



ENERGY DRINKS. THEIR COMPOSITION AND EFFECT ON THE HUMAN BODY

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<https://doi.org/10.5281/zenodo.7333060>

Аннотация: В данной статье изучен состав безалкогольных напитков, вместе с тем, разработаны и внедрены в таможенную систему современные методы определения кофеина и витаминов с методом газа жидкостной хроматографии. По результатам анализа выявлено, что безалкогольные энергетические напитки Red Bull и Gorilla содержат чрезмерное количество кофеина.

Annotation: This article analyzes the turnover of low-quality counterfeit products on world markets using the example of foreign countries. The negative impact of low-quality goods on human health and the economy of countries is substantiated. At the same time, modern methods for determining caffeine by liquid chromatography gas have been developed and introduced into the customs system. The analysis revealed that the non-alcoholic energy drinks Red Bull and Gorilla contain an excessive amount of caffeine.

Ключевые слова: некачественные, контрафактные товары, экспорт, импорт, кофеин, химический состав, энергетические напитки, алкогольные и безалкогольные напитки, газа жидкостная хроматография, органолептические и физико-химические методы, таможенная экспертиза.

Key words: low-quality, counterfeit goods, export, import, caffeine, chemical composition, energy drinks, alcoholic and non-alcoholic drinks, gas liquid chromatography, organoleptic and physico-chemical methods, customs examination.

The results of the study by Australian scientists "Energy drink consumption among adolescents and further consequences" show that consumers have no idea what substances are contained in energy drinks. Of course, the composition of substances is not devoid of positive properties. In particular, caffeine enhances brain activity and increases heart endurance. However, in order not to feel what fatigue is, the human body needs to drink at least 3 cups of an energy drink. Guarana, which is part of the drink, reduces pain during intense physical exertion, cleanses the liver, and prevents atherosclerosis. In addition, such drinks relieve fatigue and depression, increase the body's desire to work. In addition, drinks contain additives such as taurine, which enhances the work of the heart, carnitine, which improves the breakdown of fatty acids and metabolism in body tissues, matein against hunger, and melatonin, which normalizes the daily rhythm of a person. However, in addition to energy substances, drinks contain substances such as caffeine, guarana, taurine, which pose a threat to human health. It is for this reason that experts recommend not drinking such a cool drink more than 0.5 liters per day.

Otherwise, they are more likely to cause depression and nervousness, increase blood pressure and blood sugar levels. It was also found that the use of energy drinks after sports training

removes beneficial trace elements from the body. And caffeine, in addition, can cause disorders of the nervous system. Sucrose and glucose are present in virtually all non-alcoholic soft drinks and "energy" substances that the body needs. Next comes caffeine, like nicotine, which induces fatigue and sleep, deepening the mind. However, excessive consumption of caffeine can lead to nerve fiber failure and insomnia. 10-15 grams are extremely dangerous for cardiac activity. Substances such as theobramine and taurine are also key ingredients in these "cocktails". These are useful vitamins for the nerve fibers and arteries of the body (but their excess in the composition of drinks has the opposite effect). The drink also contains small amounts of vitamins such as glucuro lactone, groups B and D. The question may arise whether ordinary additives are added to drinks at the rate agreed with the Ministry of Health or not? Energy drinks are drinks containing more than 150 mg of caffeine or other components sufficient for a tonic effect on the human body. Other components besides caffeine include gaurana and taurine. The following tables show the results of the analysis of non-alcoholic energy drinks. In addition, soft drinks contain vitamins B and D, which do not pose a risk to human health. These vitamins are water soluble and are an essential source of nutrition for humans. The B complex in soft drinks is not a source of energy for the human body. In an experiment on liquid chromatography of soft drinks, the following results were obtained: drinks, the following results were obtained: One of the most effective methods for detecting low-quality food products imported into our country is the organoleptic method. The expert inspector of the customs post, through express inspection, studies the country of origin of the goods, under what conditions it is transported, its appearance, information on the label, composition, expiration date.

