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“Useful Hemp”

Cannabis sativa, a Latin term meaning ‘useful hemp’, has been cultivated since 28 BC. The versatile plant, with applications in food, construction and textiles, burgeoned from oblivion into the natural health products sector in 1998, when Health Canada approved its licensed growth and use as a controlled substance. The approval stipulates that all hemp grown in Canada must be tested at site and proven to have less than 10 ppm of TCH, the identical narcotic found in marijuana. Cultivation of hemp is banned in the USA. In October 2001 the Drug Enforcement Agency (DEA) maintained restrictions on growth and use. The Circuit Court of Appeals issued a stay in March 2002 blocking the DEA from enforcing its ruling. A final decision from the Court is expected this year.

Canadian Hemp

The Canadian prairies are home to more than 90% of the world crop due to the favourable regulatory regime described above and amenable growing conditions. The prairie region provides the optimum blend of hot and cool seasons resulting in nutrient-rich and hardy plants. Reduced levels of environmental pollutants owing to low population density are conducive to hemp’s market position.

Nutrient Appeal

The critical role of Essential Fatty Acids (EFA’s), particularly Omega-3’s, in human health is gaining acceptance and attention in established scientific, nutrition and medical circles. Hemp has a very high concentration of EFA’s, particularly Omega-6 (linoleic) and Omega-3 (alpha linolenic) acids. Hemp oil is claimed to have the highest ratio of ‘good fat’ of any vegetable seed oil. The “Essential” descriptor is because the body does not synthesize these fatty acids, yet, they are an integral component of all cellular membranes and cellular functioning.

EFA’s are associated with improved heart health, specifically reduced blood pressure, cholesterol and triglycerides. Preliminary research suggests an anti-inflammatory agent for arthritis sufferers.

Nutraceutical Applications and Technical Considerations

Supplement manufacturers and ingredient suppliers fractionate the hemp seed, removing the 35% oil content. Hemp oil is a light emerald green colour owing to the chlorophyll content, a factor that limits its application in some food products, but appears to be an asset in the capsule format. The abundant Omega-6 and Omega-3 are sold as isolates in industrial markets at value-added prices. Hemp ‘meal’ – ground hemp – has limited application in food processing due to the very high oil content. De-fatted ground hemp, called hemp flour, is derived from the mash remaining once the oil has been removed from the seed cake. It is 41% protein and gluten-free, thus suitable for specialized bakery applications. **FF**

Where to Find It

Hemp is not mainstream, but becoming a mainstay in the natural health products sector. Canada’s premier hemp seed processor, Ruth’s Foods www.ruthsfoods.ca markets Toasted Hemp Seed, a “Creative Energy” Hemp & Tropic Bar, and a “Creative Energy” Hemp Sweetie Energy Bar – just three of a diverse group of creative hemp food products.

The Nutiva Group www.nutiva.com is an aggressive and hemp-committed American processor specializing in Canadian-grown hemp and flax based products. Nutiva launched a hemp nutrition bar in 1999, and most recently, certified organic hemp oil and gel capsules. **FF**