RAW CANNABIS AND DR WILLIAM COURTNEY

If you're familiar with cannabis, then you know that raw is non-psychoactive. Because of that fact, you might be wondering why you would ever want to eat unheated weed. Well, this herb may actually turn out to be one of the most nutritionally valuable plants we've found yet.

Marijuana is a superfood. This unique plant contains over 400 different chemical compounds. The number of vitamins, essential oils, and acids found in cannabis has led experts like Dr. William Courtney of Mendocino, California to call weed a "dietary essential." Marijuana is a particularly special plant in the world of nutrition because the herb contains extremely high concentrations of cannabinoid acids. These acids are incredibly important for basic cell function.

Two of the primary cannabinoid acids that have been studied thus far are THCa and CBDa. When you heat these acids via smoking, vaping, or cooking cannabis you break them down into slightly different chemicals. Specifically, you degrade them into psychoactive THC and cannabinoid CBD. The process of converting these cannabinoid acids into their "active" form is known as decarboxylation, or "decarbing."

Active THC and CBD have their share of benefits, but the one major downside to decarbing is that your body can only handle small amounts of these now activated cannabinoids.

There are a series of cannabis strains called ACDC. 'AC' stands for alternative cannabinoid, the CBD acid molecule, which has come into focus lately as being very important as an anti-inflammatory. And 'DC' stands for dietary cannabis. If you do heat it, then your dose is around 10mg. And if you don't heat it, if it's raw, then your dose is around 1000 -2,000mg.

When you eat raw cannabis, your body is able to process extremely large amounts of THCa and CBDa without issue. Your body then converts these acids into the nutrients it needs via your own metabolism.

Consuming these cannabinoid acids is important because they help your cells communicate with each other via the endocannabinoid system. Consuming more cannaboid acids may be the key to the prevention of chronic diseases caused by endocannabinoid deficiencies. Endocannabinoid deficiencies are thought to play a major role in the development of medical conditions such as:

- Migraine
- Irritable Bowl Syndrome
- Glaucoma
- Fibromyalgia

Dr Courtney suggests that high doses of raw CBDa and THCa are much more effective than their broken-down counterparts in their:

- Anti-inflammatory properties
- Anti-diabetic properties
- Anti-ischemic properties (ischemia occurs when your blood vessels constrict, preventing oxygen from flowing to certain parts of your body.)

As with all living things, nutrients power our basic bodily functions. For example, your body cannot produce the depression-fighting neurotransmitter serotonin without key B vitamins. Like other leafy greens, cannabis contains a wealth of nutrients and proteins when eaten as a raw herb or vegetable.

Terpenes are essential oils found in cannabis and other plants. They give marijuana strains their unique scents and flavours. These compounds have many medicinal and nutritional benefits on their own, but when they're partnered with cannabinoids their health benefits increase. Some of the most common terpenes in cannabis include:

Linalool:

This terpene gives cannabis a floral, lavender-like aroma. It's known to have anti-inflammatory, analgesic, and anticonvulsant properties.

Pinene: As its name suggests, this essential oil has a strong pine-like scent. Pinene is neuroprotective and helps strengthen the functioning of the nervous systems.

Limonene: Another aptly named terpene, limonene is found in strains with a citrus aroma. Limonene can prevent gastrointestinal issues, boost metabolism, and lower cholesterol.

When you go raw, the quality and the sheer number of terpenes that you're consuming increases dramatically. This is good news if you're in need of a serious health overhaul.

There's a reason hemp-based foods have become so popular. Marijuana leaves and hemp seed are not only high in protein but contain the perfect ratio of omega 3 to omega 6 essential fatty acids. This is most important because we cannot produce these fatty acids on our own; we need to get them from dietary sources.

Essential fatty acids (EFAs) are key to brain health. The human brain is nearly 60% fat, and we need a constant intake of the right kinds of fat to protect against neurogenerative diseases. EFAs are also key to maintaining balance in the endocannabinoid system.

Cannabis also contains all essential amino acids. Like the essential fatty acids, our bodies cannot produce essential amino acids on their own. We need to get these acids from our diet. Amino acids are necessary for cell function. They help cells maintain their structure, repair damaged tissue, and transport nutrients.

You can find these amino acids in leaves, but hemp seed contains the highest concentration.

The bad news: In Australia, consumers are barred from buying whole, intact hemp seed. Only broken seeds are allowed to be sold.

Back in 2003, the U.S. Federal Government patented CBD after discovering the cannabinoid's myriad antioxidant and neuroprotective properties. Antioxidants are key to preventing cell damage, which can lead to poor health and serious illness.

In their pre-patent research, they found that CBD was a more powerful antioxidant than vitamins C and E, because you can consume extremely large amounts of CBDa when you eat raw cannabis, you also drastically increase the quantity of antioxidants you take in per serving.

Much more research needs to be done to show just how raw cannabis is metabolized in our bodies. But experts such as Dr. Courtney have shown that you can do far more with the herb than just smoke it. Incorporating more raw weed into your diet allows you to consume over 60 times as many cannabinoids in one sitting than when you puff on a bowl or eat an activated edible.

You can learn more about Dr Courtney's wonderful work at:

www.cannabisinternational.org

Raw Cannabis is the Single Most Important Dietary Element

by Dr. William Courtney

My childhood fascination with the microbiologic world was latter supported by my studies of organic chemistry and biochemistry, which came together in my undergraduate degree in microbiology. With the 2004 *Scientific American* article on the "Brain's Own Marijuana", my scientific interests of a lifetime joined forces. I have been immersed in the experiences of thousands of my patients who use raw cannabis daily. First introduced to dry green leaf, then fresh green leaf and now with the addition of raw fully mature flowers, the whole plant is consumed.

