
A Multi-Domain Analysis of Energy Drink Policies in Germany: Product Regulation, Market Controls, Sales Restrictions, and Information-Based Measures

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Abstract

Energy drink consumption has increased significantly over the past two decades in Germany, prompting public health concerns regarding excessive intake and related physical and mental health impacts, and behavioral outcomes. The aim of this study is to critically examine and evaluate Germany's regulatory energy drink policies in three key domains: product regulation, market controls, sales restrictions, and information-based measures. A qualitative, descriptive, and multi-domain policy analysis was conducted using peer reviewed literature, government documents, public health reports, and regulatory frameworks related to energy drinks in Germany. The study examines how existing policies address energy drink consumption to assess coherence and effectiveness. The findings revealed that Germany enforces strong product regulations, including caffeine limits, ingredient composition, and mandatory labeling requirements. In contrast, restrictions on marketing and sales remain limited, with no federal age restrictions, no retail restrictions, weak controls on marketing and advertising. Although information-based measures such as warning labels, public health education campaigns, and risk communication measures are implemented, their effectiveness in reducing energy drink consumption is limited because these interventions can increase public awareness but have a limited impact on consumers. The study, therefore, highlights gaps in Germany's regulatory policies regarding energy drinks and emphasizes the importance of a multi-domains approach.

Keywords: Monster; Red Bull; energy drink consumption; high caffeine intake; public health policies; regulations; market and sales controls; educational measures; Germany; Deutschland

Introduction

Energy drinks are widely consumed beverages that have become popular within the past two decades for their functional effects, including their potency for enhancing mental alertness and cognitive focus, academic and work and athletic performance, and for reducing fatigue. They are also in demand for social and recreational use, such as at parties and in nightlife. The Federal Institute for Risk Assessment (BfR) in Germany defines energy drinks as

“caffeinated soft drinks that contain caffeine as well as at least one additional substance such as taurine, glucuronolactone, or inositol” (BfR, 2026).

These energy beverages, however, typically contain high concentrations of caffeine, sugar, and other stimulants and additives that have negative health risks and outcomes. High caffeine content and stimulant combinations in energy drinks have been associated with some cardiovascular risks, such as increased heart rate, elevated blood pressure, risk of

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irregular heartbeat (arrhythmia), or cardiac arrest in some cases (Mandato et al., 2025). Neurological and mental health effects such as anxiety, nervousness, sleep disturbances and insomnia, headaches, dizziness, panic attacks, or seizures in rare cases have also been observed among adolescents with high energy drink consumption (Menzel et al., 2025; Nadeem et al., 2021; Troxel et al., 2018). Poor academic performance and cognitive development have also been observed along with sleep disturbances (Van Batenburg-Eddes et al., 2014). The high sugars have also led to metabolic and dietary risks such as an increased risk of obesity, higher likelihood of type 2 diabetes, and dental issues such as dental enamel erosion (Schulze A et al., 2024).

An alternative option, such as sugar-free energy drinks, still carries caffeine-related risks. Many energy drinks contain alcohol, which increases the chances of risky behavior such as unsafe driving, aggression, or reduced awareness (Tucker J S et al., 2016; Van Batenburg-Eddes et al., 2014). The feeling of intoxication due to alcohol in the energy drinks is masked by caffeine, which makes it even more dangerous, as it leads to a higher likelihood of excessive consumption of alcohol compared to the amount intended and safe. In addition to caffeine, alcohol, and sugar, many energy drinks contain taurine, guarana, L-carnitine, glucuronolactone, B-vitamins, etc. All these stimulants are known for enhancing mental and physical performance, but their combined physical and behavioral risks are not thoroughly understood yet (Breda et al, 2014). They may be producing additive or synergistic effects, hence increasing the possibility of physical effects such as cardiovascular or kidney strain, nerve damage, liver stress, gastrointestinal discomfort, etc., as well as some behavioral risks such as increased impulsivity, anxiety, and engagement in risk-taking behaviors, especially when energy drinks are consumed with alcohol (Galimov et al., 2019). Although energy drinks are consumed to increase alertness and reduce fatigue, over-consumption can also cause “energy crashes” – a temporary boost in

energy, concentration, and endurance followed by long-term fatigue; ultimately creating dependence-like patterns. This ultimately leads to “addiction” which is another crucial public health issue that is becoming rapidly prevalent (Nadeem et al., 2021; Wolk et al., 2012).

