

## Food

*This section aims at updating readers on the latest developments of risk-related aspects of food law at the EU level, giving information on legislation and case law on various matters, such as food safety, new diseases, animal health and welfare and food labelling.*

### Energy Drinks: Stricter Health Warnings on Caffeine Content in the EU and Sales Bans to Minors and New Excise Taxes

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#### I. Introduction

Regulation (EU) No. 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers<sup>1</sup> (hereinafter, FIR) introduces changes to existing legislation on food labelling. The FIR establishes not only new rules, such as the mandatory nutrition information on processed foods (as of 13 December 2016), the mandatory origin labelling of unprocessed meat from pigs, sheep, goats and poultry (as of 1 April 2015, according to Implementing Regulation (EU) No. 1337/2013) and the mandatory declaration of the vegetable origin of vegetable oils in the list of ingredients (as of 13 December 2014), it also provides for stricter health warnings in relation to the caffeine content in energy drinks. Lithuania adopted already in 2013 stricter health warnings on energy drinks. In a more restrictive move, on 15 May 2014, the Republic of Lithuania's parliament overwhelmingly voted to ban the sale of high-caffeine energy drinks to minors. France adopted a new excise tax on energy drinks that went into effect on 1

January 2014.

#### II. Background

The FIR repeals and consolidates a wealth of EU food labelling acts, including, inter alia, Commission Directive 87/250/EEC on the indication of alcoholic strength by volume in the labelling of alcoholic beverages for sale to the ultimate consumer,<sup>2</sup> Council Directive 90/496/EEC on nutrition labelling for foodstuffs,<sup>3</sup> Directive 2000/13/EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs (hereinafter, Directive 2000/13/EC),<sup>4</sup> and Commission Directive 2002/67/EC on the labelling of foodstuffs containing quinine, and of foodstuffs containing caffeine (hereinafter, Directive 2002/67/EC).<sup>5</sup>

One of the acts repealed by the FIR is Directive 2002/67/EC, which considers caffeine and quinine ingredients or substances that may adversely affect some people. Quinine and caffeine are used in the production or preparation of certain foodstuffs, either as flavourings or, in the case of caffeine, as an ingredient. For most consumers, the consumption of these substances in moderation is unlikely to present any health risks. According to the opinion of 21 January 1999 of the Scientific Committee on Food (hereinafter, the SCF),<sup>6</sup> the predecessor of the European Food Safety Authority (hereinafter, EFSA), on caffeine and other substances used as ingredients in energy drinks, there is no objection from the point of view of toxicology to the continued use

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1 OJ 2011 L 304/18.

2 OJ 1987 L 113/57.

3 OJ 1990 L 276/40.

4 OJ 2000 L 109/29.

5 OJ 2002 L 191/20.

6 Opinion of the Scientific Committee on Food on Caffeine, Taurine and D-Glucurono - g -Lactone as constituents of so-called "energy" drinks (expressed on 21 January 1999) available on the internet at: [http://ec.europa.eu/food/fs/sc/scf/out22\\_en.html](http://ec.europa.eu/food/fs/sc/scf/out22_en.html) (last accessed on 14 August 2014).

of quinine at a certain maximum level in bitter drinks. However, the SCF concluded that consumption of quinine may be counter-indicated for certain people for medical reasons, or because they are hypersensitive to the substance. As far as caffeine is concerned, the SCF concluded that, for adults, apart from pregnant women, the contribution of energy drinks to the total consumption of caffeine did not appear to be a cause for concern, assuming that energy drinks replace other sources of caffeine. However, for children, an increase in the daily intake of caffeine to a certain level of consumption per day may bring about temporary changes in behaviour, such as increased excitability, irritability, nervousness or anxiety. In addition, for pregnant women, the SCF's view was that moderation of caffeine intake is advisable.

In a more recent study published by researchers of the WHO, the health risks associated with energy drink consumption are primarily related to their caffeine content. Concerns were expressed about high caffeine intake, whereby an overdose can cause serious health problems such as palpitations, hypertension, nausea, convulsions and in extreme cases heart failure.<sup>7</sup>

