Post Workout/Greens Superfood – White Paper

1. Claims

CLAIMS	SUBSTANTIATION
• [Product name] provides a combination of amino acids, carbohydrates, a Green Super Foods Blend and tart cherry extract to help promote exercise recovery, powerful antioxidant protection, an increase in nitric oxide levels, support for healthy cholesterol and triglyceride levels already in a normal range, and support for upper respiratory and immune health.*	All studies in this document.
• Provides a blend of BCCA, arginine and carbohydrates clinically shown to promote more optimal levels of glucose and insulin during recovery from training.	BCAA study
• Provides a blend of BCCA, arginine and carbohydrates clinically shown to support a higher testosterone-to-cortisol ratio during recovery from training.	BCAA study
• Provides a blend of BCCA, arginine and carbohydrates clinically shown to promote a positive anabolic response during the recovery period.	BCAA study
• Provides a blend of BCCA, arginine and carbohydrates clinically shown to increase fatigue score immediately and 2 hours after exercise.	BCAA study
• [Product name] is a powerful formulation providing antioxidant protection against five key types of free radicals in your body.*	ORAC 5.0™ testing Spectra™ study 1
• Contains 4,633 ORAC units, providing the protective antioxidant equivalent of about 3 servings of fruits and vegetables*	Note 1 CFR 101.44 USDA data Spectra™ study 1-3
• Ingredients in [Product name] provide 4,633 powerful ORAC antioxidant units per capsule!†	Spectra™ study 1
• One serving of [Product name] is the antioxidant equivalent of 5 cups of broccoli, or 12 cups of romaine lettuce!†	Broccoli study 1-2 Spectra™ and broccoli discussion Romaine lettuce study 1-2 Spectra™ and romaine lettuce discussion

• With ingredients clinically demonstrated to significantly reduce dangerous free radicals in human beings.†	Spectra™ study 2-3
• With ingredients clinically demonstrated to significantly inhibit damaging free radicals known as reactive oxidant species by as much as 17%.†	Spectra™ study 3
• With ingredients clinically demonstrated to significantly inhibit damaging superoxide free radicals by 350%.†	Spectra™ study 3
• With ingredients clinically demonstrated to nearly completely inhibit the formation of damaging hydrogen peroxide.†	Spectra™ study 3
• With ingredients clinically tested to help increase nitric oxide levels by 64%.†	Spectra study 1
• Supports healthy blood sugar levels already within a normal range.*	Spirulina study 1
• Supports healthy A1C levels already within a normal range.*	Spirulina study 1
• Supports healthy triglyceride levels already within a normal range.*	Spirulina study 1-2
• Supports healthy cholesterol levels already within a normal range.*	Spirulina study 1-2, 6
• Supports healthy apolipoprotein B levels already within a normal range.*	Spirulina study 1
• Supports healthy blood pressure levels already within a normal range.*	Spirulina study 2
• Supports upper respiratory and immune health.*	Spirulina study 3-4
• May help reduce some menopausal symptoms.*	Spirulina study 5
• May help reduce appetite and promote weight loss.*	Spirulina study 6-7
• NordicCherry® improves recovery of muscle strength.*	NordicCherry® study
• NordicCherry® reduces muscle damage.*	NordicCherry® study
• NordicCherry® enhances exercise recovery.*	NordicCherry® study
• NordicCherry® promotes faster recovery from your workout.*	NordicCherry® study
• NordicCherry® provides powerful antioxidant support against oxidative stress.*	NordicCherry® study

