



The Malaysian Omega Audit

A plain-English guide to your omega-6 : omega-3 balance —
what it is, where yours leaks, and the simple swaps that move
it.

A FREE GUIDE FROM MYOMEGAHEALTH

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The ratio, in 60 seconds

Omega-3 and omega-6 are both essential fats. The thing that matters is the **balance** between them — not the totals.

Your cells build their membranes from whichever fat is most available. When omega-6 dominates, the cellular response leans that way too. Think of a kitchen with two ingredients: if every dish has 20 spoons of chili to 1 of sugar, everything tastes of fire.

For most of human history the omega-6:3 ratio sat near **1:1 to 4:1**. The modern Malaysian diet runs closer to **15:1 to 20:1**.



Darker = omega-6 · red = omega-3. Illustrative.

The good news: unlike most health markers, your omega ratio is **measurable, modifiable, and trackable**. You can know your number, change it, and confirm it moved.



02 · HOW WE GOT HERE

How Malaysian diets drifted

Two generations ago this wasn't a problem — a typical kitchen ran near 5:1 without trying. Three independent shifts changed that:

1. Cheap industrial seed oils (1970s–90s)

Refining made it cheap to extract oil from soy, sunflower, corn, and palm at scale. The cheapest cooking fat stopped being lard or coconut — a price decision, not a health one.

2. Eating out scaled (1990s–2010s)

Mamak, fast food, instant noodles, kerepek — all built on the cheap-oil supply. A typical urban Malaysian now eats out or from packaged sources for 50–70% of meals.

3. The fish changed (2000s on)

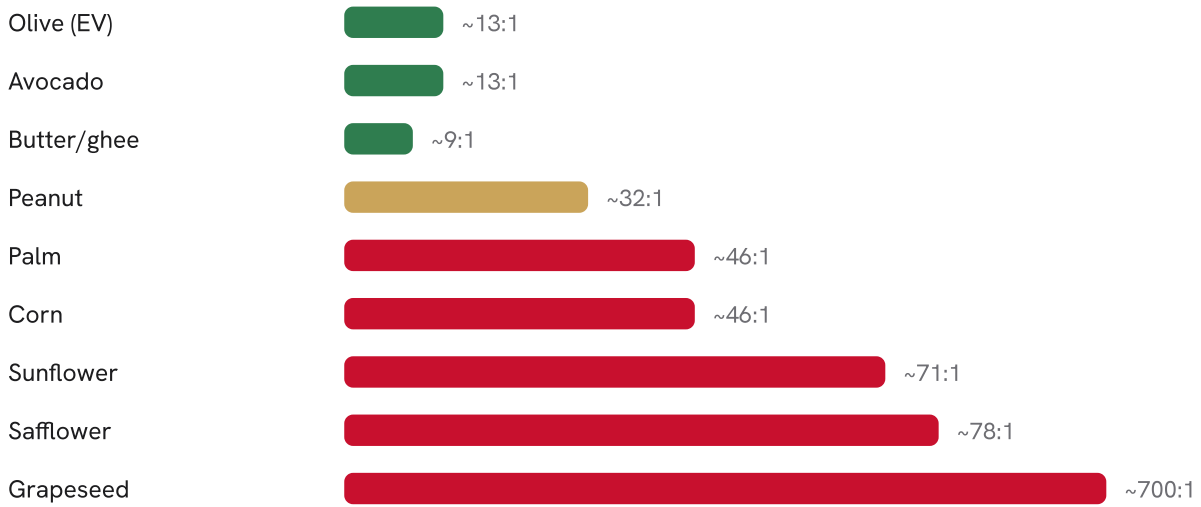
Farmed, grain-fed fish replaced the wild small fish (ikan bilis, kembung, selar) that once supplied most omega-3 — and those quietly fell out of fashion.

No single villain

Three structural changes that, together, pushed the ratio toward 15–20:1. That is why the biggest lever is cutting seed-oil exposure — not adding one fish meal.

Cooking oils, ranked

Common oils by omega-6:3 ratio. Lower = closer to the balance your body wants.



Bars capped at 100 — grapeseed would run off the page.

What to use when

- **Cold** (salads, drizzle): extra virgin olive
- **Medium heat**: olive or avocado
- **High heat**: coconut or refined palm — sparingly

Watch out for

- Sunflower, safflower, corn, grapeseed
- Hidden in dressings & packaged snacks
- Re-used / repeatedly heated oil

**Flaxseed's omega-3 is plant ALA — the body converts only ~5-10% into the EPA/DHA cells use. A useful habit, not a substitute for oily fish. And frying less often beats swapping which oil you fry in.*

The 10 biggest omega-6 sources

None are "bad" on their own — it's the daily, cumulative dose that quietly shifts the ratio. This is simply where most of it comes from in a Malaysian diet.

