THE EFFECTS OF LAMININE OMEGA^{+++} AND LAMININE ON CHOLESTEROL PROFILES AND BLOOD PRESSURE

By Dr. Edward Andujar, M.D.

Study performed winter - spring 2014

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SUMMARY

The study was designed to test the effects of the nutritional supplement, Laminine OMEGA^{+++}, independently and in combination with Laminine, on cholesterol, low density lipoproteins (LDL), high density lipoproteins (HDL), triglycerides and blood pressure. There were 15 individuals in the study, broken into three groups of five. This was a double-blind placebo-controlled study that took place over a total period of 12 weeks.

The study took place during two phases. The first lasted eight weeks and included Groups A, B, and C. Cholesterol serum profiles and blood pressure were taken from participants in each group at the start of week one and at the conclusion of week eight. During this phase of the study, participants took a total of four supplements a day—two in the morning and two in the evening. The second phase of the study only included participants from Group A and lasted an additional four weeks, after which time cholesterol serum profiles were measured again. During phase II, participants in Group A consumed eight supplements a day—four in the morning and four in the evening.

During the first phase of the study, results showed that the average cholesterol drop in Group B was about 9.8 percent, compared to 11.5 percent in Group C. Meanwhile, cholesterol levels in Group A actually increased by 1.0 percent over the first eight weeks but dropped by 12 percent between weeks eight and 12. Results for LDL and triglycerides generally followed a similar pattern.

METHODS AND MATERIALS

Laminine is a proprietary blend of Fertilized Avian Egg Extract, phyto proteins and marine proteins. Together, this combination contains the full chain of 22 amino acids.

Laminine OMEGA^{+++} is a blend of Omega 3s (Omega 3, 6, 9), CoEnzyme Q10 Extended Release, Vitamin K2 and Fertilized Avian Egg Extract.

Phase I:

Group A took two placebos in the morning and two in the evening.

Group B took one placebo and one Laminine OMEGA^{+++} supplement in the morning, and one of each in the evening.

Group C took one Laminine supplement and one Laminine OMEGA^{+++} supplement in the morning and one of each in the evening.

Cholesterol serum profiles for each participant were measured at the start of the study and again after the conclusion of week eight.

Phase II:

After the initial eight weeks, Group A was given Laminine and Laminine OMEGA^{+++} to take for four weeks. Group A was given double the number of supplements to take each day than participants during the initial eight-week period. This part of the study was not blind. Participants were given actual bottles of both supplements.

Group A took two Laminine capsules in the morning with two Laminine OMEGA^{+++} softgels and two of each again at night, for a total of eight supplements per day.

Cholesterol serum profiles for each participant in Group A were measured again at the conclusion of week 12.

Participants were selected based on abnormal results for at least one of the following: cholesterol (greater than 200 mg/dl), LDL (greater than 130 mg/dl), triglycerides (greater than 150 mg/dl) or high blood pressure (greater than 140/90). Out of the 15 participants in the study, only four (one from Group A, one from Group B and two from Group C) had abnormal blood pressure levels and thus blood pressure was only tested at the beginning and at the conclusion of the study for these individuals.

Participants did not take any medications for cholesterol or blood pressure. Individuals were assigned numbers and randomly selected for one of three groups: Group A, Group B and Group C. Two bottles were administered to participants every four weeks with instructions to take two from each per day during the first phase of the study and four of each per day during the second phase of the study (only Group A).

Subjects in Group A were also given a subjective survey at the conclusion of Phase II, when they were asked to rate improvement in their joints, memory, skin, sexual drive, muscle tone and strength, stress levels, sleep and emotional well-being. Of the five subjects in Group A, only four chose to be a part of the survey.

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RESULTS

Phase I:

	Average Cholesterol Levels in mg/dl			
	WEEK 1	WEEK 8	PT CHANGE	% CHANGE
GROUP A	211	213.2	↑ **2.2**	↑ **1.0%**
GROUP B	183.6	165.6	↓ **18**	↓ **9.8%**
GROUP C	216.8	191.8	↓ **25**	↓ **11.5%**

TABLE 1A

This table indicates that over the initial eight weeks, the drop in cholesterol was most significant in Group C, with an average decrease of 25 mg/dl or 11.5 percent. The average change in cholesterol for Group A was actually an increase of 1 percent.

