

NutraLiving

The online newsletter dedicated to health, wellness and living your best life - *naturally.*

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Obesity: An Explanation for Why We Get Fat

By: Lindy Marchuk, M.Sc.

The obesity epidemic: Searching for answers

It is increasingly evident that there is an obesity epidemic throughout the world, not only in developed countries but in third world countries as well. Obesity has been blamed on eating an excess of calories, and those of us that live in a country that is blessed with


an abundance of food and endless opportunities to overindulge tend to blame supersized meals and fast food restaurants for this epidemic.


The obesity epidemic raises many questions. How is it that undeveloped countries, such as Mexico, are also faced with this burden of an increasingly fat population? Why do we see children that are visibly malnour-


ished alongside mothers that are visibly obese? If losing weight is as simple as eating fewer calories per day than we use for energy, then why do most, if not all, diets tend to fail and why do people who join exercise programs often fail to achieve the weight loss that they had hoped for? Why will some people never become fat, and why do some people have a life-



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long struggle with their weight? After years of research and billions of dollars spent on finding the answer, why does the cause of obesity elude us? If obesity, as we are led to believe is a case of gluttony and sloth and all we have to do is reduce our calorie intake and exercise more to stay slim, why would anyone choose to be fat and endure the pain of ridicule that they are often subjected to?

Until recently, I bought into the argument of calories in and calories out, and though I don't have a particular struggle with my weight I have been a proponent of exercise as a way to allow me to eat what I like and not get fat. I have often wondered how people can allow themselves to become obese and at the same time wondered why some people I see at my fitness club attend religiously but still do not lose weight. Perhaps my beliefs are not based on fact and perhaps I owe obese people an apology.

Why calories in/calories out may not be the whole story

Recently I attended a conference on lipid metabolism. One of the speakers, Gary Taubes, challenged the audience on the beliefs that have been propagated by the scientific community. Mr. Taubes proposed that it is not the quantity of calo-

ries that we eat but the quality. He admits that his ideas are not new but that they have been lost by our focus on calories in and calories out. After years of reviewing the scientific literature, he is convinced that obesity is caused by excessive intake of carbohydrates, especially high-glycemic refined carbohydrates such as bread, pasta, rice, potatoes and sugar (sucrose or fructose). Of course, genetics and hormones play a role, which may explain why some people are more prone to put on weight, why some people can eat carbohydrates and not get fat and some can eat small amounts of carbohydrates and become obese.

Lipid metabolism, insulin and fat storage

Mr. Taubes bases his argument on the scientific fact that fat metabolism is controlled by insulin, and that carbohydrates are metabolized by insulin and stored as fat. The overall role of insulin is to maintain fat in the fat cell by converting carbohydrates to fats and storing them in the fat cell, and inhibiting the release of fat from the fat cell.

The link between refined carbohydrates and weight gain

So, as long as we eat a diet that is high in refined carbohydrates we will continue to



store fat. High-carbohydrate diets can lead to insulin resistance and diabetes which can subsequently lead to more fat storage. In order to reverse this process, Mr. Taubes recommends we must reduce the amount of refined carbohydrates in our diet.

However, the issue is further complicated by the fact that not all carbohydrates are bad. We are still encouraged to eat green leafy vegetables, but if we want to remain or become thin, then we need to avoid refined carbohydrates, starch and sugar. And in case anyone is worried about getting enough of our essential vitamins and minerals, we are assured that we can get everything we need in a diet that is low in refined carbohydrates. According to Mr. Taubes, we can eat as much protein and fat as we want and avoid exercise if we so desire and we won't be fat and we won't feel hungry. If that isn't a good enough

reason to try giving up refined carbs, I can't think of a better one.

Gary Taubes has published two books on the cause of obesity, *Good Calories, Bad Calories* and *Why We Get Fat and What To Do About It*, as well as numerous articles on the subject. He is a sought after speaker and has recently launched the Nutrition Science Initiative, a non-profit organization aimed at resolving outstanding nutrition controversies. If you are concerned about the obesity epidemic we are currently faced with or have a personal interest in how to control weight gain, please visit his website (www.garytaubes.com) or read one of his books for more information. I guarantee that you will find the information interesting, and perhaps your perspective on why we get fat will change as mine has.

