

Nano Science, Technology and Industry Scoreboard

Nanotechnology: What is it and How Does it Improve CBD?

2020-11-18

There is just about any kind of CBD product you can think of – there are edibles (with vegan options because why not?), oil tinctures, cosmetic and skin care products. There are even party favours and pet products with CBD as the main ingredient!

With these awesome and innovative products readily available in the market, it's impossible not to get curious about CBD. And the first question you might have is "does it really work?". As you go along you research, you might encounter an even newer word – CBD Nano.

So what is CBD nano? What does it do and does it really work?

We are just as curious as you are. If you really want to know more about CBD nanotechnology, read on. You came to the right place.

What is nanotechnology?

In simple words, nanotechnology involves breaking down the size of anything to "nanoscopic" dimensions. It may sound easy but nope, it requires a highly scientific process on the molecular level.

In the case of cannabidiol, nanotechnology would shrink down a single molecule by 4440%!

You may be wondering why there is a need to go through this process if it is so complicated, so complex. The idea behind nanotechnology is that by shrinking the particles and breaking the compounds apart is that it can easily enter the body through the blood streams and reach the liver faster.

Is it working? Does the idea behind it translate well to results?

Is it worth the fuss?

According to studies, the reason why breaking down or using nanotechnology in CBD is because of its lipophilic qualities. In principle, molecules could either be hydrophilic or lipophilic. Hydrophilic basically means that the particles connect themselves to water-based molecules. While the other one is an oil-based compound which is not soluble in water. CBD is lipophilic by nature.

Human bodies, being at 70% water, could have a hard time absorbing cannabidiol. Imagine pouring oil in a glass of water and expecting them to mix well. It takes time before the body can absorb the cannabidiol substance in the body. CBD in general is lipophilic and fights off water molecules that try to attach to it. So how will the body absorb cbd oil? That's where nanotechnology comes in.

The cannabinoid when broken down to nanoparticles, acts differently with water molecules. There is more scientific explanation about the actual relations of these molecules. But the fact remains that by breaking CBD down to nanoparticle size, it attaches and binds easily with lipids and water molecules. This allows faster and easier absorption of cannabinoids. These nanoparticles make massive improvements in CBD inside the body.

Conclusion

The CBD, as an industry, has a great promise although it is in its early stages yet when it comes to research and studies.

What does nanotechnology mean when it comes to using CBD products? It simply means getting more from less. Ain't that sweet?

Like everything in this world, be careful when choosing a nano CBD product. There are many companies who are over-promising this technology or worse, mislabeling their products. Check the label and the history of the company.

Nano CBD products could take the cannabidiol industry to greater heights if implemented properly. We're just excited as you are in this ever evolving world of CBD.

Right now, there are no various forms in how to take CBD. the right dosage and form will
affect how your body will respond to it - technology will help, of course. To make sure that
CBD will work for you, it is still best to consult a healthcare professional.

Read the $\underline{\text{original article}}$ on VolteFace.