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Office of Legislative and Regulatory Modernization
Policy, Planning and International Affairs Directorate
Health Products and Food Branch
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Sent via email to hc.lrm.consultations-mlr.sc@canada.ca

Dear Madam or Sir:

In response to Health Canada's "Proposed regulations for supplemented foods," amending the Food and Drug Regulations (FDR), the International Food Information Council (IFIC) would like to submit the following comments specific to the potential inclusion of caffeine on the *List of Permitted Supplemental Ingredients.*

As your regulatory process moves forward, we believe it is important that it be informed by a science-based approach to the regulation of food ingredients.

IFIC Overview

IFIC is a United States-based §501(c)(3) non-profit educational organization with a mission to effectively communicate science-based information about health, nutrition, food safety and agriculture. We are staffed by credentialed experts and science communicators across a broad spectrum of food and nutrition subjects, and our work benefits from research and input from top experts in academia, government, and the private sector. IFIC does not represent any company, industry or product, nor do we lobby or serve as an advocacy organization.

One of the objectives of IFIC is to understand public perceptions by conducting consumer research. We have been exploring attitudes and behaviors around food safety and nutrition for more than three decades, in part through our signature research project, the annual *Food and Health Survey*, now in its 16th consecutive year. Our surveys are publicly available, and the *2021 Food and Health Survey* is available here.

We have examined respondents' beliefs around a host of nutrients and food ingredients, including caffeine.

While our surveys focus on U.S. consumers, our findings nonetheless may prove informative to your regulatory process, given the close ties and similarities between the cultures and markets of Canada and the United States. Indeed, average caffeine intake levels in Canada and the United States are quite similar.[1]

Caffeine Science and Safety

Supplemental ingredients have a long history in the food supply, offering a host of potential benefits to human health and physiology beyond the inherent qualities of foods themselves. When an ingredient has established a long track record of safety and acceptance, it is especially critical that consumers have accurate information to guide their choices, mitigating the potential for confusion or misinformation. Caffeine is one such ingredient.

Caffeine currently ranks as one of the most widely consumed food ingredients in the world.[2] IFIC research has consistently found that the vast majority of people consume it on a daily basis, supporting other studies[3] reporting that as much as 85% of the U.S. population consumes at least one caffeinated beverage per day — a figure similar to the 80% of all people in the world who consume caffeine every day.[4] The average amount of caffeine consumed per person in Canada (from all sources) is estimated to be 210 to 238 mg per day.[5]

Caffeine has been safely consumed for centuries[6], and its use as a food ingredient has been approved by many regulatory agencies worldwide. Authoritative bodies around the world — including Health Canada[7], the U.S. FDA[8], EFSA[9] and FSANZ[10] — have stated that moderate caffeine consumption (less than 400 mg/day) is considered safe, although actual consumption levels generally fall far below that threshold.

While people consume caffeine from a variety of sources, there is no chemical difference whatsoever between synthetic and naturally sourced caffeine.[11] Pharmacological results from as early as the 1940s

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[1] Heckman, M.A., Weil, J. and De Mejia, E.G. (2010), Caffeine (1, 3, 7-trimethylxanthine) in Foods: A Comprehensive Review on Consumption, Functionality, Safety, and Regulatory Matters. Journal of Food Science, 75: R77-R87. https://doi.org/10.1111/j.1750-3841.2010.01561.x

[2] https://pubmed.ncbi.nlm.nih.gov/20492310/

[3] https://www.sciencedirect.com/science/article/pii/S0278691513007175

[4] https://onlinelibrary.wiley.com/doi/full/10.1111/j.1750-3841.2010.01561.x

[5] https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/caffeine

[6] https://www.researchgate.net/publication/46394171_Notes_on_the_History_of_Caffeine_Use

[7] https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/food-additives/caffeine-foods/foods.html#fn2

[8] https://www.fda.gov/consumers/consumer-updates/spilling-beans-how-much-caffeine-too-much

[9] https://www.efsa.europa.eu/en/efsajournal/pub/4102

[10] https://www.foodstandards.gov.au/consumer/generalissues/Pages/Caffeine.aspx

[11] https://pubmed.ncbi.nlm.nih.gov/20492310/

indicate that commercial caffeine and synthetic caffeine have the same physiological and toxicological effect.[12]

In addition, caffeine has been shown to confer health and physiological benefits. Numerous studies have found that "[p]erformance benefits attributed to caffeine include physical endurance, reduction of fatigue, and enhancing mental alertness and concentration. Caffeine has also been recently linked to weight loss and consequent reduction of the overall risks for developing the metabolic syndrome."[13]

Consumer Confusion

Shifting and conflicting regulatory guidance runs the risk of creating uncertainty rather than informing. In the United States, for instance, caffeine can be regulated as a supplement, a food ingredient or even a drug, potentially creating fertile ground for confusion.

Constantly shifting food advice can create baffled consumers who are ill-equipped to make healthy choices for themselves and their families. Eight in 10 consumers (80%) in the *2018 Food and Health Survey* said that there is a lot of conflicting information about what foods to eat or avoid. Of those people, 59% say that conflicting information makes them doubt their food choices.[14]

While the safety of caffeine within recommended intake ranges has been shown for decades, there are still misperceptions around this near-universally consumed food ingredient.

While IFIC's annual *Food and Health Survey* has found a steady increase in recent years in the number of adults who believe that "caffeine that is naturally occurring has the same effect as caffeine that is added," the number of people in 2021 who say that statement is false (20%) is nevertheless almost half the number who say it is true (36%). The remainder of respondents (44%) are unsure.[15]

The same survey also showed that two-thirds (66%) of adults say they know the amount of caffeine that is in the foods and beverages they consume.

IFIC's research would suggest a consumer base that is broadly aware of their caffeine intake but still prone to misinformation. Regulatory and labeling schemes regarding caffeine, therefore, must strike a delicate balance between informing consumers and further confusing them.

Conclusion

Few things are more fundamental to human health and development than our diets. That is why there is a special need for food policies and regulations that are informed by the most accurate and current science.

Caffeine holds a unique distinction among food ingredients. It is part of the daily ritual that is enjoyed by billions of people. Not only is it one of the most consumed ingredients on Earth, but it is also one of the

[12] https://www.science.org/doi/10.1126/science.105.2720.176-a
[13] https://pubmed.ncbi.nlm.nih.gov/20492310/
[14] https://foodinsight.org/wp-content/uploads/2018/05/2018-FHS-Report.pdf
[15] https://foodinsight.org/2021-food-health-survey/ *(at slide 73)*

most studied. It has a long history of safe use, as attested to by the most widely respected health authorities around the world.

When it comes to the safety of caffeine, its record is unambiguous — and Canadians will be best served by evidence-based guidance that enlightens consumers.

Thank you for the opportunity to provide our comments on this topic of critical importance.

Sincerely,

Joseph Clayton
Chief Executive Officer, IFIC

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