

Who? Knew?

Is this better than that?

BY DAVID SCHARDT

IS KRILL OIL BETTER THAN REGULAR FISH OIL?

Krill oil is “a slam dunk winner over fish oil,” claims Joseph Mercola’s popular Web site mercola.com. Quebec-based krill-oil marketer Neptune Technologies and Bio-resources agrees.

Neptune Krill Oil is “clinically proven for cholesterol management,” says the company’s Web site.¹ It’s also “clinically proven to reduce premenstrual symptoms” and “to improve joint health in only 7 days.”^{2,3} And all of those claims have been approved by Health Canada.



Only company-funded studies have concluded that krill oil is better.

What’s going on here?

Krill are shrimp-like crustaceans that occupy a spot near the bottom of the Antarctic Ocean’s food chain. They are eaten by whales, seals, penguins, squid, and fish. Krill oil, like all fish oil, contains EPA and DHA, the two omega-3 fats that help prevent sudden cardiac arrest.

“There’s some evidence that maybe 20 or 30 per cent more EPA and DHA is absorbed from krill oil than from regular fish oil,” says omega-3 expert William Harris of the University of South Dakota’s Sanford School of Medicine. “But it’s not that much more to warrant krill oil’s much greater cost.”

The DHA and EPA in krill oil cost at least 10 times more than the omega-3s in regular fish oil (which typically comes from menhaden, sardines, and herring).

Based on unpublished research by

Decisions, decisions. What we eat often comes down to weighing whether A is better than B. Fried or baked? Butter or margarine? White meat or dark? Organic or conventional? National or store brand?

In some cases, the answers are no-brainers. In others, not so much. Here’s a little help with a few you may have wrestled with.

Neptune, Health Canada approved a health claim that the company’s krill oil can lower cholesterol levels—but only in combination with a statin drug. That’s a wrinkle Neptune doesn’t make clear on its Web site. For those not taking a statin-like drug, krill oil is no better than a placebo.⁴

The claims for PMS and arthritis are based on Neptune-funded studies and haven’t been tested by other researchers.

Is krill oil better? NO.

IS CALCIUM CITRATE BETTER THAN CALCIUM CARBONATE?

“There is a difference between calcium supplements,” claims the Citracal Web site. “Citracal is made with calcium citrate. Unlike calcium carbonate (the main ingredient in many other calcium supplements), calcium citrate does not need stomach acid to be broken down.”

That’s true. So if you typically take calcium on an empty stomach, citrate is the way to go.



To get 600 mg of calcium, it takes two citrate pills but just one carbonate pill.

“But if you take your calcium supplement with a meal, there’s no significant difference between calcium carbonate and

calcium citrate pills,” notes Robert Recker, director of the Osteoporosis Research Center at Creighton University in Omaha, Nebraska. That’s true even for people who take drugs for acid reflux like Gaviscon or Zantac, which reduce stomach acid.

What’s more, calcium carbonate is cheaper and less bulky. To get the same amount of calcium, you need to take twice as much citrate as carbonate.

A recent analysis of past studies suggested that taking calcium supplements is linked to a slight increase in the risk of heart attacks.⁵ (See Quick Studies, p. 10.) Until more is known, shoot for no more than the Recommended Dietary Allowance (RDA)—1,000 milligrams a day from food and supplements combined for women 50 and under and men 70 and under, and 1,200 mg a day for people older than that.

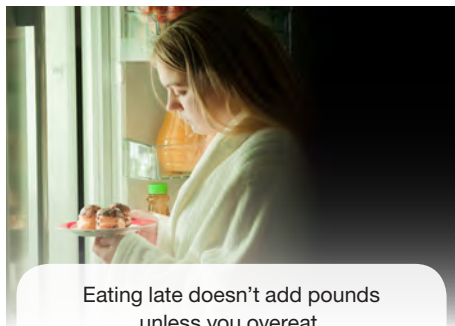
And there’s no point in taking more than 500 mg of calcium at a time, since the intestinal tract can’t efficiently absorb more than that in a single dose, says Recker.

Is calcium citrate better? DEPENDS.

IS EATING EARLIER IN THE DAY BETTER THAN EATING LATE?

Weight Watchers, the Atkins Diet, and the South Beach Diet have all told dieters to limit the food they eat at night. For generations, people have believed that food consumed when they’re less physically active is more likely to be stored as fat than burned for energy.

But that’s not based on hard evidence. When researchers tracked the eating



Eating late doesn't add pounds unless you overeat.

habits and body weights of more than 7,400 U.S. men and women for 10 years, for example, the percentage of their daily calories that they ate after 5 p.m. had no bearing on changes in their weight.⁶

"I know of no credible evidence that the time of day has any impact on the storage of fat," concludes Albert Stunkard, an obesity expert at the University of Pennsylvania School of Medicine in Philadelphia.

On the other hand, if you eat *extra* calories because you're tired or bored or stressed (and nighttime is when you're more likely to do that), expect *those* to eventually show up around your waist.

