1.31	0.11	351	911	45
<b>Imitation Alaskan King Crab, surimi</b>	81	0.39	0.15	N/A	715	17

## Herring Nutrient Content

Seafood (3 ounces)	Calories (kcal)	Total Fat (g)	Saturated Fat (g)	Omega-3' s, EPA+DHA (mg)	Sodium (mg)	Cholesterol (mg)
<b>Raw Herring</b>	134	7.68	1.73	1336	76	51
<b>Broiled or Baked Herring</b>	173	9.85	2.22	1712	98	65
<b>Pickled herring</b>	223	15.31	2.02	1181	740	11

\*All values obtained from the [USDA National Nutrient Database for Standard Reference](#). [5]



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### Source URL:

<https://www.seafoodhealthfacts.org/seafood-nutrition/healthcare-professionals/seafood-preparation-and-nutrition>

### Links

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<https://www.seafoodhealthfacts.org/seafood-nutrition/patients-and-consumers/health-benefits-omega-3s>

[3] [http://seafoodhealthfacts.org/seafood\\_nutrition/practitioners/omega3.php](http://seafoodhealthfacts.org/seafood_nutrition/practitioners/omega3.php)

[4] <http://www.aboutseafood.com/>

[5] <http://www.nal.usda.gov/fnic/foodcomp/search/>