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Consumption of energy drinks in a representative sample of Irish adults aged 18–64 years

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In recent years there has been rapid growth in the consumption of energy drinks in many countries⁽¹⁾. This has created interest in the scientific community due to the high levels of caffeine in these products and the possible health effects of consuming such drinks with alcohol or other active ingredients⁽¹⁾. There is no standard definition for energy drinks, but this category typically includes non-alcoholic beverages containing caffeine, taurine and vitamins (often in combination with other ingredients), marketed for the specific purpose of providing real or perceived effects as stimulants, energizers and performance enhancers⁽¹⁾. The term does not include "sports drinks" and other isotonic beverages.

The objective of this analysis was to investigate the consumption of energy drinks in Irish adults and the contribution of such beverages to caffeine intake. Analysis was based on the National Adult Nutrition Survey (NANS) (2008–2010) (www.iuna.net)⁽²⁾. A 4 day semi weighed food record was used to collect food and beverage intake data, and nutrient intakes were estimated using UK⁽³⁾ and Irish food composition tables⁽⁴⁾.

Brand level data were used to identify energy drinks consumed during the survey. The market leader was the main energy drink consumed (consumed on 66 of the 72 drinking occasions). Energy drinks were consumed as an accompaniment to alcohol on 30 (41·7%) drinking occasions. The mean daily intake (MDI) of caffeine in the total population (n = 1274) was 102 (P95 279) mg/d whilst the MDI of caffeine in energy drink consumers (n = 37) was 130 (range 24–320) mg/d. Among consumers, energy drinks contributed to almost half (47·6%) of their total caffeine intake (63 mg/day; range 4–268).

Among the 18–64 year old participants, energy drinks were consumed by 2.9 % of the population (3.9 % men; 1.9 % women), with 18–35 year olds being the main consumers. Table 1 reports energy drink consumption across the different age groups, both in the total population and consumers only.

Table 1: Mean daily intake of energy drinks by age group in total population and consumers only

	Total Population $(n = 1274)$		Consumers only $(n = 37)$			•
	Mean (g/d)	SD	(n)	Mean (g/d)	SD	Range
18-35 year olds (n = 531)	10.6	53.7	33	170	141	(13–666)
36-50 year olds $(n = 437)$	3.1	44.3	3	446	362	(125-839)
51-64 year olds (n = 306)	1.2	21.4	1	375	_	(375)

Overall, energy drinks were consumed by a small proportion of Irish adults. However in light of the possible health effects of consuming these drinks with alcohol and the considerable contribution of energy drinks to caffeine intake, these findings highlight the importance of monitoring energy drink intake.

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