

Seafood Nutrition

UNDERSTANDING THE SCIENCE
COMMUNICATING TO CLIENTS
RESOURCES AND RECIPES TO SHARE

RDN Toolkit: Pregnancy and Child Brain Development



**SEAFOOD
NUTRITION
PARTNERSHIP®**

Greetings!

As nutrition experts, we understand that seafood is an important part of an expectant mother's diet. Seafood is the only food rich in omega-3 DHA and EPA, which are needed for babies' brain and eye development.

Our expecting clients are often confused about the complicated fish advice they receive and that confusion leads to consuming less of it during pregnancy.¹ The real risk is not eating enough seafood.

This guide educates expectant mothers on how to maximize the many benefits of fish and the simple ways to buy, cook, and enjoy it.

This toolkit was made possible by the following SNP partner:

AQUAMAR
aquamarseafood.com

GO DIGITAL:

All resources within this toolkit are available as one-page printable downloads at seafoodnutrition.org/rd or by scanning the QR Code:

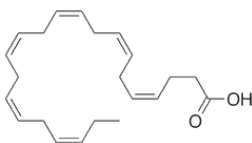


¹ Connelly, N. 2014. How can more women of childbearing age be encouraged to follow fish consumption recommendations? Environmental Research 135 (2014) 88-94

Omega-3 DHA is the Basic Building Block of the Brain

The human brain is the body's fattiest organ, and docosahexaenoic acid (DHA) is the most abundant fatty acid in the brain. DHA is to the brain as calcium is to bones.

The human body relies on this nutrient for brain growth, which is fundamental for mom and baby.²



² <https://www.goedomega3.com/storage/app/media/scientific-reports/Brain%20Health%20Monograph.pdf>



The FDA on Fish

Fish provide key nutrients that support child brain development, according to the U.S.

Food and Drug Administration's (FDA) updated advice about eating fish, including shellfish.

"Nutrients in fish can support a child's brain and immune system development."



PREGNANCY & BREASTFEEDING

FDA



Fish provide key nutrients
that support a child's
brain development.



7.7

The average IQ point gain in children whose mothers ate seafood during pregnancy compared to mothers who did not eat seafood³



3.45

The amount IQ points increased in preterm infants with DHA supplementation⁴



³ Hibbeln JR, et al. Relationships between seafood consumption during pregnancy and childhood and neurocognitive development: Two systematic reviews. PLEFA, V.151, 14-36
⁴ Gould, Makrides et al. Neonatal Docosahexaenoic Acid in Preterm Infants and Intelligence at 5 Years: N Engl J Med 2022; 387:1579-1588

66%

The percent reduction in early preterm births for women taking higher doses of DHA



Strong research shows women taking a higher dose of DHA (1000 mg/d) reduced early preterm birth compared to those taking a lower dose.⁵

The American College of Obstetricians and Gynecologists recommends at least two servings of fish or shellfish per week before and throughout pregnancy and during lactation. Not only does eating seafood lower preterm birth risk, but it is also essential for healthy eye and brain development in babies.



Buying Seafood is Easy

- Seasonal or local fresh options tend to be more cost-effective at the fish counter.
- Frozen seafood is a budget-friendly option and has many of the same benefits. Most fish is flash-frozen within hours of harvest, preserving peak flavor and texture until ready to cook.
- Stock up on canned and shelf-stable fish and shellfish for your pantry. Canned seafood is always in season.



Access our Ultimate Guide
to Buying Seafood:



Cooking Seafood is Simple

HOW TO DEFOST FROZEN FISH

Let the fish thaw in the refrigerator overnight on paper towels. In a rush? Submerge it in its vacuum packaging or a water-tight bag in cold water for 15-20 minutes.



GOOD RULE OF THUMB

Try the 10-minute rule, which says you should measure the fish at its thickest point, and cook it on medium for 10 minutes per inch, turning halfway through cooking time.

COOKING METHODS

- ▶ Lean, mild-flavored fish or “white fish:” Steaming, poaching, or baking is best for these tender pale-flesh species, which include barramundi, cod, flounder, grouper, Alaska pollock, red snapper, rockfish, sole, or tilapia.
- ▶ Rich-flavored, fatty fish: Grilling, baking, slow-roasting, or broiling all work well with a firmer texture fish that can withstand the heat. Try black cod (sablefish), bluefish, catfish, mackerel, salmon, sardines, swordfish, trout, or tuna steaks.