AVERAGE CHOLESTEROL DROP

(The effects of Laminine and Laminine OMEGA+++ after 8 weeks)

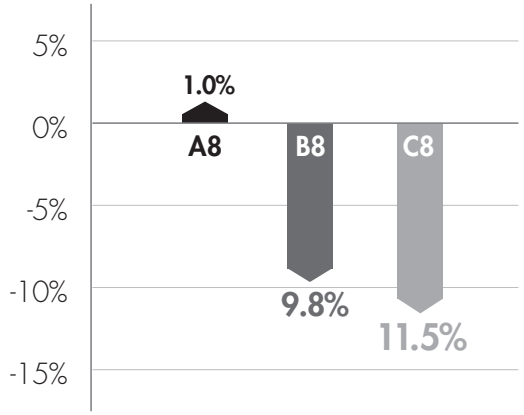

CHART 1A

	Average LDL Levels in mg/dl			
	WEEK 1	WEEK 8	PT CHANGE	% CHANGE
GROUP A	134	121	↓ **13**	↓ **9.7%**
GROUP B	96.8	77.8	↓ **19**	↓ **19.6%**
GROUP C	119.5	94.5	↓ **25**	↓ **20.9%**

TABLE 2A

Table 2A shows that Group A experienced an average drop of 9.7 percent in LDL during the eight-week period, but still substantially below the 19.6 percent decrease observed in Group B and 20.9 decrease in Group C.

AVERAGE LDL DROP

(The effects of Laminine and Laminine OMEGA+++ after 8 weeks)

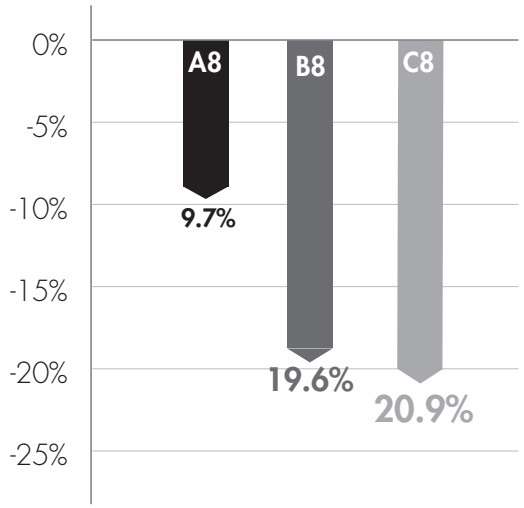

CHART 2A

LEGEND

- Group A8: Placebo/Placebo after 8 weeks
- Group B8: Laminine OMEGA+++/Placebo after 8 weeks
- Group C8: Laminine/Laminine OMEGA+++ after 8 weeks

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	Average Triglyceride Levels in mg/dl			
	WEEK 1	WEEK 8	PT CHANGE	% CHANGE
GROUP A	191	459	↑ **268**	↑ **140.3%**
GROUP B	177.4	120.2	↓ **57.2**	↓ **32.2%**
GROUP C	432.2	360	↓ **72.2**	↓ **16.7%**

TABLE 3A

Triglyceride levels varied more drastically among groups during the initial eight weeks: triglyceride levels in Group A surged 140.3 percent, but fell 32.2 percent for Group B and dropped 16.7 percent in participants in Group C.