### III. Comment

The general labelling Directive 2000/13/EC did initially not provide for compulsory and specific mention of the individual names of flavourings in the list of ingredients. Quinine or caffeine, used as flavouring, might as a result not be listed by their specific name in the list of ingredients. Moreover, even where caffeine is mentioned as such in the list of ingredients, there was no requirement to indicate whether the level was high. For these reasons, Directive 2002/67/EC established labelling rules to give the consumer clear information on the presence of quinine or caffeine in a foodstuff and, in the case of caffeine, to provide a warning message and an indication of the amount of caffeine, where this is in excess of a specific level, in beverages that do not naturally contain caffeine. Therefore, by derogation from Directive 2000/13/EC, quinine and/or caffeine used as flavouring in the production or preparation of a foodstuff must be mentioned by name in the list of ingredients immediately after the term "flavouring". Where a beverage contains caffeine, from what

ever source, in a proportion in excess of 150 mg/l (= 15mg/100 ml), the message "high caffeine content" must appear on the label in the same field of vision as the name under which the product is sold. This message must be followed by the caffeine content expressed in mg/100 ml. Common energy drinks contain about 32 mg/100 ml.<sup>8</sup> The substance taurine added as flavouring, but not as an ingredient, does not need to be specified in the list of ingredients if its presence is not highlighted in some form. Taurine may fall under the generic term "flavourings".

In the proposal for the FIR of 30 January 2008,<sup>9</sup> the EU Commission maintained the "high caffeine content" warning message and added a compulsory message "added caffeine" for other foods, where caffeine is added with a nutritional or physiological purpose. In the recommendation for second reading of 6 June 2011 on the Council position at first reading with a view to the adoption of the FIR,<sup>10</sup> the EU Parliament proposed two different warning messages: "High caffeine content. Not recommended for children or pregnant or breast-feeding women" and "Do not mix with alcohol" in the same field of vision as the name of the beverage, followed by a reference in brackets to the caffeine content expressed in mg per 100 ml. For other foods, where caffeine is added with a nutritional or physiological purpose, the EU Parliament proposed "contains caffeine" instead of "added caffeine". It also introduced a further warning message (*i.e.*, "Not recommended for children or pregnant women") in the same field of vision as the name of the product, followed by a reference in brackets to

- 7 João Joaquim Breda, Stephen Hugh Whiting, Ricardo Encarnação et al., Energy drink consumption in Europe: a review of the risks, adverse health effects, and policy options to respond, Public Health, 14 October 2014, doi: 10.3389/fpubh.2014.00134. Available on the Internet at: <http://journal.frontiersin.org/Journal/10.3389/fpubh.2014.00134/full#B10> (last accessed on 2 December 2014).
- 8 In comparison, regular colas contain about 11-12 mg/100ml and diet colas contain about 13-14 mg/100ml of caffeine and do not need to be labelled as having "high caffeine content."
- 9 Proposal for a Regulation of the European Parliament and of the Council on the provision of food information to consumers, COM 2008/40.
- 10 Recommendation for second reading of 6 June 2011 on the Council position at first reading with a view to the adoption of a regulation of the European Parliament and of the Council on the provision of food information to consumers, Amendment 109, (17602/1/2010 – C7-0060/2011 – 2008/0028(COD)), available on the internet at: <http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A7-2011-0177&language=EN> (last accessed on 14 August 2014).

the caffeine content expressed in mg per 100 g/ml. The EU Parliament justified it in that the word “contains” would technically be better in order to prevent legislative loopholes. For example, guarana is a substance, which has a natural high caffeine content and would not have to be labelled if the word “added” is used. In the final compromise reached between the EU Parliament and the EU Council, there was no agreement on the additional warning message “Do not mix with alcohol” in the same field of vision as the name of the beverage with a high caffeine content. Although some consumers do mix non-alcoholic energy drinks with alcoholic beverages, it has been argued that this has happened for decades with colas, ginger ale, tonic water, soda water and all kinds of fruit juices so the EU Parliament’s proposal in relation to the alcohol warning message was rejected by the EU Council.

However, the warning message “High caffeine content. Not recommended for children or pregnant or breast-feeding women” in the same field of vision as the name of the beverage, followed by a reference in brackets to the caffeine content expressed in mg per 100 ml, is compulsory on energy drinks as of 13 December 2014. The energy drinks manufacturers have already started adapting their labelling to the new rules. Increasing consumption of energy drinks implies a higher exposure to caffeine, taurine and D-glucurono- $\gamma$ -lactone. The study commissioned by the EFSA on “Gathering consumption data on specific consumer groups of energy drinks” of 7 February 2013 found that higher exposure to such active substances by children and young adults was identified as a potential emerging risk and that indeed available information suggests that energy drinks consumption is becoming increasingly widespread

among young people, especially in relation with mass-entertainment and sport practice.<sup>11</sup>

