

Activity of *Momordia charantia* against Herpes through deactivation of Herpes virus fusion regulator complex gH-GI (3M1C)

Babita Das¹, Rukmini Mishra²

¹babaitamani145@gmail.com

²rukmini.mishra@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

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 Herpes virus fusion regulator complex gH-GI (3M1C) 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 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.