Due to the wide range of health and behavioral risks observed over the past two decades, the increasing consumption of energy drinks has become a global phenomenon, raising public health concerns. The largest consumer age group is adolescents, as they are prompted by lifestyle, academic, and social factors. They are the most susceptible age group to the physiological functional effects of energy drinks as well as the youth-targeted marketing strategies (Breda et al, 2014). A European study uncovered that 68% of the respondents who consumed energy beverages were adolescents (Zucconi et al., 2013). An American study indicates that one-third of adolescents aged 12-17 report regular consumption of energy drinks, while young adults aged 18-30 make up another large share of consumers, especially in academic and workplace settings as well as in nightlife populations (Miller, 2018).

The children and younger adolescents are the most vulnerable age group as they get affected more rapidly and acutely by caffeine or alcohol compared to the older adolescents and adults, because the bodies of children and younger adolescents are smaller in size and their brains are still developing, making them more responsive (Seifert et al., 2011). Hence, the pediatric associations advise that energy drinks must not be consumed at all by children and adolescents due to unidentified safe caffeine thresholds. In Europe, among children aged 3-10 years, 18% consume energy drinks out of whom 16% are high-chronic users, and nearly 3% of the children are almost addictive (Zucconi et al, 2013). Among adolescents aged 10-18 years, 68% consume energy drinks out of whom 12% are high chronic users (frequent use), 12% are high acute users (very high intake episodes), and around 8% of all adolescents are close to addictive. Adolescents are the highest-risk group in Europe. Among young adults and

adults aged 18-65 years, 30% consume energy drinks out of whom 12% are high chronic users. Older adults in Europe rarely consume energy drinks (Zucconi, et al., 2013).

In Germany, data from the *EsKiMo II* study show that approximately 8.9% of adolescents aged 12-17 reported consuming energy drinks within a four-week period, with 2.2% exceeding recommended caffeine intake levels (Lehmann et al., 2020). A school survey across 13 German states by the German Federal Institute for Risk Assessment indicates that around 9% of children and adolescents consume energy drinks weekly and about 4% daily, with prevalence increasing with age (BfR, 2019). 10% of adolescents engage in high-risk consumption, such as consuming large amounts within brief time-frames, potentially increasing the risk of adverse health effects (BfR, 2019). This behavior may also cause addictive dependency on energy drinks.

Cardiovascular diseases – strokes and heart attacks – in Germany, constitute the leading cause of mortality, representing roughly 34-35% of all fatalities (Destatis, 2019). Diabetes, in comparison, accounts for only around 2-3% of total mortality (Destatis, 2023). However, the impact of diabetes is broad and substantial as it frequently contributes to the development of cardiovascular conditions, stroke, and kidney failure (WHO, 2022). As a result, diabetes plays a significant role in elevating the overall risk of cardiovascular mortality. While there is no evidence of a direct causal relationship between energy drink consumption and these outcomes at the population level, these beverages may contribute to the underlying risk factors, such as hypertension, obesity, and sleep disturbances.

Public health policies or regulations can play a vital role in protecting consumers against the health and behavioral risks of the over-consumption of energy drinks (Breda et al., 2014). Public health policies shape the environment in which individuals or societies make choices, especially when the policies are against products that are widely accessible, heavily marketed, and potentially risky

when consumed in excess. Numerous public health policies have been formulated, adopted, and implemented in different countries within the past decade for reducing the intake of energy drinks and protecting consumers. These policies generally target the following areas: product regulation, information-based measures, market and sales restrictions, marketing and advertising controls, fiscal policies, public health campaigns, school education programs, and risk communication initiatives.

In the United States, energy drinks are regulated through a combination of federal food safety oversight, labeling requirements, and voluntary industry practices. The U.S. Food and Drug Administration (USFDA) regulates these beverages as dietary supplements or conventional foods, which oversees the safety and labeling of these beverages, so they are not subjected to pre-market approval; they are only subjected to general safety and labeling requirements. Manufacturers are obliged to disclose the ingredients and label them accurately, such as caffeine content, but there are no federal restrictions on maximum caffeine levels in energy drinks. Therefore, there have been industry-led initiatives to introduce market guidelines limiting marketing practices and discouraging sales to minors. Public health authorities and professional organizations in the U.S. have issued evidence-based warnings highlighting potential risks associated with high consumption, such as cardiovascular effects and behavioral changes. Overall, the U.S. regulatory approach relies mostly on post-market marketing, labeling transparency, and self-regulatory frameworks rather than rigorous pre-market controls. Hence, there is high and persistent consumption due to continued high exposure among the youth. Approximately one-third to one-half of adolescents in the U.S. drink energy beverages, and one-third are regular consumers (Seifert et al., 2011).

In Canada and Australia, energy drink regulation includes caffeine content limits, mandatory labeling requirements, and health guidelines on safe consumption. These measures are

enhanced by the public health campaigns increasing awareness of caffeine-related risks and promoting safe consumption levels. Food Standards Australia New Zealand (FSANZ) provides the maximum levels of caffeine safe for consumption by different age groups. Energy drinks are regulated under Standard 2.6.4 of the Code. It sets the maximum permitted amount of coffee to 320 mg per liter. It also requires warning labels for the vulnerable population, such as children, pregnant women, breastfeeding mothers, and individuals sensitive to caffeine (FSANZ, 2025).

European countries have implemented a precautionary and multi-dimensional policy approach aimed at protecting public health. The European Union has mandated standardized labeling standards requiring beverages with elevated caffeine levels to include clear warnings stating “high caffeine content” as well as warning children and pregnant women against consumption (Regulation (EU) No. 1169/2011). In addition to the European Union-wide rules, several member states have adopted further protective policies, such as age-based sales restrictions, bans on sales in schools, and controls on youth-targeted marketing.

The Federal Institute for Risk Assessment has conducted studies and risk assessments examining the safe caffeine thresholds, ingredient composition, and potential adverse health effects; hence, contributing to the guidelines issued for consumers for ingredient limits and mandatory ingredient composition (BfR, 2026). Health research and monitoring studies by the Robert Koch Institute have raised concerns regarding excessive energy drink consumption among adolescents and other vulnerable population groups in Germany (Lehmann et al., 2020). Consumer protection organizations have increasingly debated the adequacy of current regulatory measures, particularly the absence of a federal law governing age restrictions and the reliance on labeling and education rather than stricter market controls (Verbraucherzentrale, 2024).

In the existing peer-reviewed Germany-specific literature, existing studies have primarily

focused on caffeine exposure, consumption trends and patterns, related health risks, particularly among adolescents, whereas comparatively less focus has been aimed at studying the regulatory measures and policies governing energy drinks. There are multiple health risk studies, youth consumption surveys, nutritional research, discussions on individual regulatory policy or marketing exposure, but there are no studies that integrate ingredient content limits, composition regulation, labeling laws, education campaigns, marketing and advertising controls, retail restrictions, fiscal interventions, and policy gaps into one unified framework. The previous studies are fragmented, and Germany is understudied in comparative policy literature. This study will analyze Germany’s regulatory framework across three key domains: product regulation, market and sales controls, and information-based measures. It will be useful to assess the coherence and effectiveness of the current regulatory framework practiced regarding energy drinks in Germany. The strengths and weaknesses of the present regulatory framework will identify the areas or domains that need more attention and work. Moreover, the past studies often discuss Poland, Lithuania, Latvia, or Chile with reference to the implementation of strict controls regarding energy drink consumption, but a detailed Germany-focused energy drink policy mapping was missing. The study also connects German policy with international evidence. There was a need to bring together the laws, regulations, public health guidance, educational measures, and research findings into a more coherent analysis, as such a comprehensive study of the strengths and weaknesses of multiple domains would help policymakers identify missing interventions.

Research Methodology

This study employed a qualitative and descriptive multi-domain policy analysis to examine how existing policies address energy drink consumption in Germany. The analysis was based on a systematic examination of regulatory frameworks

across multiple domains supported by official regulatory evidence and scientific guidance. The study mostly relied on secondary data, such as already existing published peer-reviewed research studies, risk assessment reports, legislative and policy documents, rather than primary data collection.

The following are some of the sources of data that have been collected:

- Peer-reviewed literature on energy drink consumption and policy indexed in databases PubMed and Frontiers
- Documents, reports, or risk assessments from public health authorities, such as the Robert Koch Institute, BfR German Federal Institute for Risk Assessment, and Destatis German Federal Statistical Office of Germany
- Regulatory or legislative documents from the Federal Ministry of Food and Agriculture, Federal Ministry of Health, Fruit Juice and Soft Drinks Ordinance
- Scientific reports from European regulatory frameworks, such as the European Food Safety Authority
- Scientific opinions from the World Health Organization
- Policy guidance from policy studies and implementation by other countries
- Red Bull and Monster Energy drinks' websites inform consumers about ingredients

The regulatory policies were categorized into three domains:

1. Product regulation (caffeine limits, ingredient composition, mandatory labeling)
2. Market and sales controls (age restrictions, retail limitations, marketing and advertising controls, fiscal interventions)
3. Information-based measures (warning labels, educational measures, public risk communication)

Results

Germany's current policy regarding energy drinks relies primarily on ingredient limits, mandatory labeling requirements, and consumer information, rather than imposing product access restrictions or marketing and advertising controls.

1. Production Regulation (caffeine limits, ingredient composition, mandatory labeling)

The regulation of energy drinks is mainly governed through German food legislation, especially the Fruit Juice and Soft Drinks Ordinance, together with overarching European Union labeling requirements for food products.

• Ingredient composition and limits

Since 2013, Germany has enforced legally regulated maximum concentration limits for several key ingredients commonly found in energy drinks (BfR, 2026):

Caffeine:	320	mg/L
Taurine:	4,000	mg/L
Inositol:	200	mg/L
Glucuronolactone:	2,400 mg/L	

These limits are designed to regulate ingredient composition and hence reduce health risks associated with excessive stimulant exposure. Under German regulations, energy drinks are defined as "caffeinated soft drinks" that, alongside caffeine, contain at least one of the following substances: taurine, inositol, or glucuronolactone. Popular brands such as Red Bull and Monster Energy usually contain caffeine concentrations close to the permitted maximum limit, approximately 32 mg per 100 mg, or roughly 80 mg in a 250 ml can. Under the German Fruit Juice and Soft Drinks Ordinance, standard energy drinks may contain up to 320 mg caffeine per liter (Verbraucherzentrale, 2015). The Federal Institute for Risk Assessment recommends that consuming up to 200 mg of caffeine in a single

serving is generally safe for healthy adults, and a total intake of up to 400 mg of caffeine per day is also considered safe for most individuals. These guidelines function merely as health recommendations and not as legally enforceable regulations (EFSA, 2015).

- **Mandatory labeling**

In Germany, it is mandatory for energy drinks to list their ingredients on the product label under both German and European Union food labeling laws. Under the EU Food Information Regulation (Regulation (EU) No. 1169/2011), all food and beverage manufacturers are required to provide a complete ingredient list for packaged products (BMLEH, 2026). Manufacturers must list all the ingredients in descending order by weight, identify any additives and sweeteners used, indicate allergens if applicable, and clearly state the exact caffeine concentration in mg per 100ml. However, the companies are not required to disclose the exact quantities of every ingredient unless specifically regulated or emphasized in nutrition claims.

2. Market and Sales Controls (age restrictions, retail limitations, marketing and advertising controls)

- **Age restrictions**

At present, Germany has no legal age restrictions enforced nationally for purchasing energy drinks. Children and adolescents can legally buy them because the beverages are classified as “caffeinated soft drinks” or “dietary supplements”, not as age-restricted drinks. German public health or consumer protection organizations have called for a legal ban on sales of energy drinks to children (KaufDA, 2021; Verbraucherzentrale Bundesverband, 2025), but there has not been any law banning them. Some supermarket chains voluntarily apply their own policies banning the sale of energy drinks to individuals under the age of 16 (KaufDA, 2021). However, these are merely store policies, and not federal policies.

- **Retail limitations**

In Germany, energy drinks are mainly sold in supermarkets, gas stations, convenience stores, restaurants and cafeterias, vending machines, and on the internet. They are easily accessible and widely available. There are neither any nationwide retail restrictions on accessibility and availability, nor on purchase quantity limits.

- **Marketing and advertising controls**

In Germany, there are currently no energy-drink-specific federal restrictions governing the marketing and advertising of these beverages. Popular brands such as Red Bull and Monster Energy aggressively promote their products through music festivals, sports sponsorship, e-sports and gaming, and social media marketing. However, companies cannot promote misleading or unauthorized health claims, such as promising improved focus or performance without scientific authorization under EU law. For example, Verbraucherzentrale Bundesverband (vzbv) challenged marketing claims at gamers for an energy drink product (Verbraucherzentrale Bundesverband, 2023).

