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Green Coffee Bean Extract – Infuse Obesity

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Abstract:
This is an obvious and effective technique for losing weight with coffee. But it is due to caffeine. Caffeine may slightly reduce your weight. Caffeine is found in many chocolate or cocoa ,energy drinks and colas. Although research about the connection between caffeine and weight is not definitive. The researches shows the caffeine effect on calorie burning and appetite suppression.The possible factor behind the weight loss was because of effects of chlorogenic acid on sugar absorption from starch and on fat synthesis in the body. Chlorogenic acid is present mainly in the green coffee beans. The amount of Chlorogenic acid in the roasted coffee bean is low as compare to green coffee bean. The extract of green coffee bean is mainly used as weight loss supplement. In this review paper we are going to discuss about the Chlorogenic acid, how it works in weight loss and the other health benefits of green coffee bean extract.

Keywords: *Green coffee bean extract,weight loss,Chlorogenic acid and Health benefits.*

1. Green Coffee Bean Extract

Green coffee bean extract are those which are found before roasting. The miracle active ingredient found inside this known for weight loss benefit is known as chlorogenic acid.[1] It helps in maintaining blood sugar levels, blood pressure, reduce heart diseases .Since the beans are unroasted hence this active ingredient is untouched. These are actually green seeds present inside the bright red berry. This is extracted by soaking and then concentrated. If the beans are roasted they will turn brown and the characteristic aroma and flavor will be developed. Green coffee bean extract is gaining popularity now-a-days in terms of weight loss by tending to melt your body fat resulting to superior health and fitness without much physical exercise and diet programs.

Figure 1: Green Coffee Beans

Various studies have been done which shows positive effects of the chlorogenic acid on metabolic activity resulting in signs of considerable weight-loss. But the popular study amongst these was done in 2012 and reported in the journal “Diabetes, Metabolic

Syndrome and Obesity Targets and Therapy". The study involved consumption of green coffee bean extract supplement in high doses (1050mg) for 2 weeks and low doses (700mg) for 2 weeks and along with a placebo for 2 weeks. There was also a 2 week gap in between when the subjects did not take any of the supplements. The study revealed that the consumption of the supplementation showed decrease in body weight, body mass index, body fat % and small decrease in heart rate . These changes were seen when the subjects had no significant changes in the diet or exercise during the supplement intake.[2]

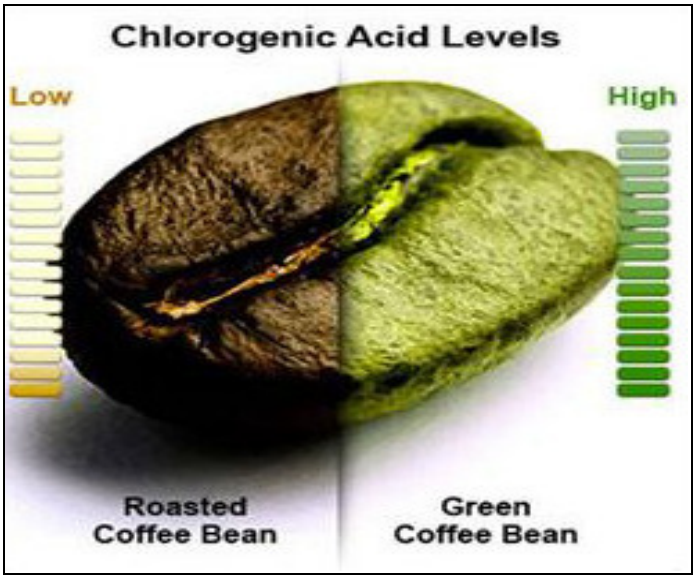

Figure 2: Chlorogenic Acid levels in both coffee Beans

The possible factor behind the weight loss was because of effects of chlorogenic acid on sugar absorption from starch and on fat synthesis in the body. There was also a study published in 2007 in "The Journal of International Medical Research" that subjects who consumed instant coffee enriched with chlorogenic acid they were seen to loose weight due to decreased absorption of glucose sugar.
One more study for 12 weeks was done on 30 subjects who were over weight. It was divided into 2 groups. One group consumed regular instant coffee, while the other group consumed instant coffee enriched with 200mg of Green Coffee Bean Extract. No group were allowed to have a change in their diet or exercise habits.[3]

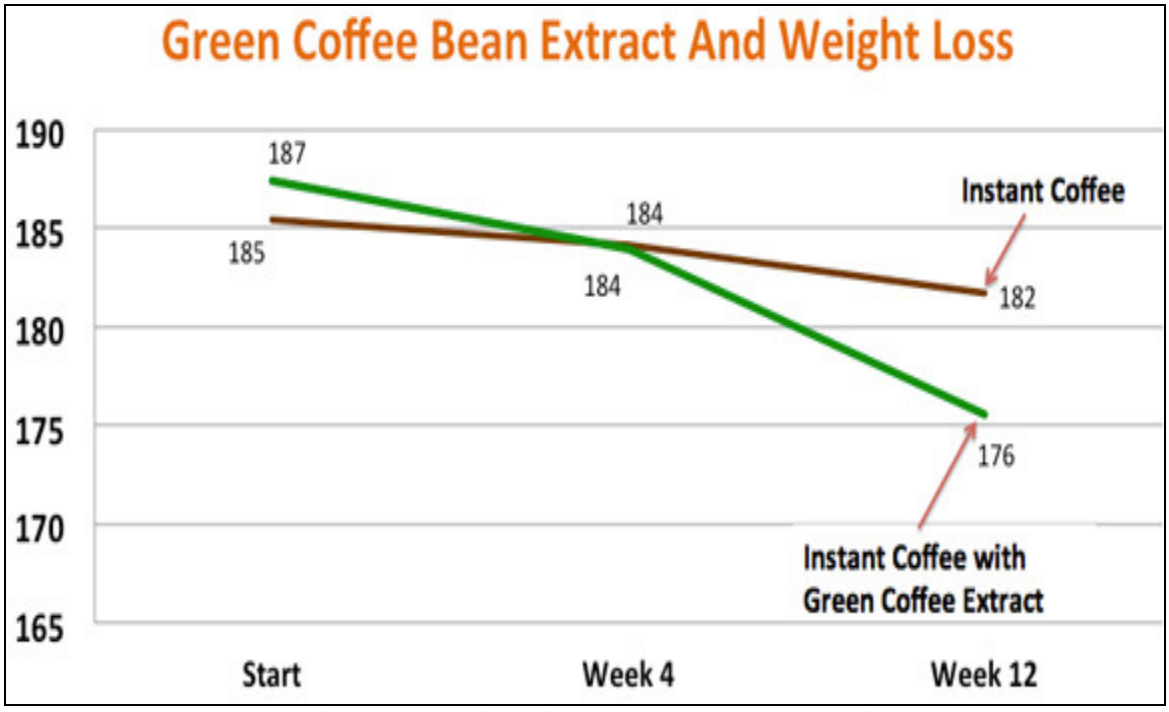

Figure 3: Reduction in weight and consumption of green coffee bean extract

The above graph shows the weight-loss undergone in both the groups from 0 – 12 weeks.
From the graph it clearly shows that the group taking the instant coffee with green coffee bean extract lost 11.9 pounds (5.4 kg), while the group which consumed plain instant coffee lost only 3.7 pounds (1.7kg).Whereas the body fat% also reduced by 3.6% in the group consuming green coffee extract, in comparison to 0.7% in the group which consumed plain instant coffee.[4]

2. Other Health Benefits

- In addition to reduce glucose absorption,it plays a protective role in diabetes management.
- It also positively affects blood vessels which is related to risk of diabetes and heart disease.
  If taken doses between 140 – 720 mg per day then it results in lowering blood pressure.
- It also acts as an antioxidant [5] as it has polyphenols that helps to counter against oxygen free radicals,which can lead to degeneration of cells.
- It also boosts digestive system.
- Improves liver functioning by detoxifying.
- Enhancing energy levels.
- Helps in overall well-being.

3. Side effects

Side effects can be there to persons who are allergic to caffeine if consumed in high concentrations,as green coffee bean contains caffeine. This may include anxiety, jitteriness, rapid heartbeat,etc.[6]
Along with this the chlorogenic acid may also have a laxative effect and cause diarrhea.
It is recommended to avoid consumption of green coffee by pregnant or breastfeeding women and children.

4. Conclusion

The main purpose of the review paper is to introduce the Green coffee bean extract as a weight loss supplement. The factor behind the weight loss is chlorogenic acid on sugar absorption and on fat synthesis. If we start using the green coffee bean as a food ingredient, we can control the obesity problem.

5. References

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