



A Natural Product for Cholesterol Support

Overview

Diversified Natural Products (DNP) offers a natural cholesterol-lowering product that is ideally suited for dietary supplement and functional food applications. The product is a low molecular weight chitosan (30,000 Daltons) known as **HEP-30**. Unlike other chitosans on the market, **HEP-30** has a very low molecular weight of 30,000 Daltons, thanks to DNP's patented production process that can cut chitosan in a consistent, homogenous manner. This low molecular weight chitosan has been shown to be more effective than any other natural product in lowering LDL cholesterol. **HEP-30** is an odorless, tasteless white powder, making it ideal for functional foods. **HEP-30** is available in bulk powder, bulk capsules or final packaging.

Recent Events

DNP has recently completed purchasing **HEP-30**, adding this intellectual property to our Natural Health Division. **HEP-30** has been successfully launched in Canada by Santé Naturelle, which is part of CK Life Sciences. It is currently being sold in Quebec under the brand name Cholestol. DNP is now actively seeking distribution partners in the US, Europe and Asia for **HEP-30**, both as a dietary supplement and as a functional food ingredient.

DNP is supporting our distributors of **HEP-30** by conducting a 240 patient, double blind, randomized placebo controlled study in 16 centers in Canada and the US. We are committed to researching new applications for **HEP** and improving our production process through an ongoing research collaboration with the University of Sherbrooke in Quebec.

We are also reconfirming our commitment to the State of Michigan by planning for a new manufacturing facility to be built on our property in Scottville, MI, where we grow and sell Midsummer Exotic mushrooms.



A smart choice for health.



Scientific Data

The scientific literature indicates that chitosans are safe, irrespective of molecular weight. Safety studies have also been performed on **HEP-30**, including an 80 patient study in healthy volunteers who took the product for 3 months. The study found no significant side effects, no impact on absorption of vitamins such as Vitamin D, and no impact on the cardiovascular or neurological systems. The product has been on the market for over 2 years, and to date there have been no adverse drug reactions reported, nor any cases of possible drug interaction.

There are also several studies in the scientific literature illustrating the cholesterol lowering effect of short chain chitosans. Most compelling was a 12 week, 80 patient double blind study conducted by Jing in Japan. Though the patient population was atypical (patients were on renal dialysis), the product reduced total cholesterol by over 42%, as well as lowering triglycerides and raising HDL cholesterol levels.

A 26 patient open label study was conducted last year, administering **HEP-30** for 4 weeks. The study showed that there was a drop in total cholesterol of 14% in 4 weeks, with a 17% drop in LDL, in a population of mild to moderate hypercholesterolemia patients. Research has also shown that the cholesterol lowering effect of **HEP-30** reaches its peak efficacy after 3 to 5 months of treatment.

Recognizing that a definitive, large-scale study would be beneficial to commercial development, DNP recently obtained approval from Health Canada to conduct a multi-center double-blind placebo controlled study on 240 patients. Enrollment began in February 2006, and the results should be available in the summer 2006.

Distribution Opportunities

DNP is seeking two types of distributors: (i) consumer health companies that can distribute **HEP-30** under their own brands as dietary supplements; and (ii) food companies that can incorporate **HEP-30** into functional foods and drinks.

DNP is prepared to supply **HEP-30** in bulk powder, bulk capsules or finished product, but would prefer to supply bulk powder. DNP is also prepared to develop a unique cholesterol lowering formulation for naturopaths that would be differentiated from the **HEP-30** found on retail pharmacy shelves. DNP is prepared to offer volume discounts for long term supply agreements.

DNP also requires all distributors to co-brand their product by including the **HEP-30** logo on all packaging. This allows distributors to differentiate their products and benefit from ongoing clinical research conducted by DNP.