

# Increasing the Impact of Cochrane Reviews by Editing Wikipedia

## Background

As Cochrane authors of a review on the effect of alcohol on blood pressure, we decided to contribute to editing the Wikipedia pages on alcohol because of its potential impact on public health. Providing the best available evidence on the harms and benefits of alcohol on Wikipedia has the potential for helping many people worldwide.

## Objective

We edited the Wikipedia articles on alcohol with the aim to:

- ❖ Detect inaccurate evidence/citations, outdated and omissions of Cochrane reviews and correct them;
- ❖ Include relevant evidence from Cochrane and non-Cochrane reviews.

## Methods

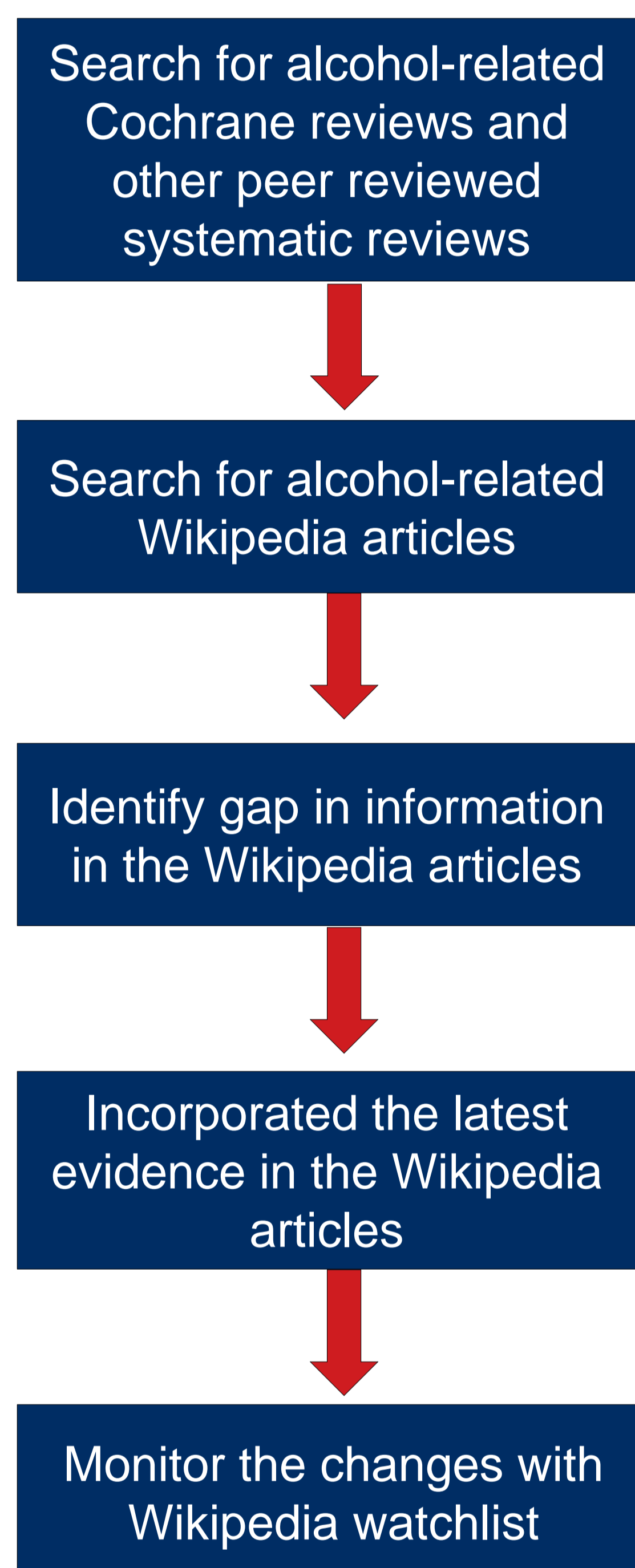
31 citations including both Cochrane and non-Cochrane systematic reviews related to alcohol's effect on cardiovascular system and mortality were identified in Cochrane library.

