

# The effect of recreational cannabis use in people with diabetes: a rapid review

## Summary

Recreational cannabis use may negatively impact diabetes metabolic factors and self-management behaviours in people with type 1 diabetes. In people with type 2 diabetes, recreational cannabis may increase risks for peripheral arterial occlusion, myocardial infarction and renal disease. However, there is a need for more robust studies to further elucidate this association. Higher quality research methods such as mechanistic studies (including dose-response studies) will enhance understanding of the biological effects of cannabis use in people with diabetes.

## Implications

Results from this rapid review will inform citizens, health care providers, diabetes educators, and other key stakeholders on the effects of recreational cannabis use on diabetes metabolic factors and self-management behaviours.

**Reference:** Porr CJ, Rios P, Bajaj HS, et al. The effects of recreational cannabis use on glycemic outcomes and self-management behaviours in people with type 1 and type 2 diabetes: a rapid review. *Syst Rev.* 2020;9(1):187.

PMID: [32807222](https://pubmed.ncbi.nlm.nih.gov/32807222/)

For more information, please contact Dr. Caroline Porr  
[cporr@mun.ca](mailto:cporr@mun.ca)

## What is the current situation?

- The Cannabis Act came into effect in Canada on October 17, 2018, allowing citizens 19 years of age and older (18 years and older in Alberta and Quebec) to consume cannabis for recreational purposes.
- There is limited published literature about how recreational cannabis use may affect people with diabetes.

## What is the objective?

- The object of this study was to conduct a review of the scientific literature to examine and appraise existing evidence on the effects of recreational cannabis use in people with diabetes.

## How was the review conducted?

- Database searches were conducted in MEDLINE, Embase and PsycINFO for human studies published in English from January 2008 to January 2019.
- Study selection, data abstraction, and quality appraisal were completed by pairs of reviewers working independently.
- Data collected from included studies were tabulated and summarized descriptively.

## What did the review find?

- The search resulted in 1,848 citations, 322 duplicates were removed, 1,526 were excluded and 6 were included in the review.
- Included studies were conducted in Canada, USA and Poland and the sample sizes ranged from 75 to 1,184 participants with the ages ranging from 16.5 to 39.1 years old.
- Recreational cannabis use may negatively impact diabetes metabolic factors and self-management behaviours in people with type 1 diabetes.
- Recreational cannabis may increase risks for peripheral arterial occlusion, myocardial infarction and renal disease in people with type 2 diabetes.
- Available research of the effects of cannabis in people with diabetes is of poor quality.
- However, the information from this rapid review guides healthcare providers to caution their patients about the potential risks of cannabis use on diabetes.