The quality of the product and its impact on human health will be studied. The most effective way to identify these goods is to set up automotive "express labs" at regional customs offices and use equipment to read QR barcodes to identify substandard goods. It is known that as a result of scientific and technological progress, new products appear that have significantly different consumer properties and meet different levels of social needs. It is known that as a result of scientific and technological progress, new products appear that have significantly different consumer properties and meet different levels of social needs. Considering the consequences of using these products, they must be identified and classified with high accuracy, as this leads to the economic security of the country. Identification of goods in the process of customs clearance occupies a special place in the further improvement of the activities of customs inspections. Modern technically equipped and existing methods of customs identification require constant development. The use of more advanced mechanisms and methods for identifying goods is required. In this regard, customs expertise is becoming increasingly important as a means of determining the consumer characteristics of goods and ways to use them. One of the main tasks of the customs authorities is to improve the mechanisms of customs inspection in the identification of goods. Soft drinks are in group 22 of Section IV of the TN VED of the Republic of Uzbekistan. Item 2201 includes plain natural water, minerals (artificial and natural), carbonated or non-carbonated sugar, or other sweeteners, flavors, and sweeteners, while 2202 includes sugar or other sweeteners and flavors. The term "non-alcoholic beverages" in item 2202 is classified as a beverage with an alcohol content of less than 05%. Depending on the type of raw material used in the preparation of soft drinks, carbonated, natural fruits, berries, drinks from synthetic raw materials, general health, vitamin, dietary, bread, walrus, juices, carbonated drinks with

vegetables and fruits, mineral waters, concentrates, extracts, syrups are divided into categories. In group 2202: "Coca-Cola"; "Coca-Cola Mcfizz Vanilla"; "Coca-Cola ZERO"; "Sprite"; "Fanta"; Lemonade "Grenadine"; "Rich Lemonade"; "Sunrise"; Tea "Lipton" green; Tea "Lipton" lemon; Coffee-based drinks, Smoothie Mango; Smoothie Mango-Pineapple; "Smoozie Strawberry"; Smoothie Strawberry-Banana. Drink: Mulled Wine; "Mojito"; "Seasonal mix"; "Fruit mix"; "Citrus mix"; "Berry taste"; sea buckthorn-ginger. Morse drinks: "Citrus"; "Berry mix"; lingonberry; cranberry and others; In connection with the foregoing, in our research work, laboratory studies were carried out in this area. In customs practice, the correct classification of soft drinks based on the HS of the Republic of Uzbekistan, based on the nature of the drink and the need to improve it based on the relevant criteria, clearly shows the time itself. This will allow correctly calculating customs duties to the state budget, ensuring the economic security of the country, as well as developing logistics centers, providing the population with quality drinks, avoiding environmentally and environmentally harmful drinks and providing drinks that meet international, state and technical standards. According to the current state standard requirements, the alcohol content in soft drinks must be less than 0.5%. However, in the retail sector today, the amount of alcohol contained in soft drinks is produced in containers of different sizes, under different names, and moves freely across customs borders. Soft drinks and other non-alcoholic drinks; dairy alcoholic and non-alcoholic drinks (beer, wine, etc.); alcoholic distilled solutions and alcoholic beverages (liqueurs, alcoholic beverages, ethyl alcohol); vinegar and its substitutes are included in group 22 of the TN VED.

Conclusion The most effective way to identify low-quality counterfeit food products imported into our country is the organoleptic method. At the same time, the expert inspector of the customs post helps speed up the clearance process by clearly checking the country of origin of the goods, the conditions under which they are transported, their appearance, label composition, expiration date. The processing of perishable foodstuffs is time-consuming, documentation of their quality, as well as an examination of the impact of products on human health. The most effective way to determine the quality of medicines is the creation of express automobile laboratories in regional departments. Registration is carried out on the basis of the data of the State Unitary Enterprise "State Center for Expertise and Standardization of Medicines, Medical Devices and Medical Equipment" of the Agency for the Development of the Pharmaceutical Industry under the Ministry of Health of the Republic of Uzbekistan. This leads to inaccuracies in the results. A method for identifying substandard medicines and goods is the use of QR/barcode readers. Thus, the expert inspector will quickly get acquainted with the full information about the drug, as a result of which low-quality, counterfeit or falsified products will be identified

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