

Medicinal Cannabis in Human History Fact Sheet

by The Dà Má Collective 大麻



Earliest record of human cannabis use

Human cannabis use has been confirmed as far back as 12,000 years ago. The amazing herb entered the archaeological record of Japan and Eastern Europe nearly simultaneously, between 12,000-10,200 years before present day (10,000-8,200 BC). By at least 10,000 years ago (and likely earlier), the cannabis plant was widely distributed throughout Asia and Europe.

This is also the earliest species-confirmed archaeological evidence that's been found for the human use of any plant. This bears repeating: cannabis is the oldest and first known plant we have evidence of humans cultivating and crafting - the evidence of cannabis use pre-dates written history. (The next oldest known cultivated crop is wheat, which was known to have been cultivated in Jericho soon after 8,000 BC or under 10,000 years ago.)

Cannabis and the healing arts

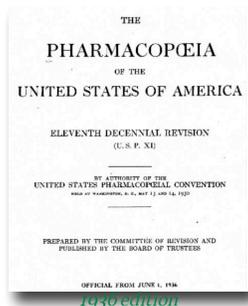
Cannabis use in medicine has been documented (via surviving ancient medical texts) since at least 4,800 years ago (2,800 BC), when it was regarded in China (via Shen Neng's pharmacopeia) as a "superior" healing & longevity elixir, recommended for upwards of 120 forms of ailments/disease. Today cannabis remains in the list of the 50 Fundamental Herbs in Traditional Chinese Medicine. The earliest hard physical evidence we have for human medicinal cannabis use is 1,600 years old and comes from Israel: In (June) 1992, Israel Antiquities Authority archaeologists discovered organic remains of a substance containing hashish, grasses and fruit, on the abdominal area of a teenage female skeleton that dates back to 400 A.D. She was discovered in a family tomb in the ancient city of Beit Shemesh, near Jerusalem.

The mention of cannabis as a healing agent recurs repeatedly, across continents cultures & traditions, throughout the historical record. A brief sampling:

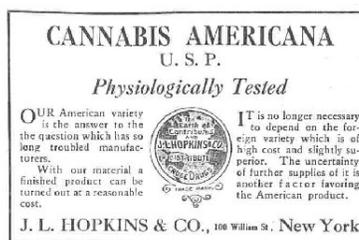
- 4,800 years ago (2,800 BC): China, Cannabis is listed in the Shen Neng Pharmacopeia (written by the inventor/discoverer of acupuncture & Traditional Chinese Medicine) as a remedy for 120+ forms of disease.
- 4,000 years ago: Africa, cannabis specimens found in African archaeological site dating from ~2,000 BC, medicinal cannabis use has been documented across the continent (including Rhodesia, Zimbabwe, & among the South African Bantu tribes).
- 3,700 years ago (1,700 BC - 200 AD): Egypt, medicinal cannabis mentioned in at least 6 ancient Egyptian medical texts/papyruses.
- 3,500 years ago (1,500 BC): India, Cannabis mentioned in Atharvaveda, the ancient Vedic healing & spiritual text. Cannabis is still listed in India's present-day national pharmacopeia.



- 2,000 years ago (77 AD & 90 AD): Rome & Greece, Pliny the Elder and Dioscorides both wrote of medicinal cannabis use (cannabis is listed in the Greek De Materia Medica).
- 1,300 years ago (700 AD): Arabia, Jabir Ibn Hayyan (aka Geber), the court physician to Caliph Harun al-Rashid (the Caliph of Arabian Nights fame) prepared alchemical cannabis (bhajj) concoctions.
- 1,200 years ago (800 AD): North America, pre-Columbian pipes containing cannabis resin found in Morristown, Ohio.
- 170 years ago (1840 AD): England via India: Western medicine's interest in cannabis revived via Dr. William O'Shaughnessy's landmark 1839 paper "On the Preparations of Indian Hemp or Gunjah".
- 160-80 years ago (1851 AD - 1936 AD): Cannabis listed in the United States Pharmacopeia.



- 120 years ago (Indian Hemp Drugs Commission Report of 1893-94): To inform the question of whether or not it would be wise to consider prohibiting cannabis use in India, the Indian Hemp Drugs Commission completed the largest and most systematic study ever (to date) on cannabis, investigating the plant's role in Indian (Vedic) medicine, spirituality & society. The conclusion was basically that Indian society would collapse if cannabis was removed; in India cannabis has never been illegal.
- 100 years ago (early 1900's, before prohibition): USA, 2,000+ documented pharmaceutical grade medicinal cannabis products were being offered to the general public by commercial manufacturers including Abbott, Eli Lilly, Parke Davis (Pfizer), Bristol Myers Squibb, and a host of others (cannabis cigarettes were sold to treat asthma).
- Last 20 years: Since 1996 the published peer-reviewed biomedical literature (as listed in the US National Library of Medicine's Pubmed indexing service) has seen 10,300+ papers published mentioning cannabis, 16,700+ papers on cannabinoids, and 7,500+ papers on the human endocannabinoid system. While it's possible some of these might be overlaps, even if you count just the "cannabis" papers, that's at least one paper published each day for the past 20 years. There's already been a llllot of research on cannabis!

