

Activity of *Momordia charantia* against Herpes through deactivation of Thymidine Kinase of Herpes Simplex virus (1KIM)

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Abstract: An in-silico study was performed to determine the activity of *Momordia charantia* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Thymidine Kinase of Herpes Simplex virus (1KIM) enzyme. It was found that Sulforaphane helped to prevent Herpes.

Introduction: *Momordia charantia* is known for its medicinal activities. Juice of the leaves is used to treat piles and herpes.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Cucurbitales
Family	Cucurbitaceae
Genus	<i>Momordia</i>
Species	<i>charantia</i>

Major phytochemicals present in the plant are:

- Curcumin
- Ascorbic acid
- Sulforaphane
- Digoxin

One of the major enzymes required for the survival of the organism causing Herpes is Thymidine Kinase of Herpes Simplex virus (1KIM) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.