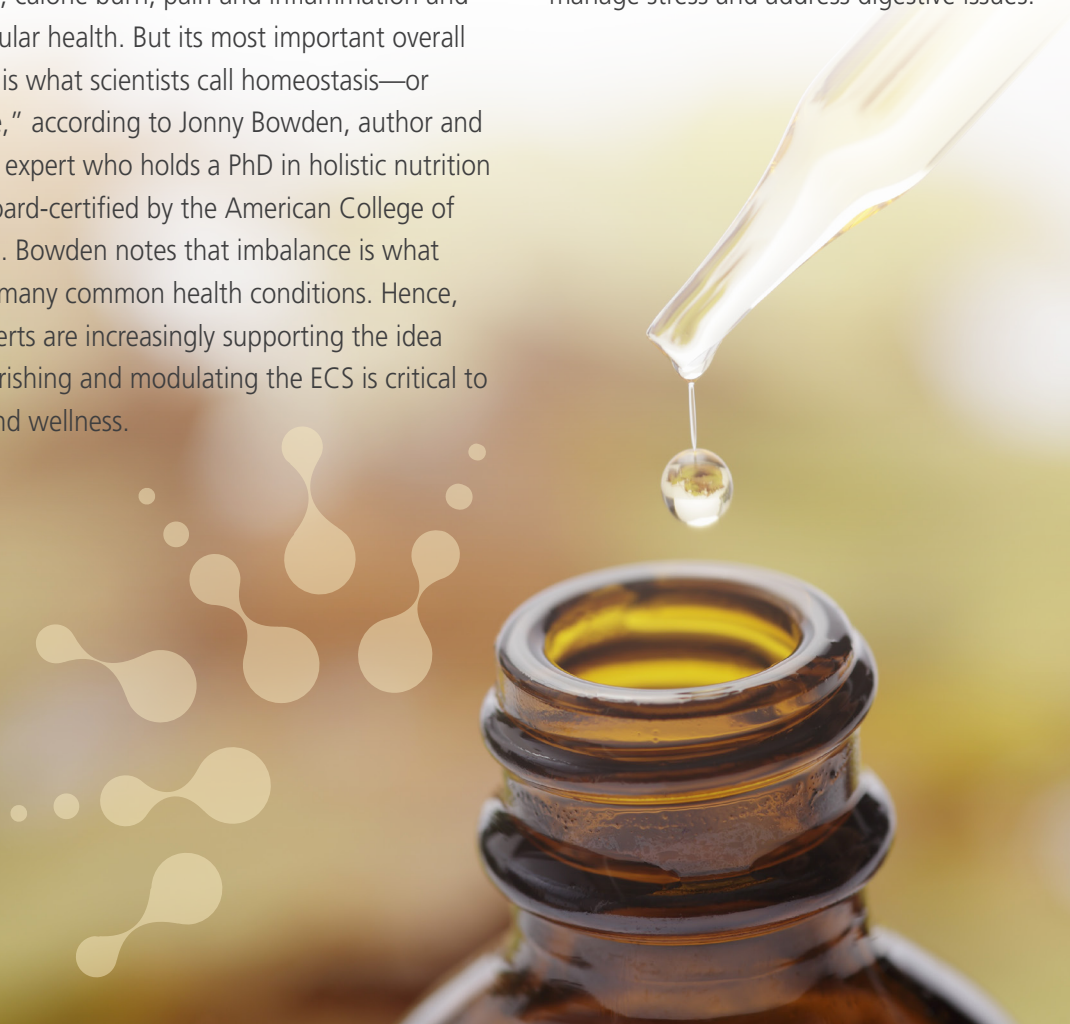


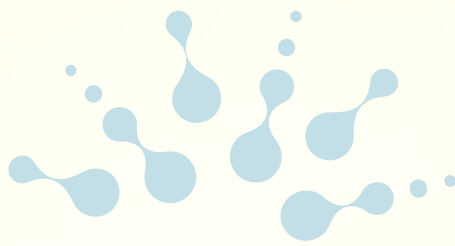
A retailer's guide to the endocannabinoid system

Educating your customers on the body's master system

The more research reveals about our health, the more we learn how everything in our body is connected. The key to that connection—and to better health—may just lie in the endocannabinoid system (ECS). The ECS helps to balance many of our physiological systems and supports the body. It impacts just about everything: appetite, immune response, calorie burn, pain and inflammation and even cellular health. But its most important overall function is what scientists call homeostasis—or “balance,” according to Jonny Bowden, author and nutrition expert who holds a PhD in holistic nutrition and is board-certified by the American College of Nutrition. Bowden notes that imbalance is what leads to many common health conditions. Hence, why experts are increasingly supporting the idea that nourishing and modulating the ECS is critical to health and wellness.

Though the ECS hasn't been on scientists' radars for long, as more and more information about the power and potential of the ECS emerges, education is beginning to spread about the enormity of what this system does—and its healing potential. Knowing the basics can empower you to educate your customers on how they can support healthy sleep, manage stress and address digestive issues.





PAID CONTENT

A BRIDGE BETWEEN BODY AND MIND

This homeostasis-balancing function is key to how our body regulates conditions. "The endocannabinoid system is involved in a huge number of disease states—mostly as a protective system," says pioneering ECS researcher, Hebrew University medicinal chemistry professor Raphael Mechoulam, PhD. According to a 2013 research review published in the Federation of European Biochemical Society Journal, keeping the ECS in balance can positively impact nearly all human conditions, from weight and inflammation to gut, liver and skin issues.

Because the ECS modulates all physiological functioning, and helps the body adapt to changing environmental conditions (including all types of stress), making sure the ECS is healthy is key to systemic health.

HOW CBD WORKS IN THE BODY

Our body creates a neurotransmitter called anandamide (AEA), also known as the bliss molecule. The more AEA, the happier our ECS. But we don't create a store of AEA to save for when the body needs it, like we do with fat. Instead, our body makes AEA and another compound that stimulates receptors called 2-arachidonoyl glycerol (2-AG) on demand. When needed, they're created, work and disappear within seconds. What makes them disappear? The fatty acid amide hydrolase (FAAH) breaks down AEA. CBD works like a missile defense system, interrupting FAAH, the bad guys, before they can break down the AEA and 2-AG, the good guys.

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— Raphael Mechoulam, PhD



CBD is helpful in other ways, too. According to *CBD: A Patient's Guide to Medicinal Cannabis* (North Atlantic Books, 2017), it acts upon various other receptors in the brain, including serotonin 5HT1A (contributing to its antidepressant effect), TRPV1 (contributing to its anti-psychoactive effect), the nuclear receptor PPAR-gamma (regulating immune response) and the orphan receptor GPR55 (contributing to its osteo-protective effects) among others.

SUPPLEMENTING WITH CBD

Everybody's ECS is different, so the amount of CBD taken, how it is taken and how it works can vary from person to person. Different from pharmaceutical drugs delivered in specific doses, CBD is highly individualized. There are no researched potency standards, delivery systems or dosages that physicians can consistently rely on.

With CBD, the number of mg used can be as unique as the person, explain Leonard Leinow and Juliana Birnbaum in *CBD: A Patient's Guide to Medicinal Cannabis*. You can put drops of a tincture or oil blend under your tongue, take softgels, add oils to food such as smoothies or rub salves and lotions onto your skin. These options give people the power to create personalized wellness solutions that work best for them.

Other ways your customers can support their ECS:



Bumping up
omega-3 intake



Exercising
regularly



Developing strong
social networks



Eating antioxidant
and anti-inflammatory
green vegetables



Alternative therapies
such as massage and
acupuncture

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