The Omega-3 & Seafood Guide

A Practical Reference for Brain, Heart & Healthy Aging

Why Omega-3s Matter

Omega-3 fats — specifically EPA and DHA — are structural building blocks in the body.

They support:

- Brain structure and communication
- Mood and emotional regulation
- Cardiovascular health
- Healthy inflammatory balance
- Cell membrane flexibility
- Metabolic resilience

Your brain is nearly 60% fat. DHA is one of its primary components.

In midlife — when hormonal shifts influence inflammation, cardiovascular risk, and cognitive clarity — omega-3 status becomes even more important.

Omega-3 vs. Omega-6: Why Balance Matters

Both omega-3 and omega-6 fats are essential.

We need both.

But they influence inflammatory signaling differently.

Omega-6 fats (common in seed oils and many processed foods) tend to promote inflammatory pathways when dominant.

Omega-3 fats help regulate and resolve inflammation.

Historically, humans consumed these fats in roughly a 1:1 to 4:1 ratio.

Today, many Americans consume 10–20 times more omega-6 than omega-3.

The goal is not eliminating omega-6.

The goal is restoring balance — and increasing marine omega-3 intake is one of the most effective ways to do that.

SMASH Fish: Your Omega-3 Foundation

Aim for 3–4 ounces (about the size of your palm), 2–3 times per week.

Fish	Standard Serving	Approx. EPA + DHA	Why It's Powerful
Salmon (wild)	3–4 oz	1,200–2,000 mg	Brain + heart support, rich in astaxanthin
Sardines	1 can (3.75 oz)	1,000–1,500 mg	Low mercury, high calcium
Mackerel (Atlantic)	3 oz	1,000–1,800 mg	Very omega-3 dense
Herring	3 oz	1,500–2,000 mg	Excellent omega-3 + vitamin D
Anchovies	~2 oz (8–10 fillets)	~1,000 mg	Tiny fish = tiny toxin load

Note: Choose Atlantic mackerel. Avoid king mackerel (higher mercury).

Anchovies: Small but Powerful

Anchovies are often overlooked, but nutritionally exceptional.

Why they're excellent:

- Small, short-lived fish
- Very low mercury
- Highly concentrated EPA + DHA
- Generally sustainable fisheries

Ways to use them:

- Blend into salad dressings (they dissolve)
- Add to tomato sauce for depth
- Mash into olive oil for roasted vegetables
- Add to sautéed greens

They provide savory richness — not a strong fish flavor when used properly.

Salmon Decoded: Wild vs. Farmed

Important Clarification

In the U.S.:

- Wild salmon sold commercially is almost always Pacific species (Sockeye, Coho, King, Pink, Chum).
- Atlantic salmon is almost always farmed.

If a label says “Atlantic salmon” and does not specify wild, assume it is farmed.

Salmon Comparison Guide

Label You See	Species	Wild or Farmed?	Omega-3 Level	What to Know	Practical Guidance
Wild Alaskan Salmon	Pacific	Wild	High	Natural diet, strong sustainability standards	Gold standard
Wild King (Chinook)	Pacific	Wild	Very High	Highest omega-3 content	Maximum omega-3 boost
Atlantic Salmon	Atlantic	Almost always Farmed	High	Farmed globally	Check sourcing
Farmed – Norway	Atlantic	Farmed	High	Strong regulatory oversight	Good alternative
Farmed – U.S.	Atlantic	Farmed	Moderate –High	Regulated but varies by producer	Acceptable with transparency
“Organic” Salmon	Usually Atlantic	Farmed	Varies	No consistent U.S. seafood organic standard	Look deeper

Simple rule:
Wild Alaskan first.
Norwegian farmed next.
Other farmed when sourcing is clear.

Salmon is a low-mercury fish.

Restaurant Fish Quick Guide

When ordering at a restaurant:

Best Omega-3 Boost

- Salmon
- Sardines
- Mackerel (Atlantic)
- Herring

Lean White Fish (Lower Omega-3, Generally Low Mercury)

- Cod
- Haddock
- Sea bream
- Branzino
- Flounder
- Sole

These are excellent protein choices, but generally not the best Omega-3 source. So just ensure fatty fish shows up elsewhere in your week.

Moderate Mercury (Enjoy Occasionally)

- Halibut
- Sea bass
- Yellowfin tuna

Limit

- Swordfish
- Shark
- King mackerel
- Tilefish
- Bigeye / ahi tuna

Shellfish vs Fatty Fish: Omega-3 Snapshot

Most shellfish are:

- Low in mercury
- Short-lived and low on the food chain
- Rich in minerals (zinc, selenium, iodine, B12)

- Excellent lean protein sources

From a toxin perspective, they are generally safe choices for most adults.

However, while shellfish do contain omega-3 fats, they are not as concentrated as fatty fish like salmon or sardines.

Think of them as a nutrient-dense protein — not your primary omega-3 strategy.

Shellfish (3 oz cooked):

- Mussels: 500–700 mg
- Oysters: 300–500 mg
- Shrimp: 200–300 mg
- Scallops: ~200 mg

Fatty fish (3–4 oz):

- Salmon: 1,200–2,000 mg
- Sardines: 1,000–1,500 mg

What If You Don’t Eat Fish?

Plant sources of omega-3 include:

- Flaxseeds
- Chia seeds
- Walnuts

These provide ALA (alpha-linolenic acid).

However, ALA must convert into EPA and DHA — and conversion is limited:

- Approximately 5–10% converts to EPA
- Approximately 0.5–5% converts to DHA

Research suggests this conversion may decline during and after menopause.

Plant omega-3s are supportive — but not equivalent to marine EPA and DHA.

If you do not eat fish at all, consider:

- Evaluating your intake
- Testing your Omega-3 Index
- Discussing supplementation with your healthcare provider

Testing Your Omega-3 Status

The Omega-3 Index measures EPA + DHA levels in red blood cell membranes and reflects intake over several months.

General interpretation:

- Less than 4% → Low
- 4–8% → Intermediate
- 8–12% → Optimal

Testing can help personalize your approach.

When Supplements Make Sense

Supplementation may be helpful if:

- You eat fish less than twice weekly
- Your Omega-3 Index is below 8%
- You avoid seafood
- You have higher inflammatory demand

When choosing a supplement, look for brands that clearly state third-party testing for heavy metals and contaminants.

If it's hard to find that information on the label or website, that's a red flag.

Because omega-3 fats are delicate, freshness also matters. A high-quality product should not have a strong fishy smell or aftertaste and should be stored properly. Many reputable brands include antioxidants to help protect against oxidation.

Consult your healthcare provider if taking blood thinners or managing medical conditions.

The Big Picture

- Eat fatty fish 2–3 times weekly
- Choose smaller fish often
- Limit large predatory fish
- Restore omega-3 to omega-6 balance
- Consider testing if curious

Omega-3s support brain clarity, emotional steadiness, cardiovascular health, and long-term resilience. Small, consistent choices compound over time.