

## Information Regarding Over-the-counter Dietary Supplement Hemp Oil and False-Positive Drug Screens

Pain is often inadequately treated with currently available drugs, such as opioids. Nevertheless, opioids continue to be used, overused, and even abused, by people seeking to find pain relief. Thus, physicians and patients are seeking new approaches to treat pain that also address concerns about drug abuse.

Cannabinoids, including cannabidiol (CBD), are natural chemicals found in hemp that have pain-fighting properties. CBD has been scientifically shown to be safe and effective in treating pain and is virtually absent of abuse potential. Therefore, in an effort to curb the use of opioids, over-the-counter and legal hemp-derived dietary supplements containing CBD are being recommended more and more by physicians as complementary and adjunctive agents useful for treating pain.

Legal industrial hemp contains only a fraction of THC (i.e. tetrahydrocannabinol) a psychoactive compound found in marijuana. The federal limit for hemp THC content is 0.3 percent, and in accordance with the 2014 U.S. Farm Bill, hemp grown in Kentucky is routinely tested to ensure that its THC level falls at or below the legal limit.

Activation of the body's CB1 (i.e. cannabinoid-1) receptor is responsible for THC's psychoactive properties. In contrast, CBD does *not* activate the CB1 receptor in the same manner as THC. This is why CBD is considered to be non-psychoactive. In other words, CBD will *not* cause intoxication or a "high."

However, because of the fat-soluble nature of THC and other cannabinoids found in hemp oil, accumulation and excretion of hemp oil byproducts can result in a positive drug test for THC. Thus, since hemp oil can be legally sold in stores as a dietary supplement, consumption of hemp oil products (i.e. CBD from hemp) may be a viable explanation for "false-positive" detection of THC (i.e. marijuana) in drug screens.

For more information, please contact your patient's pharmacist or Ananda Professional's Medical Director at [alex.capano@anandahemp.com](mailto:alex.capano@anandahemp.com).

Sincerely,

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### References:

(1) Ther Clin Risk Manag. 2008 Feb; 4(1): Cannabinoids in the management of difficult to treat pain.

(2) Epilepsy & Behavior Volume 70, Part B, May 2017, Pages 288-291: The legal status of cannabis (marijuana) and cannabidiol (CBD) under U.S. law.