

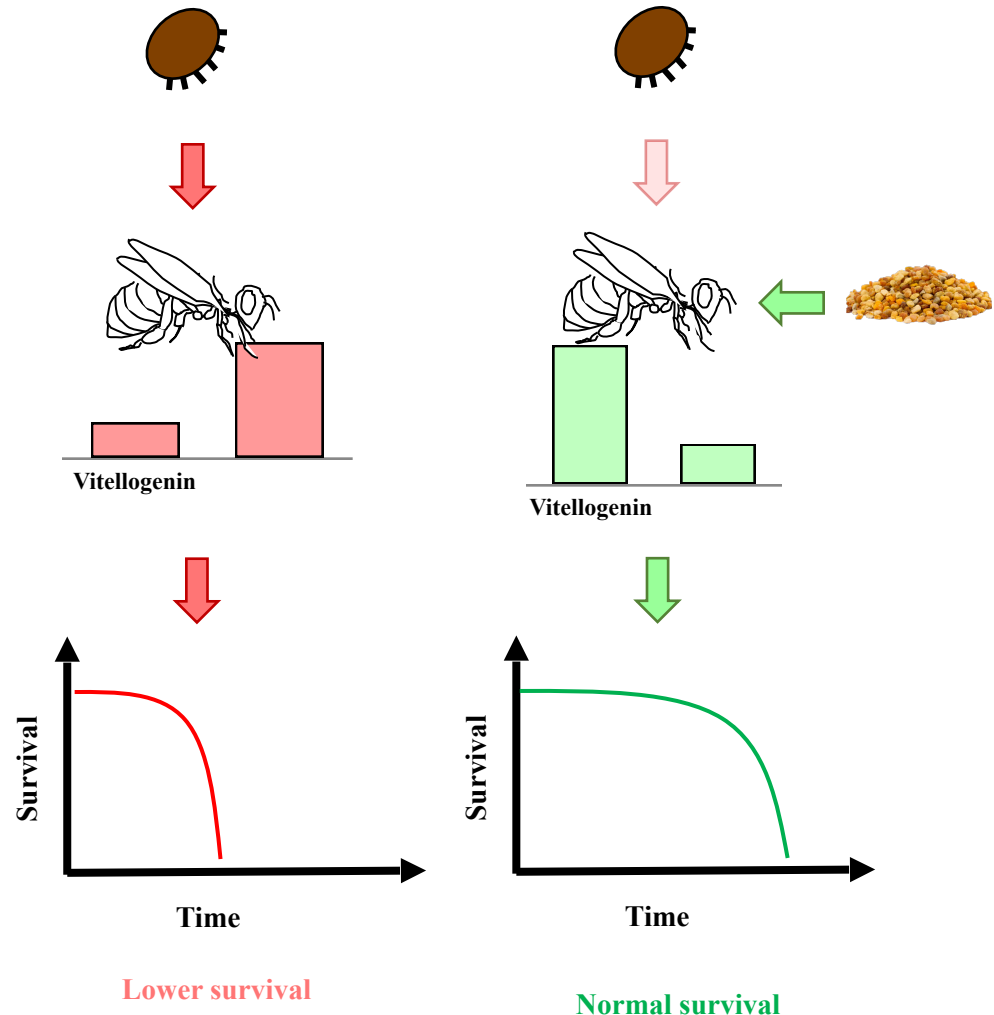
# Pollen slows down the aging induced by Varroa mites

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Pollen is the only source of proteins, fats, amino acids and vitamins for honey bees and is essential for colony survival. Recently, it has been demonstrated that pollen can also mitigate the deleterious effect of *Varroa destructor*: the most important parasite of the honey bee.

Varroa accelerates the aging of honey bees influencing proteins and hormones. In particular, the mite inhibits the production of a specific protein (i.e. Vitellogenin), typical of younger bees and stimulates the synthesis of a hormone typical of the older ones (i.e. Juvenile hormone). This impairment reduces the lifespan of the honey bees.

We show that pollen increases the lifespan of mite-infested bees restoring the natural balance of Vitellogenin and Juvenile hormone. This counteracts the faster aging induced by the parasite. Together with previous studies, these data highlight the importance of pollen feeding for honey bees.



The scientific paper on which this summary is based can be found [here](#)