AVERAGE TRIGLYCERIDES DROP

(The effects of Laminine and Laminine OMEGA^{+++} after 8 weeks)

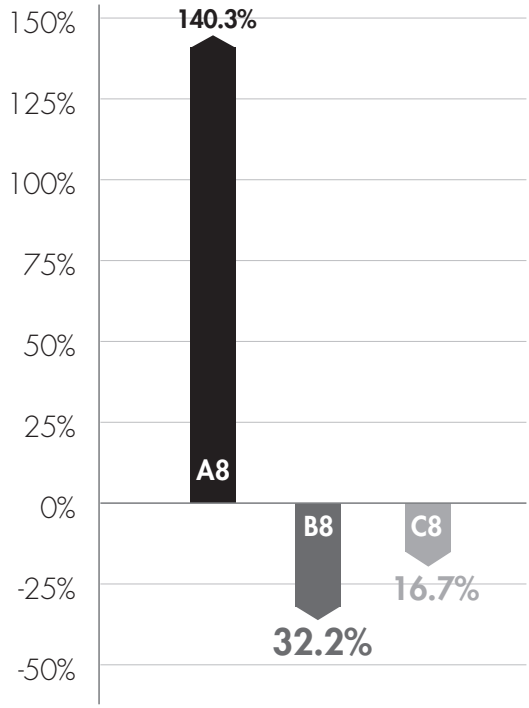

CHART 3A

LEGEND

- Group A8: Placebo/Placebo after 8 weeks
- Group B8: Laminine OMEGA^{+++}/Placebo after 8 weeks
- Group C8: Laminine/Laminine OMEGA^{+++} after 8 weeks

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Phase II:

	Average Cholesterol Levels in mg/dl			
	WEEK 9	WEEK 12	PT CHANGE	% CHANGE
GROUP A	213.2	189.8	↓ **23.4**	↓ **11%**

TABLE 1B

Cholesterol levels in Group A from week nine to week 12 decreased by 23.4 mg/dl or 11 percent after participants consumed four Laminine and four Laminine OMEGA^{+++} supplements per day, a significant drop for only four weeks, but below the 11.5 percent decrease in Group C taking four supplements a day for the eight weeks in Phase I.

AVERAGE CHOLESTEROL DROP

(The effects of Laminine and Laminine OMEGA^{+++} after 4 weeks)

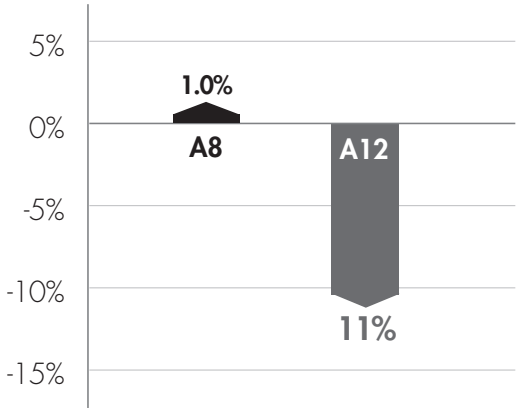

CHART 1B

	Average LDL Levels in mg/dl			
	WEEK 9	WEEK 12	PT CHANGE	% CHANGE
GROUP A	121	118.5	↓ **2.5**	↓ **2.6%**

TABLE 2B

LDL levels in Group A actually fell more significantly during Phase I of the study (Placebo/Placebo), but still decreased an additional 2.6 percent during Phase II.

AVERAGE LDL DROP

(The effects of Laminine and Laminine OMEGA^{+++} after 4 weeks)

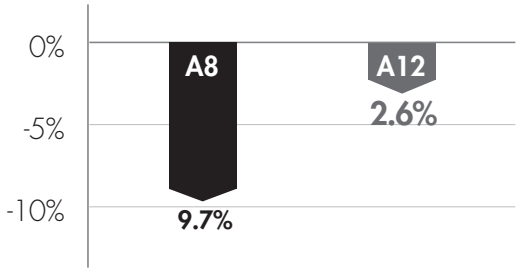

CHART 2B

LEGEND

- Group A8: Placebo/Placebo after 8 weeks
- Group A12: Laminine/Laminine OMEGA^{+++} (week 9-week12)

