We often hear cannabis consumers talking about the entourage effect, but in truth many consumers don’t know what it means. In this article I explain what the entourage effect means and how they can be enhanced using essential oils.

The Western, reductionist approach to medicine often overlooks the holistic aspects of good health: Meaning that, for example, while exercise and a healthy diet each offer their own benefits, the combination of both is greater than the sum of the individual parts.

This analogy applies to cannabis, too, and the relationship between cannabinoids (the plant’s active compounds) and terpenes (aromatic compounds that give plants their flavor and smell).

While the therapeutic benefits of cannabinoids like THC and CBD have received much attention, the healing capacities of terpenes have been somewhat overlooked. In addition to providing their own benefits, like anti-anxiety or anti-inflammatory properties, terpenes also act as cannabinoid boosters. Although cannabinoids can produce significant effects in isolation, thanks to the entourage effect, when they're combined with terpenes, their impact is magnified.

The Entourage Effect Explained

“The entourage effect is better described as what I like to call the symphony effect,” explains Groovy Singh, CEO and founder of Glasshouse Brands, the maker of the Roam Escapes flavored vape pens. “All the instruments playing together in harmony sound much better compared to only one instrument trying to execute an orchestral piece. All the compounds in the cannabis product work in a synergistic manner, as opposed to just THC or CBD working on their own.”

In short, the entourage effect enhances the effects of the individual cannabinoids and terpenes, when they’re in the presence of one another. However, the entourage effect doesn't apply only to the elements of the cannabis plant. In fact, when cannabis oil is mixed with essential oils from other plants, the presence of new terpenes can also make a significant contribution to the process.

In a sense, terpenes define the personality of a plant — which is why, even if two different varieties of cannabis have the same cannabinoid profile, they can have two wildly different effects based on the kinds of terpenes that are present.

Broad-spectrum and full-spectrum cannabis oil products, which include a complete variety of terpenes, can magnify the entourage effect and often work far better than pure CBD or THC extract alone. But terpenes don’t have to come directly from cannabis to contribute to better CBD or THC performance. Terpenes are ubiquitous in nature and can be extracted from many different plants. That's why essential oils (or plant extracts) are sometimes mixed with cannabinoids as a way to enhance the entourage effect.

There are more than 90 varieties of essential oils, all of which have the capacity to improve health in one manner or another. Essential oils often contain the same types of terpenes as cannabis products, and if inhaled or absorbed through the skin concurrently with cannabis oil, they can augment the entourage effect. In fact, they may be able to increase its intensity to a remarkable degree.
“Terpenes appear in cannabis in exceptionally minute quantities,” points out Jessie Gill, a registered nurse and the founder of the popular blog Marijuana Mommy. “They appear in much higher quantities in essential oils.”

In order to mix the effects of cannabis and terpenes derived from other plants, Eric Hara, executive chef and co-founder of La Vida Verde Brands, created an edible called Super Cookies. “Super Cookies are completely organic, non-GMO, and contain no sugar or gluten,” Hara tells Civilized. "They’re infused with essential oils, which help boost — for lack of a better word — the entourage effect."

Super Cookies start with a coconut and cashew base (eliminating the need for refined sugars and wheat flour), and are available in a brownie sativa, lemon pie indica, and two hybrids: raspberry and caramel. Today La Vida Verde’s Super Cookies are sold in over 3,000 dispensaries throughout Southern California.

But terpenes are not just boosters for other compounds. Each can have its own, unique impact on physical, emotional and psychological functioning.

The terpenes in essential oils and cannabis will spur activity in the limbic system, a part of the brain responsible for a multitude of important functions, including the regulation of emotions, behavior and long-term memory. It also plays a role in the maintenance of several unconscious physiological activities, such as breathing, heart rate, and blood flow.

Among their many potential effects, essential oils and their terpenes can help relieve stress, anxiety, depression, headaches, insomnia, inflammation, muscular or joint pain, and skin or hair problems. Regular use of essential oils in aromatherapy can also strengthen immune system response and help protect against viruses and infections. Combined with cannabis products, their therapeutic effects are reinforced.

“Yes, non-cannabis-derived terpenes, when added to cannabis, can and do produce the entourage effect,” Groovy Singh confirms. “Most terpenes present in cannabis are also found in other plants, a lot of them are beneficial, and they act together to provide the user with the desired effect — relief, euphoria, relaxation — that they seek.”

Terpenes from any source can amplify the efficacy of CBD and THC. But there is also a cumulative aspect to the equation: When the level of a particular terpene is elevated by adding essential oils to cannabis, the effects of that terpene will be enhanced beyond what would be possible by consuming cannabis or using the essential oil alone.

“Some people use essential oils to target a specific effect,” says Jessie Gill, explaining the motivations of those who mix cannabis with these alternative sources of terpenes. “For example, the terpene linalool is known to be sedating. Some will add lavender oil, which is high in linalool, to achieve a more sedative state. Cannabis lore has long claimed the terpene myrcene enhances the intoxicating effects [of THC]. Some people believe by adding lemongrass oil, which is also high in myrcene, they can enhance the intoxicating effects.”
Essential oils can be used in combination with cannabis products in one of two ways: They can be taken separately, but simultaneously, with the essential oils placed on the skin for absorption and/or inhaling while the cannabis is consumed. Or, the essential oils can be used as an additive to topical cannabis products, or mixed with cannabis extracts suitable for vaping. Essential oil extracts by themselves are somewhat caustic and must be mixed with a carrier oil before being applied to the skin.

While the entourage effect is often treated as synonymous with terpenes plus cannabinoids, terpenes can also complement and intensify the activity of other terpenes.

As an example, three terpenes known as pinene, myrcene and caryophyllene often work well in combination as an antidote for anxiety. A mixture of the essential oils of rosemary (for pinene), lemon grass (for myrcene) and copaiba (for caryophyllene), added to a broad-spectrum CBD topical cream, could help ease a person’s anxiety as the combination is slowly absorbed through the skin.

The entourage effect is a prime example of the benefits of holistic medicine. The healing properties of CBD, THC and all the individual terpenes are only partially contained within each substance. When they are expertly combined, they unleash emergent restorative benefits, proving that with cannabis, the whole is greater than the sum of its parts.

Meanwhile, essential oils can stimulate the entourage effect even further, making a valuable healing substance even more potent and efficient. Good products are made better, and it is the magic of the terpenes that makes this happen.

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