# The Impact of CBD on Health and Wellness: Assessing its Transformative Benefits in Skincare

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#### **Background/ Purpose**

Cannabidiol (CBD) is making its way into the world of health and wellness. It is derived from the cannabis plant and is known to have anti-inflammatory and antioxidant properties. Skin disorders, such as acne, psoriasis, eczema, etc. are common across all populations and can be mentally and physically damaging, which is why it is important to further explore new therapeutics and educate patients and health care providers about the current evidence for CBD in skin disorders.

## Methods

A literature review was performed utilizing PubMed. The following terms: (Cannabidiol, cannabis, topical, dermatological skin disorders, acne, psoriasis, transdermal). Some filters used while conducting this search were in vivo studies, human and animal studies, and topical route of administration.

#### Results

57 articles were identified, 8 met criteria, 3 were in animals and 5 were in humans. One of the 3 animal studies had 53 rats. In all three animal studies, there was an improvement in dermatological condition measured by visual assessment and reduction in IL-17A, PGE<sub>2</sub>, and TXB<sub>2</sub> levels. There were 102 humans studied who self-reported subjective measures of symptom resolution. CBD dosages included 3-4 mg/day topically, 30ml hemp seed oil, and 3% *Cannabis* seed extract cream. There was a statistically significant difference found in use of hemp seed oil compared to olive oil based on analysis of self reported scoring of skin dryness, itchiness, and use of medication.

## Conclusion

Many studies conducted in humans do not yield results that are measurable, do not indicate dosage forms, or the amount of CBD used. In the animal models there is an obvious positive outcome with the use of CBD on common disease states such as psoriasis and erythema; however, the measures of positive outcomes in humans are not as quantitative but more

qualitative and self reported. We have shed light on the purported pharmacological action and current lack of human data to support the use.