

Annex to: Derivation of a health-based guidance value for Δ^8 -Tetrahydrocannabinol (Δ^8 -THC) and its occurrence in food. doi: 10.2903/j.efsa.2025.9735

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Annex B: Literature search and selection for relevance of studies related to Δ^8 -Tetrahydrocannabinol (Δ^8 -THC) in food

To search for different types of publications providing information on Δ^8 -Tetrahydrocannabinol (Δ^8 -THC), the following databases were used:

Database	Platform	Dates
Web of Science Core Collection	Web of Science	1975-present
CAB Abstracts	Web of Science	1910-present
Current Contents Connect	Web of Science	1998 -present
FSTA	Web of Science	1969-present
Medline	Web of Science	1991-present
ProQuest Dissertations &Theses	Web of Science	1637-present
BIOSIS Citation Index Web of Science 1926-present	Web of Science	1926-present
PubMed	NLM	1946-present
Embase	Embase.com	inception-present
Scopus	Scopus.com	inception-present

Additional searches were conducted for the retrieval of clinical trials related to Δ^8 -Tetrahydrocannabinol (Δ^8 -THC). The clinical trial registries are presented here:

Registry	Publisher
ClinicalTrials.gov	NLM/NCBI
Cochrane CENTRAL	Wiley
EU Clinical Trials Registry	EMA
International Clinical Trials Registry Portal	WHO

Finally, a target search for articles addressing both Δ^8 -THC and cannabinoid receptors was contacted.

Methodology

Date of searches

13/07/23, 24/11/23, 27/11/2023 - Last update 18/09/24, 19/09/2024 (for clinical trials)
07/02/2025, 20/02/2025

Search protocol and search strategies

For full transparency and reproducibility, the search terms used are recorded in the search protocols to retrieve potentially relevant studies for subsequent screening of titles and abstracts.

Search terms

Controlled vocabulary (PubMed)	Free text terms
"delta-8-Tetrahydrocannabinol" [Supplementary Concept]	5957-75-5 Δ^8 -Tetrahydrocannabinol Δ -8-Tetrahydrocannabinol Δ^8 -tetrahydro-cannabinol Δ -8-tetrahydro-cannabinol Delta ⁸ -Tetrahydrocannabinol Delta ⁸ -Tetrahydrocannabinol Delta8-tetrahydro-cannabinol Delta-8-tetrahydro-cannabinol D8-THC D-8-THC Δ^8 -THC Δ -8-THC Delta8-THC Delta-8-THC Δ^8 - <i>trans</i> -Tetrahydrocannabinol Δ - <i>trans</i> -Tetrahydrocannabinol D8- <i>trans</i> -Tetrahydrocannabinol D-8- <i>trans</i> -Tetrahydrocannabinol Delta8- <i>trans</i> -Tetrahydrocannabinol Delta-8- <i>trans</i> -Tetrahydrocannabinol Δ^8 - <i>trans</i> -Tetrahydro cannabinol Δ - <i>trans</i> -Tetrahydro cannabinol D8- <i>trans</i> -Tetrahydro cannabinol D-8- <i>trans</i> -Tetrahydro cannabinol Delta8- <i>trans</i> -Tetrahydro cannabinol Delta-8- <i>trans</i> -Tetrahydro cannabinol Δ^8 -l-Tetrahydrocannabinol Δ -8-l-Tetrahydrocannabinol Δ^8 -l-Tetrahydro cannabinol Δ -8-l-Tetrahydro cannabinol Delta8-l-Tetrahydrocannabinol Delta-8-l-Tetrahydrocannabinol Delta8-l-Tetrahydro cannabinol Delta-8-l-Tetrahydro cannabinol D8- l-Tetrahydrocannabinol D-8- l-Tetrahydrocannabinol D8- l-Tetrahydro cannabinol D-8- l-Tetrahydro cannabinol $\Delta_{1(6)}$ -Tetrahydrocannabinol

Controlled vocabulary (PubMed)	Free text terms
	Delta1(6)-Tetrahydrocannabinol D1(6)-Tetrahydrocannabinol $\Delta_{1(6)}$ -THC Delta1(6)-THC D1(6)-THC Δ_6 -Tetrahydrocannabinol Delta6-Tetrahydrocannabinol D6-Tetrahydrocannabinol Δ_6 -THC Delta6-THC D6-THC $\Delta_{1(6)}$ - <i>trans</i> -Tetrahydrocannabinol (-)- Δ_6 -Tetrahydrocannabinol (-)- Δ_8 -6a,10a- <i>trans</i> -Tetrahydrocannabinol NSC 134453

In an additional search, the free text above was combined using the Boolean operator AND with the following terms to perform the targeted search on Δ^8 -THC and cannabinoid receptors:

("Cannabinoid receptor*" [tiab] OR
 "CB receptor*" [tiab] OR
 "Cannabinoid receptor*1" [tiab] OR
 "Cannabinoid receptor*2" [tiab] OR
 "CB1 receptor*" [tiab] OR
 "CB2 receptor*" [tiab] OR
 "Receptor* CB1" [tiab] OR
 "Receptor* CB2" [tiab])

The references were subsequently screened for relevance and characterised in relation to the areas of interest based on their titles and abstracts.

Screening for relevance and study characterisation

The titles and the abstracts of the articles retrieved were screened for their potential relevance (Level 1) and were separated according to different categories of interest. More specifically, the following categories were included: acute toxicity studies, long-term toxicity studies, neurotoxicity studies, genotoxicity studies, human studies, toxicokinetics, chemistry, occurrence, exposure, read-across studies, and others.

The abstracts proposed as potentially relevant were then screened by the working group (WG) members and, by applying expert judgement were used in the assessment if considered relevant for the risk assessment (Level 2).

Results

Searches on Δ^8 -THC		
	Level 1	Level 2
Category	Number of studies	Number of studies
Total	1374	
Included	948	235
Excluded	426	
Searches on Δ^8 -THC and cannabinoids receptors		
	Level 1	Level 2
Category	Number of studies	Number of studies
Total	77	
Included	18	4
Excluded	59	