As stated above, the Republic of Lithuania has now banned the sale of high-caffeine energy drinks to minors. Lithuania adopted Law No. XII-885<sup>12</sup> amending the Food Law No. VIII-1608<sup>13</sup> (hereinafter, Law No. XII-885). Article 2 of Law No. XII-885 supplements Article 6 of the Food Law No. VIII-1608 (which concerns market restrictions for food and other related food products) and, in relevant part, states that the sale, purchase, or otherwise transfer of energy drinks to children under 18 years of age is prohibited. Energy drink sellers are entitled to request identity documents to check the age. Article 1 of Law No. XII-885 adds a definition of energy drinks as No. 20 to Article 2 of the Food Law No. VIII-1608 and reads as follows: “Energy drink is a non-alcoholic beverage containing more than 150 mg/l of caffeine (regardless of the source), or containing more than 150 mg/l of caffeine and one or more other stimulants of the central nervous system like glucuronolactone, inositol, guarana, ginsenosides, ginkgo extract and taurine. Energy drink may contain carbohydrates, vitamins, minerals, amino acids, food additives, fruit juices and plant extracts.” It must be noted that the list of “other stimulants of the central nervous system” is an open list and could include substances not expressly listed. The Lithuanian ban on sale of energy drinks to minors will take effect in November 2014. In 2012, prior to the adoption of Law No. XII-885, the Nutrition unit of the National Food and Veterinary Risk Assessment Institute of Lithuania<sup>14</sup> carried out a risk assessment on energy drinks entitled “Analysis of the impact assessment of energy drinks and their ingredients on human health, based on laboratory testing”,<sup>15</sup> which found, *inter alia*, that “for pregnant women, too much caffeine (more than 200 mg) might result in a baby having a lower birth weight than it should, which can increase the risk of some health conditions in later life.” The risk assessment also found that “there is some evidence which suggests that high levels of caffeine can result in spontaneous miscarriage and that children and adolescents are more sensitive to caffeine” and that “consumption of energy drinks with alcohol causes a simultaneous diuretic effect and an increased risk of dehydration and also has negative effect on the central nervous system.”

It has been reported that Lithuania, an EU Member State since 2004, hopes that other EU Member

11 Gathering consumption data on specific consumer groups of energy drinks, Question number: EFSA-Q-2011-00309, Accepted: 7 February 2013, available on the internet at: <http://www.efsa.europa.eu/en/supporting/pub/394e.htm> (last accessed on 14 August 2014).

12 Lithuanian Law Register (Teisės akty registras), 2014-05-21, No. 2014-05574, available on the internet at: [http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_l?p\\_id=471243&p\\_tr2=2](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=471243&p_tr2=2) (last accessed on 14 August 2014).

13 Available on the internet at: [http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_l?p\\_id=266822](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=266822) (last accessed on 14 August 2014).

14 “Nacionalinis maisto ir veterinarijos rizikos vertinimo institutas” in Lithuanian.

15 Available on the internet at: [http://www.nmrvvi.lt/uploads/File/Strukturos/energy\\_drinks\\_risk\\_assessment.pdf](http://www.nmrvvi.lt/uploads/File/Strukturos/energy_drinks_risk_assessment.pdf) (last accessed on 14 August 2014).

States, that only have recommendations in place, not sales bans to minors, will follow suit.<sup>16</sup> When other EU Member States legislate similarly to Lithuania, this would ultimately lead to a fragmentation of the rules applicable in the EU Single Market. The provisions established in Lithuania, banning the sale of energy drinks to minors, are arguably justifiable on grounds of consumer protection and protection of health of humans, and would therefore likely not violate the provisions on the free movement of goods set out in Articles 34-36 of the Treaty on the Functioning of the European Union (TFEU). However, in view of national initiatives on the marketing of energy drinks, a harmonised approach in the EU would be welcomed.

In this context, it must be noted that on 7 November 2013, Lithuania already adopted Law No. XII-577 on the amendment of the Advertising Act No. VIII-1871<sup>17</sup> which provides in Article 2, *inter alia*, that paragraph 7 is added to Article 14 of the Act, which states that energy drink advertisements must include the wording “do not consume with alcoholic beverages”. This is the wording that the EU Parliament proposed for the FIR and that, in the end, was not included in the regulation. Under Lithuania’s Advertising Act No. VIII-1871, it is already prohibited to: (i) indicate energy drinks as products of sponsors or to advertise them in any other way in educational establishments attended by persons under the age of 18 and (ii) distribute energy drinks for advertising purposes to persons under age of 18.<sup>18</sup>

The draft measure amending the Advertising Act No. VIII-1871 was notified on 13 March 2013<sup>19</sup> to the European Commission under the so-called TRIS (*i.e.*, Technical Regulation Information Service) procedure set up under Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.<sup>20</sup> The aim of TRIS is to provide transparency and avoid unjustified barriers between EU Member States. The TRIS procedure imposes an obligation upon the EU Member States to notify to the European Commission and to the other EU Member States all the draft technical regulations concerning products and information society services before they are adopted in national law. In the course of the TRIS procedure relating to the draft Lithuanian measure, Spain and the UK provided comments on the amendment of the Lithuanian Advertising Act, while Austria, the Czech

Republic, Italy and Slovenia issued a detailed opinion. However, the amendment to the Lithuanian Advertising Act was adopted. It must be noted that Lithuania has not notified the draft law amending the Food Law No. VIII-1608 banning the sale of high-caffeine energy drinks to minors under TRIS. The sales ban does not appear to be considered a “technical standard” that has to be notified under the TRIS procedure.

