[Eur J Clin Microbiol Infect Dis.](https://www.ncbi.nlm.nih.gov/pubmed/31422545" \o "European journal of clinical microbiology & infectious diseases : official publication of the European Society of Clinical Microbiology.) 2020 Jan;39(1):5-17. doi: 10.1007/s10096-019-03674-0. Epub 2019 Aug 17.

**Melittin: a venom-derived peptide with promising anti-viral properties.**

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[**Author information**](https://www.ncbi.nlm.nih.gov/pubmed/31422545)

1

Skin Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

2

Skin Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran. memaryani@gmail.com.

**Abstract**

Despite tremendous advances in the development of anti-viral therapeutics, viral infections remain a chief culprit accounting for ongoing morbidity and mortality worldwide. Natural products, in particular animal venoms, embody a veritable cornucopia of exotic constituents, suggesting an immensurable source of anti-infective drugs. In this context, melittin, the principal constituent in the venom of the European honeybee *Apis mellifera*, has been demonstrated to exert anti-cancer, anti-inflammatory, anti-diabetic, anti-infective, and adjuvant properties. To our knowledge, there is no review appertaining to effects of melittin against viruses, prompting us to synopsize experimental investigations on its anti-viral activity throughout the past decades. Accumulating evidence indicates that melittin curbs infectivity of a diverse array of viruses including **coxsackievirus, enterovirus, influenza A viruses, human immunodeficiency virus (HIV), herpes simplex virus (HSV), Junín virus (JV), respiratory syncytial virus (RSV), vesicular stomatitis virus (VSV), and tobacco mosaic virus (TMV)**. However, medication safety, different routes of administrations, and molecular mechanisms behind the anti-viral activity of melittin should be scrutinized in future studies.

**KEYWORDS:**

Anti-viral activity; Bee; Drug; Melittin; Venom

PMID: 31422545 DOI: [10.1007/s10096-019-03674-0](https://doi.org/10.1007/s10096-019-03674-0)