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

2. Claim Substantiation

BCAA study

This randomized, double-blind, placebo-controlled cross-over trial[1] investigated the effects of BCAA, arginine and carbohydrate combined beverage (BCAA Drink, 200 mL) on biochemical responses and psychological conditions during recovery after a single bout of exhaustive exercise. Fourteen healthy males were assigned to drink either BCAA Drink (BA trial) or placebo (PL trial) immediately after exercise on two sessions separated by 2 weeks. The BCAA consisted of valine 0.5 grams, leucine 1.0 gram, and isoleucine 0.5 gram in combination with arginine 0.5 gram and carbohydrate 12.1 gram. Blood samples of each subject were collected before exercise, 0, 10, 20, 40, 60, 120 min and 24 h after exercise. No significant differences in the levels of lactate, ammonia, creatine kinase and glycerol between the two groups were observed at any of the time points. However, the levels of glucose and insulin were significantly higher in the BA trial as compared to those in the PL trial at the 40 and 60 min recovery points. Furthermore, the testosterone-to-cortisol ratio at the 120 min recovery point was significantly higher in the BA trial as compared to that in the PL trial. The results indicate the occurrence of anabolic response during the recovery period. The benefit of BCAA Drink was also performed by Profile of Mood States to assess the psychological condition. Fatigue score increased immediately at exhaustion in both groups, but the decrease in the fatigue score at 120 min recovery point was significant only in BA trial. These data indicate that a single bout of exhaustive exercise enhanced the feeling of fatigue. The detrimental consequence was reduced by an ingestion of BCAA Drink.

Spectra™ study 2

ORAC and other in vitro methods have to date proved useful in measuring antioxidant potential in foods. In order to better understand the potential relationship between diet and free radical production/mitigation, an in vivo analytic method can provide new insight into directly measuring reactive oxidant species (ROS). Dihydrorhodamine-6G (DHR6G) is indiscriminate to the various free radicals found in humans, and therefore can be useful in quantifying total ROS in vivo. Our aim was to investigate whether the total ROS in human subjects can be quantified using DHR6G after intake of a blend of antioxidants-rich fruit, vegetable, and herb powders and concentrates called Spectra™. Twelve participants were given 100 mg of Spectra™, and blood samples were collected at 0, 60, 120 and 180 min and were subsequently tested for ROS in serum using DHR6G as a fluorescent probe. By quantifying this fluorescence, we were able to measure ROS concentrations in human blood. This method is both reliable and efficient for evaluating the efficacy of antioxidants against ROS in vivo. Our data indicate that eleven participants responded to the intake of Spectra™ by significant decreases of ROS concentrations.[2]

Spectra™ study 3

The research community is generally agreed that maintenance of healthy levels of free radicals and related oxidants are important for good health. However, utilization of the “redox stress hypothesis” can provide us with concrete nutritional targets in order to better support and maintain “optimal health.” Following

this hypothesis we performed a crossover, double-blind, placebo-controlled, single-dose study[3] on the effects of SPECTRA™ (100 mg/day), a dietary supplement, on oxidative stress markers (OSM) in human participants (n = 22, aged 21–59 years). The measurement of OSM (ex vivo intra- and extracellular formation of reactive oxygen species (ROS, O2-, H2O2, OH-) in whole blood, respiratory activity of blood cells, as well as mitochondrial-dependent ROS formation, and respiratory activity), was performed using EPR spectrometer *nOxyscan*, spin probe CMH, and oxygen label NOX-15.1, respectively. Furthermore, we investigated the ability of SPECTRA™ to modulate ex vivo cellular inflammatory responses induced by stimulation with exogenous TNF-a and also followed changes in bioavailable NO concentrations. In this clinical study, we demonstrated that administration of SPECTRA™ resulted in statistically significant long-term inhibition of mitochondrial and cellular ROS generation by as much as 17% as well as 3.5-times inhibition in extracellular NADPH system-dependent generation of O2-, and nearly complete inhibition of extracellular H2O2 formation. This was reflected in more than two times inhibition of ex vivo cellular inflammatory response and also increases in bioavailable NO concentration 64%). For the first time, we have measured synergetic, biological effects of a natural supplement on changes in OSM and cellular metabolic activity. The unique design and activity of the plant-based natural supplement, in combination with the newly developed and extended Vitality test, demonstrates the potential of using dietary supplements to modulate OSM and also opens the door to future research into the use of natural supplements for supporting optimal health.