As of 1 January 2014, a new excise tax is levied in France on energy drinks according to Article 18 of the Law on the financing of the social security for 2014.<sup>21</sup> The tax applies to beverages containing at least 0.22 g of caffeine per litre for human consumption, packed in a container for retail sale (*i.e.*, in barrels, bottles, bricks, cans, jars, etc.). The final rate of contribution is fixed at 101.90 EUR per hectolitre, which is about 25 cents for a commonly used energy drinks can of 250 ml).

## IV. Conclusion

Labelling of caffeinated energy drinks, sales bans and other measures are not only discussed in Europe. In the study “Young adolescents’ perceptions, patterns, and contexts of energy drink use - A focus group study”, Australian academics warn that young ado-

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- 16 Nikola Solic, Lithuania becomes first EU country to ban energy drink sales to teens, 15 May 2014 Reuters, available on the internet at: <http://rt.com/news/159284-lithuania-ban-energy-drinks-teens/> (last accessed on 14 August 2014); John D. Stoll, Mike Esterl, Frances Robinson, Lithuania Bans Energy Drinks Sales to Minors - Country Hopes Other EU Nations Will Follow Its Lead, Wall Street Journal of 15 May 2014, available on the internet at: <http://online.wsj.com/news/articles/SB10001424052702304908304579563690934380648> (last accessed on 14 August 2014).
  - 17 Lietuvos Respublikos Reklamos Įstatymo 14 Straipsnio Pakeitimo Ir Papildymo Įstatymas 2013 m. lapkričio 7 d. Nr. XII-577 (Žin., 2000, Nr. 64-1937; 2011, Nr. 123-5814; 2013, Nr. 57-2854). Available on the Internet at: <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getfinal&inum=1971716> (last accessed on 14 August 2014).
  - 18 Available on the Internet at: [http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_e?p\\_id=414814](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_e?p_id=414814) (last accessed on 14 August 2014).
  - 19 Available on the Internet at: [http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=pisa\\_notif\\_overview&sNlang=EN&iyear=2013&inum=153&lang=EN&iBack=2](http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=pisa_notif_overview&sNlang=EN&iyear=2013&inum=153&lang=EN&iBack=2) (last accessed on 14 August 2014).
  - 20 OJ 1998 L 204/37-48.
  - 21 Loi de financement de la sécurité sociale pour 2014. Available on the Internet at: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000028372809&dateTexte=&categorieLien=id> (last accessed on 14 August 2014).

lescents can easily identify energy drinks brands but are unaware of key ingredients including caffeine, guarana and taurine.<sup>22</sup> The study finds that young adolescents use energy drinks without knowing what they are drinking and how they are contributing to their personal risk of harm. The study concludes that as the advertising, appeal and use of energy drinks by adolescents appear to share similarities with alcohol and tobacco, regulations, labelling and advertising rules should be tightened.

The energy drink industry is rapidly growing, and other substances with a physiological purpose, which

are added to drinks, may come under the scrutiny of EU and EU Member States' regulators. Manufacturers of such drinks are advised to monitor safety assessments by EFSA and EU Member States' authorities and regulatory developments in this sector, such as labelling requirements, sponsorship restrictions, sales restrictions, excise taxes on energy drinks and safety assessments by EFSA and EU Member States' authorities in order to ensure regulatory compliance. This task is becoming increasingly difficult, when energy drinks are banned on health grounds for specific parts of the population by certain EU Member States. Stricter health warnings on energy drinks and higher taxes, similar to those on alcoholic beverages and tobacco products, are arguably disproportionate. Furthermore, in light of the many new botanical substances or extracts used in energy drinks, expert advice should be sought to ensure regulatory compliance.

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22 Beth Costa, Alexa Hayley & Peter Miller, Young adolescents' perceptions, patterns, and contexts of energy drink use - A focus group study, *Appetite*, Volume 80, 1 September 2014, Pages 183-189. Available on the Internet at: <http://dx.doi.org/10.1016/j.appet.2014.05.013> (last accessed on 14 August 2014); and <http://www.sciencedirect.com/science/article/pii/S0195666314002153> (last accessed on 14 August 2014).