



CHARLOTTE'S WEB™
STANLEY BROTHERS

LEADERS IN CBD QUALITY & RESEARCH

SUPERIOR QUALITY

- QUALITY TESTING
- VERTICALLY INTEGRATED
- ORGANIC CERTIFIED**
- CONSISTENCY IN GENETICS



HIGHEST
TESTING STANDARDS

—up to—

100 pesticides & glyphosate
with COAs



ORGANIC
CERTIFIED

farms and organic
certified tinctures**

** 17mg and 60mg tinctures

VERTICALLY
INTEGRATED



\$40M | GMP & ISO
Certified
MANUFACTURING FACILITY



5 | PATENTED
CULTIVARS

—with—
proprietary genetics
for consistency

CLINICAL EFFICACY

RADICLE SCIENCE ACES RESEARCH¹

Charlotte's Web™ hemp extract supports
quality of life, overall wellness, sleep,
stress, and discomfort*



74%
WELL-BEING*



53%
STRESS*



32%
SLEEP QUALITY*



28%
DISCOMFORT*



CLINICAL TRIALS IN
COLLABORATION WITH
DR. STACI GRUBER

Multiple clinical trials focused
on neurological benefits of CBD



CW THC-FREE
EXTRACT STUDY

Aims to alleviate concerns
of testing positive for THC



THE JOHNS HOPKINS
UNIVERSITY SCHOOL OF
MEDICINE- OBSERVATIONAL
RESEARCH REGISTRY (ORR)

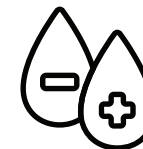
Ongoing consumer survey
tracking real-life CBD usage

SAFETY



VALIDCARE CBD
SAFETY STUDY²

Results demonstrated that
CBD does not cause liver
toxicity or disease



CBD PHARMACOKINETIC
STUDY AT UNIVERSITY
OF BUFFALO

Examining how CBD is
absorbed and metabolized
for future trials



CHARLOTTE'S WEB™
INITIATED ADVERSE
EVENT REPORTING

Safety Call International
physicians track consumer
concerns

* These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure or prevent any disease.

¹ Radicle Science Releases Initial Findings from Largest Real World Evidence
Study Evaluating Effectiveness of CBD Products | Business Wire. 11/2021.
N=3000, 208 participants received Charlotte's Web hemp extract.

² Robert Kaufmann, Keith Aqua, Je Lombardo, and
Martin Lee. Cannabis and Cannabinoid Research.
12/2021. <http://doi.org/10.1089/can.2021.0114>.

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RESEARCH OVERVIEW

PUBLISHED RESEARCH

- CHARLOTTE'S WEB™ ORIGINAL FORMULA SHOWN TO BE EFFECTIVE ACCORDING TO RESEARCH DONE BY RADICLE SCIENCE ACES (ADVANCING CBD EDUCATION & SCIENCE)

Radicle Science conducted an open label controlled trial to evaluate the effectiveness of commercially available CBD products. 13 manufacturers, including Charlotte's Web™, provided products to participants who previously haven't taken CBD.

The participants were assessed once every four weeks and compared against controls. The results* for Charlotte's Web Original Formula demonstrated a:

- 74% increase in well-being
- 32% improvement in sleep quality
- 53% decrease in feelings of stress
- 28% decrease in discomfort

Radicle Science Releases Initial Findings from Largest Real World Evidence Study Evaluating Effectiveness of CBD Products | Business Wire. 11/2021 N=3000, 208 participants received Charlotte's Web hemp extract.

* Biggest improvements occurred in the first week; average dose was 1.8 servings daily (Original Formula, one serving = 50 mg CBD)

- VALIDCARE STUDY DEMONSTRATES THAT CBD DOES NOT CAUSE LIVER TOXICITY OR DISEASE

Validcare conducted a study with 11 manufacturers, including Charlotte's Web™, and 839 participants who were already using CBD.

The participants in the study used CBD for 30 days then had their liver enzymes tested. The research concluded that regular use of CBD does not cause liver toxicity or liver disease.

Robert Kaufmann, Keith Aqua, Jeff Lombardo, and Martin Lee. Cannabis and Cannabinoid Research. 12/2021. <http://doi.org/10.1089/can.2021.0114>.

RESEARCH IN-PROGRESS

- THC FREE ASSURANCE STUDY AIMS TO ALLEVIATE CONCERNS OF TESTING POSITIVE FOR THC

Charlotte's Web™ is currently conducting a study with the goal of providing assurance that our THC free extract can be used without causing a positive drug test.

- THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE OBSERVATIONAL RESEARCH REGISTRY (ORR) PARTNERS WITH REALM OF CARING (ROC).

Through the ORR, ROC participants continue to submit data over the course of months or years. They provide real-life data about their CBD use, including benefits experienced, adverse events, and drug interactions.

ROC has published one ORR study on patients with neurological disorders who use CBD and future papers are expected soon.

- TO UNDERSTAND HOW CBD IS ABSORBED AND METABOLIZED, THE UNIVERSITY OF BUFFALO IS CONDUCTING A CBD PHARMACOKINETIC STUDY

A pilot study is being conducted at the Translational Pharmacology Core Laboratory at University of Buffalo's Center for Integrated Global Biomedical Sciences.

The purpose of the study is to investigate the pharmacokinetic properties of Charlotte's Web™ full spectrum hemp-based CBD extract in healthy volunteers.

Participants took 50mg / 1mL of Original Formula for six days. CBD levels were measured every hour for eight hours on day 1 and 6. Data from this study will be used to design future research.

- TO DEMONSTRATE CBD EFFICACY, CLINICAL TRIALS ARE BEING CONDUCTED IN COLLABORATION WITH HARVARD'S DR. STACI A. GRUBER
Dr. Staci A Gruber is an Associate Professor at Harvard Medical School and Director of the MIND program at McLean Hospital.

One study evaluates a custom-formulated high CBD product on stress. The other study is a longitudinal observational trial with Veterans who use Charlotte's Web products.