The alcohol-related articles with a focus on alcohol's pathophysiology, its effect on blood pressure, and its effect on cardiovascular risk and mortality were identified in Wikipedia.

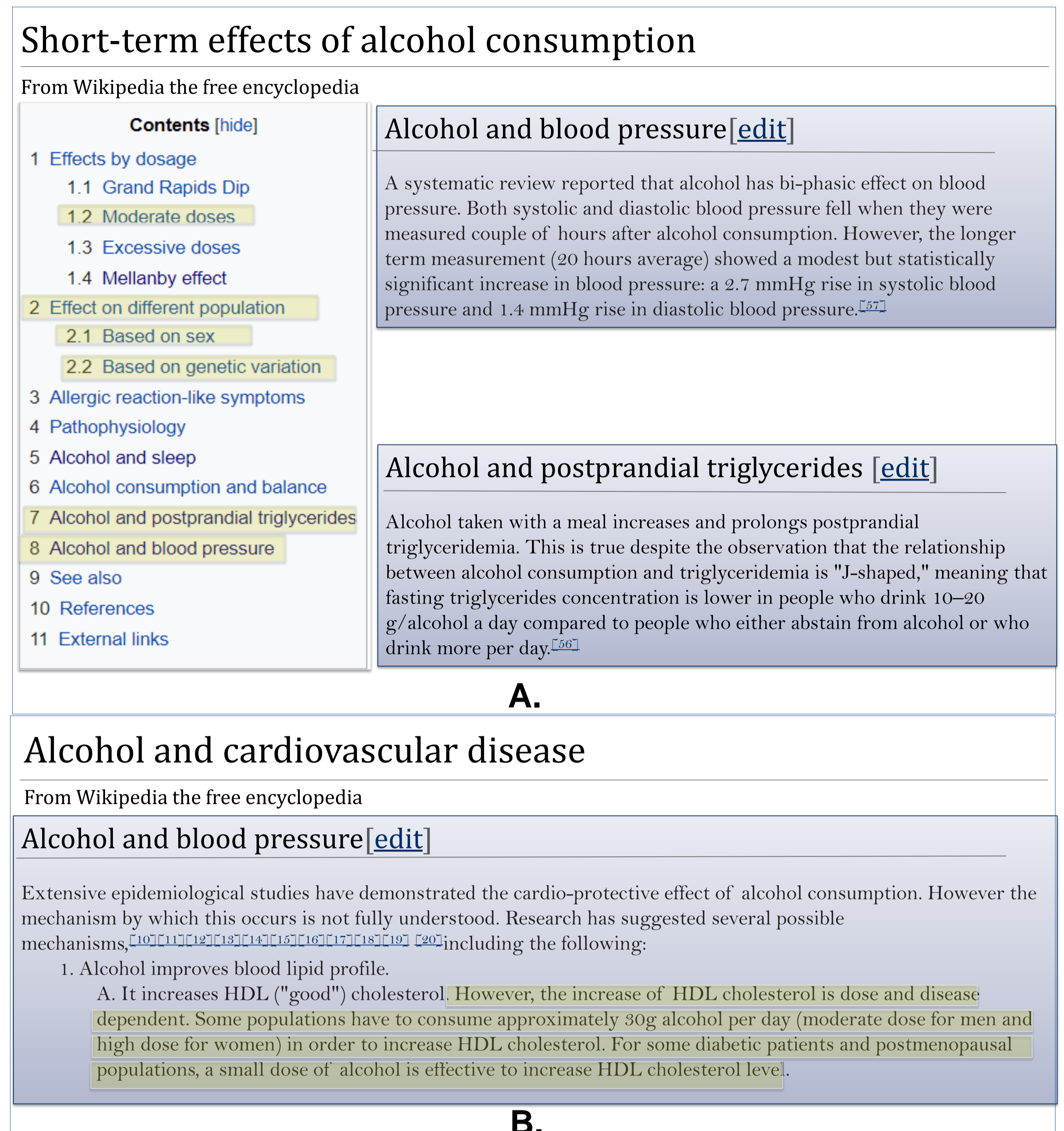
The identified Wikipedia articles were examined for inaccurate evidence/citations, outdated and omissions of Cochrane Reviews.

