A Novel Nutriceutical Formula Raises HDL and Lowers Triglycerides.

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Background

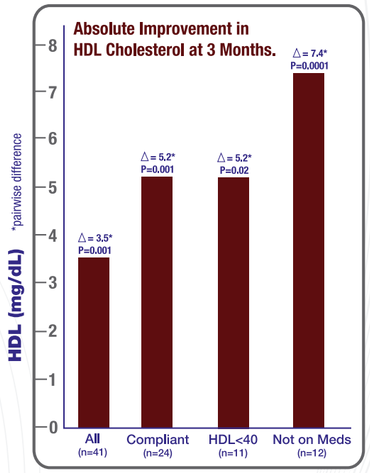
Low High Density Lipoprotein (HDL) is an independent risk factor for coronary artery disease (CAD), and raising it often presents a therapeutic challenge. We studied a novel preparation combining vitamins, minerals, specific antioxidants, and other nutriceuticals designed for impact on markers of human cardiovascular disease risk, here labeled Heart Formula (HF).

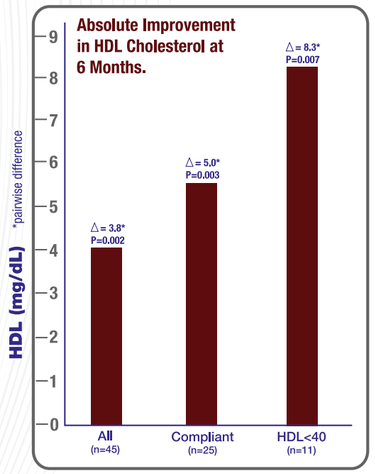
Methods

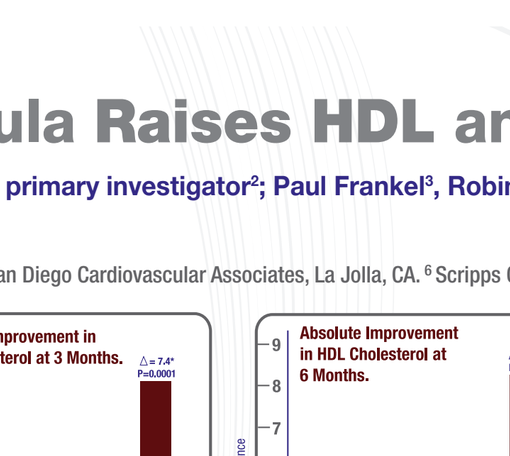
50 patients (29 female, 21 male) with at least one risk factor for coronary artery disease in addition to abnormal lipids underwent baseline evaluation including Vertical Automated Profile (VAP) lipid analysis, History and Physical (H&P), and dietary counseling. HF, a dietary supplement consisting of: vitamins C, E, B6, B12, niacin (low dose, 40 mg/day), and folic acid; minerals magnesium and selenium; and supplements coenzyme Q10, policosanol, L-carnitine, L-arginine, N-acetylcysteine, alpha lipoic acid, tocotrienols, soy isoflavones, taurine, and the herbal extracts of hawthorn (Crategus oxyacantha) berry, garlic (Allium sativum), grape (Vitis vinifera) seed extract, and grape (Vitis vinifera) skin extract, was administered (two capsules twice daily). After six months' administration, VAP, H&P, and NIH were repeated. Statistical analysis was performed using Last Observation Carried Forward (LOCF) technique. All p-values were derived from t-testing based on log-transformed data.

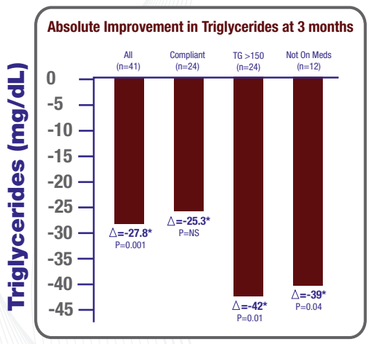
Study Baseline:

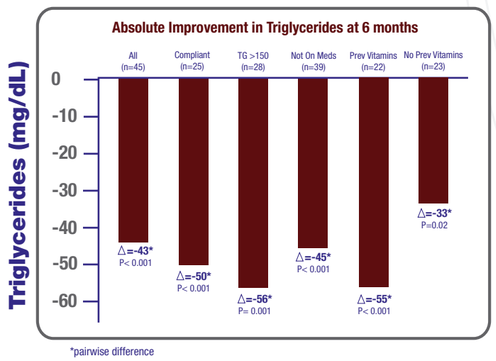
Total cholesterol	221 (153-356)
TC / HDL ratio	4.7 (1.9-7.4)
HDL	45 (31-118)
LDL	147 (85-252)
Triglycerides	180 (62-467)
Homocysteine	8.7 (4.8-14.5)
Lp(a)	7 (1-19)











Results

High Density Lipoprotein (HDL) increased significantly (20% p=0.007) overall, with greater increases for those with HDL <40. HDL2 increased by 28% (p<0.001). Total cholesterol to HDL ratio decreased by 11% (p=0.01). High sensitivity C-reactive protein (hsCRP) decreased by 27% (p=0.07) and by 34% (p=0.06) for those with elevated hsCRP at baseline. Low density lipoprotein (LDL) did not change in a significant manner. Patients had an average decrease in triglycerides of 33% (p<0.001). Homocysteine levels decreased by 12% (p=0.01). Side effects were minimal. Non-specific abdominal complaints were reported in 2 patients and flushing 1 patient.

Conclusions

This pilot study suggests that a combination nutriceutical provides significant benefit in treating low HDL and high triglycerides and hsCRP. The authors suggest that a randomized controlled trial be done using a larger patient population to further elucidate specific benefits.

Author Disclosure: D. Goodman—Scientific Advisory Board, Enzymatic Therapy, Inc. and developer, HDL Booster Enzymatic Therapy, Inc and HDL RX, Integrative Therapeutics, Inc. G.W. Dennish III—none. P. Frankel—none. R. Gawrych Whitman-none. D. Heggins—none.