In order to counter the mounting apprehension regarding the youth exposure to energy drink marketing, public health authorities and consumer organizations in Germany have advocated for stricter controls. They have proposed limiting youth-targeted advertisements, banning sports sponsorship involving children and adolescents, and stronger regulation of social media promotion (BZfE, 2025; tagesschau, 2025). Nevertheless, all these propositions are largely advisory in nature, as Germany has not yet incorporated these measures into legally binding federal policies. Hence, these initiatives remain merely recommendations at present.

- **Fiscal interventions**

In Germany, there are no fiscal interventions to reduce the consumption of energy drinks. Germany

does not impose any specific tax on energy drinks nor on any other sugary beverages. At present, Germany exercises taxation only on specific products such as tobacco, alcohol, coffee, and energy/fuel products. Energy drinks are only subject to the usual Value Added Tax (VAT) and standard food and beverage regulations. Proposals for sugar or energy drink taxes have faced opposition from beverage industry groups, the sugar industry, and some political parties. Some of these critics argue that taxes on energy drinks would encourage replacement with artificial sweeteners rather than improving overall health outcomes (Reuters, 2026).

3. Information-based measures (warning labels, educational measures, consumer risk communication):

Germany has implemented several forms of public education and awareness initiatives regarding energy drinks, mainly through mandatory warning labels, educational initiatives, and consumer risk communication campaigns.

- **Warning labels**

Germany follows both national and European Union labeling requirements for highly caffeinated drinks. Under the European Union Food Information Regulation (1169/2011), drinks containing more than 150 mg of caffeine per liter must display a warning: “High caffeine content. Not recommended for children or pregnant or breastfeeding women.” The label must also state the exact caffeine content in mg per 100 ml (Verbraucherzentrale NRW, 2025). These are rules not only for the packaged drinks, but also for the drinks sold loose in restaurants or cafeterias. In such cases, warning information must be stated on the menus or signs (Verbraucherzentrale NRW, 2025).

Highly concentrated products, the “energy drinks”, are marketed as food or dietary supplements and are required to provide recommended consumption instructions, which usually limit intake to a single portion per day. There are warning labels

printed on the energy shots advising the consumer not to drink more than one serving within 24 hours, but there is no federal or regional law banning it, and no law restricting the sale of more than one bottle per person in 24 hours. Furthermore, the Federal Institute for Risk Assessment recommends that energy drink labels must include warnings against consumption in combination with alcohol or during intense physical exercise, because these practices may increase the risk of negative cardiovascular outcomes (BfR, 2026).

- **Educational measures**

One of the noteworthy educational measures targeting youth in Germany is the school-based program developed by the Federal Center for Nutrition. The program provides teaching resources, including informational videos, worksheets, infographics, guided classroom discussions, and activities focusing on topics such as caffeine-related health risks, excessive energy drink consumption, marketing and social media advertising strategies, and debates surrounding potential minimum age restrictions. The program’s goal is to strengthen adolescents’ critical understanding of marketing practices and promote informed consumption behavior (BzFE, 2026). Furthermore, schools are encouraged to carry out on-campus awareness campaign activities and student surveys related to energy drink consumption.

- **Consumer risk communication**

In recent years, public health communication in Germany has placed greater attention on digital and social media awareness in relation to energy drink consumption. Educational materials are designed to encourage students to critically assess social media promotion and influence-based advertising techniques employed by the energy drink industry (BzFE, 2026).

Multi-Domain Comparative Assessment

The analysis reveals that there is a structural regulatory imbalance in Germany's energy drink policy framework. The following table demonstrates

the strengths and the key characteristics of the three policy domains:

Policy Domain	Strength	Key Characteristics
Product Regulation	Strong	caffeine limits, ingredient composition guidelines, mandatory labeling
Market & Sales Controls	Weak	no age restrictions, no retail limitations, weak marketing and advertising controls, no fiscal interventions
Information-based Measures	Moderate	mandatory warning labels, few educational measures, few consumer risk communication initiatives

Germany's regulatory framework to address energy drinks relies mainly on ingredient regulation, labeling requirements, educational measures, and a few consumer risk communication messages, while stronger market and sales controls—such as nationwide age restrictions, retail limitations, and fiscal interventions—have not yet been implemented. Marketing controls and advertising bans remain underdeveloped.

