World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-36, July 2024
ISSN: 2749-3644

MODERN IDEAS ABOUT ENERGY DRINKS AND THEIR EFFECTS ON THE HUMAN BODY AND ANIMALS

A free applicant. Bukhara State Medical Institute, pathologist at the specialized Scientific and Practical Center of Oncology and Radiology of the Bukhara branch.**Rakhmanova K.E**
At the Military Innovation University
, Doctor of Biological Sciences, Professor of the Department of Exact and Natural Sciences. **Ilyasov A.S.**

Article history:

Received: May 26th 2024
Accepted: June 24th 2024

Abstract:

This article presents scientific research on energy drinks, the composition of energy drinks their effects on the human and animal body

Keywords: Rats, thymus, energy drinks

All over the world, humanity has been trying to find and use ingredients that enhance physical and mental activity since time immemorial. In the XIV–IX centuries, before the battle, warriors (fighters) drank drinks from fly agarics containing a hallucinogenic or intoxicating substance — muscarine (phyto toxin), which can affect the speed of passage of nerve impulses and cause a feeling of euphoria.

At the same time, warriors from other nations could not fight for a long time, since the combat trance in which they were could not last long. Ordinary people have long been accustomed to using tobacco, tea, coffee, alcohol or similar drinks to raise their physical and intellectual tone.

Recently, so-called energy drinks (EN) have been used to achieve this goal. Their intended role coincides quite closely with their name. The main task solved by using the consumption of EN is to provide a person with an additional impulse of internal energy.

Currently, EN is a powerful and prolonged remedy that can keep a person in good shape for 2-5 hours, whereas, for example, the effect of a cup of well—brewed coffee ends after 20-30 minutes.

Many people associate the emergence of EN in Europe, the USA and Asia with the appearance on the market of a product with a very sonorous catchy and menacing trade name EN, for example, Red Bull-an angry bull., Gorilla Energy-a formidable monkey., Burn-a blazing fire., Black Monster-The black monster [Pilate, T. L. 2011].

Currently, ANN such as: Red Bull, Gorilla Energy, Burn, Black Monster and others EN contains inositol. Along with pantothenic acid, it is called the "vitamin of youth". Inositol, which is a hexatomic aromatic alcohol (C6H6O6), is partially produced by the human and animal body itself.

Scientists think that inositol has the ability to relieve a person from feelings of tension, worries and fear, as well as reduce blood pressure. Inositol affects the transmission of nerve signals and participates in the regulation of the balance of copper and zinc in the body, which helps to reduce nervousness and irritability (Shterman S. In 2011).

Thus, it can be noted that energy drinks are not physiologically necessary for normal human life. The prescription composition of energy drinks does not have a deep scientific basis to date. In this regard, it is necessary to conduct further research in this direction on the formulation of the basic principles of the balance of biologically active substances and other components in the composition of drinks of this kind (Shterman S. In 2013).

Designers developing the formulation of energy drinks have recently begun to pay significant attention and often include such a biologically significant component as D-ribose in the composition of drinks. D-ribose is a carbohydrate that is naturally present in the human body and is similar in its chemical structure to glucose.

Ribose is a part of ribonucleic acids responsible for the transmission of genetic information in the body, and is also one of the main components of ATP, a very important molecule that serves as the main supplier of fast bioenergy for muscles [Mikhailov, S. S. 2009].

Studies show that, compared with taking a placebo, athletes who consume energy drinks maintain a stable mood and the ability to maintain interpersonal contacts, for example, in a team, against the background of fatigue [Rao, A. et al. 2005].

At the same time, attention should be paid to the fact that any substance, including ordinary water or table salt, with excessive consumption can turn into a toxiletal outcome. The longest-term tests on the consumption of energy drinks within the established norms, conducted over several weeks, did not reveal any changes in the studied values of biosafety markers in healthy subjects [Roberts, M.D 2008].

When athletes took 120 ml of an energy drink before training, they had a feeling of having a reserve

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-36, July 2024
ISSN: 2749-3644

of vital and emotional energy and the appearance of a state of inner concentration [Campbell B. 2013].

To date, the exact motives for drinking energy drinks have also not been determined, although according to some data, the main reasons for their use are the desire to overcome fatigue and improve the feeling of the effect of alcohol [Attila S, 2011].

Over the past 10-15 years, smart products have become popular on the market, and the so-called EN have become especially widespread among them. At the same time, there are suggestions about their possible negative effect on the human body [Altshuler V.B. et al. 2002].

Their abuse is becoming a new source of a variety of addictive disorders and diseases [Chernobrovkina T.V. 2012].

As previously conducted studies have shown, with regular consumption of energy drinks, they can cause anxiety, nervousness, irritability, insomnia, depression, tachycardia or cardiac arrhythmia, psychomotor agitation. In addition to severe changes in the nervous system, doctors identify other diseases associated with the use of energy drinks: kidney failure, liver disease, impaired respiratory function, heart failure. That is why the sale of tonic drinks in retail chains is prohibited in many countries [Hasler Clare M.2019].

