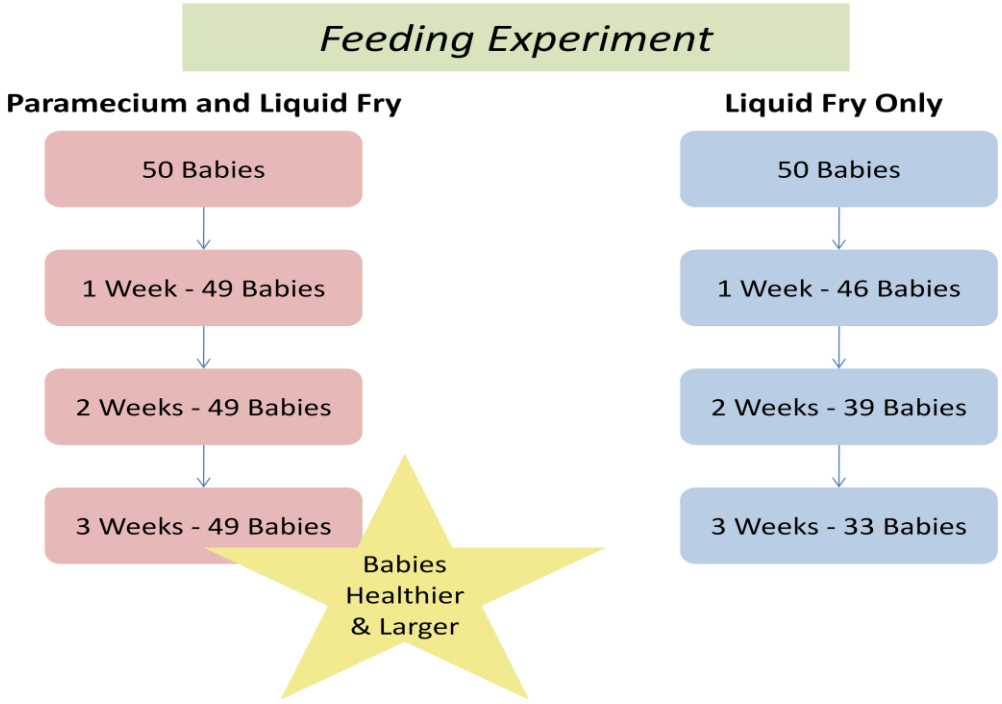
Raising Zebrafish Feeding Experiment

Introduction and Background: One of the main ways, in which zebrafish babies are fed, is with paramecium. However, many zebrafish often do not grow to adult stage, but rather parish as babies. One of the hypotheses explaining this phenomenon is that the paramecium food (currently used) harbors a type of contaminant. This contaminated food is leading to the high fatality rate observed while raising zebrafish babies. In order to test the contamination hypothesis an experiment was employed comparing two feeding methods. One clutch of 50 healthy, 7 day old zebrafish were given paramecium and liquid fry; while another identical clutch of 50 were fed only with liquid fry until they grew enough to start a diet of flake food. In both cases, the fish were fed twice per day. In addition, the temperature, pH, and the drip rate of each tank was held constant at 80.2°F, 7, and 12 drips per minute, respectively. Over the course of three weeks we documented the fatality rate in each experimental group in order to calculate the number of fish remaining.



Conclusion: The zebrafish babies fed with paramecium and liquid fry show a substantially reduced fatality rate in comparison with the clutch, fed only with liquid fry. Specifically, 1 zebrafish baby died in the tank consisting of paramecium and liquid fry, while 17 baby zebrafish died when fed with liquid fry only. In addition, the specimens fed with paramecium and liquid fry were larger and brighter in color at the end of the three weeks and were ready to start being fed flake food. This implies that they were not only healthier, but developed quicker, possibly due to increased nutrients found in paramecium that are not available in liquid fry.

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