The Analysis of 20 Hemp Commercial Products for Their Claimed vs. Found CBD , THC, and Impurity Contents to Determine Their Safety and Efficacy Outcomes

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A total of 20 hemp and CBD commercial products (4 vape oils, 7 oils, 4 edibles and 5 topicals) were collected from dispensaries and CBD shops. These products were extracted by solvent extraction and analyzed quantitatively by Gas Chromatography (GC-FID) using a validated method to determine the CBD and THC concentrations as well as the presence of impurities to prove label accuracy claimed on these products. Most of the tested products did not match the claimed composition on the labels. THC was detected in some of the tested products labeled THC free. There were many impurities also present in products claiming to have no impurities. These inconsistencies can be potentially harmful to consumers. This can lead to many unexpected health complications. Due to these inaccuracies, governments should give more concern and more regulations on the markets of hemp and CBD products.

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