

Many children and adolescents get too much caffeine from energy drinks

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When children aged 10-14 consume energy drinks, one in five consumes too much caffeine. When their caffeine intake from other sources such as cola and chocolate is included, every second child and more than one in three adolescents aged 15-17 consume too much caffeine. This is the finding of a new study conducted by the National Food Institute, Technical University of Denmark. The institute estimates that energy drinks cause or contribute to a large proportion of children and adolescents exceeding the recommended maximum daily intake of caffeine.

Sales of [energy drinks](#) in Denmark have almost tripled in recent years from about 4 million liters sold in 2010 to about 11 million liters in 2013. Energy drinks are [soft drinks](#) with added sugars or sweeteners that contain between 150-320 mg of caffeine per liter.

A study of 10-35 year olds Danes' intake of energy drinks conducted by the National Food Institute shows that taste is the main reason for drinking energy drinks. Many also use energy drinks as the quick and easy solution to stay awake for a long time and as a performance enhancer.

Intake often results in too much caffeine

Energy drinks are not a health concern for adults who consume them in moderate amounts. However, [children](#) and young people quickly exceed

the National Food Institute's maximum intake recommendation of 2.5 milligrams of caffeine per kg of body weight per day – even if they have a moderate consumption of energy drinks. Intake of caffeine above the maximum recommendation may cause side effects such as insomnia, restlessness, heart palpitations, irritability, nervousness and anxiety.

New calculations from the National Food Institute show that one in five children aged 10-14 exceed the maximum recommended caffeine intake when they consume energy drinks. This is due to their low [body weight](#). When including their [caffeine intake](#) from other sources such as cola and chocolate every second child and more than one in three [adolescents](#) aged 15-17 exceed the recommendation when drinking energy drinks.

The National Food Institute estimates that energy drinks cause or contribute to a large proportion of children and adolescents consuming [caffeine](#) in excess of the recommended intake.

Adverse effects

27% of 10-35-year-olds drink energy drinks at least once a month according to the National Food Institute's study. Boys/men aged 15-26 consume the most energy drinks with nearly one in two consuming energy drinks at least once a month. 13% of 10-14-year-olds consume energy drinks at least once a month.

42% of energy drink consumers have experienced adverse effects such as insomnia, restlessness and heart palpitations.

"It is worrying that so many have experienced adverse effects from drinking energy drinks," senior adviser Jeppe Matthiessen from the National Food Institute says.

Lack of awareness of the impact on health

Interviews also indicate that 10-14 year olds have limited knowledge of the ingredients in energy drinks, the side effects of drinking them and the recommendation that children, pregnant women and breastfeeding mothers should not consume energy drinks. Interviews with parents show that they are also not aware of the recommendation and for example serve energy drinks at children's birthday parties or let their children consume energy drinks in connection with sports.

"It seems as if there has been a change in the perception of the types of drinks that people consider normal to drink. Among younger consumers energy drinks now have the same status as soft drinks had previously. Both the use of and attitudes towards energy drinks give us reason to be concerned that the intake will increase in the coming years and we therefore suggest that more information will be made available about energy drinks aimed at children and adolescents as well as their parents," Jeppe Matthiessen says.

Energy drinks associated with a less healthy lifestyle

The study also shows that people who consume energy drinks often have a less healthy lifestyle than people who do not consume energy drinks. As such overweight, smoking, a lack of sleep, a lot of screen time and a large intake of sweetened drinks are all associated with the consumption of energy drinks.

More information: The study results are presented in the report: Energidrikke i Danmark. Undersøgelse af indtaget blandt 10-35-årige (pdf – available in Danish with an English summary). [www.food.dtu.dk/english/~/medi ... rikke-i-Danmark.ashx](http://www.food.dtu.dk/english/~/medi...rikke-i-Danmark.ashx)

Provided by Technical University of Denmark

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