

# Seafood Smarts

A DIVE INTO BENEFITS FOR KIDS



**The benefits of seafood for kids are big! Fish and shellfish supply the nutrients, vitamins and omega-3s essential for strong bones, brain development, and healthy heart and immune system.**

Protein, vitamins B-6, B-12 and D, and omega-3 fatty acids (especially DHA and EPA) are key nutrients found in seafood that promote healthy growth and development throughout childhood, and can help minimize chronic disease risk later in life.

Despite everything we know about the importance of seafood for growing minds, overall, kids are only getting about 40% of the omega-3s EPA+DHA recommended by the National Academy of Medicine.<sup>2</sup>



For more ways to increase your seafood intake, visit our website or follow us on social media.

[f](#) [i](#) [t](#) [p](#) @Seafood4Health | #Seafood2xWk  
[seafoodnutrition.org](http://seafoodnutrition.org)

- **BIG BRAINS:** Fish makes your brain bigger, literally!<sup>3</sup> Your brain is nearly 60% fat,<sup>4</sup> and omega-3 fatty acids found in seafood are among the most crucial molecules that determine your brain's ability to perform.

- **BETTER GRADES:** Kids who eat fish at least once per week may do better in school.<sup>5</sup> Seafood's omega-3s help your kids' brains develop, leading to higher IQs and improved reading and spelling skills.<sup>6</sup>

Research shows that kids who eat fish at least once a week sleep better and have an IQ about 4.8 points higher than those who seldom or never eat fish.<sup>7</sup>

- **HEALTHY EYES:** Along with supporting healthy eye development, seafood's omega-3s support our ability to detect light. Nearly half of our eye's light-detecting cell structure are made up of omega-3s.<sup>8</sup>

- **STRONG BONES:** Fish – especially salmon – is naturally packed with Vitamin D, a bone-strengthening nutrient that is naturally present in very few foods. Fish has more vitamin B12 and vitamin D than any other type of food.<sup>9</sup> D is necessary for building bones and teeth and assisting in the absorption of calcium.

Seafood is an excellent source of lean protein, essential for a child's body development especially during times of rapid growth. Protein is found in every cell in your body and is necessary for the continuous repair and growth of tissues including bone, skin and muscles.

- **LESS STRESS:** Children who consume more seafood have less anxiety and better focus. Omega-3s have been shown to help reduce behavior problems and aggression in children – and their parents.<sup>10</sup>

- **BREATHE WELL:** Want fewer sick days? Research shows that omega-3 DHA improved children's immune responses and kids have a lower risk of some allergic diseases and upper respiratory infections.<sup>1</sup>

Fish twice a week may help reduce asthma symptoms in children,<sup>11</sup> a disease affecting 1 in 12 kids in the U.S., according to the CDC.

### Recipe by Blue Circle Foods

A healthy alternative to traditional fish sticks, Happy Fish® contain just three ingredients – our sustainably sourced fish, sea salt and pepper. These versatile fish-shaped bites, available in salmon or cod, cook directly from frozen in just 8 minutes and contain no additives, fillers or preservatives.

Happy Fish® is:

- Free of antibiotics, added hormones and GMOs
- No gluten or sugar
- Certified sustainable by Monterey Bay Aquarium's Seafood Watch Program, the Aquaculture Stewardship Council and the Marine Stewardship Council.

### HOW TO COOK

- **Sauté:** Lightly brush pan with oil over medium heat. Sear Happy Fish® for 4 minutes per side.
- **Grill:** Cook Happy Fish® for 4 minutes per side on a hot grill.
- **Poach:** Add to boiling water and cook for 7 minutes.

### PAIRING IDEAS

1. Add to boiling **pasta** 7 minutes before the pasta is done. Drain, top with desired sauce and serve.
2. Gently coat Happy Fish® on both sides with Everything Bagel seasoning or sesame seeds before sautéing for 4 minutes per side. Pair **crusted** Happy Fish® with your favorite dipping sauce.
3. Build Happy Fish® **sliders**. Sauté Happy Fish® for 4 minutes a side. Serve on a potato roll or slider bun and top with avocado, arugula and chipotle mayo.



**1. HAVE FIN FUN! WHEN SEAFOOD LOOKS FUN, IT'S "YUM!"** For younger kids, this can simply be visually appealing, like a sandwich shaped like a fish. The heart of this concept is for there to be an exciting component. 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, chicken fingers for breaded fish or any numbers of easy swaps into their family-favorite dishes.

**4. TOP IT. KIDS LOVE IT!** Kids love fruit? Pile it on! Try making an avocado and fruit salsa with mango, pineapple or even strawberries to top a fillet.

**5. ADD IT TO A FAVE, WATCH 'EM RAVE!** Crab in mac & cheese, please! Tuna on pasta makes it go fasta!

For more tips, visit [seafoodnutrition.org/kids](https://seafoodnutrition.org/kids).

<sup>1</sup> Nettleton J, Salem Jr. N. International Society for the Study of Fatty Acids and Lipids 2018 Symposium: Arachidonic and Docosahexaenoic Acids in Infant Development. *Ann Nutr Metab* 2019;74:83-91.

<sup>2</sup> Thompson M, et al. Omega-3 Fatty Acid Intake by Age, Gender, and Pregnancy Status in the United States: National Health and Nutrition Examination Survey 2003-2014. *Nutrients*. 2019;11(1):177.

<sup>3</sup> Raji CA, et al. Regular fish consumption and age-related brain gray matter loss. *Am J Prev Med*. 2014;47(4):444-451.

<sup>4</sup> Chang CY, Ke DS, Chen JY. Essential fatty acids and human brain. *Acta Neurol Taiwan*. 2009 Dec;18(4):231-41.

<sup>5</sup> Kim J, et al. Fish consumption and school grades in Swedish adolescents: a study of the large general population. *Acta Paediatrica*. 2010;99: 72-77.

<sup>6</sup> Kuratko CN, et al. The relationship of docosahexaenoic acid (DHA) with learning and behavior in healthy children: a review. *Nutrients*. 2013;5(7):2777-2810.

<sup>7</sup> Liu J, et al. The mediating role of sleep in the fish consumption - cognitive functioning relationship: a cohort study. *Scientific Reports*. 2017;7(17961).

<sup>8</sup> Innis S. Perinatal biochemistry and physiology of long-chain polyunsaturated fatty acids. *J Peds*. 2003;143(4):1-8.

<sup>9</sup> FDA and EPA. Advice about Eating Fish. <https://www.fda.gov/food/consumers/advice-about-eating-fish>. Current as of: 07/02/2019.

<sup>10</sup> Raine A, et al. Reduction in behavior problems with omega-3 supplementation in children aged 8-16 years: a randomized, double-blind, placebo-controlled, stratified, parallel-group trial. *J Child Psychology & Psychiatry*. 2015;56(5):509-520.

<sup>11</sup> Papamichael M, et al. Efficacy of a Mediterranean diet supplemented with fatty fish in ameliorating inflammation in paediatric asthma: a randomised controlled trial. *J Human Nutr & Dietetics*. 2019;32(2):185-197.