

## Advisory Commission for Plant Preparations

Advice of 25<sup>th</sup> April 2023 emitted by the Advisory Commission for Plant Preparations concerning the use of the seeds and products derived therefrom, of *Cannabis sativa* L. in or as food.

The Advisory Commission for Plant Preparations was asked by the Directorate-General Animals, Plants and Food of the Federal Public Service Health, Food Chain Safety and Environment to issue an advice about the safe use of the seeds, and products derived therefrom, of *Cannabis sativa* L.

Regarding the Royal Decree of 31 August 2021 concerning the manufacture of and trade in foodstuffs composed of or containing plants or plant preparations, and in particular Article 3, §2.

Considering that *Cannabis sativa* L. is mentioned on List 1 of the Royal Decree of 31 August 2021 (Dangerous plants that should not be used in or as food).

Considering that *Cannabis sativa* contains, amongst others, the psycho-active substance delta-9-tetrahydrocannabinol ( $\Delta^9$ -THC) and its non psycho-active precursors, the delta-9-tetrahydrocannabinolic acids ( $\Delta^9$ -THCA-A and  $\Delta^9$ -THCA-B) which are readily converted to  $\Delta^9$ -THC upon heating<sup>1</sup>.

Considering the acute reference dose (ARfD) of 1  $\mu$ g  $\Delta^9$ -THC/ kg body weight, established by EFSA in its Scientific Opinion of 2015 on risks for human health related to the presence of tetrahydrocannabinol (THC) in milk and other food of animal origin<sup>1</sup>.

Considering the scientific report of EFSA (2020) assessing acute human exposure to  $\Delta^9$ -THC, using the occurrence data for total  $\Delta^9$ -THC (the sum of  $\Delta^9$ -THC and its precursors); the EFSA ARfD of 1 µg/kg bw was exceeded in adult consumers for most of the hemp and hemp-derived products<sup>2</sup>.

Considering the EU Regulation (EU) 2022/1393<sup>3</sup>, laying down the maximum level of  $\Delta^9$ -THC equivalents, expressed as the sum of  $\Delta^9$ -THC + (0.877 x  $\Delta^9$ -THCA):

- for hemp seeds: max. 3,0 mg/kg
- for ground hemp seeds, (partially) defatted hemp seed and other hemp seed derived products (products derived exclusively from hemp seeds), with the exception of hemp seed oil: max. 3,0 mg/kg
- for hemp seed oil: max. 7,5 mg/kg

Considering art. 3 §2 of the Royal Decree of 31<sup>st</sup> August 2021, in particular the last paragraph which states that "derogations may be granted when a toxicological and analytical dossier shows that the plant preparations no longer contain the toxic properties or substances of the plant from which the plant preparations were obtained".

Considering that hemp seeds may be contaminated by other plant parts containing THC; different lots of hemp seeds may be harvested at different times or at different locations; the THC content in hemp seeds can therefore vary considerably from one lot to another;



Directoraat-generaal Dier, Plant en Voeding Dienst Voedingsmiddelen, Dierenvoeders en Andere Consumptieproducten

The Advisory Commission on Plant Preparations concludes that

- the seeds of *Cannabis sativa* L. can be used in or as food if the level of  $\Delta^9$ -THC equivalents, expressed as the sum of the content of  $\Delta^9$ -THC + (0.877 x the content of  $\Delta^9$ -THCA) is maximum 3,0 mg/kg for hemps seeds, ground hemp seeds, (partially) defatted hemp seed and other hemp seed derived products (products derived exclusively from hemp seeds). Hemp seed oil can be used in or as food if the sum of the content of  $\Delta^9$ -THC + (0.877 x the content of  $\Delta^9$ -THCA) is maximum 7,5 mg/kg.
- The compliance of the products containing hemp seed or hemp seed oil, has to be demonstrated by analysis, for every lot of hemp seeds or hemp seed oil. If the analysis is carried out on a product containing multiple ingredients, the relative amount of hemp seed or hemp seed oil must be taken into account. E.g. a product containing 10% hemp seed should not contain more than 0.3 mg/kg THC equivalents.

The Advisory Commission on Plant Preparations reserves the right to re-examine this advice in the light of new considerations.

## **References**

- 1. EFSA CONTAM Panel (EFSA Panel on Contaminants in the Food Chain), "Scientific Opinion on the risks for human health related to the presence of tetrahydrocannabinol (THC) in milk and other food of animal origin", EFSA Journal 2015;13(6):4141 (https://doi.org/10.2903/j.efsa.2015.4141)
- EFSA Scientific Report "Acute human exposure assessment to tetrahydrocannabinol (Δ<sup>9</sup>-THC)", EFSA Journal 2020;18(1):5953 (<u>https://doi.org/10.2903/j.efsa.2020.5953</u>)
- 3. Commission Regulation (EU) 2022/1393 amending Regulation (EC) No 1881/2006 as regards maximum levels of delta-9-tetrahydrocannabinol ( $\Delta^9$ -THC) in hemp seeds and products derived therefrom