



Dr. Ben Kim Supplement Impact on Cholesterol and Triglycerides

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ABSTRACT

Dr. Ben Kim supplement is a super green food mixture that is the highest quality and most effective nutritional supplement. The study aimed to investigate the effect of Dr. Ben Kim and bakol on the level of triglycerides was investigated. The subject used Dr. Ben Kim supplied from Korea and bakol supplied from Arkopharma, France. Lipid profile measurement done with Reflotron plus EN device from German with Reflotron strip. The samples collected at 0, 7, 17, and 27 days. This supplement can decrease the level of cholesterol and triglyceride effect while increase the level of high density lipoprotein thus this supplement have cardio-protective impact.

1. Introduction

Dr. Ben Kim supplement is a great green food mixture that is the highest quality and most effective nutritional supplement. It contains a broad mixture of digestive enzymes that can considerably improve digestive efficiency and decrease excessive burden on the digestive organs, mainly the liver and pancreas. It confirms optimal nourishment of the cells with the several health-supporting antioxidants and phytochemicals that obviously happen in green vegetables. These nutrients are simply absorbed into the bloodstream [1].

The most effective material in this supplement are:

Urtica dioica, is an herbaceous perennial flowering plant, native to Asia, northern Africa, North America and Europe, and is the best-identified member of the nettle genus. The plant has numerous hollow stinging hairs called trichomes on its leaves and stems, which action like hypodermic needles, inserting histamine and other chemicals that yield a stinging sensation when contacted by humans and other animals [2]. The plant has a long history of use as a medicine and as a food source. Nettle leaf is an herb that has a long tradition of use as an adjuvant remedy in the treatment of arthritis in Germany. Nettle leaf extract contains active compounds that reduce TNF- α and other inflammatory cytokines [3]. It has been demonstrated that nettle leaf lowers TNF- α levels by potently inhibiting the genetic transcription factor that activates TNF- α and IL-1B in the synovial tissue that lines the joint [4]. Nettle root extracts have been extensively studied in human clinical trials as a treatment for symptoms of benign prostatic hyperplasia (BPH). These extracts have been shown to help relieve symptoms compared to placebo both by themselves [5] and when combined with other herbal medicines. Because it contains 3,4-divanillyltetrahydrofuran, certain extracts of the nettle are used by bodybuilders in an effort to increase free testosterone by occupying sex-hormone binding globulin. Urtication, or flogging with nettles, is the process of deliberately applying stinging nettles to the skin in order to provoke inflammation. An agent thus used is known as a rubefacient (something that causes redness). This is done as a folk remedy for rheumatism, providing temporary relief from pain. The counter-irritant action to which this is often attributed can be preserved by the preparation of an alcoholic tincture which can be applied as part of a topical

preparation, but not as an infusion, which drastically reduces the irritant action [6].

Barley grass, is promoted as a source of antioxidants, the most important being O-glycosyl isovitexin, superoxide dismutase (SOD), catalase (CAT), vitamin E, vitamin C, and carotenoids. Generally speaking, young plant parts are characterized by increased contents of some vitamins, provitamins, antioxidants, and other bioactive substances. Barley grass contains significant quantities of calcium, copper, iron, magnesium, potassium, zinc, β -carotene, folate, pantothenic acid, vitamins B1, B2, B6, C, and E, superoxide dismutase, catalase, and chlorophyll. However, the nutrient contents of all barley varieties depend on where the plants are grown, the soil quality, the average rainfall, and the harvest technique. It is known that the highest concentrations of nutrients are present for just a few critical days [7].

Holy Basil, is an indigenous plant in India and Southeast Asia. Numerous ancient systems of medicine value this plant for its medicinal properties, including Ayurveda, Greek, Roman, Siddha and Unani [8]. Holy Basil, *Ocimum sanctum*, should not be confused with Sweet Basil, *Ocimum basilicum*, which is commonly used for culinary purposes. In India, Holy Basil's name of *Tulsi* translates to "incomparable one" and is considered sacred anywhere it is grown. It is the most sacred plant in the Hindu religion. Holy Basil is an important part of religious ceremonies. Like a number of other medicinal herbs from other parts of the world, it is thought to provide protection for homes where it is cultivated. The smell of the plant is effective in keeping away insects that typically spread disease, such as mosquitoes and flies. In the United States of America, Holy Basil has been granted "Generally Recognized as Safe" (GRAS) status by the FDA. Holy Basil is valued for its versatility in helping to restore health where imbalance is the cause of illness [9].

3. Experimental Methods

The study investigate the impact of bakol (phytosterols and policosanols) and Dr. Ben Kim supplement on the level of triglycerides was investigated. The subject used bakol supplied from Arkopharma, France and Dr. Ben Kim supplement supplied from Korea. The triglycerides measurement done with Reflotron plus EN device from German with Reflotron strip. The samples collected in 0, 7, 17, and 27 days the measured done and the results showed in the Fig. 1.