Article sections with insufficient or unclear information were updated with the latest evidence from relevant peer-reviewed systematic reviews.

The changes in the articles were monitored for the next 3 months.



Flow diagram– Steps of the method



**Short-term effects of alcohol consumption**  
From Wikipedia the free encyclopedia

**Contents [hide]**

- Effects by dosage
  - Grand Rapids Dip
  - Moderate doses
  - Excessive doses
  - Mellanby effect
- Effect on different population
  - Based on sex
  - Based on genetic variation
- Allergic reaction-like symptoms
- Pathophysiology
- Alcohol and sleep
- Alcohol consumption and balance
- Alcohol and postprandial triglycerides
- Alcohol and blood pressure
- See also
- References
- External links

**Alcohol and blood pressure [edit]**

A systematic review reported that alcohol has bi-phasic effect on blood pressure. Both systolic and diastolic blood pressure fell when they were measured couple of hours after alcohol consumption. However, the longer term measurement (20 hours average) showed a modest but statistically significant increase in blood pressure: a 2.7 mmHg rise in systolic blood pressure and 1.4 mmHg rise in diastolic blood pressure.<sup>[c]</sup>

**Alcohol and postprandial triglycerides [edit]**

Alcohol taken with a meal increases and prolongs postprandial triglyceridemia. This is true despite the observation that the relationship between alcohol consumption and triglyceridemia is "J-shaped," meaning that fasting triglycerides concentration is lower in people who drink 10–20 g/alcohol a day compared to people who either abstain from alcohol or who drink more per day.<sup>[c]</sup>

**A.**

**Alcohol and cardiovascular disease**  
From Wikipedia the free encyclopedia

**Alcohol and blood pressure [edit]**

Extensive epidemiological studies have demonstrated the cardio-protective effect of alcohol consumption. However the mechanism by which this occurs is not fully understood. Research has suggested several possible mechanisms, including the following:

- Alcohol improves blood lipid profile.
  - It increases HDL ("good") cholesterol. However, the increase of HDL cholesterol is dose and disease dependent. Some populations have to consume approximately 30g alcohol per day (moderate dose for men and high dose for women) in order to increase HDL cholesterol. For some diabetic patients and postmenopausal populations, a small dose of alcohol is effective to increase HDL cholesterol level.

**B.**

Figure 1. Examples of Wikipedia page edits. (A) shows two new sections added (rectangular text boxes on the right) with a summary of updated list of contents (highlighted contents are new). (B) shows an example of replacement of unreferenced content with further clarifications (highlighted) and citations.

## Results

We have added 31 citations and over 1500 words to seven Wikipedia pages. After finishing our edit, we monitored the pageview statistics and observed notable increase in number of views. During the editing process we noticed some misleading information. For example, one of the articles mentioned that alcohol increases good cholesterol/HDL (high-density lipoprotein). We corrected this to be more precise, that it has only been found to be true for a specific dose and population. Moreover, some of the reported information in the pages did not have any citations. We have experience removal of some of the details of our edits and randomized controlled trials-related citations by one Wikipedia editor.

Number of Wikipedia articles edited	Number of citations added	Number of words contributed
7	31	1579

Table 1: Summary of the results

## Conclusion

While authoring a Cochrane Review we discovered that Wikipedia information about alcohol's health effects was insufficient and in need of improvement. We hope that our experience will encourage other Cochrane authors to contribute to and improve Wikipedia information.

## Acknowledgement

We would like to thank Cochrane Hypertension group members for their constructive feedback during the process.