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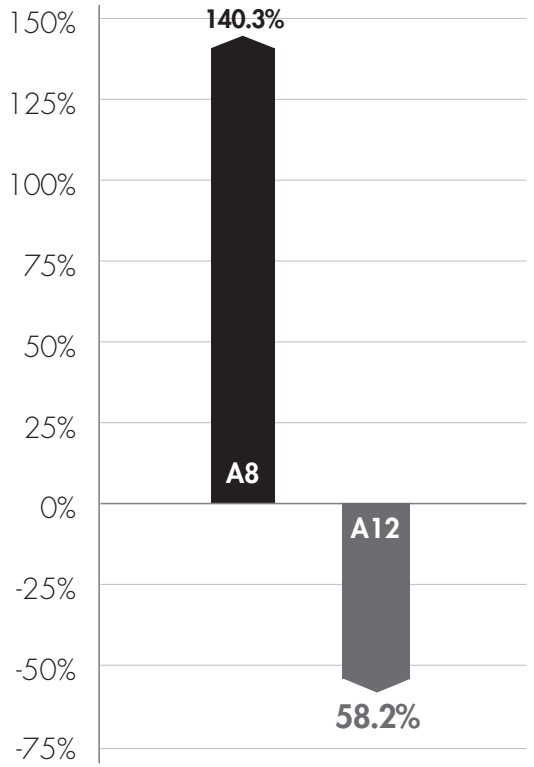
	Average Triglyceride Levels in mg/dl			
	WEEK 9	WEEK 12	PT CHANGE	% CHANGE
GROUP A	459	192	↓ **267**	↓ **58.2%**

TABLE 3B

Triglyceride levels in Group A dropped by 267 mg/dl or 58.2 percent during Phase II, substantially higher than the 16.7 percent decrease in Group C during Phase I.

AVERAGE TRIGLYCERIDES DROP

(The effects of Laminine and Laminine OMEGA^{+++} after 4 weeks)



LEGEND

- Group A8: Placebo/Placebo after 8 weeks
- Group A12: Laminine/Laminine OMEGA^{+++} (week 9-week12)

CHART 3B

Phase I and II:

Blood Pressure

	Systolic/Diastolic (mm Hg)		
	WEEK 1	WEEK 8	CHANGE
SUBJECT 1 FROM GROUP A	140/90	164/94	↑ **24/4**
SUBJECT 1 FROM GROUP B	152/100	138/88	↓ **14/12**
SUBJECT 1 FROM GROUP C	152/94	100/80	↓ **52/14**
SUBJECT 2 FROM GROUP C	180/110	140/90	↓ **40/20**

TABLE 4A

Of the four participants that had high blood pressure at the beginning of the study (one from Group A, one from Group B, and two from Group C), all experienced positive results, with individuals in Group C experiencing the most notable decreases.

	Systolic/Diastolic (mm Hg)		
	WEEK 9	WEEK 12	CHANGE
SUBJECT 1 FROM GROUP A	164/94	134/88	↓ **30/6**

TABLE 4B

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Survey

After Phase II, the average improvement in all categories was about 5.75 on a scale of 0-10, with zero representing no change and 10 representing a significant improvement. These are subjective results but nonetheless notable.

	AVERAGE IMPROVEMENT AT WEEK 12
JOINTS	5.8
MEMORY	6
SKIN	5.8
SEXUAL DRIVE	5.8
MUSCLE TONE AND STRENGTH	5.5
STRESS	5
SLEEP	6.2
EMOTIONAL WELL-BEING	6.2

TABLE 5

DISCUSSION

Triglyceride levels in Group A dropped by 267 mg/dl or 58.2 percent during Phase II, the most substantial change throughout the duration of the study. However, participants in Group C experienced the best and most consistent overall results. HDL levels were within normal limits both at the beginning and end of the study for all participants.

Although participants in Group A took double the Laminine and Laminine OMEGA+++ during Phase II, results were not drastic enough to recommend doubling the suggested usage for Laminine OMEGA+++ for all individuals. The decrease in LDL was not significant in Group A during Phase II as compared to Group C during Phase I. Nevertheless, for individuals that do have high triglycerides, doubling the intake of Laminine and Laminine OMEGA+++ can yield a drastic improvement in a short period of time.

From these data, we can conclude that Laminine OMEGA+++ helps to lower cholesterol, LDL, triglyceride and blood pressure levels (Group B), but when taken with Laminine, the decreases are more significant as a whole (Group C after Phase I and Group A after Phase II).