

AT A GLANCE

MEGASPOREBIOTIC™ AND TRIGLYCERIDE LEVELS STUDY

EFFICACY OF SPORE FORMING BACILLI SUPPLEMENTATION IN PATIENTS WITH MILD TO MODERATE ELEVATION OF TRIGLYCERIDES: A 12 WEEK, RANDOMIZED, DOUBLE-BLIND, PLACEBO CONTROLLED TRIAL.

PUBLISHED APRIL 2020



RESEARCH SUMMARY

Approximately one-third of the US population has hypertriglyceridemia (HT), defined as serum triglycerides over 200mg/dl. Triglycerides are produced through the diet and the intestinal tract. It has been well documented in scientific literature that HT is linked to elevated LDL levels and lower HDL levels, atherogenesis, pancreatitis, and fatty liver disease. With its strong correlation to cardiovascular disease and stroke, there is a need for non-pharmacological treatment methods. This double-blind placebo-controlled trial aims to demonstrate how spore-based probiotics effectively lower triglyceride levels. Eighty participants enrolled in the study for a 12-week period. At the start of the study, the average triglyceride level of the experimental group was 214mg/dl. After 6 weeks, the experimental probiotic group saw a 51.7mg/dl reduction in serum triglyceride levels. After 12 weeks, there was a 77.7mg/dl reduction. This reduction from 214mg/dl to 136.3mg/dl is both clinically and statistically significant. In the control group, no meaningful changes were observed, in fact, there was a slight increase in serum triglyceride levels. In this study, the improvement in triglyceride levels over 12 weeks is significant due to the epidemiological data linking hypertriglyceridemia with cardiovascular events. While cardiovascular disease is multi-faceted and requires multiple routes of intervention to control, use of Megaspore is a safe and effective adjunct treatment in reducing hypertriglyceridemia.

GOALS

This, randomized, double-blind, placebo-controlled trial demonstrated that probiotics consisting of five spore forming bacilli effectively lowered triglyceride levels in participants with mild to moderate hypertriglyceridemia.

KEY TERMINOLOGY

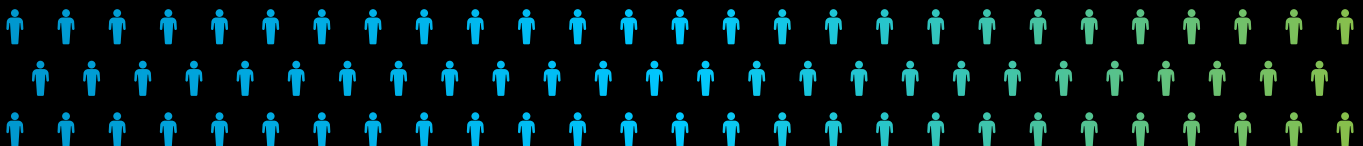
HYPERTRIGLYCERIDEMIA
Higher than 200 mg/dl

BORDERLINE TRIGLYCERIDEMIA
150–200 mg/dl

NORMAL TRIGLYCERIDE LEVELS
Less than 150 mg/dl

SUBJECTS

80 participants were randomized into the intervention of placebo group



MATERIALS AND METHODS

Inclusion criteria included: good general healthy, between the ages of 25–75, serum fasting triglyceride level >150mg/dl, willingness to take oral supplements and adhere to regimen.

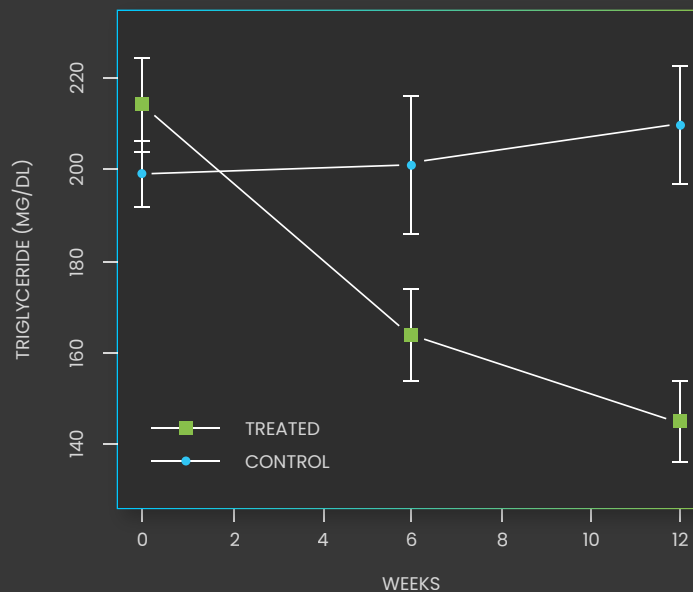
Participants were evaluated at 6 weeks and 12 weeks.

RESULTS

The experimental group exhibited a sharp decline in triglyceride level from baseline to 6 weeks and further at 12 weeks. No changes in the control group.

At six weeks, there was a significant 51.7 mg/dl reduction in the probiotic group compared to the control group. (P= 0.0009)

At twelve weeks, there was a significant 77.7mg/dl reduction in the probiotic group compared to the control group. (P<0.0001)



CONCLUSIONS

Targeted probiotics is a simple and safe intervention strategy for attenuating cardiovascular risk.

Use of MegaSpore for 12 weeks resulted in a clinically and statistically significant reduction in serum triglycerides. Participants in the experimental group started with hypertriglyceridemia and ended with normal serum triglyceride levels.