



Are Natural Weight Loss Products Effective?

Is it the maple syrup? Whatever the reason, Canadians are getting plumper by the day. In 2004, Health Canada reported a substantial 58.5% of us were either overweight or obese – a 10% increase from the previous year.¹ It's not surprising, then, that the market is huge for products to remedy this weighty issue and lots of companies want a piece of the pie.

Some pharmacies and health food stores now carry a full range of natural weight loss products, from simple preparations containing one or two ingredients to complex concoctions with a myriad of herbs. Disappointingly, credible evidence that any of these natural substances will help to shed the pounds is scant to say the least. Below is a listing of common ingredients found in natural weight loss products.²

Appetite Suppressants		Stimulants
St. John's Wort		Ephedra (Ma Huang)
5-Hydroxytryptophan (5-HTP)		Country mallow (Sida cordifolia)
Hoodia		Bitter orange
Garcinia		Caffeine (green tea, oolong tea, black tea, kola nut)
Chromium		
Absorption Blockers		Miscellaneous (Proposed mechanism of action)
Psyllium	Glucomannan	Conjugated linoleic acid (↑ apoptosis in adipose tissue)
Barley	Guggul	7-keto-DHEA (↑ metabolism, ↑ thermogenesis)
Guar Gum	Inulin	Pyruvate (↑ fat oxidation)
Chitosan	Bean pod(kidney bean)	Chromium (↑ thermogenesis, ↓ appetite)

Although studies suggest a handful of these agents (*5-HTP, hoodia, glucomannan, CLA, 7-keto-DHEA and pyruvate*) may possess some efficacy, proof is still very preliminary, making it hard to justify their recommendation.^{2,3} (More information on Hoodia available on the SDIS website, www.usask.ca/druginfo.) In particular discourage the use of products containing stimulants. These boost metabolism by raising heart rate, blood pressure and heat production.² In 2002, Health Canada issued a recall of all products with ephedra being marketed for obesity after cases of heart attack, stroke, arrhythmia, seizures, psychosis and even death were linked to their use.⁴ Interactions with other medications can also be a concern, e.g., bitter orange inhibits intestinal cytochrome 3A4 and thus has the potential to increase the absorption of many drugs.² Few of these natural weight loss products have been approved by Health Canada's Natural Health Product Directorate so quality of product and standardization of dosage are not regulated. These products are also relatively expensive often selling for more than \$30.00 for 50 doses.

The bottom line? Don't recommend natural weight loss products to patients. The most dependable way to safely lose weight is still lifestyle modification – reducing caloric intake and increasing exercise.

Why are unapproved natural products still available for sale? ⁵

The Natural Health Products Directorate is in the process of implementing regulations to govern the manufacturing, labeling and marketing of all natural health products (NHPs) in Canada. Once fully enforced, companies will no longer be permitted to make inappropriate product health claims and all product doses must be standardized.

According to Health Canada, the term *natural health product* extends to

- ☞ **Traditional Medicines**, such as traditional Chinese medicine
- ☞ **Vitamins and Minerals**
- ☞ **Herbal Remedies**
- ☞ **Homeopathic Medicines**
- ☞ **Probiotics**
- ☞ **Others, like amino acids and essential fatty acids**

In addition, to be classified as a NHP, the product must be safe to be selected by the consumer and not require a prescription.

NHP Regulations in a Nutshell:

As of December 31, 2005, all *manufacturers, packagers, labelers and importers* of NHPs must obtain a **site license** to legally carry out these activities in Canada. To receive licensure, the company must demonstrate Good Manufacturing Practices, including quality inspection and procedures to facilitate product batch recalls.

To be legally *marketed* in Canada, a NHP must hold a **product license** issued by Health Canada. Once granted, this license signifies that the product has been approved for safety, efficacy, quality and satisfactory labeling. **The implementation of this part of the regulations is currently in transition. (Please see below for details.)**

As of January 1, 2010, the Natural Health Product Regulations will be in full effect for all NHPs.

Health Canada is Phasing in the Requirement for Product Licensure

Prior to the new regulations, some NHPs, such as vitamins and minerals, were regulated as drugs under the Food and Drugs Act and issued a Drug Identification Number (DIN). These products have until **December 31, 2009** to switch over to licensure as a NHP. Until the same date, a person may sell a lot or batch of these products labeled in accordance with the Food and Drugs Act, rather than the NHP regulations.

All other NHPs (formerly regulated as foods) have been required since **January 1, 2004** to obtain a product license before being marketed in Canada. As of the same date, only those product batches labeled according to the NHP regulations may be sold.

Non-Compliance with the Regulations

Health Canada is well aware that many NHPs are being marketed in Canada without authorization and has developed a strategy to enforce compliance. Priority in addressing compliance issues is based on a product's risk to the consumer.

How do I know if an NHP has been approved by Health Canada?

Once a NHP has been approved, it will receive an 8-digit product license number known as a Natural Product Number (**NPN**) or Drug Identification Number – Homeopathic Medicines (**DIN-HM**) which must appear on the label. You can also find a listing of all approved NHPs on the Health Canada website. Simply visit this address: http://www.hc-sc.gc.ca/dhp-mps/prodnatur/applications/licen-prod/lists/listapprpsn_e.html.

What you will see on a NHP Label:

Health Canada has developed stringent labeling requirements to allow the consumer to make a more informed decision when selecting a NHP. Here are just some of the specifications:

- ☞ **Recommended use or purpose***
- ☞ **Recommended dose, route of administration and duration of use**
- ☞ **Risk information, if any** (cautions, warnings, known adverse reactions and contraindication)
- ☞ **Storage requirements**
- ☞ **Brand name**
- ☞ **NPN or DIN-HM**
- ☞ **Quantity of each medicinal ingredient per dosage unit**
- ☞ **Non-medicinal ingredients**
- ☞ **Lot number**
- ☞ **Expiry date**
- ☞ **Name and address of the product license holder**

* Traditional uses that have not been scientifically proven must be listed as traditional uses on the label. **All** claims for benefits must be approved by Health Canada.

References:

1. Tjepkema Michael Adult Obesity in Canada: Measured Height and Weight Statistics Canada. Accessed August 31, 2006. Available from: <http://www.statcan.ca/english/research/82-620 MIE/2005001/articles/adults/aobesity.htm#1>.
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4. Health Canada requests recall of certain products containing ephedra/ephedrine. Health Canada Warnings, Advisories and Recalls – 2002. Accessed July 27, 2006. Available from: www.hc-sc.gc.ca/ahc-asc/media/advisories-avis/2002/200201e.html.
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