

## In this issue:

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## Why omega-3s are mega good!

When it comes to ingredienthealth relationships, the science is often contradictory. Some studies might find that a certain nutrient or active compound has health benefits, while others will show the opposite. Still others might find that the ingredient in question actually has no effect, and that more research is needed to clarify the relationship.

This isn't the case with omega-3 fatty acids. The body of scientific evidence supporting the health benefits of omega-3s is robust, including more than 2000 randomized, controlled human studies. In fact, more research has been done on omega-3s than any other nutritional ingredient.

In honour of our omega-3 issue, we've summarized the areas of omega-3 research that have the strongest body of evidence and what this information means for your health.

#### Cardiovascular Disease Prevention

The current consensus: According to several large metaanalyses, supplementation with omega-3s (in the form of fish oil, which contains the omega-3 fatty acids EPA and DHA) is significantly associated with a reduced risk of death overall, as well as death from cardiovascular disease.

**The takeaway:** Taking fish oil supplements containing EPA plus

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DHA can protect you from developing heart disease later in life.

#### Coronary Heart Disease

The current consensus: Individuals with low blood levels of omega-3s, particularly EPA and DHA, have an increased risk of adverse cardiovascular events such as heart attack and stroke.

The takeaway: If you don't consume enough omega-3s (regulatory and scientific organizations recommend at least 250-500 mg of EPA and DHA per day), you have a greater risk of suffering a potentially life-threatening cardiovascular event.

#### Triglyceride Lowering

The current consensus: Consumption of omega-3s in the form of fish oil has been shown to significantly reduce serum triglycerides in a dosedependent manner.

The takeaway: Fish oil supplementation can help reduce your risk of cardiovascular disease by lowering blood triglyceride levels.

#### Blood Pressure Lowering

The current consensus: Increased omega-3 intake has been shown to decrease blood pressure, a key factor implicated in cardiovascular disease development.

The takeaway: Consuming more omega-3s can help reduce your risk of heart disease by lowering blood pressure.

Sources: Atherosclerosis; British Medical Journal; Global Organization for EPA and DHA Omega-3 (GOED); Natural Standard; Journal of the American College of Cardiology

## Ask Jenny: Natural Health Products



Jennifer Molnar, M.Sc., a nutritional scientist at NDI, an-

swers all your burning questions about the not-sostraightforward world of natural health products (a.k.a. dietary supplements).

Q: I'm vegetarian. What should I look for when choosing an omega-3 supplement? *Jessica H., Guelph, ON* 

A: Unfortunately for vegetarians and vegans, the most popular and well-researched omega-3 natural health products are derived from animal sources, namely fish oil and krill oil. Although omega-3s naturally occur in a number of plant-based foods, it is difficult to reach optimal omega-3 intake levels (particularly EPA and DHA, the two major types of heart-healthy omega-3s) from the diet alone. This is true even for meat-eaters.

Luckily, there are other vegetarian-friendly omega-3supplements to choose from. Algae supplements, which deliver DHA—and sometimes EPA too, depending on the brand are becoming increasingly popular. Look for approved products (those with an 8-digit NPN [Natural Product Number] or EN [Exemption Number]) containing algae (one example is *Echium plantagineum*).

Whichever product you pick, make sure to read the label carefully—supplements containing plant-based medicinal ingredients still might be packaged in capsules made from gelatin (which is derived from animal bone marrow and/or skin). Check the list of non-medicinal ingredients to be certain.

Q: What's the deal with omega 3-6-9 supplements? Do I need to get all three fatty acids from a supplement? *Petra M., Mississauga, ON* 

The short answer is: not really! Let me explain...

These popular, widely available products contain a mixture of omega-3, omega-6 and omega-9

fatty acids. Omega-3s cannot be made in the body and therefore must be obtained from the diet. Although extensive research has revealed numerous health benefits of omega-3 consumption, most North Americans don't get enough. In short, taking an omega-3 supplement is a good idea.



This is where things get more complicated. When it comes to omega 3-6-9 supplements, the first red flag to be aware of is that omega-9s are actually *not* essential—we can make them in our bodies. In other words, you're paying money for an ingredient you are probably getting enough of already.

Some omega-6s, on the other hand, *are* essential and must be acquired from the diet. From a nutritional perspective, humans

should be eating up to 4 times more omega-6s than omega-3s (i.e., a ratio ranging from 1:1-4:1 of omega-6s to omega-3s). However, unlike omega-3s, omega-6s are exceedingly common in the typical North American diet. Because the Westernstyle diet contains far too much omega-6s and not nearly enough omega-3s, you are likely already eating too much omega-6s (which, again, you are paying for when you buy your supplements).