Lindy Marchuk is a program manager in NDI's pharmaceutical development division.

Ask Jenny: *Natural Health Products*



Jennifer Andrews (Molnar), M.Sc., a nutritional scientist at NDI, answers all your burning questions about the not-so-straightforward world of natural health products (a.k.a. dietary supplements).

Q: What’s the deal with cold and flu supplements? Do they actually work?

You’ve heard the phrase time and time again: there’s no cure for the common cold. Fortunately, natural health products that may help to prevent the onset of cold and flu, reduce the frequency, severity and duration of infection or help to alleviate pesky symptoms are becoming widely available in the Canadian marketplace. This is good news for those who prefer a non-drug approach.

The most common active ingredients that have shown some promise in clinical research for cold and flu include echinacea, vitamin C, zinc and ginseng (*Panax quinquefolius*; the me-

dicinal ingredient found in Cold-FX). Dosage forms include oral capsules, liquids and lozenges (typically containing zinc). However, since the research for many of these ingredients is conflicting, more human studies are needed to confirm their efficacy.

In the meantime, your best bet is to look for products that have an 8-digit Natural Product Number (NPN) or Exemption Number (EN) on the label, which signifies that the product has been reviewed and approved by the Natural Health Products Directorate (NHPD) of Health Canada. And, as always, consult your healthcare practitioner before taking *any* natural health product.

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



Sources: Natural Standard; Natural Health Products Directorate

Hot Ingredient

Mushrooms

What are they? A mushroom is the fruiting body (essentially, the part of the organism that you can see with the naked eye) of certain types of fungi. There are thousands of varieties of mushrooms, some of which are edible.

What do they do? Certain types of mushrooms, particularly maitake, shiitake and reishi, have been used medicinally for centuries. Potential health benefits include immune support, antioxidant and anti-cancer effects.

Are they safe? In Canada, the reishi mushroom (*Ganoderma lucidum*) is currently approved for use as a natural health product for the following, **when taken at the recommended dosage and considering all directions for use and risk information:**

- Provides antioxidants

- Used in herbal medicine as a liver tonic
- Used in herbal medicine to support the immune system
- Used in traditional Chinese Medicine for a variety of indications including insomnia, fatigue and poor appetite

Always consult your healthcare practitioner before taking any natural health product.



Source: Natural Health Products Directorate-issued monograph for Reishi (2012)

In Season Now: *Squash*

Autumn has arrived in Ontario, and with it brings chilly air, breathtaking scenery and a bounty of local produce. Winter squash are one of the most varied and versatile (not to mention healthy) fall vegetables available this time of year. **Low in calories** and **rich in fibre**, squash are brimming with disease-fighting compounds including **beta-carotene** as well as **potassium, vitamin C** and **folate**.



Whether it's sweet and mild butternut squash, stringy spaghetti squash or one of the many varieties of pumpkin, the culinary possibilities are endless. Virtually all types are delicious when roasted. For thinner-skinned varieties, simply peel, scoop out the seeds and cut into cubes; toss with a little olive oil and roast until fork-tender. Those with thicker skin can be cut into wedges, seeds removed, and roasted with the skin on. To serve, scoop out the flesh with a spoon. Try adding cubed roasted squash to pastas, risotto, stir-fries, salads and curries. The seeds from any type of squash make a tasty snack when roasted with seasonings. Or, experiment with cooked pumpkin purée (fresh or canned) by adding it to creamy sauces, soups and even hummus. *Sources: Foodland Ontario; Health Canada*

Celebrate NHP Week! *November 12 to 18, 2012*

As members of the **Canadian Health Food Association (CHFA)**, we are proud to be celebrating Natural Health Products (NHP) Week from November 12 to 18! The purpose of NHP Week is to help raise awareness about the importance of natural health products and how they can help improve your health when used properly. For more information about NHP Week, or to learn how you can get involved, visit CHFA's website (www.chfa.ca).



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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