

The Effect that Red Meat and Soursop Have in the Production of Cells in *Drosophila melanogaster*

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The purpose of this research was to observe the effect of the dietary supplement in the cell production of *Drosophila melanogaster*. The problem was, "What is the effect of meat and soursop in the production of cells (eggs) in *Drosophila melanogaster*?" The hypothesis was: Red meat and soursop have an effect on the production of cells (eggs) in *Drosophila melanogaster*, which can be used as an indirect measure of cell division as it occurs in cancer cells. In this research, three dietary supplements, such as soursop, red meat and fermented food were used without prior knowledge of their effect on cell division. The reproduction of flies can be used as an indirect measure of cell division. The effect of the treatment with these foods on the egg-laying rate of *Drosophila melanogaster* was examined. The flies were exposed to these dietary supplements for one week. Flies in the fermented food (flies' regular diet) were used as the control group. In the analysis tube that contained soursop 32 eggs were found and 0 larvae, while in the fermented food tube there were 20 eggs and 26 larvae. In the analysis tube with red meat there were 127 eggs and 25 larvae. The hypothesis was accepted because with soursop there was a decrease in the production of cells (eggs) while with red meat there was a considerable increase in the production of cells. It is possible that these findings can be related to the cell division process that occurs with cancer cells.