

## Evaluation of anti-aging effects of vitamins in Drosophila

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### Abstract

Aging is a natural phenomenon that has attracted extensive biological research efforts in past. Interest in this area is growing since the discovery of single gene mutations that extended the life-span of laboratory model organisms. Many molecules have been reported to extend the life-span of laboratory model organisms. Insulin/insulin-like growth factor controlled lifespan extension in the nematode worm *Caenorhabditis elegans* is due to some lifespan-extending mutations. Diet restriction method can also extend the life-span of *Drosophila* and *Caenorhabditis elegans*. In this study we have tested the group of vitamins (vitamin B1, B2, B9, B12 and A) by feeding them at different concentrations to *Drosophila*. It is observed that vitamin B1 at 5  $\mu\text{M}$ , vitamin B2 at 500, 200, 1  $\mu\text{M}$ , vitamin B9 at 500, 200  $\mu\text{M}$ , vitamin B12 at 500  $\mu\text{M}$ , vitamin A at 1  $\mu\text{M}$ , concentrations enhanced the average age of *Drosophila* population. Further the anti-aging effects of aforementioned group of vitamins are needed to be explored at molecular level in *Drosophila*.

### Biography:

Kirtypal Singh is currently pursuing PhD in Biotechnology from School of Animal Biotechnology at Guru Angad Dev Veterinary and Animal

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