conferenceseries.com

J Obes Weight Loss Ther 2018, Volume 8
DOI: 10.4172/2165-7904-C4-067

Cocoa supplementation has beneficial effects on plasma High Density Lipoproteins cholesterol (HDLc) and triglyceride in central obesity male with atherogenic dyslipidemia, but no significant changes on oxidized Low Density Lipoproteins (LDL)

Syaiyed Jamaluddin
Hasanuddin University, Indonesia

Background: Central obesity related to atherogenic dyslipidemia which was characterized by high serum triglycerides, increased sLDL and decreased HDLc. Cocoa powder rich in polyphenols as antioxidant sources reduced atherosclerosis risk.

Objective: To investigate the influence of cocoa supplementation to atherogenic dyslipidemia in central obesity male subjects by assessing lipid profiles and oxidised LDL.

Method: 34 healthy males (aged >25-55 years, waist >90 cm) were recruited to participate in an 8-week randomized, paralel and double-blind study: 17 subjects received 4-gram cocoa in capsules and the other 17 subjects received placebo. Both groups had 15% energy restriction and fat <25% of total energy, no changes in activities.

Results: After 8 weeks, no changes in total cholesterol and triglycerides in both groups ($p > 0.05$). LDLc level decreased significantly in both groups (cocoa $p=0.003$ vs. placebo $p=0.004$,). HDLc level increased significantly only in cocoa group ($p<0.05$) and oxidized LDL level showed no changes in both groups ($p>0.05$). If we compared atherogenic cocoa group with atherogenic placebo group (n=17), we found no changes in total cholesterol in both groups ($p>0.05$), but higher reduction in triglyceride showed in atherogenic cocoa group p=0,043). HDLc level increased significantly only in atherogenic cocoa group ($p=0.011$), no changes in atherogenic placebo group ($p=0.575$). Oxidized LDL level showed no changes in both atherogenic groups ($p>0.05$).

Conclusion: Cocoa supplementation on central obesity male within a hypocaloric and low-fat diet increased HDLc in dyslipidemia and atherogenic dyslipidemia, higher reduction in triglyceride in atherogenic dyslipidemia then placebo. No significant changes showed in oxidized LDL level in both dyslipidemia and atherogenic dyslipidemia.

syaiyedjamaluddin@gmail.com