

## Antimicrobial Actions of Graviola (*Annona muricata*)

Graviola has demonstrated in research to kill bacteria, viruses, and fungi utilizing various mechanisms of action. These include some standard disease-causing gram positive and gram negative bacteria, and several multi-drug-resistant strains of bacteria and *Candida*. The leaf extracts (both water and water/alcohol extracts) have also shown the ability to break through standard biofilm activity meant to protect these microbes from substances which might kill them. Additionally, graviola has been reported to demonstrate significant antiviral properties against the human immunodeficiency virus, Herpes simplex virus, human papilloma virus, Hepatitis C, COVID 19, and dengue virus. The plant's antimicrobial action is mainly attributed to various polyphenols and acetogenins found in the leaves. Among all of the published *in vitro* research, there are a handful of animal studies indicating the graviola can actually treat bacterial and viral infections in animals.

### Published Research:

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