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Health, wellness and living your best life - *naturally.*

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Hot Topic: Genetically Modified Foods *Should you take note of this hot button issue?*

The GMO debate is a hot topic. As a consumer you may be asking how this issue affects you and your family. What most consumers may not be aware of is that lurking in the aisles of your neighbourhood market, under shiny packaging and bright lights, are an abundance of genetically modified organisms (GMOs). Food manufacturers estimate approximately seventy percent of processed foods contain GMOs, with a handful in whole foods as well.

What are GMOs anyway?

A genetically modified organism is one that has had its genetic material manipulated in order to give it new characteristics. This allows manufacturers to produce foods that, for example, are resistant to insects, extreme heat or drought. Among the many GMO foods and food ingredients, 90% of soy produced in the United States is genetically modified, as is 85% of corn and 90% of cottonseed. Most crops using GMOs are grown in large industrial farms, and are then processed into hundreds of other ingredients that show up in our food supply as corn syrup, soy lecithin or canola oil, to name a few. Processed foods aren't the only GMO culprit as some strains of vegetables, fruits and legumes are grown using GMOs in order to protect manufacturers from loss due to insects, drought or excessive heat.

As genetically modified ingredients became more prevalent in our grocery stores, consequently so did the controversy associated with the potential risks to consumers. Advocates of GMOs insist that there is no clear scientific proof that GMOs are detrimental to humans; their opponents believe there is not enough long-term data to substantiate their claim.

Recently, GMOs have again hit the mainstream media as many stateside governments work to pass new legislation which would require labeling of all products containing GMO ingredients. The US Senate recently squashed a measure that would have required GMO labelling, an existing regulation in the European Union. However, in over a dozen states including California and Connecticut, the fight for transparency continues. These efforts are aided in part by Just Label It, a grassroots campaign, with support from over 600 organizations.

Similar to the United States, labelling of genetically engineered ingredients in Canada is completely voluntary. GMOs in Canada are regulated by Health Canada, as foods derived from biotechnology.

As a consumer what can you do?

Get educated! Form your own judgments and learn how you can spot and avoid genetically engineered foods if you choose to. As a general rule eat whole, non-processed foods to avoid the vast majority of genetically modified ingredients. Looking to cut GMOs completely out of your diet? Eating 100% certified organic products is the best way to avoid GMOs altogether.



Sources: Health Canada; Just-Label It; Non-GMO Project.

Ask Jenny: *Natural health products*



Jennifer Andrews, M.Sc., a nutritional scientist at Nutrasource Diagnostics, answers all your burning questions about the not-so-straightforward world of natural health products.

Q: Can Omega-3 supplements protect me from the sun?

Sources: Health Canada, 2010; Men's Health, 2013; New Hope 360, 2013

A: While there is no supplement that should be taken in the place of sunscreen, consider adding more omega-3s to your diet by eating oily fish such as salmon or by taking a supplement. In addition to the potential sun protection, omega-3s have heart, brain and anti-inflammatory benefits.

Recently, researchers at The University of Manchester found that omega-3 fatty acids may help protect skin from sun damage and potentially skin cancer. In the first clinical trial of its kind, researchers examined the relationship between omega-3 supplementation and skin immunity.

During the trial, 79 healthy volunteers took a 4-g dose of omega-3 derived from oily fish and were then exposed to either 8, 15 or 30 minutes of summer midday in Manchester.

The study found that immunosuppression was 50% lower in people who took the omega-3 supplement and were exposed to 8 or 15 minutes of sunshine.

The results published in the American Journal of Clinical Nutrition suggest that getting your daily dose of omega-3 fatty acids could make you more immune to sunlight by decreasing the inflammation in skin tissue.

This summer, I'd suggest suntan lotion of at least 15 SPF with a diet rich in omega-3 fatty acids, to protect yourself from the sun's harsh rays.

For a burn free summer, I suggest apply sunscreen of at least 15 SPF 30 minutes before sun exposure to allow the ingredients to fully bind to the skin. Remember to reapply immediately after swimming, toweling off or sweating excessively.



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

What's trending in the world of supplements?

The natural health product industry is constantly evolving. From “The Dr. Oz effect” to changing demand patterns, here are the latest facts, figures and trends in the supplement industry to help keep you in the know.

Market Watch

Nutraceutical product market expected to reach **\$204 billion** by 2017

Fish oil market forecast to reach **\$1.7 billion** by 2018

In 2012, the US natural health products market was valued @ **\$99 billion**, **supplements accounted for \$12 billion**

In a recent study of supplement buying habits it was found that **multivitamin-mineral products** were most frequently taken, followed by **calcium** and **fish oil supplements**.

Dh! Mega Three Fatty Acids
\$30 Billion:

The value of retail sales of omega-3 fortified functional food products in 2012

In the past **12** months alone, over **150** human clinical trials have been conducted documenting the benefits of **OMEGA-3** fatty acids

TRENDING

The protein market is hot. On top of more protein supplements, we can guarantee you'll see added protein in your favourite foods such as yogurt, hummus, and even pizza!

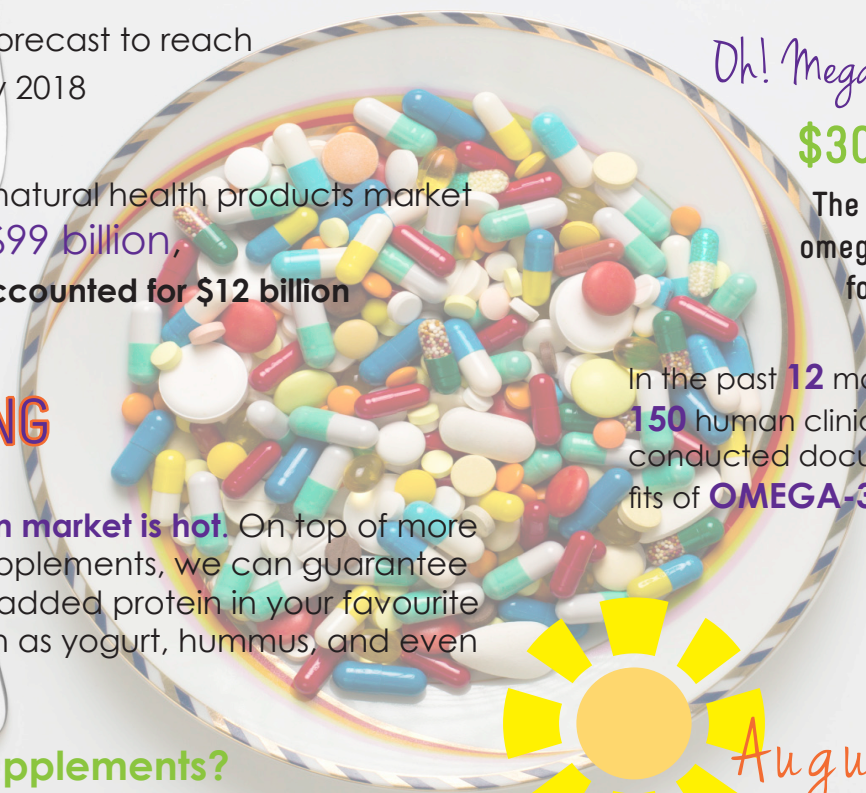
GMO free supplements?

“Suppliers aren't there with us yet.” according to manufacturers



August...

The month when vitamin D absorption is at its highest!



Sources: Medical Daily, 2013; Natural Products Insider, 2013; NewHope 360, 2013; Nutraceuticals World, 2013; Nutra-Ingredients USA, 2013.

What's in season this Summer...

Blueberries

Affectionately known as nature's candy, berries are among the most nutrient-dense foods available. Blueberries are no exception!

The tiny blue orbs are rich in disease-fighting antioxidant compounds called anthocyanins. These powerful plant pigments have been linked to numerous health benefits including protection against atherosclerosis (hardening of the arteries), ischemic stroke, neurodegenerative diseases (such as dementia) and certain cancers.

A half-cup of fresh blueberries (125 ml) contains just 44 calories plus a generous helping of dietary fibre. Enjoy raw or add fresh or frozen blueberries to cereals, smoothies, muffins and breads. Blueberries are also a flavourful addition to salads.



Tomatoes

Classified as a vegetable for culinary purposes, the tomato is actually a fruit in the botanical sense. No matter what you call 'em, tomatoes are bursting with good-for-you nutrients including lycopene and other carotenoids, folate and vitamins A, C and E.

Lycopene specifically has been researched extensively for its antioxidant and cardioprotective properties. One medium tomato (123 g) contains just 22 calories and 3165 µg of lycopene, a relatively high quantity compared to other fruits and vegetables. Cooked tomatoes such as stewed tomatoes, tomato sauce and tomato paste contain even more lycopene than raw – almost double the amount!

