



Behind the hype:

Energy Drinks

Why is this an issue?

Energy drinks can be high in caffeine and sugar. They are not recommended as part of a healthy diet, particularly for people who are more sensitive to the negative effects of caffeine, including pregnant or breastfeeding women, children, and young people^{1, 2, 3}. Some supermarkets in New Zealand have now banned the sale of energy drinks to under sixteen year olds.

What are energy drinks?

Energy drinks are non-alcoholic, water-based drinks containing caffeine⁴. They also tend to be high in sugar and energy (kilojoules), although zero sugar varieties are available. Caffeine is a stimulant, and energy drinks are promoted as improving mental and physical performance. Energy drinks are not recommended as part of a healthy diet.

Energy drinks must contain between 145mg to 320mg caffeine per litre[#]. This equates to 36-80mg in a 250ml serve – similar to a 250ml cup of plunger coffee (66mg caffeine).

Some of these drinks can have up to 7 teaspoons (28g) of sugar in a 250ml serve⁵ (see Figure 2). This is more than half the World Health Organization's (WHO's) recommended maximum daily intake of free sugars for an adult. The WHO recommends adults and children reduce their daily intake of free sugars to less than 10% of their total energy intake^{6, 7}. For New Zealand adults, the Ministry of Health recommends that drinks with little or no added sugar are chosen⁸.

Sugary drinks are linked to a range of poor health outcomes, including tooth decay, unhealthy weight gain and obesity, insulin resistance, type 2 diabetes, hypertension, and heart disease⁹.

Energy drinks and pregnancy

Energy drinks are not recommended for pregnant women because of their high caffeine content³. Caffeine is a stimulant, readily crossing the placenta to an unborn baby. A moderate intake of caffeine is generally not associated with adverse developmental or reproductive effects¹⁰. However, high intakes of caffeine in pregnancy may be associated with negative outcomes¹¹. Plain water or trim milk are the best choices for pregnant women. For more information on caffeine, see our **Behind the hype: Caffeine** fact sheet.

In a nutshell

- Energy drinks can be high in caffeine and sugar. They are not recommended as part of a healthy diet.
- Pregnant women are advised to avoid energy drinks because of their high caffeine content – caffeine can readily cross the placenta to an unborn baby.
- Caffeine can pass into the breast milk during breastfeeding, so energy drinks are not recommended for breastfeeding women.
- Energy drinks and energy shots are not recommended for children and young people, who may be particularly sensitive to the negative effects of caffeine.

Energy drinks and breastfeeding

Energy drinks are not recommended for breastfeeding women because of their high caffeine content. During breastfeeding, caffeine moves into breast milk³. Breastfeeding women should limit their intakes of caffeine, as it can lead to irritability and disturbed sleep for the baby. Plain water or trim milk are the best choices for breastfeeding women.

[#]Energy drinks sold in New Zealand must comply with the Australia New Zealand Food Standards Code - Standard 2.6.4 Formulated Caffeinated Beverages

Energy drinks and children

Energy drinks are high in sugar, or contain artificial sweeteners, and are not recommended for children or young people^{1,2}. Infants and young children may be more sensitive to the negative effects of the caffeine in energy drinks, which can include; irritability, restlessness, rapid heart rate, disturbed sleep patterns, and dehydration¹².

Figure 1: Choose these drinks for different population groups*



Pregnancy and breastfeeding

Limit intake of caffeine to <300mg per day. Choose drinks with little or no added sugar³. Choose: water and low-fat unflavoured milk.



Infants aged 0-1 years

Avoid caffeine and added sugar⁴. Choose: breast milk⁵ and from six months of age, water.



Toddlers aged 1-2 years

Avoid food or drinks containing caffeine and added sugar⁶. Choose: breast milk, whole milk or suitable alternatives, and water.



Children aged 2-18 years

Limit intake of foods and drinks containing caffeine. Energy drinks and energy shots are not recommended for children and young people. Choose: water and low-fat unflavoured milk.



Adults

Choose drinks with little or no added sugar. Choose: water, low-fat milk or moderate amounts of tea or instant coffee.

*Infant formula is the only suitable alternative to breast milk for babies who are aged 0-1 year.

*Recommendations from the Ministry of Health^{1,2,3,8}.

⁴Children under two years should not be given foods or drinks with caffeine or added sugars (including coffee, tea [including herbal teas], cordials, juice, soft drinks or energy drinks)¹.

Figure 2: Caffeine and sugar content of energy drinks*

Energy drink (250ml)	Energy drink (500ml)	Energy drink (750ml)
		
Caffeine: 80mg Sugar: 28g (7tsp)	Caffeine: 160mg Sugar: 56g (14tsp)	Caffeine: 240mg Sugar: 84g (21tsp)

*This is a rough guide. Refer to labels for more information.

References:

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Free nutrition and physical activity resources are available from:
www.nutritionandactivity.govt.nz