Broccoli study 2

According to testing by Brunswick Labs,[4] one gram of freeze dried broccoli provides 899 ORAC units (µmol TE/g)—based upon the lowest ORAC 5.0 value for testing on batch 3.

Broccoli

[Freeze Dried]

ORAC 5.0

	Results (µmol TE/g)			
	Batch 1	Batch 2	Batch 3	Batch 4
ORAC Antioxidant power against **peroxyl radicals**	168	147	155	194
HORAC Antioxidant power against **hydroxyl radicals**	412	432	396	458
NORAC Antioxidant power against **peroxynitrite**	7	7	7	11
SORAC Antioxidant power against **super oxide anion**	64	107	73	84
SOAC Antioxidant power against **singlet oxygen**	269	208	269	226
ORAC 5.0 Total $ORAC_{FN}$ (sum of above)	921	901	899	973

Spectra™ and broccoli discussion

Based upon the lowest ORAC 5.0 testing on Spectra™, Total ORAC was 46,333 µmol TE/g. This calculates out to 4,633.3 ORAC units per 100 mg (the amount provided in this formula). Based upon the equivalencies previously described, 1 cup of broccoli provides 899 ORAC units, and Spectra provides the antioxidant equivalent of 5 cups of broccoli (46.333.3 ÷ 899 = 5.1538375, rounded down to 5).

Romaine lettuce study 1

According to the USDA,[5] 1 cup of shredded romaine lettuce is 47 g, of which 44.74 g is water. When the water is removed, that leaves 2.3 g. Therefore, 2.3 g of freeze-dried romaine lettuce is equivalent to 1 cup of fresh shredded romaine lettuce.

Romaine lettuce study 2

According to testing by Brunswick Labs,[6] one gram of freeze dried broccoli provides 384 ORAC units (µmol TE/g)—based upon the lowest ORAC 5.0 value for testing on batch 3.

Spectra™ and romaine lettuce discussion

Based upon the lowest ORAC 5.0 testing on Spectra™, Total ORAC was 46,333 µmol TE/g. This calculates out to 4,633.3 ORAC units per 100 mg (the amount provided in this formula). Based upon the equivalencies previously described, 1 cup of shredded romaine lettuce provides 384 ORAC units, and Spectra provides the antioxidant equivalent of 73 cups of romaine lettuce (4,633.3 ÷ 384 = 12.065885, rounded down to 12).

ORAC 5.0™ testing

Whereas the original ORAC analysis only tested the antioxidant capacity of on the peroxyl radical, the newer Oxygen Radical Absorbance Capacity for Food and Nutrition, ORAC 5.0™, consists of five types of assays that evaluate the antioxidant capacity of a material against five primary reactive oxygen species found in humans: peroxyl radical, hydroxyl radical, superoxide anion, singlet oxygen, and peroxynitrite.[7]

While the peroxyl radical is the most abundant free radical in the human body, other types also contribute toward oxidative damage. The hydroxyl radical is highly reactive and cannot be eliminated by our endogenous enzymes (such as SOD and glutathione). It can damage virtually all types of macromolecules: carbohydrates, nucleic acids, lipids and amino acids. In the skin, hydroxyl radicals are created by UV exposure. Peroxynitrite radicals are reactive nitrogen species that are particularly harmful to proteins. They have been implicated in the development of certain cancers, hepatitis, and chronic inflammation. In the skin, peroxynitrate contributes to the breakdown of vitamin proteins, such as collagen. In the skin, singlet oxygen is generated by UV. In vivo, it is linked to the oxidation of LDL cholesterol and cardiovascular disease; singlet oxygen is highly unstable and durable. Superoxide anions are precursors of all other reactive oxygen species. It is highly toxid and contributes to lipid and DNA damage. Antioxidants that scavenge superoxide anions also help prevent the formation of radicals such as hydrogen peroxide and hydroxyl. Superoxide anions have been linked to hypertension and cardiovascular damage. [8] [9]