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3. Results and Discussion

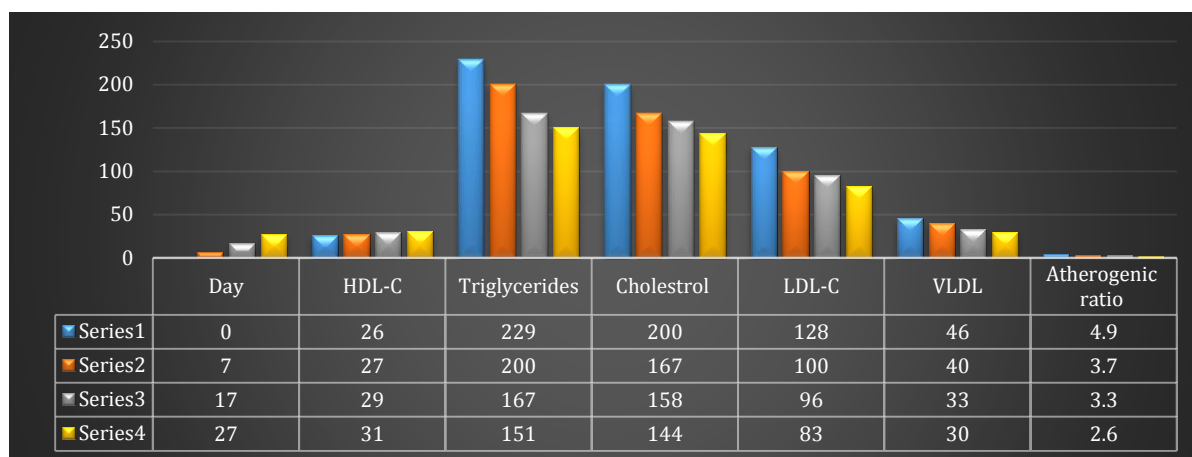


Fig. 1 The changes in levels of lipid profile

The results in Fig. 1 show the effect of Dr. Kim supplement on the lipid profile which revealed a decreasing effect on cholesterol, triglycerides and LDL, while there is elevation in the level of HDL, this effect related to the constituent of this supplement like *Urtica dioica* has been used as antihypertensive, antihyperlipidemic and antidiabetic herbal medicine, reported by Ahangarpour et al [10] Cholesterol is one of the body fats and is an important building block in the structure of biological membranes, and used in the biosynthesis of steroid hormones, bile acids and vitamin D. Moreover, the high cholesterol concentration in the blood increases the risk of developing atherosclerosis and related cardiovascular diseases [11]. Low-density lipoprotein takes the cholesterol from liver to tissues, whereas high-density lipoprotein facilitates the translocation of cholesterol from the peripheral tissues to liver for catabolism. Therefore, HDL has a useful effect in reducing serum cholesterol and the increase of its level in serum is suggested [12]. The LDL/HDL ratio is an important predictor of coronary heart disease risk. Therefore, this dose of extract had more efficacies to decrease liver damage.

Barley grass is promoted as a source of antioxidants, plant environment. Due to the activity of enzymes, vitamin C was rapidly oxidised by mere plant crumpling and wilting [7].

Numerous constituents of Holy Basil have been identified; they include: eugenol [13] cinnamyl acetate, and beta-elemene. Extraction of the fresh leaves and stems of *Ocimum sanctum* yielded the following compounds: cirsilioneol, cirsimaritin, isothymusin, isothymonin, apigenin, rosmarinic acid, and appreciable quantities of eugenol, polysaccharides have been found [14], along with flavonoids, including orientin and vicenin. Holy basil also includes trace levels of zinc and other minerals, ursolic acid and at least five fatty acids (stearic, palmitic, oleic, linoleic and linolenic acids) [15]. Holy Basil has numerous mechanisms of action. Its beneficial effects are found across quite a few categories of medicinal activities, including anti-stress, anti-lipidemic, antidiabetic and glycemic lowering properties. For the scope of this research review, this paper will focus on specific properties. The constituent eugenol [15] *Ocimum sanctum* and eugenol lowered restraint stress-induced cholesterol levels; they also effectively lowered the restraint stress-induced elevations in lactate dehydrogenase (LDH) and alkaline phosphatase. A reduction in total cholesterol, triglyceride, phospholipids, and total lipids, in the liver, kidney, or heart was demonstrated by the addition of *Ocimum sanctum* leaf powder to the diet of diabetic and non-diabetic rats. A study done using normal albino rats, given fresh leaves of *Ocimum sanctum*, showed significant increases in HDL-cholesterol and total fecal sterol contents, and decreases in serum total cholesterol, LDL cholesterol, phospholipids and triglyceride levels [16]. Dandelion leaf supplementation resulted in significant increase in the levels of HDL cholesterol. The diet with dandelion leaf also lowered the both levels of triglyceride and LDL cholesterol significantly [17]. Comparing between previous study [18] which used only bakol with this study which used bakol in complain with Dr. Ben Kim supplement, this study have best hypo cholesterol effect.

4. Conclusion

The supplement decrease the level of cholesterol and triglyceride effect while increase the level of high density lipoprotein thus this supplement have cardio-protective impact.

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