

Anti-Inflammatory		
Anti-inflammatory Activity in Colon Models Is Derived from Δ^9 -Tetrahydrocannabinolic Acid That Interacts with Additional Compounds in Cannabis Extracts	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5627671/	anti-inflammatory activity of Cannabis extracts on colon epithelial cells derives from a fraction of the extract that contains THCA. It is suggested that in a nonpsychoactive treatment for IBD, THCA should be used rather than CBD.
THCA marketedly alleviates liver fibrosis and inflammation in mice	https://pubmed.ncbi.nlm.nih.gov/33341026/	Δ^9 -THCA prevents TGF β -induced fibrotic markers in vitro and liver inflammation and fibrogenesis in vivo, providing a rationale for additional studies on the medicinal use of this cannabinoid, as well as cannabis preparations containing it, for the treatment of liver fibrosis and the management of NAFLD.
Can You Pass the Acid Test? Critical Review and Novel Therapeutic Perspectives of Δ^9 -Tetrahydrocannabinolic Acid A	https://pubmed.ncbi.nlm.nih.gov/28861488/	Many in vitro studies seem to indicate that THCA-A interacts with a number of molecular targets and displays a robust pharmacological profile that includes potential anti-inflammatory, immuno-modulatory, neuroprotective, and antineoplastic properties. Moreover, the few in vivo studies performed with THCA-A indicate that this compound exerts pharmacological actions in rodents, likely by engaging type-1 cannabinoid (CB1) receptors
Epilepsy / Dravet's Syndrome		
Pharmacokinetics of Phytocannabinoid Acids and Anticonvulsant Effect of Cannabidiolic Acid in a Mouse Model of Dravet Syndrome	https://pubmed.ncbi.nlm.nih.gov/31686510/	the brain and plasma pharmacokinetic profiles of CBDA, THCA, cannabichromenic acid (CBCA), cannabidivarinic acid (CBDVA), cannabigerolic acid (CBGA), and cannabigerovarinic acid (CBGVA) were examined following intraperitoneal administration in mice.
The current status of artisanal cannabis for the treatment of epilepsy in the United States - Epilepsy & Behavior	https://pubmed.ncbi.nlm.nih.gov/28254350/#:~:text=Results%3A%20Of%2027%20combined%20patients,%25%20experienced%20a%2076%20%2D99%25	Four case reports are included that illustrate clinical responses at doses <0.1mg/kg/day, biphasic dose-response effects, the use of THCA for seizure prevention, the use of THC for seizure rescue, and the synergy of cannabinoids and terpenoids in artisanal preparations.
Evaluation of the Possible Anticonvulsant Effect of Δ^9 -Tetrahydrocannabinolic Acid in Murine Seizure Models	https://pubmed.ncbi.nlm.nih.gov/33998858/	The anticonvulsant profile of Δ^9 -THCA was variable depending on the seizure model used and presence of Δ^9 -THC. Because of the unstable nature of Δ^9 -THCA, further exploration of Δ^9 -THCA through formal anticonvulsant drug development is problematic without stabilization. Future studies may better focus on determining the mechanisms by which combined Δ^9 -THCA and Δ^9 -THC alters seizure thresholds, as this may uncover novel targets for the control of refractory partial seizures.
Obesity		
Tetrahydrocannabinolic acid (THCA-A) reduces adiposity and prevents metabolic disease caused by diet-induced obesity	https://pubmed.ncbi.nlm.nih.gov/31706843/	Our data validate the potential of Δ^9 -THCA-A as a low adipogenic PPAR γ agonist, capable of substantially improving the symptoms of obesity-associated metabolic syndrome and inflammation.
Neuroprotective		
Tetrahydrocannabinolic acid is a potent PPAR γ agonist with neuroprotective activity	https://pubmed.ncbi.nlm.nih.gov/28853159/	Δ^9 -THCA shows potent neuroprotective activity, which is worth considering for the treatment of Huntington's disease and possibly other neurodegenerative and neuroinflammatory diseases.
Phytocannabinoids: General Aspects and Pharmacological Potential in Neurodegenerative Diseases	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6206465/	Phytocannabinoids are chemically and biologically diverse and possess interesting bioactive properties well suited to their development as novel treatments of such diseases. This includes both general antioxidant and anti-inflammatory, but also directly neuroprotective properties mediated via several distinct biochemical pathways.
A systematic review of minor phytocannabinoids with promising neuroprotective potential	https://pubsopen.onlinelibrary.wiley.com/doi/full/10.1111/psp.15185	Δ^9 -THCA had anti-inflammatory effects, CBG and Δ^9 -THCA, like CBD, mediate their anti-inflammatory effects through PPAR γ .
Nausea-induced Vomiting		
Tetrahydrocannabinolic acid reduces nausea-induced conditioned gaping in rats and vomiting in <i>Suncus murinus</i>	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3792001/	THCA potentially reduced conditioned gaping in rats and vomiting in <i>S. murinus</i> , effects that were blocked by SR. These data suggest that THCA may be a more potent alternative to THC in the treatment of nausea and vomiting.
