

## INDUSTRIAL USE OF HEMP IN FOOD AND SUPPLEMENTS: PROGRESS OF THE REGULATIONS IN LATAM

Yury Caldera\*

After 60 years of being rejected, three years of being scientifically reviewed by the WHO, and two years of diplomatic discussions, last December 2<sup>nd</sup>, 2020, the UN recognized the therapeutic properties of the cannabis flower. The multilateral organization decided to eliminate cannabis for medical use out of the list of the 4<sup>th</sup> Convention on Drugs of 1961.

This progress has made it possible to decriminalize it to be able to use it therapeutically in different Latin American countries and at the same time, the extraordinary industrial versatility of the non-psychoactive hemp has been identified that consists of oils, resins, dyes, crude extracts, or other innovations resulting from technological development derived from the non-psychoactive cannabis or hemp, with a content of THC less than 1%, including cannabinoids, isomers, acids, terpenes, salts, and salts of isomers, derived from plant material such as stems, seeds, seed hulls, woody material, or other foliar material such as biomass.

Nowadays, the use of derivatives as a raw material in the food industry is of great interest (see Image 1), once it's been confirmed that hemp seeds and their derivatives (such as oil and flour) contain: Polyunsaturated fatty acids (PUFAs) with low concentrations of saturated fatty acids; proteins with an exceptional content of amino acids that contain sulfur, which is methionine, cysteine, and arginine, in addition to its content of vitamins and minerals, which provides it with a great nutritional value and utility in the food industry.



Image 1. Industrial use of hemp in the food category in Latin America. February 2022

\*Specialist in labeling and food policies in LATAM

Recognizing its potentialities to use it in food and supplements is currently under discussion, considering that being products for human consumption, the national sanitary authorities have a special interest and they must be regulated. In this regard, Latin America has shown important progress in this matter. Countries like Colombia, Ecuador, Uruguay, Chile, and Paraguay, (Chart 1) have made some progress in different levels, and others like Argentina, are working on regulations to authorize the industrial use of hemp in foods, beverages, and dietary supplements.

The following are the most relevant aspects:

**Chart 1. Regulatory progress in the industrial use of non-psychoactive hemp in food**

COUNTRY	COMPONENTS	FOOD/INGREDIENTS	NONPSYCHOACTIVE THC LEVEL	REGULATION
Chile	Seed	▪ Edible oil	10 mg of THC / Kg of food	2015
Uruguay	Seed	▪ Protein	10 ppm (mg THC / kg protein)	2020
Ecuador	Seed	▪ Processed foods	< 0,3% THC	2021
	Plant parts	▪ Drinks ▪ Food additives ▪ Food supplements		
Colombia	Seed Plant parts	▪ Food and drinks ▪ Alcoholic beverages ▪ Dietary supplements	<1% THC by weight	2022
Paraguay	Seed Plant parts	▪ Food ingredients for export	< 1% dry weight	2019
Argentina	Seed Plant parts	▪ Not specific	It does not specify (It is being studied using criteria similar to that of Regulation (EU) N° 1307/2013, paragraph 28	Bill presented to the Senate 2021

## Chile

Since 2015, through Exempt Resolution N° 432, they have authorized getting *edible oil derived from Hemp seeds of cannabis sativa*. However, it specifies it cannot contain Tetrahydrocannabinol (THC). In 2016 a public consult notice was sent to the World Trade Organization to modify article 170 of the Food General Regulations that would establish the maximum level of Tetrahydrocannabinol (THC) in human nutrition and hemp-based foods (*Cannabis sativa*), which should be 10 mg of THC/Kg of food. It was used as a reference to the maximum level in Canada and EFSA background. The suggestion hasn't been yet included in the national law.

## Uruguay

In January 2020, Decree 19/020 was published; it modified the National Bromatological Regulation to include *the protein of the hemp seed* that results from the seeds or nuts of the industrial hemp as a food ingredient. The hemp protein will be processed in powder form since this is the ingredient's presentation admitting a THC concentration of up to 10 ppm (mg THC/kg protein) for the powdered ingredient. This decree describes the composition of macronutrients in % and also the expected characteristics of the amino acids. In addition, it takes into account that all the labels of the products should show the statement "Protein of the hemp seed" in the list of the ingredients.

## Ecuador

In February 2021, Resolution 002-2021 on "Regulation and control of finished products of human use and consumption containing non-psychoactive cannabis or hemp" was published. The regulation authorized all the parts of the non-psychoactive cannabis or hemp as a food ingredient, as well as the non-psychoactive cannabis or hemp derivatives whose values are less than 0.3% of THC in *industrial food, beverages, food additives, and dietary supplements*. In addition, it establishes the requirements for labeling, advertising, and the express prohibition to use the claims relating to the health benefits.

## Colombia

In July 2021, Decree 811 was published, substituting title 11 "On the safe and informed access to the use of cannabis and cannabis plant". The new regulation stipulates that for industrial purposes, it will be taken into account the following uses other than medical and scientific, including, but not limited to *food, beverages, and dietary supplements*. The use of grain, plant components, and products derived from non-psychoactive cannabis is authorized. In any case, those products for industrial purposes derived from cannabis and/or plant components whose content of Tetrahydrocannabinol (THC) including its isomers, salts, and acid forms is less than one percent (1 %) in weight.

In February 2022, the regulation of Decree 811 was published, through Resolution 227, which describes the requirements that must be met by food, beverages, and dietary supplements that include non-psychoactive cannabis derivatives as ingredients.

## Paraguay

In October 2019, Resolution N° 829 came into force. It authorizes the non-psychoactive industrial hemp farming for its industrial use, and established that it is decriminalized when it's "non-psychoactive cannabis" containing "THC of less than 1% in dry weight". This progress makes it possible for the country to position itself as the leader in exporting *oil, proteins, and industrial hemp derivatives*, and it became the first Latin American country to export non-psychoactive cannabis food derivatives to the European Union and the United Kingdom. However, this is a paradox due to the fact that the national regulation does not authorize its use in the food category.

## Argentina

In June 2021, the Senate passed a bill on the "Regulatory framework for the development of the medical cannabis and industrial hemp industry". One of its goals is to legalize different productive links and the hemp or industrial hemp commercialization that includes the food category and its sub-products, as well as promoting the authorization mechanisms for the producers and distributors, and safety, control, and traceability strategies in the chain.

## Conclusions

Currently, they're still working on a phase of discovery and development globally to improve or create new products, ways to commercialize, and regulatory modalities to be applied according to the categories of sanitary interest like food. However, the progress they've made so far will continue and more and more countries in Latin America will incorporate new regulations and amendments that allow the industrial use of hemp in food safety, with quality and efficiency by consumers.

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