- 1 Deep-fried hawker & mamak food (fried in seed or palm oil)
- 2 "Vegetable oil" blends used at home and in most restaurants
- 3 Kerepek and packaged fried snacks
- 4 Instant noodles
- 5 Biscuits, pastries, and kuih made with refined oils
- 6 Fast food
- 7 Repeatedly re-heated frying oil
- 8 Farmed fish (e.g. tilapia) — grain-fed, higher in omega-6 than wild
- 9 Seed-oil salad dressings and mayonnaise
- 10 Sunflower, corn, and grapeseed oils for everyday cooking

You don't have to eliminate these — just notice how often they show up in a normal week. Awareness is the first swap.



05 · THE FISH THAT COUNT

Wild vs farmed — and what to favour

A fish is only as good as what it ate. Wild salmon eats algae and small fish; farmed salmon eats corn and soy feed — so the omega numbers diverge sharply.

PER 100 G	WILD SALMON	FARMED SALMON
Omega-3	~2.5-3 g	~1.0-1.5 g
Omega-6	low	3-5x higher
Feed	algae, krill, small fish	corn, soy, fish oil

Favour these in Malaysia

- **Wild small fish** — ikan kembung, ikan bilis, sardines (canned in olive oil or water, *not* soybean oil)
- **Wild deep-sea fish** — tenggiri, kerisi, wild siakap
- **Saba (mackerel)** at Japanese restaurants — usually wild, very high omega-3
- **Frozen wild salmon** — often cheaper than fresh, just as nutritious

"Salmon" on a Malaysian menu is almost always farmed (Norway/Chile). Not bad fish — just not the omega-rich fish you might assume. The small, humble local fish often win.

The 70/30 rule

Reducing omega-6 moves your ratio further than adding omega-3 does.

Your cells use whichever fat is most available. At a 20:1 ratio they reach for omega-6 about 95% of the time — so adding fish oil while everything else stays the same barely moves the number. The math, made concrete:

- Start: 30 g omega-6 + 1 g omega-3 = **30:1**
- Add 1 g omega-3 (a capsule) → **15:1**. Small win.
- Cut omega-6 to 10 g → **10:1**. Bigger win.
- Do both → **5:1**. Massive shift.

~70% subtraction · ~30% addition

Subtract: cook at home more, fewer fried meals, switch your everyday oil. Add: oily fish 2-3× a week, or a quality marine omega-3.

100%

Plant ALA eaten

7%

Converted to EPA
at best

1%

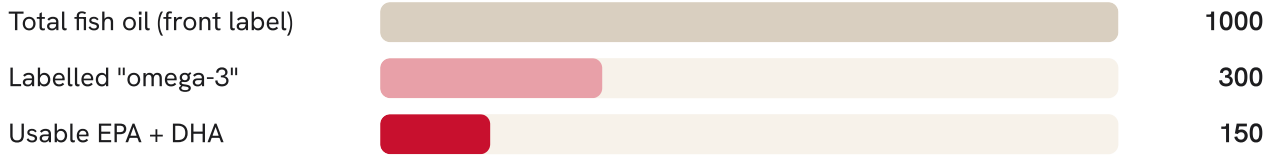
Converted to DHA

How little plant ALA (flax, chia, walnuts) becomes the EPA and DHA cells use.

That is why marine EPA & DHA move the needle more per gram than plant ALA.

How to read a fish-oil label

The big number on the front is marketing. Here is what a typical "1000 mg fish oil" capsule actually contains:



mg per capsule. Only the EPA + DHA does the work.

The two specs most brands hide

- **EPA + DHA per serving** — add the two; that is your real dose. Watch the serving-size trap (figures may be per 2 capsules).
- **Totox (freshness)** — oxidation score. Industry ceiling 26, premium under 10, best under 5. Not printed? Ask for the batch Certificate of Analysis; no answer is your answer.

Also worth knowing: triglyceride (TG) form absorbs better than ethyl ester (EE); small fish (anchovy, sardine) carry less heavy metal than large ones.

How much do you actually need?

What counts is combined EPA + DHA, not total fish oil. Reference points (educational, not a prescription):



EFSA-approved claims: EPA and DHA contribute to the normal function of the heart; DHA contributes to the maintenance of normal brain function and normal vision — with a daily intake of 250 mg of EPA and DHA combined.

