



Is caffeine in soft drinks really necessary?

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Is Caffeine in soft drinks really necessary?

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Our food environment is obesogenic and personal-injury lawsuits against food and beverage companies are prominent in the U.S.A, however proving the addictive nature of a food or its components is challenging. What cannot be questioned is that rates of childhood overweight and obesity are growing and so are the associated multiple negative health and psychosocial effects.¹ Given the serious health consequences of obesity, it is imperative for researchers and community groups to continually challenge the food and beverage industry to produce foods that are not going to impinge on the health and wellbeing of our children. The consumption of sugar sweetened soft-drinks has been linked to increasing body mass index and risk of obesity in children and adolescents.² There are many potential reasons for this over consumption including aggressive marketing. However a further contributing factor is the presence of caffeine. Caffeine is a mildly addictive chemical at low doses,³ and an additive in cola soft drinks in Australia (0.55-0.67mM). Soft-drink manufacturers claim caffeine is a flavour enhancer in soft drinks,⁴ but we have demonstrated that caffeine has no flavour activity in a common cola soft-drink.⁵ Thirty trained tasters completed over 1,600 individual discrimination testes. The tasters were unable to detect 0.67mM caffeine in a soft-drink. If we cannot discriminate between a caffeinated and non-caffeinated sample, there is no flavour activity. A 0.67mM concentration of caffeine is equivalent to approximately 55mg in a 500ml bottle of cola and this dose results in physiologic and psychologic modifications in adults,³ that manifest in behavioural modification including increased alertness, energy, and ability to concentrate. Such positive post-ingestive affects are subconsciously associated with consumption of the sugar sweetened beverage thereby increasing liking and encouraging repeat consumption. Children are more likely to be effected by caffeine and it is reasonable to assume that even lower doses of caffeine will result in

behavioural modifications and encourage repeat soft drink consumption. On average 113L of soft drink are consumed per person per year in Australia and although not all of these beverages are caffeinated, the top sellers are cola soft drinks.⁶ As caffeine has been shown not to have any flavour activity in these beverages, we pose the question; Given the serious nature of childhood and adolescent overweight and obesity, should caffeine be an additive in soft-drinks marketed aggressively and sold to children and adolescents?

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