The Effects of Ketone Supplements on Reducing Postprandial Glucose Levels

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The purpose of this experiment is to determine the extent in which ketone supplements reduce postprandial glucose levels in human test subjects. The researcher hypothesized that if the caffeine free ketone supplement is utilized at mealtime, then a decrease in glucose levels would be observed due to the speculation that exogenous ketones could produce a small release of isulin, which would lower blood glucose throgh the removal of glucose from the blood stream. The first step in experimentation was to have all participants remotely watch the assigned informational videos on how to properly conduct glucose and ketone tests. All communication with participants was done virtually. After completing the videos, participants conducted a glucose and ketone test previous to eating the assigned meal. One hour after meal consumption, participants conducted a second test of glucose and ketone levels. Participants conducted a second posttest, 2 hours after meal consumption. Trials two, three, and four all included the ketone supplement added to their meal. The same pretest-posttest-posttest method is followed in the three test trials with only the ketone supplement added as a drink to the meal. The researcher found that in trial 1, glucose levels in all participants increased while ketone levels remained the same. However, in trials 2, 3, and 4, a lesser increase in glucose levels were recorder throughout the test trials. Along with the lower glucose levels, the researcher also recorded an increase in ketone levels. Due to the rise in ketone levels, a decrease in GKI levels were found placing all participants closer towards reaching ketosis. The researchers hypothesis was supported due to the decrease in glucose levels after using the ketone supplements.