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|  | **Conclusion**  Christine and I spent over two weeks feeding, observing and running these mice through a maze. Trying to analyze and understand the data was the hardest part of this experiment. Since each mouse had its own capabilities, intelligence, and personality, we had to be careful not to credit the outcomes to the wrong assumption. From observation, we are certain that the treatment groups consumed the ginseng and ginkgo biloba. The evidence includes a higher rate of activity among the ginkgo biloba group compared to the control group. We credit this to the affect ginkgo biloba is believed to have on peripheral circulation. What we mean is that ginkgo biloba is believed to increase blood flow to the arms and legs, increasing activity. The ginseng group also showed an increase in activity, although not as much as the ginkgo biloba group. While completing the task of cleaning the aquarium, Christine and I noticed that the stool of the ginseng treatment group was soft, somewhat like diarrhea. This is a known adverse affect of ginseng. Also, the mice receiving the ginseng treatment were very nervous, another known affect of ginseng. They were shaky when Christine and I tried to pick them up. In the maze they were unsure of their surroundings and the nervousness showed through again. From this evidence, we concluded that the treatment groups were consuming the two herbs.  From the first time Christine and I ran the mice through the maze, they seemed to know exactly what to do. We expected the first few runs to take more time; we expected the mice to be confused about just what to do. However, once we placed them at the start, they smelled the food and went in search of it. Each mouse had its own capability in running the maze. However, from studying the trends in the graphs it appears that the two herb treatments learned the maze structure faster than the control group. Although all their times improved and regressed, the graph of the ginkgo biloba treatment had fewer of these points. Also their times seemed to even out so that they were all just about the same. We believe this segment of the line represents either the fastest time the mice were capable of, or a possible tolerance developed to the ginkgo biloba. However, there is a similar segment on the control graph. This suggests that the segment represents the capability of the mouse. Lesser times can be explained by chance. However, we do not completely rule out the possibility that a tolerance could have been developed. We had not considered the possibility of tolerance and therefore did not test it. If we could do a follow-up experiment Christine and I would explore this hypothesis.  The ginseng graph also showed evidence to suggest that ginseng did affect how fast the mice could learn the maze. The graph shows an early improvement of times and then regression, and evens out as the ginkgo biloba graph did. However, upon studying segments of improvement on each graph, it appears that the ginseng treatment did not learn the maze as quickly as the ginkgo biloba group. The straight-line segment begins at a later trial than the ginkgo biloba graph. The slope of the segments showing improvement is not as steep as the slopes of the ginkgo biloba graphs either. Therefore we conclude that ginkgo biloba is a better herbal supplement than the ginseng. This refutes our hypothesis.  The control group graph shows the ability of mice to learn the maze without any artificial aid. The trial times were higher than the treatment groups, but it followed the same pattern. However the segment of the line that straightens out happens later than in the treatment groupsí graphs. From this we conclude that ginkgo biloba and ginseng do aid in memorization. This supports our hypothesis. |

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