

Establishing a safe level for tetrahydrocannabinol (THC) as a contaminant of cannabidiol (CBD) novel foods and other hemp-derived products - Lay Summary

Lay Summary

A joint Subgroup of the ACNFP and COT was formed to address the safety issues of hemp-derived ingredients and cannabidiol (CBD). The primary aim of the Subgroup was to help the Food Standards Agency (FSA) and Food Standards Scotland (FSS) perform risk assessments for CBD and other hemp-derived novel foods. One minor component found at very low levels in CBD novel foods and other hemp-derived products is a compound called tetrahydrocannabinol (THC), which exists naturally in the hemp plant. THC is a controlled substance within the United Kingdom (UK) due to safety concerns and its use as a recreational drug, prohibiting its sale or use as a food. Safety concerns have been raised specifically for THC consumed in foods because it has effects on the brain and body. Some examples of the effects THC may cause are sleepiness, an impact on the ability to perform tasks, impaired thinking, irregular heart rate, and potential harm to pregnant women and the unborn child.

The presence of THC as a contaminant is unavoidable in CBD novel foods and in other hemp-derived products due to it forming part of the family of very similar compounds found in the hemp plant; this has required the FSA to assess its safety and any potential health risk to consumers. Little is currently known about the safety of THC when it is consumed as part of a food or whether presence in different types of foods have differing or additional risks to human health. Additionally, discussions have been held in parallel by the Advisory Council on the Misuse of Drugs (ACMD) on how to manage THC from a legal standpoint.

In-line with the ACNFP and COT joint Subgroup's remit, a scientific review of THC as a contaminant of CBD novel foods and other hemp derived products has been carried out to help the FSA/FSS establish a safe upper limit. The view is that consumption of THC below the safe upper limit is not expected to result in harm. The safe upper limit has been established from the evidence base used in this review. This has taken into consideration both the ACMD advice on THC in consumer products and the 2015 European Food Safety Authority (EFSA) Panel on Contaminants in the Food Chain's (CONTAM Panel) scientific opinion on the risks for human health from the presence of THC in milk and other products of animal origin.

A safe upper limit was identified by the ACNFP-COT Subgroup, which is defined as 1 microgram of THC, per kilogram of body weight, per day. This value is equivalent to 70 micrograms of THC per day for an average 70-kilogram adult. Consumers are considered to be protected with intakes at or below the safe upper limit value, where no harmful effects are expected to occur.

In conclusion, THC is a controlled substance within the UK, but it is present as an unavoidable contaminant in CBD novel foods and other hemp-derived products. The Subgroup reviewed previous assessments by two authoritative bodies: the EFSA - CONTAM Panel and the ACMD - and agreed with their reasoning and recommendations on safe levels for THC. The Subgroup concluded that consuming THC as a contaminant of CBD and other hemp-derived products at or below an intake of 1 microgram, per kilogram of body weight, per day, is not expected to be harmful under normal use.

Abbreviations

ACNFP Advisory Committee on Novel Foods and Processes

ACMD Advisory Council on the Misuse of Drugs

CBD Cannabidiol

CONTAM Panel The Panel on Contaminants in the Food Chain

COT Committee on Toxicity

EFSA	European Food Safety Authority
FSA	Food Standards Agency
FSS	Food Standards Scotland
THC*	Tetrahydrocannabinol

*This refers to total tetrahydrocannabinol, which is the sum of delta-9-tetrahydrocannabinol and delta-9-tetrahydrocannabinolic acid – both of which are considered in this position statement.