Effect of combined doses of Δ^9 -tetrahydrocannabinol and cannabidiol or tetrahydrocannabinolic acid and cannabidiolic acid on acute nausea in male Sprague-Dawley rats	https://link.springer.com/article/10.1007/s00213-019-05428-4	Combinations of very low doses of CBD + THC or CBDA + THCA robustly reduce LiCl-induced conditioned gaping. Clinical trials are necessary to determine the efficacy of using single or combined cannabinoids as adjunct treatments with existing anti-emetic regimens to manage chemotherapy-induced nausea.
Immuno		
Unheated Cannabis sativa extracts and its major compound THCA have potential immuno-modulating properties not mediated by CB1 & CB2 receptor coupled pathways	https://pubmed.ncbi.nlm.nih.gov/16504929/	Unheated Cannabis extract and THCA inhibit the PLC-PLC activity in a dose-dependent manner. These results suggest that THCA and THC exert their immuno-modulating effects via different metabolic pathways.
Pain		
Modulation of Recombinant Human T-Type Calcium Channels by Δ^9 -Tetrahydrocannabinolic Acid In Vitro	https://pubmed.ncbi.nlm.nih.gov/33988881/	THCA modulated T-type ICa currents in vitro, with significant modulation of kinetics and voltage dependence at low μ M concentrations. This study suggests that THCA may have potential for therapeutic use in pain and epilepsy through T-type calcium channel modulation without the unwanted psychoactive effects associated with THC.
Liver Disease		
Expanding Research on Cannabis-Based Medicines for Liver Steatosis: A Low-Risk High-Reward Way Out of the Present Deadlock?	https://pubmed.ncbi.nlm.nih.gov/35420457/	Besides the "major" phytocannabinoids, other, still understudied, cannabinoids such as cannabinoid acid precursors in the plant flowers (e.g., tetrahydrocannabinolic acid [THCA] or cannabidiolic acid [CBDA]), may be of interest for NAFLD prevention, due either to their interaction with endocannabinoidome receptors, or, as previously suggested for CBD, their immunomodulatory, anti-inflammatory, or antioxidant actions.
Arthritis		
Δ^9 -Tetrahydrocannabinolic acid alleviates collagen-induced arthritis: Role of PPAR γ and CB1 receptors	https://pubmed.ncbi.nlm.nih.gov/32510591/	Δ^9 -THCA-A modulates CB1 receptors through the orthosteric and allosteric binding sites. In addition, Δ^9 -THCA-A exerts anti-arthritis activity through CB1 receptors and PPAR γ pathways, highlighting its potential for the treatment of chronic inflammatory diseases such as rheumatoid arthritis.
General		
Affinity and Efficacy Studies of Tetrahydrocannabinolic Acid A at Cannabinoid Receptor Types One and Two		
The dimerization of Δ^9 -tetrahydrocannabinolic acid A (THCA-A)	https://pubmed.ncbi.nlm.nih.gov/31649855/	The renewed interest in dimeric salicylates as broad-spectrum anti-inflammatory and anti-diabetic agents provided a rationale to investigate the dimerization of the substituted salicylate Δ^9 -tetrahydrocannabinolic acid (THCA-A, 3a) as a strategy to solve its instability to decarboxylation and to generate analogues and/or pro-drugs of this native pre-cannabinoid
COVID-19		
Cannabinoids Block Cellular Entry of SARS-CoV-2 and the Emerging Variants	https://pubs.acs.org/doi/10.1021/acs.jnatrod.1c00946	THCA can bind to the spike protein of SARS-CoV-2, the virus that causes Covid-19. By binding to the spike protein, the compounds can prevent the virus from entering cells and causing infection, potentially offering new avenues to prevent and treat the disease.
Unheated Cannabis sativa extracts and its major compound THC-acid have potential immuno-modulating properties not mediated by CB1 and CB2 receptor coupled pathways	https://www.sciencedirect.com/science/article/pii/S1567576905002882?via%3Dihub	Unheated Cannabis extract and THCA were able to inhibit the tumor necrosis factor alpha (TNF- α) levels in culture supernatants from U937 macrophages and peripheral blood macrophages after stimulation with LPS in a dose-dependent manner. This inhibition persisted over a longer period of time, whereas after prolonged exposure time THC and heated Cannabis extract tend to induce the TNF- α level.
Effects of cannabinoids Δ^9 -tetrahydrocannabinol, Δ^9 -tetrahydrocannabinolic acid and cannabidiol in MPP+ affected murine mesencephalic cultures	https://www.sciencedirect.com/science/article/abs/pii/S0944711312001249?via%3Dihub	data show that cannabinoids THC and THCA protect dopaminergic neurons against MPP+ induced cell death.
Extensive phytocannabinoid profiles of seized cannabis and cannabis-based medicines – Identification of potential distinguishing markers	https://www.sciencedirect.com/science/article/abs/pii/S0379073821000931	Investigation of phytocannabinoid profiles of cannabis, Sativex and Dronabinol. Identification of characteristic features for each type of cannabis-based medicine. Comparison of medical and seized cannabis samples via principal component analysis.