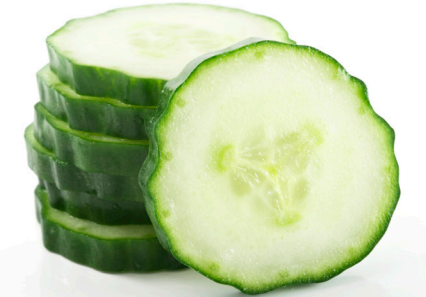
Try raw tomatoes in fresh summer salads with olive oil and basil, or on sandwiches and pasta. To benefit from the added lycopene in cooked tomatoes, grill or roast them to serve alongside meat dishes, or opt for tomato-based sauces and soups.



Cucumber

Cucumbers - There really is something to the saying, “cool as a cucumber”: a cuke's internal temperature is several degrees colder than the air temperature thanks to its 90%+ water content. Water-rich cucumbers help keep the body hydrated and are also low in calories compared to other vegetables (4 slices [28 g] contain just 14 calories!).

But that doesn't mean they don't pack a nutritional punch. Cucumbers contain potassium (a heart-healthy electrolyte) plus some vitamin C and beta-carotene. But don't peel them – the peel is a source of dietary fibre which helps aid digestion.



Sources: Department of Biological Science and Technology, China Medical University; Health Canada, 2008; Molecular Nutrition & Food Research; Statistics Canada.

We've just launched our latest third-party testing and certification program, the International Fitness Ingredient Testing Program. If you are interested in participating or are looking to see how your supplement compares to other brands visit us online @ ifitprogram.com.

Understanding Sports & Fitness Supplements: Choosing the Right Product

The consumption of sports and fitness supplements is on the rise and the interest in healthy and convenient nutritional solutions is at the forefront of the consumer's mind.

Sports and fitness supplements are used by a number of consumer categories including bodybuilders and physique competitors, athletes, recreational consumers and lifestyle consumers.

Depending on the category, supplements may be used as a meal replacement, healthy snack or performance aid. Athletes and recreational consumers may be more likely to use supplements to build lean muscle mass, to increase endurance and to aid in pre- and post-workout nutrition to optimize performance and recovery. In contrast, lifestyle consumers may be more likely to use supplements as a meal replacement or healthy snack.

With such a wide variety of supplements on the market it is hard to determine what each product should be used for and what results you might expect to see from taking a specific product. It is also important to consider the cost-effectiveness of each product type and brand when you are deciding which supplements you want to purchase. Some supplement types have a robust body of scientific research to support their efficacy, while others have little research data or emerging research data. It is common for some athletes to swear by the

results they have seen with certain supplements whereas other athletes may not have experienced the same results.

Since it is becoming more complicated to determine which fitness supplements may be most effective depending on your needs, and which may give you the best bang for your buck, here are a few tips to help make the decision-making process easier.

1) Do your own research using reliable resources and published data.

It is easy to listen to a friend, colleague or the guy at the health food store who is trying to sell you products. Do your own research - you will be happy that you did.

2) Read product labels carefully.

Look at the macro- and micro-nutrient contents of the products, read any disclaimers and scan the ingredient list very carefully. Look for any certification marks stating that the product has passed third party testing and certification which further validates the safety, stability and quality of the product. When shopping in Canada, be sure to look for the 8-digit Natural Product Number (NPN) on the product label – this number indicates that the product has been reviewed and approved by the Natural Health Products Directorate (NHPD) of

Health Canada for safety, efficacy and quality.

3) Set realistic expectations of the benefits that you might expect to see while using a particular supplement.

Some products use more aggressive marketing claims than others. When choosing supplements, be realistic about the results that you might expect to see while supplementing. Remember that you will still need to eat right and exercise regularly to lose weight, gain muscle or meet your health and fitness goals! A rule of thumb: If it sounds too good to be true, it probably is.

4) Some supplements may be more cost-effective than others.

Determine your monthly, quarterly or yearly budget for fitness supplements and plan accordingly. Purchasing your ideal supplement stack can be an expensive endeavour. Use your research findings from step 1 to determine which products are more likely to give you better results. If you have more room in your budget, then you can consider adding more supplements to your stack.

Sources: Euromonitor International, 2009; Global Health and Wellness: Powerful Nutrition 2009 and Beyond.

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From nature to science... From science to you.

We want to hear from you!

If you have a question or comment, or would like to suggest a topic for a further issue of NutraLiving we're all ears! Just drop us a line!

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