

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

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**Project Number** 

J0512

# **Project Title**

# **Effectiveness of Home Remedies Used for Lowering Cholesterol**

# **Abstract**

# **Objectives/Goals**

This study examines the question of difference in efficacy of digesting beef fat by three home remedies commonly used for lowering cholesterol levels in blood.

#### Methods/Materials

The efficacy of Apple Cider Vinegar, Honey Garlic Paste and Coriander Juice is investigated using beef fat as substrate, in controlled laboratory environment. Equal amount of the test remedies are incubated at 37 °C with measured amount of beef fat. Ethyl Alcohol is used as positive and Distilled Water as negative controls. The amount of digested/disintegrated fat is measured and texture of the digest is noted. The experiment is repeated 3 times.

#### **Results**

Apple Cider Vinegar digested the most fat, an average of 1.07 grams (5.35%), while Coriander Juice digested the least at only 0.18 grams (0.9%). Honey Garlic paste digested 0.39 grams (1.95%). In comparison, the positive control digested 1.86 grams (9.3%) and negative control digested nothing. Honey Garlic paste thickened the most.

#### **Conclusions/Discussion**

The results suggest that Apple Cider Vinegar is the best to naturally digest/disintegrate fat, which is the major source of cholesterol in daily diet. Apple Cider Vinegar could be the best of the three tested commonly used home remedies to lower cholesterol.

# **Summary Statement**

Apple Cider Vinegar could be the best home remedy to control hypercholesterolemia.

### Help Received

Initiated, discussed and completed the project at the UCLA-CURE Digestive Diseases Research Center laboratory under the supervision of Lixin Wang, MD, PhD.