Instead of opting for an omega-3 -6-9 supplement, keep it simple: aim to increase your intake of omega-3 fatty acids. This can be done by taking an omega-3 supplement like fish oil or by eating more omega-3-rich foods like fatty fish. (check out our feature recipe on page 3 for ideas!).

Sources: Health Canada; American Heart Association; Biomedicine & Pharmacotherapy; Experimental Biology and Medicine; Food Reviews International; Lipids in Health and Disease

> Have a question? Just ask! newsletter@nutrasource.ca

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## Krill oil

What is it? Krill oil is derived from the body of Pacific krill (*Euphausia pacifica*) and Antarctic krill (*Euphausia superb*). Krill oil has become a popular supplement due to its content of omega-3 fatty acids.

What does it do? Supplementation with krill oil has been shown to improve blood lipid parameters including reduced glucose, total cholesterol, LDL cholesterol and triglycerides and increased HDL cholesterol.

**Is it safe?** Krill oil has been administered to humans at high doses with no adverse effects. The Natural Health Products Directorate of Health Canada recommends an upper limit of 4.1 g per day of krill oil. Consult a health care practitioner prior to use if you have a preexisting medical condition, are taking prescription medication, or are pregnant or breast-feeding.

Sources: Alternative Medicine Review; Health Canada; Lipids; Nutrition Research; Nutrition Reviews

## Feature Recipe: Maple-Glazed Salmon with Wilted Sesame Spinach

This Asian-inspired salmon dish offers a pleasant blend of savoury, salty and sweet flavours, the latter of which is thanks to the addition of pure Canadian maple syrup. You can purchase the salmon pre-cut into serving pieces or as a whole fillet. Serves 4.

## For the salmon:

#### Ingredients

Just one serving of farmed Atlantic **salmon** (2½ oz, or ½ cup), contains 3.3 g of goodfor-you polyunsaturated fatty acids, including 1.09 g of DHA and 0.52 g of EPA.

- 1 large (about 1½) skinless salmon fillet, cut into 4 serving pieces
- ¼ cup pure Canadian maple syrup
- 2 tbsp low-sodium soy sauce
- 1 tsp Dijon mustard

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- 2 tbsp fresh lemon juice
- 2 green onions, thinly sliced

#### Directions

Preheat oven to 425°F. In a bowl combine the maple syrup, soy sauce, mustard and lemon juice. Place salmon fillets on a parchment -lined baking sheet and brush with the glaze. Bake for about 10-12 minutes, or until fish flakes easily with a fork. Keep warm until it's time to serve.

## For the spinach:

#### Ingredients

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• 1 tbsp white sesame seeds



A recent study found that pure **maple syrup** contains 20 active compounds that are beneficial to health, some of which have never been seen in nature before. These phenolic compounds have beneficial antioxidant, anticancer and anti-inflammatory properties.

- 5 cups fresh baby spinach
- 1 tbsp canola or peanut oil
- 1 tbsp low-sodium soy sauce
- 3 tbsp dark sesame oil
- 2 cloves garlic, finely chopped

#### Directions

Toast the sesame seeds in a large dry pan over medium heat; reserve. In

the same pan, add the oil and heat over medium heat. Add the garlic and cook for 30 seconds before adding the spinach. Cook, stirring occasionally, until the spinach is slightly wilted. Remove pan from heat. Add the soy sauce and sesame oil, tossing to coat. Sprinkle with the toasted sesame seeds and serve warm along-

Cooked **spinach** is practically bursting with disease-fighting nutrients including betacarotene, vitamin A and folate.

Source: Health Canada

## In Season Now: Asparagus

Those interested in supporting local agriculture will be happy to hear that asparagus is grown in Ontario during the months of May and June. Asparagus is high in vitamin C, vitamin A and folacin and is a source of antioxidants and soluble dietary fibre. Plus, one half-cup serving of cooked asparagus contains only 24 calories!

Asparagus can be steamed, oven-roasted, added to stir-fries or even grilled. Some suggestions for serving cooked asparagus include dressing it with olive oil, wrapping it in thinly-sliced ham or prosciutto, or sautéing it with garlic and wild mushrooms.

Sources: Foodland Ontario; Journal of Nutrition; Journal of Physiology and Biochemistry



## Words of wisdom: 3 easy ways to boost your omega-3 intake

Instead of	try:
Conventional barbecue favourites like chicken breasts, beef burgers and pork sausages	Grilled salmon skewers, tuna steaks and salmon bur- gers
Regular eggs in your omelet	Omega-3 enriched eggs (they're produced from hens fed omega-3-rich flaxseed)
Pizza topped with pepperoni, bacon or sausage	Anchovy pizza! It's not as 'fishy' tasting as you might think



We want to hear from you!

If you have a question or comment, or would like to see a certain topic covered in the next issue, we're all ears! Simply send us an email (newsletter@nutrasource.ca) or connect with us on Facebook, Twitter and our blog.



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