Discussion

This comprehensive and descriptive multi-domain policy analysis determines that Germany relies on caffeine limits, mandatory labeling, public education measures, and risk communication to address energy drink consumption, whereas stronger sales and market controls, such as nationwide age restrictions, retail limitations, advertising bans, and fiscal interventions, remain underdeveloped. The findings suggest that Germany prioritizes consumer responsibility over market restrictions. The current public health approach in countering energy drink consumption is information-based, which may increase awareness but may have a very limited impact on consumer behavior. Germany's energy drinks regulatory framework remains comparatively moderate. It prioritizes product safety and informed choice, but lacks behavioral interventions targeting

consumption trends and patterns. Evidence from international policy research suggests that structural interventions such as sales restrictions, marketing bans, retail limitations, and fiscal measures are generally more effective in reducing harmful consumption than information-based approaches alone.

Poland, for example, has adopted direct market and sales controls to reduce energy drink consumption among children and adolescents. The Polish legislation introduced a national law in 2024 prohibiting the sale of energy drinks to individuals under 18 years of age and restricting the sale in vending machines in educational settings. As a result, the prevalence of energy drink consumption decreased significantly among adolescents from 46.4% in 2022 to 19.1% in 2025 following the implementation of the sales ban for individuals under 18 years of age (Granda et al., 2025). Public health experts in Poland have argued that restricting direct access to energy drinks may reduce impulsive purchasing behaviors and contribute to healthier consumption patterns among minors (Zgliczyński, 2024). Latvia, on the other hand, has also introduced strong advertising controls that ban youth-targeted marketing and require health warnings to appear in advertisements of energy beverages (Likumi, 2016). Similarly, Lithuania adopted a restrictive preventive approach in 2015 by banning the sale of energy

drinks to young individuals across the country (LRT, 2015). While Germany emphasizes informing consumers, Chile, in contrast, emphasizes actively discouraging consumers through multiple structural interventions. A policy research in market regulations has identified a multi-phase set of policies implemented in Chile, including prominent large front-of-package warnings, child-targeted marketing restrictions, school sales restrictions, and the conduct of anti-obesity initiatives (GFRP, 2016). Chile's warning-label and anti-obesity policies appear to have significantly reduced purchases of unhealthy beverages overall (Taillee, 2023). Mexico has also observed a significant reduction in the purchases of sugar-sweetened beverages, including energy drinks, since the legislative body in Mexico implemented the National sugary drink tax in 2014 (Pedraza et al., 2019).

The contrast between Germany and other countries highlights Germany's continued emphasis on consumer information and individual responsibility over access restrictions, direct market and sales controls, and fiscal interventions. If Germany continues to depend mainly on information-based measures to address energy drinks, there may not be any substantial reduction in the harmful consumption. The effectiveness of current policies in reducing harmful consumption of energy drinks may remain limited without implementing additional measures such as age restrictions, sales restrictions, marketing bans, retail limitations, and fiscal measures. European policy briefing suggests that age restrictions and direct access controls tend to be more effective in reducing youth consumption than information-based measures alone (European Parliament, 2025). Germany's current energy drink regulatory framework is weak compared to the strict international models. There is a need for a more comprehensive preventive regulatory framework that would more effectively reduce harmful consumption, especially among high-risk groups such as children and adolescents.

Germany could strengthen its current energy drink regulatory policy framework by combining information-based measures with stronger preventive and market-based interventions. Introducing a legal age limit similar to that in Poland and Lithuania could reduce youth exposure and impulsive behavior. Advertising restrictions and mandatory health warnings within energy drink advertisements could also reduce youth access. Introducing a sugar-sweetened beverage tax could further discourage excessive consumption, especially among the low socioeconomic population. Putting bans on sales of energy drinks in schools and vending machines in educational settings could save children and adolescents. Larger front-of-package warnings similar to those in Chile could be considered. Nationwide awareness campaigns and school-based prevention strategies could further strengthen Germany's current regulatory framework and decrease the effects of harmful consumption of energy drinks.

Conclusions

This multi-domain study examined the regulatory policy framework governing energy drinks in Germany using a qualitative analysis of multiple policy domains. The findings indicate that Germany depends mainly on information-based measures such as ingredient regulation, mandatory labeling, public health education, consumer risk communication measures while more effective regulatory tools such as age restrictions, taxation, retail limitations, market and advertisement controls remain underdeveloped. The current approach emphasizes consumer information and individual responsibility rather than preventive and market-based interventions, which may limit its effectiveness in reducing harmful consumption of energy drinks. A broader regulatory framework integrating information-based measures with stronger preventive policies may therefore be essential to better protect public health.

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