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*Is Homeopathy More Than the Placebo? The Effect of Homeopathic Arnica Montana on Fruit Flies*

To assess if the homeopathic remedy Arnica Montana has any effect on fruit fly hatching rates, populations, and physical defects beyond that of the placebo.

Hypothesis: Homeopathic Arnica Montana will have negative effects on fruit fly hatching rates, populations, and physical defects in comparison to the placebo, particularly in higher dilutions.

Four groups of three male and three female fruit flies were fed different dilutions of homeopathic Arnica Montana: distillation 6c, 30c, 200c, with a control of distilled water (to model the placebo). There were five trials in each group. The offspring of these groups, Generation 1, were analyzed for differences in hatching rates, total populations, and physical defects between the groups fed with Arnica Montana and the control.

In both hatching rates and total populations, the groups fed with Arnica Montana had a significant difference in comparison to the placebo. In hatching rates, the control had the most productive hatching rate, followed by the 6c, 30c, and then 200c. At their peaks, the control produced on average 47.2 fruit flies, while the 200c produced only half that (average 23.6 fruit flies). A similar trend was present in total populations. The control (average 126 fruit flies) produced approximately 65% more fruit flies than the 200c (average 76.4 fruit flies). No significant physical defects were noted.

Conclusions: The results of this experiment indicate homeopathic Arnica Montana has a significant negative effect on fruit fly hatching rates and populations compared to the placebo, particularly in higher dilutions.