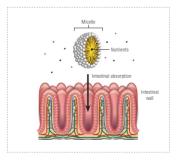
Micellized CBD compounds: Nuriv launches patented oral formulations

22 Nov 2019 --- Delivering 20 ml cannabidiol (CBD) per serving, Nuriv's new CBD oral formulations will join its range of stand-alone CBD products. The offerings contain a micellized form of CBD, meaning it is water-insoluble, is absorbed quicker and touts improved pharmacokinetics. To process CBD in its products through this patented process, Nuriv has global licensing from Virun, a biotechnology company in the food, beverage and dietary supplement space.

"CBD is a non-polar compound and is an oil when you consider broad and full spectrum CBD. It is difficult to solubilize CBD into water-based product applications, like a beverage shot or Nuriv multi-serving smoothies coffee creamers. Furthermore, CBD is very bitter and tastes like aspirin, so there is a need for downstream processes and technologies to help improve the flavor of the CBD oil," Philip Bromley, CEO at Virun, tells NutritionInsight.

SCIENCE BEHIND NURIV MIZELLIZATION





The particle size of the compound is too large to pass through the lining of the gut efficiently, but through micellization they can be converted, and absorbed.

"The IP portfolio of Virun includes natural and organic solubilization technology that can dissolve CBD into clear and cloudy applications, depending on the product being developed. In addition, Nuriv has acquired Virun's Bicarbonate (HCO3-) Downstream Process technology that improves the flavor and the organoleptic properties of CBD oils," he explains.

The particle size of the compound is too large to pass through the lining of the gut efficiently, but through micellization, difficult-to-absorb compounds, such as cannabinoids, can be converted into liposomal

micelles. These micelles are pre-digested and encapsulated to be in the range of 10-20 nanometers in diameter to efficiently pass through the lining of the gut and improve viability.

CBD is an ingredient attracting substantial traction in the market, but consumers may struggle to find an effective, high-quality formula.

Bromley notes that the soft gel and tincture market is becoming saturated, and consumers are increasingly moving toward beverages, shots, yogurts, smoothies, stick packs and pouches. The company also combines CBD with other medicinal ingredients like Docosahexaenoic (DHA), astaxanthin and CoQ10, which allow more robust claims and improved effectiveness.

The company's range includes custom formulations such as Nuriv Sleep Night Time Broad-Spectrum Hemp Extract in Chocolate Brownie, Nuriv Joint Health & Inflammation Broad-Spectrum Hemp Extract in Orange Creamsicle, Nuriv Relax & Stress Relief Broad Spectrum Hemp Extract in Chocolate Brownie and Nuriv Focus & Eye Health Hemp Extract in Peanut Butter Cup.

A cloudy regulatory front

Bromley also expands on operating as a business in the CBD space, which is notoriously unclear for operators.

"In my nearly 20 years in the dietary supplement industry, I have never seen as much interest in an ingredient as CBD," he says.

But he notes that the regulatory cloudiness and slow evolution has helped innovation in the CBD space. Clear regulations from the get-go would have allowed big brands to peddle their CBD products, thereby flooding the market. "Some of the innovative products, like CBD Chocolate, or our CBD Nuriv Coffee Creamers may not have seen the light of day. It would have likely all been soft gels and tinctures, and it's hard to compete with big brands," he expands.

Moving forward, the best thing a consumer can do when wanting to purchase a CBD product is to check to see if the company is permitted by the Food and Drug Administration (FDA) and request Current Good Manufacturing Practice (cGMP) statement of compliance from the company, explains Bromley. "Requesting

third party, ISO-certified test reports for every lot produced, including heavy metals and CBD purity is also helpful. If the brand cannot supply that information, then maybe they never tested it."

By Laxmi Haigh

To contact our editorial team please email us at $\underline{\tt editorial@cnsmedia.com}$