Access our Ultimate
Guide to Cooking
Seafood:





On Your Plate

SNP RDN
Education
Toolkit:



KEEP SEAFOOD ON HAND

Canned seafood, such as canned salmon, tuna, or sardines, makes for a delicious, easy, and healthy meal with minimal food prep.

EAT A VARIETY OF SEAFOOD

With more than 500 species commonly available, it's easy to find one that suits your tastes. If you're new to fish, try a mild species like cod or sole.

COOK IT ONCE, EAT IT TWICE

Try doubling recipes to get ahead on cooking and have a lunch or dinner later in the week. Cook an extra piece of fish to use on a salad or sandwich the next day.



Kids Love Seafood, Too!

1. MAKE SEAFOOD LOOK FUN

For younger kids, this can simply be visually appealing, like a sandwich shaped like a fish. Maybe it's interactive and they can "play" with their food.

2. DIPPING MEANS YUMMING!

Kids love to dip foods into their favorite condiments, such as ketchup, ranch dressing, and barbecue sauce.

3. DO THE SEAFOOD SWAP!

Replace taco filling with shrimp or swap chicken fingers for breaded fish!

4. TOP IT. KIDS LOVE IT!

Make an avocado and fruit salsa with mango, pineapple, or strawberries to top a fillet.

5. ADD IT TO A FAVE, WATCH 'EM RAVE!

Crab in mac and cheese or top a pizza with shrimp.



View our
Seafood Smarts
Handout:



Try This Favorite

Surimi Crab Salad

Servings 2

Ingredients

8 oz pack Aquamar Surimi Chunks

$\frac{3}{4}$ cup frozen corn

1 tsp vegetable oil

1 large red potato

1 stalk of celery

2 tbsp of minced red onion (optional)

$\frac{1}{2}$ cup of mayo

$\frac{1}{4}$ tsp salt (for step 4)

$\frac{1}{4}$ tsp pepper (for step 4)

1 tbsp of bottled lemon juice



Instructions

1. Toss frozen corn with a teaspoon of vegetable oil and lightly salt and pepper.
2. Roast frozen corn for 20 min at 425F on a pie tin or cookie sheet. After, place in a bowl and cool in the fridge.
3. Boil the red potato in a small pot of water until tender. After, place in a bowl and cool in the fridge.
4. To prepare the dressing, whisk together mayo, salt, pepper, and lemon juice.
5. Cube the red potato, slice the celery stalk into medium size dices, add the roasted corn, and (optional) minced red onion into a bowl.
6. Add Surimi and toss with the prepared dressing until coated.

AQUAMAR

U.S.-based Aquamar produces the highest quality, best-tasting, and sustainable surimi products in styles that will delight consumers. Surimi is a healthy protein dish made from wild-caught Alaskan pollock/whiting that can be used in many seafood recipes, from sushi to pasta and from lunch to dinner. Learn more at aquamarseafood.com

WHICH FISH IS THE RICHEST IN OMEGA-3s? (PER 4 OUNCE COOKED PORTION)

Studies show omega-3s can reduce risk of heart disease, depression, dementia, arthritis, and improve overall happiness. Prominent health organizations suggest eating a variety of seafood at least twice a week, aiming to consume an average of 250 to 500 milligrams of omega-3s EPA and DHA per day.

> 1,000 milligrams



Anchovies
Herring
Mackerel
(Atlantic & Pacific)
Oysters (Pacific)
Sablefish (Black Cod)
Salmon
(Atlantic, Chinook,
Coho)
Sardines
(Atlantic & Pacific)
Swordfish
Trout

500 - 1,000 milligrams



Alaskan Pollock
Barramundi
Crab
Mussels
Salmon (Chum,
Pink & Sockeye)
Sea Bass
Squid
Tilefish
Tuna (Albacore)
Walleye

250 - 500 milligrams



Catfish
Clams
Flounder/Sole
Grouper
Halibut
Mackerel (King)
Oysters (Eastern)
Perch
Rockfish
Snapper
Tuna
(Skipjack, canned)

< 250 milligrams



Cod
Crayfish
Haddock
Lobsters
Mahi Mahi
Shrimp
Scallops
Tilapia
Tuna (Yellowfin)

Source: U.S. Department of Agriculture, FoodData Central at fdc.nal.usda.gov

If you are not able to meet the omega-3 recommendation from seafood
then consider supplementing with omega-3 EPA + DHA capsules.