

## Activity of *Mentha piperata* against Herpes through deactivation of Herpes virus fusion regulator complex gH-GI (3M1C)

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**Abstract:** An in-silico study was performed to determine the activity of *Mentha piperata* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes virus fusion regulator complex gH-GI (3M1C) enzyme. It was found that Digoxin helped to prevent Herpes.

**Introduction:** *Mentha piperata* is known for its medicinal activities. It is used for treatment of a variety of conditions, including irritable bowel syndrome (IBS), nausea, herpes and other digestive issues, as well as the common cold and headaches.

The plant is classified as follows:

|          |                 |
|----------|-----------------|
| Kingdom  | Plantae         |
| Division | Magnoliophyta   |
| Class    | Magnoliopsida   |
| Order    | Lamiales        |
| Family   | Lamiaceae       |
| Genus    | <i>Mentha</i>   |
| Species  | <i>piperata</i> |

Major phytochemicals present in the plant are:

- Sulforaphane
- Carotene
- Digoxin
- Tannic acid

One of the major enzymes required for the survival of the organism causing Herpes is Herpes virus fusion regulator complex gH-GI (3M1C) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.