

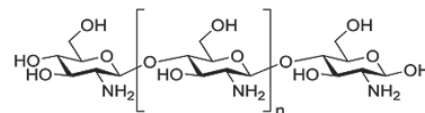


Apax Business Development
4833 Front Street, #415
Castle Rock, CO 80104 USA
lineatabs.com/USA

Structure/Function Substantiation

CLAIM:

Helps maintain healthy cholesterol levels.



Deacetylchitin; Poly-(D) glucosamine

STUDY RESULTS

80 subjects randomized to either chitosan or placebo, with both following a 1000 kcal diet; those taking chitosan had significantly lower plasma lipids after 4 weeks.

84 normal weight women were randomly assigned to either placebo or chitosan group. The chitosan group was given 1.2 g chitosan per day (3 capsules 2X/d) after their meal. Although significant decreases were seen for TC and LDL-c in the chitosan group vs. placebo group, the declines were clinically small (241 to 233 mg/dl and 152 to 143, respectively).

150 subjects randomized to 5 groups for 12 weeks comparing 3 doses at one, two or three times per day. No diet counseling. LDL-c was significantly lower (-17%) vs. placebo group followed by 400 mg three times daily (-11%) at 2400 mg given once daily. Total cholesterol was significantly lower than placebo after 4 weeks.

60 elderly, hyperlipidemic subjects were randomized to 3 groups: 2 chitosan groups (water and water insoluble chitosan) given 2 tablets prior to each of 3 meals/daily for 8 weeks. Each tablet contained ~300 mg chitosan, thus total chitosan was ~900 mg per day. After 8 weeks both chitosan groups had significantly lower plasma lipids (TC declined 8-9%).

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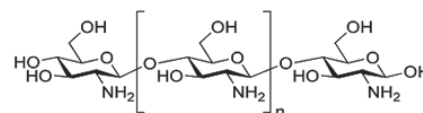


Apax Business Development
4833 Front Street, #415
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Structure/Function Substantiation

CLAIM:

Helps reduce body weight.



Deacetylchitin; Poly-(D) glucosamine

STUDY RESULTS

100 overweight or obese adults randomized to either placebo of chitosan group for 4 weeks and followed calorie restricted diet (1000 kcal/day). Chitosan group lost significantly more weight, 7 kg vs. 3 kg.

69 overweight or obese females were given 1g chitosan/meal for 3 meals/day for 8 weeks without following a hypocaloric diet. After 8 weeks, BW was significantly less than placebo (1 kg loss vs. 1.5 kg gain).

50 obese females followed a 1000 kcal diet and were randomized to a chitosan group (4.5g/d via 2 capsules per each of 3 meals) vs. placebo for 24 wks. The chitosan group lost 16 kg vs. 11 for the placebo group, which was significantly different.

24 obese adults were randomized to placebo or chitosan /glucosaminan product for 6 weeks. At end of study, the treatment group lost significantly more weight body (-2.3 vs. 0.0 kg); percentage body fat (-1.1 vs. 0.2%) and fat mass (-2.0 vs. 0.2 kg).

150 overweight or obese adults were randomized to one of three groups: one was taking 1g chitosan 3X/d and were instructed to follow a Lifestyle Workbook; the other group was a placebo group who took identical capsules and also followed the Lifestyle Workbook, the third group was the control and did not take supplements nor follow the Lifestyle Workbook. The chitosan group lost significantly more weight than either group (-2.8 lbs, p<0.001). They also lost significantly more fat mass (2.6 lbs, p<0.006) than either the control or placebo group. There were no changes in lipid profiles.

12 obese adults were randomized to 750 mg chitosan 3X/d or placebo for 3 months. Weight decreased significantly (p =0.027) after chitosan administration (-6 kg vs. -3 kg) and waist circumference (-7 cm vs. -3 cm). In addition, TG was significantly reduced in those taking the chitosan supplement (-0.8 mmol/L, p=0.028). Interestingly, insulin sensitivity was significantly enhanced in only the chitosan group (p=0.043).

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