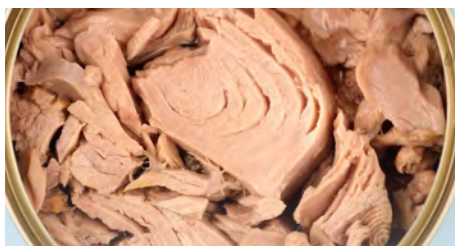
Is eating earlier better? NO.

IS CANNED LIGHT TUNA BETTER THAN ALBACORE?

Light tuna typically has much less mercury than white (albacore) tuna. That's because albacore is a larger, more predatory species than skipjack tuna, which is canned as light tuna.

In January, *Consumer Reports* magazine analyzed 42 cans and pouches of tuna purchased in the New York metropolitan area. The light tuna samples averaged 0.07 parts per million of mercury, while the albacore averaged 0.43 ppm—six times as much. Those results also likely reflect what's in canned tuna sold in Canada.

Health Canada's advice: Women who are pregnant or nursing should consume no more than 300 grams of canned



Canned light comes from smaller skipjack tuna, which has less mercury.

albacore tuna (roughly 2 drained 170-gram cans) a week, children aged 5 to 11 no more than 150 grams (1 can) a week, and children aged 1 to 4 no more than 75 grams (½ can) a week. There are no limits on canned albacore for anyone else and no limits on canned light tuna for anyone.

If you're willing to spend more, you can find albacore with mercury levels much closer to those of light tuna, says Michael Morrissey, director of the Oregon State University Seafood Laboratory in Corvallis.

It comes from smaller, juvenile Pacific albacore that are pole- or troll-caught in the coastal waters off British Columbia, Oregon, and Washington state. The juveniles, which haven't had as much time to accumulate mercury as larger albacore, average about 0.14 ppm of mercury.

Northern Pacific pole- or troll-caught albacore is one of just six "Best of the Best" species on the "Super Green" list of California's Monterey Bay Aquarium.

Green-list species are low in mercury and PCBs, rich in omega-3s, and "abundant, well-managed, and caught or farmed in environmentally friendly ways." (The other five species: wild-caught Alaska salmon, farmed rainbow trout, wild-caught Pacific sardines, farmed oysters, and freshwater coho salmon farmed in inland tank systems in the United States.)

Two brands of canned northern Pacific albacore—Raincoast and Wild Planet—are sold at Loblaws, Whole Foods Market, and some health food stores.

Is light canned tuna better? YES.

ARE LYCOPENE PILLS BETTER THAN TOMATOES?

Tomatoes and prostate cancer have been linked since 1995, when Harvard researchers reported that among the nearly 48,000 men in their Health Professionals Follow-Up Study, those who ate at least 10 servings of tomatoes (including tomato sauce) a week were one-third less likely to be diagnosed with prostate cancer than those who ate fewer than 1½ servings a week.⁷

Since then, however, most studies that tracked the eating habits of large groups of men for years have seen no link between prostate cancer and either tomatoes or lycopene, the major carotenoid in tomatoes.

Ideally, researchers would feed men tomatoes or give them lycopene or a

placebo and wait to see how many in each group get prostate cancer. But that kind of study is expensive and difficult to pull off, so it isn't likely to be done.

"We do have impressive animal studies, though," says lycopene researcher John Erdman of the University of Illinois.

In one, rats exposed to a prostate-cancer-causing chemical who consumed a diet containing finely ground dried whole tomatoes were 26 per cent less likely to die of prostate cancer than rats who got lycopene or a placebo.⁸ And when Erdman and his research group transplanted prostate tumours into rats, the tumours grew more slowly in those given tomato powder, but not in those given lycopene.⁹



Lycopene isn't the only important compound in tomatoes.

"It looks like you may need an array of bioactive ingredients that you find in the whole tomato," says Erdman. "Lycopene is one of the important components, but it's not the only one."

Of course, rats aren't people. "Eating tomatoes may or may not protect men from prostate cancer," concedes Erdman. "Still, they're a nourishing food." As for lycopene pills, "it doesn't make sense for men to take them in place of eating tomatoes."

To absorb the most carotenoids from tomatoes, eat them cooked, says Erdman. Or, if they're in a salad, make sure the dressing or the rest of your meal contains at least 10 grams (two teaspoons) of fat.

Are lycopene pills better? NO. 🍅

¹ *Altern. Med. Rev.* 9: 420, 2004.

² *Altern. Med. Rev.* 8: 171, 2003.

³ *J. Am. Coll. Nutr.* 26: 39, 2007.

⁴ *Lipids* 46: 37, 2011.

⁵ *BMJ* 342: d2040, 2011.

⁶ *Int. J. Obes. Relat. Metab. Disord.* 21: 407, 1997.

⁷ *J. Natl. Cancer Inst.* 87: 1767, 1995.

⁸ *J. Natl. Cancer Inst.* 95: 1578, 2003.

⁹ *Cancer Res.* 67: 836, 2007.

Have a question for a future
"Is this better than that?"?
E-mail betterthan@cspinet.org.