

11 September 2020

Urgent Proposal P1054 Pure and highly concentrated caffeine products - Assessment of the Approved Variation

Thank-you for the opportunity to provide feedback on the Proposal P1054 Pure and highly concentrated caffeine products.

Dietitians NZ is the professional association of registered dietitians and associated nutritional professionals. With a membership of approximately 650, we represent the largest group of fully qualified food and nutrition professionals in New Zealand. Whilst some of our individual members may have differing views, the comments reflected in this submission are the opinion of the Dietitians NZ Public Health Special Interest Group, on behalf of the Dietitians NZ membership. We trust the comments made in our submission will be given due consideration.

As a group of food and nutrition experts in New Zealand we are concerned about access to caffeine in the food supply particularly for our vulnerable populations, including breast-fed infants, children and young people (also young women who may become pregnant), who may not be aware of the dangers of high caffeine consumption to themselves (and to their unborn/breast-fed baby). We are also concerned that there may be low consumer awareness of the potential adverse effects of high caffeine consumption among some groups and that this may be exacerbated by risk taking behaviours among young people, rising 'café culture' in NZ and strong marketing of caffeine containing beverages targeted at young people.

Dietitians NZ supports **Option 3: prepare a proposal to amend and/or add to the approved variation**. We welcome a **broader review of caffeine levels in the food supply** and the **continued ban** on the sale of pure and highly purified forms of caffeine to consumers. A wider assessment of caffeine in the food supply will identify if there are other foods or beverages containing high doses of caffeine that could be harmful to public health and safety. Particular sub-populations may be at risk from over-consumption. A concerning number of people (122) contacted the National Poisons Centre in New Zealand reporting overdosing on caffeine, over a six-year period (2004-2010), with the average age of the caller just 13 years old ¹.

¹ <https://www.rnz.co.nz/news/national/96138/122-cases-of-caffeine-overdose>

A review of the caffeine content of the food supply would provide up to date data that could be incorporated into reviews of the Ministry of Health's Eating and Activity Guidelines which includes specific information on caffeine, mainly related to caffeine-containing (high sugar) beverages. New Zealand is one of many countries that have restrictive messaging on caffeine containing foods in food based dietary guidelines².

Caffeine intake is not routinely measured in New Zealand. However, exposure is estimated to be between <1 to an excess of 1000mg/day varying on age and consumption of caffeine containing foods, however, it is noted that consumption of energy drinks and energy shots would have an additive effect on caffeine exposure³. A recent small study of NZ adolescents (16-18 years) (n=216) reported that while median caffeine intake was only 68mg/day, caffeine containing beverages were commonly consumed by 95% of adolescents, and one-fifth had a caffeine consumption intake above the European Food Safety Authority recommended safe intake (3mg/kg/day)⁴. This study also showed that the proportion of adolescents consuming caffeine on a daily basis had increased since 2008/2009 from 71% to 95% in this age group, with coffee the predominant source. Consumption of caffeine was shown to be higher among tertiary students (n=314) compared to adolescents at 147mg/day with 14% of the sample estimated to be consuming over 400mg/day⁵. Given this concerning evidence, Dietitians NZ applauds Woolworths NZ's recently instituted ban on sales of energy drinks to under 16-year olds. This ban indicates that there has been concern and responsibility shown by sections of the food industry about the health effects of caffeine overconsumption in vulnerable groups⁶.

Other subpopulations of concern are pregnant and breast-feeding women and people who may be sensitive to caffeine. Caffeine has been shown to cross the placenta and be transferred to breast milk. The Food and Nutrition Guidelines for Pregnant and Breast-feeding women in NZ recommend limiting caffeine intake and not exceeding 300mg/day. Forty-two percent of pregnant women and 50% of breast-feeding women were shown to consume coffee daily in a sample of over 400 women in NZ (48% and 47% consume tea, respectively), although women reported reducing consumption during this life stage⁷. Unfortunately, intakes of higher risk caffeinated beverages are unknown.

² Reyes, C. M., & Cornelis, M. C. (2018). Caffeine in the diet: country-level consumption and guidelines. *Nutrients*, 10(11), 1772.

³ Ministry for Primary Industries (2012) Caffeine. Accessed 11 Sept 2020.
<https://www.mpi.govt.nz/dmsdocument/3569/direct>

⁴ Turner, S. (2019). Secondary school students and caffeine: consumption habits, motivations and experiences: a thesis presented in partial fulfilment of the requirements of the degree of Master of Science in Nutrition and Dietetics. Massey University,

⁵ Stachyshyn, S., Rutherford-Markwick, K., Ali, A., & Wham, C. (2019). Caffeine Related Risk among Tertiary Students in New Zealand. *Proceedings*, 8(1), 24.

⁶ <https://www.foodnavigator-asia.com/Article/2019/09/09/Energy-drinks-take-a-hit-in-New-Zealand-as-grocery-chain-ban-sales-to-teenagers#:~:text=FREE%20newsletter%20Subscribe-,Energy%20drinks%20take%20a%20hit%20in%20New%20Zealand,chain%20ban%20sales%20to%20teenagers&text=New%20Zealand%20supermarket%20chain%20Countdown,when%20seeking%20to%20make%20purchases.>

⁷ Brown, K., von Hurst, P., Rapson, J., & Conlon, C. (2020). Dietary Choices of New Zealand Women during Pregnancy and Lactation. *Nutrients*, 12(9), 2692.

In summary, the risk from pure and highly purified forms of caffeine to consumers remains and Dietitians NZ agrees that:

- this ban should continue to prevent harm to consumers, and
- Option 3 is the prudent additional step required at this time to protect public health and safety.

If you have any questions regarding any of the information contained in this submission, please contact:

██████████ NZRD, MPH
Member of Dietitians New Zealand

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Yours Sincerely

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General Manager, Dietitians NZ