NOT DESIGNED FOR ATHLETES!

Association québécoise des médecins du sport

SPORTSQUÉBEC
Faire bouger

CMSQ
Conseil de médecine du sport du Québec

SPORT. ÉDUCATION. FIERTÉ.
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Éducation, Loisir et Sport
Québec

TOO MUCH!

GASTRO-INTESTINAL PROBLEMS

sugar!

≤ 70g

DEHYDRATION

EXCESS WEIGHT

TOO MUCH!

ANXIETY

caffeine!

≤ 350mg

TREMBLING

HEART PROBLEMS

ENERGY DRINKS AND SPORTS:

Handle With Care!

Québec

TOO MUCH *caffeine!*

Depending on the brand and format, an energy drink can contain from 50 to 350 mg of caffeine, up to the equivalent of **four cups of coffee**! Caffeine is a stimulant. According to Health Canada, the maximum daily dose of caffeine should not exceed:

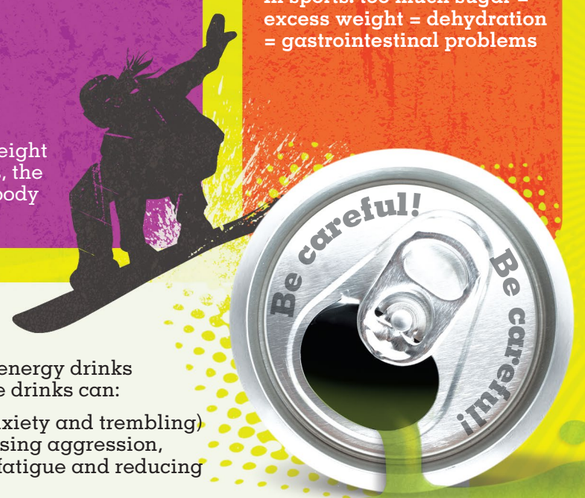
- **45 mg for ages 4 to 6**
- **62.5 mg for ages 7 to 9**
- **85 mg for ages 10 to 12**
- **400 mg for a healthy adult**

Given the differences in individual height and weight among 13- to 18-year-olds, the maximum daily dose is 2.5 mg/kg of body weight, without exceeding 400 mg.

TOO MUCH *sugar!*

An energy drink can contain up to **14 teaspoons of sugar**, depending on the brand and format.

In sports: too much sugar = excess weight = dehydration = gastrointestinal problems



OTHER *ingredients*

Other ingredients in energy drinks include vitamins and various nonmedicinal ingredients with negligible energizing effects.

These drinks also include taurine, which can interfere with the workings of the heart and arteries. The long-term effects of regular consumption of taurine are not known. The short-term effects, similar to those of caffeine, have raised concerns in the scientific community because of potential cardiovascular risks.

AVOID MIXING AND OVERDOSING!

The risk of complication increases when several energy drinks are consumed at once or when one or more drinks are consumed in addition to the following:

- other sources of caffeine (coffee, chocolate, soft drinks, tea)
- another stimulant, including energy shots
- medication, alcohol or drugs

ETHICS AND DOPING

Using caffeine is not considered doping. However, using a product to improve personal performance can lead to doping. That is why caffeine is listed in the World Anti-Doping Agency's Monitoring Program, which aims to document the prevalence of caffeine use among athletes.

UNWANTED SIDE EFFECTS

Athletes are advised not to consume energy drinks when practising sports because these drinks can:

- inhibit coordination (by inducing anxiety and trembling)
- increase the risk of injury (by increasing aggression, slowing the appearance of signs of fatigue and reducing the pain threshold)
- lead to dehydration (caffeine increases urination)
- cause heartburn and nausea
- lead to heart problems (increased blood pressure and heart rate caused by too much caffeine combined with the stress of competition and inadequate hydration can lead to severe heart problems such as palpitations or arrhythmia and, in extreme cases, a heart attack)

The negative effects of caffeine can be exacerbated in people who are taking medication or who have other health problems including cardiovascular diseases, insomnia, diabetes, hypertension or hyperactivity. Caffeine can also lead to physical and psychological addiction.

IN CONCLUSION

The World Health Organization has deemed irresponsible the marketing of products that have an adverse effect on consumer health. In light of the health risks associated with energy drinks, the Association québécoise des médecins du sport advises against consuming these products while practising sports.

Sports are an excellent vehicle for sharing ethical values and promoting healthy lifestyle habits. Since energy drinks are not designed for athletes and they can have adverse effects on performance and health: