

Communication 009/2025

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EDKAR study: Data collection on the consumption of energy drinks and their health effects in adolescents completed

First data assessment does not indicate any worrying effects on the heart

→ Updates the version of 21 March 2025: It has been specified that only some of the study participants underwent cardiological examination.

In August 2020, the German Federal Ministry of Food and Agriculture (BMEL) asked the German Federal Institute for Risk Assessment (BfR) to conduct a study on chronic high consumption of energy drinks, lifestyle and the cardiovascular system in adolescents. The data collection, including the cardiological examination of this complex study – EDKAR for short – has been completed. The results are currently being checked for plausibility in preparation for publication in a scientific journal. As soon as this is complete, the public will be provided with comprehensive information about the results of the study. An initial assessment of the data has not shown any worrying results in the cardiological parameters examined. However, the BfR points out that excessive consumption of energy drinks can be associated with health risks, especially for people with undetected heart disease, high blood pressure, diabetes or obesity, and that consumption together with alcohol or in combination with sports can pose health risks.

EDKAR stands for “**E**nergy **D**rinks und **K**ardiologisches Risiko” (= “**E**nergy **D**rinks and **C**ardiological risk”). In the study, more than 5,000 school students aged between 15 and 18 in Berlin were asked about their energy drink consumption and some of them subsequently underwent a cardiological examination. Energy drinks are caffeinated soft drinks that are advertised as increasing concentration and physical performance. The aim of the study is to find out whether and, if so, what health consequences a permanently high intake of the drinks has on the heart health of adolescents.

Further information on energy drinks

Frequently asked questions on caffeine and foods containing caffeine, including energy drinks

https://www.bfr.bund.de/en/frequently_asked_questions_on_caffeine_and_foods_containing_caffeine_including_energy_drinks-194902.html

EDKAR study (in German)

<https://www.bfr.bund.de/de/edkar.html>

About the BfR

The German Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the Federal Ministry of Food and Agriculture (BMEL) in Germany. The BfR advises the Federal Government and the States ('Laender') on questions of food, chemicals and product safety. The BfR conducts independent research on topics that are closely linked to its assessment tasks.

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