Based on the analysis of the data obtained, it can be concluded that the consumption of energy drinks remains one of the most pressing problems today. Almost a quarter of respondents (24.0%) admitted that they had experience consuming energy drinks together with alcohBased on the analysis of the data obtained, it can be concluded that the consumption of energy drinks remains one of the most pressing problems today. Almost a quarter of respondents (24.0%) admitted that they had experience consuming energy drinks together with alcohol. Alcohol, potentiating the effect of caffeine, which is part of energy drinks in sufficiennks.

The male part of the respondents, to a greater extent than the female, prefers to consume energy drinks together with alcohol, which indicates that the male sex is at a higher risk of developing complications from abuse of energy drinks. Analyzing the gender structure of the reasons for drinking energy drinks, it is worth noting the number of people who consume energy drinks together with alcohol, depending on the age, there are significant differences. First of all, it is worth noting that the vast majority of boys (40.6%) try energizers for the first time during sports. For boys, the emphasis should be on physical education and sports, for girls – on the educational process. (Shalygin L.D. 2016)

The main component of energy drinks that cause these effects is caffeine. Even in low doses (12.5 – 100 mg), caffeine can improve mood and cognitive functions [Smit HJ 2000]. However, along with the positive effects, caffeine has a detrimental effect on the body. It has been shown that caffeine (not taurine) causes an increase in diuresis and natriuresis [Riesenhuber A 2006]. High caffeine intake reduces insulin sensitivity [Lee SJ 2005], increases blood pressure [Bichler A 2006].

As for the effect, energy drinks really have an "invigorating" effect on the body, causing a surge of new strength. Studies have shown that energy drinks had a positive energy effect, compared with placebo, in subjects in the group from 18 to 55 years old. The effect persisted for 30 minutes to 1.5 hours [Smit HJ 2019].

REFERENCES.

1. Штерман С.В. Энергетические напитки сегодня: за и против. Часть IC. В. Штерман, канд. тех. Наук. Московский государственный университет пищевых производств Г. И. Андреев, д-р тех. наук, профессор ОАО «Научно-исследовательский институт «Кулон» УДК 663.6 / .8иинновационные продукты 2011 14-17 стр.
2. Штерман С.В., Энергетические напитки сегодня: за и против. Часть II С. В. Штерман, канд. тех. Наук. Московский государственный университет пищевых производств Г.И. Андреев, д-р тех. наук, профессор ОАО «Научно-исследовательский институт «Кулон» УДК 663.6 / .8иинновационные продукты 2011 стр. 36-39.
3. Штерман С. В, Энергетические напитки сегодня: за и против. Часть II. канд. тех. Наук Московский государственный университет пищевых производств Г. И. Андреев, д-р тех. наук, профессор ОАО «Научно-исследовательский институт «Кулон» УДК 663.6 /.8 36-39 ПИВО и НАПИТКИ 1 2012
4. Campbell, B. International Society of Sports Nutrition position stand: energy drinks / B. Campbell, C. Wilborn, P. Bounty [et al] // Journal of the International Society of Sports Nutrition. — 2013. — Vol. 10:14 (6 pp)
5. Attila S, Cakir B. Energy-drink consumption in college students and associated factors. Nutrition.2011;27:316—322.
6. С.В. Штерман., М.Ю.Сидоренко. Энергетические напитки в спортивном

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-36, July 2024
ISSN: 2749-3644

питании В.С. Штерман, канд. хим. наук, доцент; М.Ю.Сидоренко, д-р техн. наук, профессор Московский государственный университет пищевых производств пиво и напитки 2018 41-46 с.

7. Campbell, B. International Society of Sports Nutrition position stand: energy drinks / B. Campbell, C. Wilborn, P. Bounty [et al] // Journal of the International Society of Sports Nutrition. 2013. Vol. 10:14 (6 pp).
8. . Zastrozhin, N.A. Drozhzhina, Журнал гигиена питания и вопросы питания. Том 84, № 2, 2015 (19-24 стр.)
9. . Н.А. Дрожжина и М.С. Застрожин Гендерные различия в мотивации и особенностях употребления энергетических напитков молодежью на территории российской федерации, август №8 (245) (15-16 стр.)
10. . Пилат, Т. Л О вреде коктейля «Ягуар». 2011 http://www.alcologia.ru/stati/vred kokteylya-yaguar-jaguar.html 2011
11. Hasler Clare M.Europe Energy Drinks Market 2019 http://www.micromarketmonitor.com/market/europeenergydrinks-1139194468.html
12. Шалыгин Л.Д., Еганян Р.А. Энергетические напитки реальная опасность для здоровья детей, подростков, молодежи и взрослого населения. Часть Состав энергетических напитков и влияние на организм их отдельных компонентов Профилактическая медицина. 2016 56-63.
13. Smit HJ Экспертиза качества безалкогольных энергетических напитков. Маркетинговая компания Академия Сервис. 2019. http://www.asmarketing.ru.электронный научный журнал