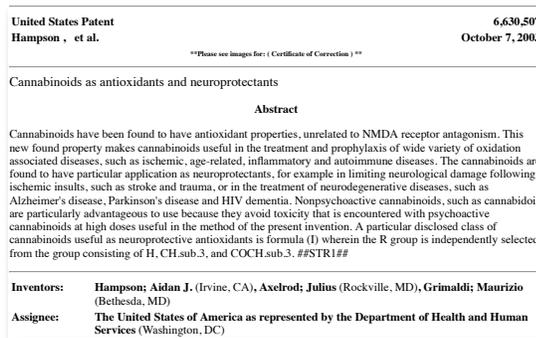


Medicine bottle from 1920's





- October 7, 2003: The United States of America as represented by the Department of Health and Human Services, filed patent #6630507, for the medical use of cannabinoids as antioxidants and neuroprotectants. From the text of the patent (freely available via the US Patent & Trademark Office): “This new found [antioxidant] property makes cannabinoids useful in the treatment and prophylaxis of wide variety of oxidation associated diseases, such as ischemic, age-related, inflammatory and autoimmune diseases. The cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, such as stroke and trauma, or in the treatment of neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease and HIV dementia.”



US Patent #6630507

The Human Endocannabinoid System

One of the most illuminating recent discoveries about the role cannabis plays in regulating & optimizing human physiology is the existence of the human endogeneous (or endo-) cannabinoid system (ECS) and the important role cannabinoids play in maintaining homeostasis (equilibrium) of the human organism. First discovered in 1988 with pioneering research being done in the mid-1990's, there are now 7,500+ medical research papers published on the endocannabinoid system, an average of about one paper per day.

The endocannabinoid system consists of a widely distributed network of cannabinoid receptors located throughout the human body, which respond to both endocannabinoids (cannabinoids naturally produced by the body, the two most important being anandamide “the bliss molecule” and 2-AG a.k.a. 2-arachidonylglycerol) and phytocannabinoids (cannabinoids produced by plants including but not limited to cannabis; other plants that stimulate the endocannabinoid system include the capsaicin in hot pepper, kava-kava root, mangos and chocolate/ cacao).

The endocannabinoid receptors are believed to be the most numerous and widely distributed of any protein receptor in the body, particularly densely distributed in the nervous system and brain, connective tissues, gonads, glands (hypothalamus etc), organs, the immune system and its associated structures. Some tissues contain more CB1 receptors, others more CB2, many tissues have both. In other words, our system is hard-wired to respond favorably to cannabis!



Cannabinoid receptors in human body.
Red/yellow = densest. Image via BBC 2009

Cannabinoid receptors are found in many other animals (all vertebrates & some invertebrates) and are thought to have been included in the basic biological template/wiring for all higher life forms since at least 400 million years ago. Cannabinoid receptors can be thought of as a molecular lock/keyhole in the



membrane of a cell, it takes a particular size & shape of molecule (the key) to fit into and activate the receptor.

There are 3 types of cannabinoid receptors, each responds to a wide range of cannabinoids however the CB1 receptors are particularly receptive to THC cannabinoids, while CB2 receptors are especially receptive to CBD & CBN. CB3 receptors are a relatively new discovery and we're still learning more about those.

The body naturally produces cannabinoids especially in times of cellular or systemic stress or trauma, both endo- and phyto-cannabinoids serve to regulate, modulate & protect the normal function of human cellular activity & immune response (for example, cannabinoids are known to dampen the glutamic acid inflammation/pain response & act as a powerful neuroprotectant). A new treatment model is emerging based on the concept of clinical endocannabinoid deficiency (CECD), with the prospect that cannabinoid deficiency could underlie the pathophysiology of migraine, fibromyalgia, irritable bowel syndrome, and other conditions shown to be alleviated by clinical cannabis. (See Russo's *Clinical Endocannabinoid Deficiency: Can this Concept Explain Therapeutic Benefits of Cannabis in Migraine, Fibromyalgia, Irritable Bowel Syndrome and other Treatment-Resistant Conditions?* *Neuroendocrinology Letters*, 2004; 25(1/2):31-39).

For the rest of the story (including citations & research sources), check out The Newbie's Guide To Medicinal Cannabis! www.TheDaMaCollective.com

"The Dà Má Collective" is the pen name for the band of merry hempsters writing The Newbie's Guide To Medicinal Cannabis: industry pioneers, doctors nurses & caregivers, advocates, alchemists, artists, product & equipment manufacturers, growers, medical & cultural advisors, dispensary & smokeshop owners & staff, medicinal cannabis cardholders + other experts & collaborators.

Our mission is to plant seeds of cannabis knowledge far & wide, serving as an independent trusted source of medicinal cannabis education, facts & research. We aim to dissolve the stigma and rectify, restore and re-normalize healthy positive attitudes & perceptions towards the cannabis plant: as a benevolent life-saving medicine, and a time-&-tradition-honored means of enhancing relaxation, good humour, inspiration, and communion with one's faith. We trust that as knowledge grows (individually & collectively) about the virtues, therapeutic benefits, history, and the biological hard-wiring of cannabis into the human metabolic system, attitudes will be transformed and shifted towards greater appreciation, respect, and gratitude for this ancient healing herb that has, since before the beginning of human history, been an integral thread in the fabric of human culture & the healing professions.

*"No gem or jewel can touch in value cannabis taken
truly and reverently"*

- Indian Hemp Drugs Commission Report of 1893-94