What Effect Do Goji Berries Have on the Viability of Alzheimer’s Sick Drosophila melanogaster?

Svensson, Alexandra

Alzheimer’s disease is a type of dementia that causes nerve cells in the brain to gradually break down. The aim of this experiment was to see if the viability of Alzheimer’s sick fruit flies possibly could be prolonged if feeding them with goji berries. Fruit flies were kindly donated to this experiment by the scientist Anki Brorsson, from the University of Linkoping. The fruit fly Driver elav –gal4C155 females were bred in the school laboratory and were then mated with transgenic Arctic– and W1118 male flies, to produce offspring with and without Alzheimer’s disease. At last the viability of Alzheimer’s sick fruit flies and control flies eating goji berries and ordinary food was examined. The results showed that the life expectancy of the sick flies consuming goji berries was 2.4 days longer than for the sick flies consuming ordinary food. Furthermore, it took 4 days longer for all flies within the group consuming goji berries to die than it did for the group consuming ordinary food. Moreover, the medium survival for the flies consuming goji berries was 4 days longer than for the flies consuming ordinary food. From the data in this investigation it may be concluded that Alzheimer’s sick flies consuming goji berries had a longer lifetime than Alzheimer’s sick flies consuming ordinary food. However much more research is needed in order to definitely know the effect of goji berries on Alzheimer’s sick fruit flies.

Awards Won: