Can Honeybees Kill Cancer?

Printed from https://www.cancerquest.org/newsroom/2020/09/can-honeybees-kill-cancer on 11/23/2024	
Close up of honeybee on comb	

It may seem strange that honeybee venom could be used to treat breast cancer, but it is currently being explored by Dr. Ciara Duffy at the Harry Perkins Institute of Medical Research and The University of Western Australia. She found that the venom itself, or melittin (a major venom component) were able to destroy cancer cell membranes within 60 minutes

The venom and the melittin were also shown to halt cancer cell growth and reproduction by affecting chemical messengers responsible for tumor growth. Dr. Duffy wanted to see if the success of this treatment could be used to enhance already existing forms of treatments, like chemotherapy. Excitingly, she found that the chemotherapy drug docetaxel was able to easily enter cancer cells due to the cell membrane damage done by melittin. In mice, the combination of docetaxel and melittin was able to reduce the growth of aggressive breast cancer tumors.

Overall results are very encouraging, but more studies are required before melittin can be used to treat cancer.

Source

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