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Toxicology and Food Safety, Rimkus Consulting Group

- Senior Consultant with 15 years of Toxicology experience.
- Industrial experience in consumer and regulatory toxicology.
- Trained as a National Institute of Drug Abuse (NIDA) fellow in genetics and neuroscience.

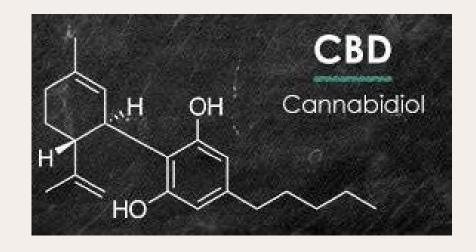


The Hazy Science of CBD

Dr. Chris Spaeth & Dr. Scott Drouin
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What is CBD?

- CBD- cannabidiol; extracted from Cannabis sativa plants
- Poorly absorbed by the skin
- Not psychoactive!
- Binds cannabinoid receptors (CB1)



Claims for CBD not consistent with the science.



ADD/ADHD * Addiction * Alzheimer's Anorexia * Anxiety * Atherosclerosis Arthritis * Asthma * Autism Bipolar * Cancer * Colitis/Crohn's Depression * Diabetes Endocrine disorders * Epilepsy Seizures * Fibromyalgia Glaucoma * Heart Disease Huntington's * Inflammation * IBS Kidney disease * Liver disease Metabolic syndrome * Migraine Mood disorders * Motion sickness Multiple sclerosis * Nausea Neurodegeneration Neuropathic pain * OCD Osteoporosis * Parkinson's * PTSD Rheumatism * Schizophrenia Sleep disorders * Stress * Stroke/TBI • Distributors claim CBD cures a vast array of medical problems...

 The science: CBD at 99% is only approved for <u>ONE</u> use treating a rare form of childhood epilepsy.



Conclusion I...

Claims for CBD are <u>not scientifically validated</u> and safety issues are still being investigated.



Scott Drouin, Ph.D.

Toxicology and Food Safety, Rimkus Consulting Group

- Senior Consultant with 22 years of Toxicology experience.
- Expert on health risks from substance exposures in food and the environment.
- Trained as a NIAID fellow in human infection and disease.

Quality Control

or

What else is in that CBD product you're using?

Does your CBD product only contain cannabidiol?

- Cannabis: Mother Nature's cannabinoid factory.
- All CBD products are <u>not</u> equal.

What internal QC guidelines exist?

What *else* can contaminate your CBD?

- Potential sources of contamination resulting from farming of *Cannabis*...
- and from processing into CBD.

What external QC guidelines exist?

Conclusion II...

Lack of comprehensive quality controls increases the risk of *deleterious health effects*.