

There are major differences between the novel, unique hemp stalk extract known as Hempanol and standard CBD oil. The hemp stalk extract is exclusively produced through the cold, supercritical, CO<sub>2</sub>-extraction process. This process follows the strictest, most stringent European specifications and is in alliance with strenuous USA import designations.

This cold-processing method without any heat whatsoever is crucial to the quality and therapeutic value of the finished product. Heat of any kind damages the delicate, hemp-based molecules. This is particularly true of the cannabinoids, which are greatly corrupted by the application of heat. These kinked, corrupted molecules are frequently problematic for the end user.

The Gestalt of the whole hemp cold extract product is greater than the sum of its parts. Thus, all of the components of the industrial hemp extract are important, not just CBD. The novel, hemp-based substances known as terpenes, which are driven off or lost due to heat application, are of major importance for a balanced, effective human support application. It is a further corruption to alter the original, cold, CO<sub>2</sub>-derived hemp, since it changes the natural, God-made substances as they normally exist within the plant structure. For example, all CO<sub>2</sub> extracts are not the same. A number of them involve the use of high temperatures after the initial cold extraction. High temperatures plus pressure are used to concentrate the cannabinoids, particularly CBD, and the resulting product with variable amounts of CBD is then sold for exorbitant prices. Some is so-called "standardized" to specific cannabinoid levels. Only Hempanol offers a truly cold-pressed, unadulterated, natural, industrial hemp supercritical CO<sub>2</sub> extract where no manipulation or heat is involved. Because of this careful process, Hempanol retains the full complement of beneficial and protective terpenes, including the highly invaluable terpenoid substance Beta-caryophyllene, along with limonene, linalool, and pinene.

There is also the issue of standardization, where the chemical profile is vigorously manipulated. Thus, it is so altered that it is far different than the originally derived material from the true plant source. This is done to increase the amount of CBD or cannabidiol in the end product. Therefore, it is important to review the advantages of the whole, crude, CO<sub>2</sub>-extracted hemp oil versus heat-treated, altered CBD oil:

### Whole, crude, CO<sub>2</sub>-extracted hemp oil (Hempanol)

- Never solvent-extracted
- 100% raw and unheated
- Enzymes intact
- Full terpene profile
- Full profile of the highly potent, novel terpenoid cannabinoid Beta-caryophyllene
- No toxicity
- No side effects of any kind
- Synergistic profile of other cannabinoid-rich extracts such as wild oregano P73, hops extract, and extract of chamomile
- No THC risk

### Heat-treated CBD oil

- Often solvent-extracted using, for instance, butane, hexane, alcohol, and/or isopropyl alcohol (rubbing alcohol)
- Nearly always heat-treated
- Enzymes destroyed by heat and solvents
- Minimal or reduced terpene profile
- Low profile of Beta-caryophyllene, the molecule often extensively damaged by heat and/or solvent extraction
- It contains solvent residues, particularly butane and hexane, which may cause tissue toxicity, including damage to kidneys and liver
- Side effects include drowsiness, apathy, heavy limbs, and a sensation of being "stoned"
- No synergy: contains only cannabinoids from hemp
- Some CBD oils have high THC contents, which may lead to a modest degree of hallucinations and also the sensation of being "stoned"