Many cheap capsules deliver only 120-180 mg EPA+DHA each, so a "60-capsule" bottle can be a 20-30 day supply, not 60. Always do the per-serving math. For your own dose, especially with any health condition, speak to a qualified professional.

Your one-week swap plan

Small, realistic changes — one a day. This week is for building the habit, not chasing a number.

Day 1 Swap your home cooking oil to extra virgin olive oil.

Day 2 Eat one wild oily-fish meal — mackerel, sardines, or ikan kembung.

Day 3 Skip fried snacks. A handful of walnuts or some yogurt instead.

Day 4 Cook breakfast at home (skip the mamak / fast-food breakfast).

Day 5 Add a flax- or chia-seed smoothie.

Day 6 Eat at home for both lunch and dinner.

Day 7 Repeat your favourite three changes from the week.

In seven days your habits change, not your blood — the cellular shift takes about 8-12 weeks. Track meals cooked at home and oily-fish servings; the ratio follows over the next few months.

Measuring your ratio

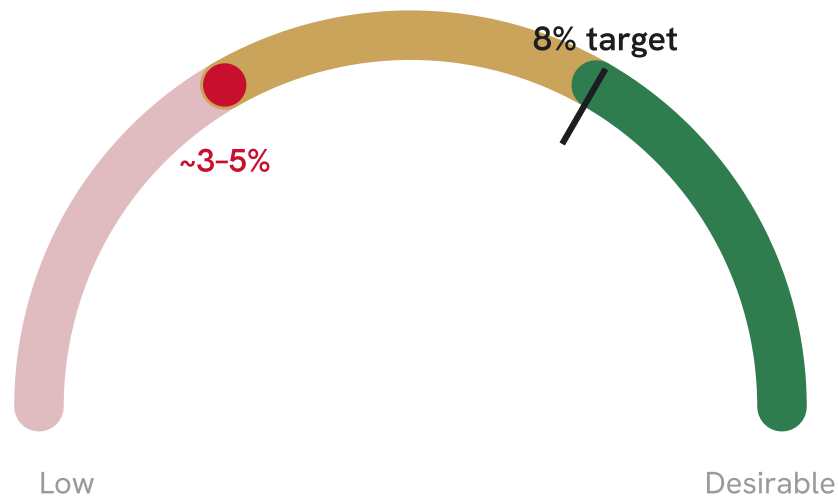
An omega blood test usually reports two numbers worth knowing:

Omega-6:3 ratio

- 1:1 - 3:1 — optimal range
- 4:1 - 9:1 — better than average, room to improve
- 10:1 and up — where most modern people start

Omega-3 Index

The share of EPA + DHA in your red blood cell membranes — a long-term marker. Above 8% is the researched target; most modern people test 3-5%.



Re-test at 90–120 days

Cellular fatty acids turn over slowly. Test, change your inputs, and re-test after ~3–4 months to see real movement — not after a week.

Omega balance on RM50 a month

You are not paying for "fish oil" — you are paying for grams of fresh, usable EPA + DHA. On a tight budget, fresh food usually beats a cheap supplement.

The cost-per-gram check

A "cheap" RM50 / 60-capsule bottle at 150 mg each works out to ~**RM5.56 per gram** of EPA+DHA. A better liquid at RM150 with 1500 mg per serving is ~**RM3.33 per gram** — and half of pharmacy bottles exceed the Totox 26 freshness ceiling anyway.

A realistic RM50 month

- **Month 1:** skip the supplement — buy fresh sardines or ikan kembung weekly. Two portions a week shifts your ratio more than a low-dose capsule.
- **Month 2:** switch your cooking oil to a decent olive oil for non-frying use.
- **Month 3:** take the free 2-minute check, then decide whether the next RM50 belongs in a supplement at all.

FAQ & what's next

How fast will I notice a change?

Habits shift immediately; cellular omega-3 takes 8-12 weeks. Subjective changes (energy, sleep) are commonly reported but vary person to person — not guaranteed.

Plant or marine omega-3?

Both help. Marine EPA/DHA is the more reliable lever per gram — plant ALA converts only ~5-10% to EPA.

Is fish oil halal?

Depends on the capsule shell and certification — look for JAKIM plus a marine or plant-based shell, and a brand transparent about its source.

Pregnant, or buying for a child?

These have specific, individual considerations — please speak with your doctor or obstetrician. This guide is general education, not personal medical advice.

See where your own habits land

Take the free 2-minute check · myomegahealth.com/quiz

This guide is educational and observational. It does not diagnose, treat, or cure any condition, and subjective experiences vary from person to person. Always consult a qualified healthcare professional for personal advice. myomegahealth is an independent omega-3 education resource.