

Briefing for the Citizen Participation and Public Petitions Committee on petition PE1919: Ban the sale of high caffeine products to children for performance enhancement, lodged by Ted Gourlay

Brief overview of issues raised by the petition

Caffeine acts as a stimulant on the human central nervous system. The effects of caffeine include an increased level of alertness but it can also induce unwanted effects such as irregular heart rhythms and difficulty sleeping.

[Caffeine has been shown to enhance exercise performance](#), including improved muscle endurance, strength and speed. As a result, some athletes have been known to supplement their diet with caffeine, including caffeinated gum.

However, the petition raises concerns about the impact of products like caffeinated gum on young people who take them to enhance sporting performance. These concerns include a potential increased risk of cardiac death.

The European Food Safety Authority (EFSA) published [a 'Scientific Opinion' in 2015 on the safety of caffeine](#) which concluded the following in relation to cardiac risk:

“A single dose of 200 mg of caffeine consumed one to two hours pre-exercise significantly increases [Blood Pressure] during resistance training in caffeine-naive subjects as well as in habitual coffee consumers after 24–48 hours of caffeine withdrawal. A single dose of 200 mg of caffeine also decreases [Myocardial Blood Flow] if consumed approximately one hour prior to endurance exercise (i.e. when the BP-raising effect of

caffeine reaches its peak). Although such changes could increase the risk of acute cardiovascular events in subjects with an increased risk of [Cardio Vascular Disease] (e.g. with underlying hypertension and/or advanced atherosclerosis), the Panel considers the effect to be of low clinical relevance for healthy individuals in the general population under normal environmental conditions.”

However, it does go on to say that higher doses (>3mg per kg body weight) **could** lead to prolonged physical exercise that might compromise the cardiovascular system and/or musculoskeletal system.

In relation to children and adolescents, EFSA could not derive a safe caffeine intake due to insufficient information on the link between caffeine intake and health outcomes. However, it proposed that the safe limit derived for adults (3mg per kg of bodyweight per day) may also apply to children given that their body’s ability to clear caffeine from the blood is at least that of adults.

There are currently no statutory restrictions on the availability of any caffeine products in Scotland, including caffeinated gum. However, there have been concerns about the consumption of energy drinks by young people and there are now several non-statutory policies in place. These include a ban on the sale of energy drinks on NHS sites, schools and local authority sites.

Some retailers also operate a voluntary ban on the sale of energy drinks to under 16s.

The Scottish Government has not taken any action around caffeinated gum but it has [consulted on the sale of energy drinks to young people](#). This includes the application of a statutory age restriction.

The Scottish Government is currently considering the responses to the consultation and its subsequent policy response.

Key Organisations and relevant links

[British Heart Foundation](#)

[Food Standards Scotland](#)

[Cardiac Risk in Young](#)

[Sports Scotland](#)

[Athletics Scotland](#)

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The purpose of this briefing is to provide a brief overview of issues raised by the petition. SPICe research specialists are not able to discuss the content of petition briefings with petitioners or other members of the public. However, if you have any comments on any petition briefing you can email us at spice@parliament.scot

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