

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

J1422

Project Title

Blood Sugar vs. Exercise and Diet

Abstract

Objectives/Goals
The Objective is to determine if a controlled die

The Objective is to determine if a controlled diet and exercise will lower blood glucose levels and reduce the amount of insulin requirements of a type 1 diabetic.

Methods/Materials

My mother was used as a test subject, in the first 30 days she ate her normal diet and went about her usual routine. Blood sugars were checked 3 times per day 7 days a week. During the second 30 days, diet was controlled 7 grams of protien for every 15 grams of carbohydrates consumed. One hour of exercise daily and blood sugar levels were checked 3 times per day. Insulin was adjusted 2 units at a time as needed. Material used: Insulin, Humolog & Humulin N, MediScene Optium blood glucose monitoring system, Ultilet lancets, one time use, MediScene Optium blood glucose test strips, BD ultra-fine 31 gauge needle, 1/2 cc syringes.

Results

Exercise and a controlled diet lowers blood glucose levels and reduces the insulin requirements of a type 1 diabetic.

Conclusions/Discussion

My results support my hyporthesis. The information from my project will help my mother and others to gain better control of type 1 diabetis.

Summary Statement

Will a controlled diet and daily exercise lower blood glucose levels and reduce insulin requiements in a type 1 diabetic.

Help Received

Mother was my test subject.