

Diarrhea ain't dope: Canada needs to consider the food safety implications of edible cannabis

Dear Editor:

As Canada pursues legalization of cannabis, the issue of food safety related to edible cannabis products has received little attention. In Europe and the United States, the cannabis industry has already experienced a number of outbreaks and product recalls linked to food-borne pathogens, moulds, unsanitary conditions, temperature abuse, and the presence of pesticides in edible cannabis products (hereafter, "edibles").^{1,2} The addition of edibles to the Canadian market will inevitably exacerbate the already significant health³ and economic⁴ burden of food-borne disease in the Canadian population.

There are a number of questions currently unanswered in relation to edibles, namely: will edibles be classified as food or medicine?; who will be permitted to make edibles?; can they be made in the same facilities as other food items?; what are the labelling requirements for edibles?; and, who will oversee the safe production and sale of edibles? In California, edibles are classified as neither food nor medicine, allowing them to fall through legislative cracks into an unregulated abyss.⁵ The Canadian government is set to legalize marijuana production, sale and possession, leaving provinces responsible for setting distribution regulations.² Considering that provincial and municipal governments already have robust food safety legislation and regulatory agencies in place that are well equipped to deal with potential food safety issues, it may be wise for the federal government to officially classify edible marijuana products as food. As such, the existing infrastructure and regulations can provide a clear mandate of responsibility for the oversight of edibles, their safe food handling best practices and labelling requirements, and resources to meet increased regulatory demands.

Consumer food safety related to edibles will require coordinated efforts at every step of the process, from harvest through production and sale, to safe use and storage by consumers. Edibles have the potential to be low risk, which includes items with low water activity, high acidity, or fermentation (e.g., cookies, brownies, or beer),⁵ or high risk, which includes infused oils, butters, chocolate, and other low acid and high water activity ready-to-eat foods. High-risk, sealed products, like infused oils, are of particular concern for botulism.⁶ Last, the recent *Escherichia coli* outbreak associated with flour in Canada⁷ highlights the need for

strong food safety standards for all consumable items, including low-risk baked products.

As with other food products, safe production and consumption of cannabis edibles should include licencing, Hazard Analysis and Critical Control Points (HACCP) plans,⁵ source ingredient traceability, toxicity testing (e.g., THC, pesticides, and heavy metals), integrated pest management, and safe food handler training.^{1,2} This will require federal, provincial, and local government agencies working closely with industry, not only to address the recognized issues of labelling standards and maximum toxicity levels (i.e., THC) but also to consider safe food handling practices. Premises must also be subject to routine inspections, ideally by certified public health inspectors, in line with existing practices around other consumer food items. Regardless of the path forward, the role of food safety in cannabis edibles should not be ignored, but rather proactively addressed.

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doi: 10.17269/CJPH.108.6362

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