

Abstract

Caffeine Related Risk among Tertiary Students in New Zealand [†]

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Background: Caffeine-related health incidents in New Zealand have escalated over the last two decades. Tertiary students may be at higher risk as they are known to seek caffeinated products to treat sleep deprivation and while studying for exams or completing major course projects. The aim of this study was to examine the caffeine consumption habits of tertiary students and their motivations for use across a broad range of caffeinated products.

Method: Eligible participants were invited to complete a caffeine consumption habits questionnaire (CaffCo) via the online survey software, Qualtrics.

Results: A total of 317 participants (46.7% men) completed the online CaffCo. Most (74.4%) were aged between 19 to 30 years and nearly a half were NZ European (47.5%). The majority (99.1%) consumed at least one source of caffeine in their diet. Coffee was the largest contributor (61.4%) followed by tea (14.4%), energy drinks (8%), chocolate (7.3%), kola drinks (5.3%), sports supplements (2.4%), RTDs (0.8%) and caffeine tablets (0.5%). The median estimated daily caffeine consumption was 146.73 mg·day⁻¹ ($n = 314$), or 2.25 mg·kgbw⁻¹·day⁻¹ ($n = 281$). An estimated 14.3% of caffeine consumers exceeded the suggested ‘safe limit’ of 400 mg·day⁻¹. Cigarette smokers were significantly more likely to exceed this level. Caffeine and alcohol were co-ingested by 38.5% of the participants, especially among those in paid employment or by cigarette smokers. The majority of caffeine consumers (84.7%) reported experiencing at least one adverse symptom post caffeine consumption especially to energy drinks (77.3%). Two thirds (64.2%) reported being dependent on at least one caffeine source, and 47.3% reported experiencing at least one withdrawal symptom.

Conclusions: These findings provide critical information for developing caffeine-related risk-reduction strategies for NZ tertiary students. Improved labelling and consumer education which targets those who consume caffeinated products above the daily 400 mg safe limit may help ameliorate caffeine related risk.



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