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# BOOK OF ABSTRACTS

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## A new validated HPLC method for cannabidiol quantification in CBD-containing food supplements

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Genuine cannabis compounds and their derivatives are popular chemicals used for medical and recreative purposes. Due to diverse regulation in EU member states a lot of cannabinoid-containing products can be found mainly in foods, food supplements, and e-cigarette liquids. The loose regulation of these products results in uncontrolled quality and content.

In Hungary, the use of cannabidiol (CBD) is prohibited in food supplements. No products with CBD that are intended for human consumption should be on the Hungarian market, but medicines. Despite of regulations, the CBD-containing products are easily available online and in stores as well. Since these products are out of the focus of authorities, their quality is not known.

The aim of the present work was to set up a new and simple method for CBD content determination. An HPLC method was elaborated and validated with simple sample preparation. This analysis included twenty food supplements. CBD could be identified in all the products. In eleven products, the amount of the active substance was less than 25% of the declared amount, whereas in eight products the amount of the CBD was 19%–60% less than displayed on the label. In one product the CBD-content was 36% higher than declared.

The findings of this analysis demonstrate that almost 50% of the products did not contain the amount of CBD stated on the label. Besides being illegal, CBD content deviation might suggest that these products were not subjected to extensive quality control, thus their administration might be unsafe.

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