The central therapeutic paradigm of Western medicine is the silver bullet, penicillin. Its single action is to block the synthesis of cell walls, which are unique to bacteria and therefore do not directly harm the individual with pneumonia. The Western medical mind has a very hard if not impossible time trying to understand the diverse actions of Cannabidiol.

10,000-year-old cultural practices involve drying, then heating cannabis to effect a nearly complete decarboxylation of THC-Acid into THC. The creation of massive amounts of THC is compounded by the introduction of a psychoactive side effect that has a 10 mg dose limitation secondary to CB1 receptor stimulation. Research conducted in Bethesda, Maryland led to Patent 6,630,507, held by the United States of America since 2003, that teaches that the lack of psycho-activity in CBD allows doses that are 100-200 times

greater than the tolerable dose of THC. The articulated “Effective oral human dosage schedule of 20 mg / kg body weight” requires a considerable amount of cannabis. The simplest approach is to consume the trichrome laden fully mature flower along with 80-day leaf. Patient responses have exceeded any expectations.

Historically, dietary use of the entire raw cannabis plant brings us back in line with 34 million years of cannabis evolution. Lipid messenger molecules preceded cannabis by billions of years. The 4 billion-year-old development of lipid messenger molecules not only regulated resource management in the most primitive life forms, but were central in the earliest autocrine and paracrine modulation of cellular function. I believe autocrine cross talk was the necessary precedent to symbiotic, then multi-cellular life forms. Tissue specific or paracrine cluster regulation is the domain of the lipid messenger molecules and is the path to comprehending the incredible diversity of function that is only now beginning to be understood. While our perception of these physiologic properties is new, the phenomenal beneficial affects were there yesterday, last year, if not hundreds of millions to billions of years ago.

I seek to consolidate the science regarding the essential nature of the phyto-cannabinoid contributions to health maintenance and restoration. Akin to Essential Fatty Acids and Essential Amino Acids, there need to be Minimum Daily Requirements established to guide worldwide adoption of raw cannabis as the single most important dietary element.

Dr. William L. Courtney has an extensive medical education that began with a Bachelor of Science in Microbiology from the University of Michigan. He also received his Doctor of Medicine from Wayne State University, and Interned for Residency in Psychiatry at California Pacific Medical Center and went on to earn his Post Doctorate in Forensic Examination and Forensic Medicine. Dr. Courtney is currently a member of The American Academy of Cannabinoid Medicine, the International Cannabinoid Research Society, the International Association of Cannabis as Medicine, and the Society of Clinical Cannabis. Dr. Courtney has also been teaching Continuing Medical Education (CME) courses in clinical cannabis.

His area of special interest is the dietary uses of cannabis to achieve 250 to 500 mg of cannabinoid acid intake, which he considers as a conditionally essential nutrient in the diet of individuals from age 30 on. He has presented on high dose non-psychoactive dietary uses at Cannabis Therapeutics at the Institute of Molecular Psychiatry at the University of Bonn, the Institute for Advanced Studies at The Hebrew University of Jerusalem, and the International Cannabinoid Research Society conference in Chicago.

Dr. Courtney is Vice President of the Association Luxembourgeoise des Methodes Preventives, an ambulatory care facility in Luxembourg utilizing dietary unheated cannabis. He is working with dispensaries interested in providing high dose raw / juiced cannabis to seriously ill medical marijuana patients, and is also working to establish analytic / medical laboratories in Mendocino and Humboldt Counties, California.

www.cannabisinternational.org

When Was Homegrown Cannabis Entirely Legal in Australia?

The first record of common hemp seeds brought to Australia was with the First Fleet at the request of Sir Joseph Banks, who marked the cargo "for commerce" in the hope that hemp would be produced commercially in the new colony. Early governments in Australia actively supported the growing of hemp with gifts of land and other grants, and consumption of cannabis in Australia during the nineteenth century was widespread.

It was popular as a medicine, and was used as an intoxicant by members of the literati. Marcus Clarke, author of "For the Term of His Natural Life", experimented with cannabis as an aid to writing. A short story he wrote, *"*Cannabis Indica*",* was written under the influence of cannabis. Clarke and other members of Melbourne's bohemian Yorick Club were notorious cannabis users. Until the late nineteenth century, **"**Cigares De Joy**"** (cannabis cigarettes) were widely available; these claimed to "give immediate relief in cases of asthma, cough, bronchitis, hay-fever, influenza and shortness of breath".

Like many Western nations, Australia first responded to the issue of cannabis use in the 1920s, acting as a signatory to the 1925 Geneva Convention on Opium and Other Drugs.

This saw the use of cannabis restricted to medicinal and scientific purposes only. Cannabis was grouped with morphine, cocaine and heroin, despite cannabis' rare use as a medicine or remedy in Australia at the time.

This prohibition model was applied with little research into cannabis use in Australia. Most drug-related laws enacted by jurisdictions of Australia during this time were related to opium. But, as a result of pressure from the United Kingdom, Australia began implementing local laws consistent with the Geneva Convention. In 1928 Victoria enacted legislation that prohibited the use of cannabis. SA followed in 1934, NSW in 1935, Queensland in 1937 and WA in 1950. Tasmania was the last to ban cannabis, in 1959.

In Australia and in many other countries, you can still be sent to prison for growing or using homegrown cannabis. Why? Because big government and big pharma demand absolute control?

Are you angry yet?

Then tell your "epresentatives" in government – and tell the media what YOU think!