Spirulina study 1

Spirulina, with its high concentration of functional nutrients, is emerging as an important therapeutic food. This study[10] aimed to evaluate the hypoglycemic and hypolipidemic role of Spirulina. Twenty-five subjects with type 2 diabetes mellitus were randomly assigned to receive Spirulina (study group) or to form the control group. At baseline, the control and study groups were matched for various variables. The efficacy of Spirulina supplementation (2 g/day for 2 months) was determined using the preintervention and postintervention blood glucose levels, glycosylated hemoglobin (HbA(1c)) levels, and lipid profiles of the diabetic subjects. Two-month supplementation with Spirulina resulted in an appreciable lowering of fasting blood glucose and postprandial blood glucose levels. A significant reduction in the HbA(1c) level was also observed, indicating improved long-term glucose regulation. With regard to lipids, triglyceride levels were significantly lowered. Total cholesterol (TC) and its fraction, low-density lipoprotein cholesterol (LDL-C), exhibited a fall coupled with a marginal increase in the level of high-density lipoprotein cholesterol (HDL-C). As a result, a significant reduction in the atherogenic indices, TC:HDL-C and LDL-C: HDL-C, was observed. The level of apolipoprotein B registered a significant fall together with a significant increment in the level of apolipoprotein A1. Therefore, a significant and favorable increase in the ratio of A1:B was also noted. These findings suggest the beneficial effect of Spirulina supplementation in controlling blood glucose levels and in improving the lipid profile of subjects with type 2 diabetes mellitus.

Spirulina study 2

The objective of the study[11] was to determine the lipid-lowering effects of Spirulina in Cretan Greek dyslipidaemic patients, and to document its effectiveness as a possible alternative treatment for dyslipidaemia. Fifty-two adult Cretan outpatients (32 men, 20 women), median age 47 (range, 37-61) years, with recently diagnosed dyslipidaemia, consumed orally 1 g Spirulina (Greek production) per day for 12 weeks. The full lipid profile was measured in fasting blood samples at the beginning and end of the study period. Anthropometric measurements including systolic and diastolic blood pressure, height, weight and body mass index were also recorded. The results at the end of the 3-month intervention period the mean levels of triglycerides, low density lipoprotein-cholesterol, total cholesterol, non-high density lipoprotein-cholesterol levels, and the ratio of total cholesterol to high-density lipoprotein cholesterol were significantly decreased: 16.3% ($P < 0.0001$), 10.1% ($P < 0.0001$), 8.9% ($P < 0.0001$), 10.8% ($P < 0.0001$) and 11.5% ($P = 0.0006$) respectively, whereas the mean high-density lipoprotein-cholesterol levels were not significantly increased (3.5%). Blood pressure, weight and body mass index remained almost unchanged. In conclusion, Spirulina supplementation at a dose of 1 g daily has powerful hypolipidaemic effects, especially on the triglyceride concentration in dyslipidaemic Cretan outpatients.

Spirulina study 3

The prevalence of allergic rhinitis is increasing globally due to various causes. It affects the quality life of a large group of people in all around the world. Allergic rhinitis still remains inadequately controlled with present medical means. The need of continuous medical therapy makes individuals anxious about the side effects of the drugs. So there is a need for an alternative strategy. Effects of spirulina, tinospora cordifolia and butterbur were investigated recently on allergic rhinitis in just very few investigations. Spirulina represents a blue-green alga that is produced and commercialized as a dietary supplement for modulating immune functions, as well as ameliorating a variety of diseases. This double-blind, placebo-controlled study[12] evaluated the effectiveness and tolerability of spirulina for treating patients with allergic rhinitis. Spirulina consumption significantly improved the symptoms and physical findings compared with placebo ($P < 0.001$) including nasal discharge, sneezing, nasal congestion and itching. Spirulina is clinically effective on allergic rhinitis when compared with placebo. Further studies should be performed in order to clarify the mechanism of this effect.

Spirulina study 4

Researchers have previously shown that the *in vitro* culture of Spirulina with human peripheral blood mononuclear cells (PBMCs) modulated the production of cytokines. In the present randomized double-blinded crossover study[13] versus placebo, allergic individuals were fed daily with either placebo or Spirulina, at 1,000 mg or 2,000 mg, for 12 weeks to evaluate impact on the production of cytokines [interleukin (IL)-4, interferon (IFN)-gamma, and IL-2] critical in regulating immunoglobulin E-mediated allergy. PBMCs isolated before and after the Spirulina feeding were stimulated with phytohemagglutinin (PHA) prior to determining the levels of cytokine from cell culture supernatants. Although Spirulina seemed to be ineffective at modulating the secretion of Th1 cytokines (IFN-gamma and IL-2), researchers discovered that Spirulina, administered at 2,000 mg/day, significantly reduced IL-4 levels by 32% from PHA-stimulated cells. These results indicate that Spirulina can modulate the Th profile in patients with

allergic rhinitis by suppressing the differentiation of Th2 cells mediated, in part, by inhibiting the production of IL-4. To our knowledge, this is the first human feeding study that demonstrates the protective effects of Spirulina towards allergic rhinitis.

Spirulina study 5

Menopause transition is able to induce a significant change in the quality of life of women and a growing demand for alternative treatments to hormonal therapy of the psychological and somatic/vasomotor symptoms related to menopausal transition has been observed in these last years. This study[14] investigated the effect of a two-month supplementation period with the Klamath algae extract Klamin® on the general and psychological well-being of a group of 30 menopausal women, free from any hormonal therapy. Patients were randomly subdivided in 2 groups (15 patients each) and each of them was treated with Algae Klamath extract (Klamin®, Nutrigea, Urbino, Italy) (1600 g/day) or with placebo (vanilla tablets) for 8 weeks. Patients were evaluated both for the hormonal and psychological profiles (Symptom Rating Scale - Italian version [SRT] and Zung Self-Rating Scale) before and after the treatment interval. Results were that both groups of patients were similar in baseline conditions but significant changes were observed after the treatment interval in the group administered with Algae Klamath extracts. Though no hormonal changes occurred after the treatment interval in both groups, only patients under Klamin administration showed both SRT and Zung scales significantly improved, thus reporting a consistent change in their quality of life, for mood, anxiety and depressive attitude. In conclusion, since the Klamath extract did not show steroid-like effects on the hormonal parameters, it could be proposed as valid integration for those women seeking for alternative treatment to hormonal therapy so that to overcome many of the menopausal symptoms.

Spirulina study 6

The objectives of the current study[15] were to determine the effects of Spirulina platensis on anthropometric parameters, serum lipids, appetite and serum Vascular Endothelial Growth Factor (VEGF) in sixty four obese individuals aged 20-50 years were enrolled and randomly allocated into two groups of intervention and placebo. Intervention group (n = 29) received each 500 mg of the Spirulina platensis a twice-daily dosage while the control group (n = 27) received two pills daily starch for 12 weeks. Anthropometric parameters and serum VEGF and lipid profile were measured in fasting blood samples at the beginning and end of the study period. Dietary intakes were assessed by a 24-h recall method and appetite was measured using standard visual analogue scale (VAS). Results were that body weight and body mass index (BMI) were decreased in intervention and placebo treated groups although the mean reduction in Spirulina platensis-treated group was significantly higher ($P < 0.05$). Serum total cholesterol (TC) significantly reduced in intervention group ($P < 0.05$). Also, treatment with Spirulina platensis significantly reduced appetite ($P = 0.008$). Mean serum VEGF, low density lipoprotein-cholesterol, and triglycerides did not change significantly after intervention. Serum high density lipoprotein-cholesterol concentrations (HDL-c) significantly increased in both groups while no difference in mean difference of this change has been observed. In conclusion, Spirulina supplementation at a dose of 1 g/d for 12 weeks is effective in modulating body weight and appetite and partly modifies serum lipids. This can further confirm the efficacy of this herbal supplement in control and prevention of obesity and obesity- related disorders.

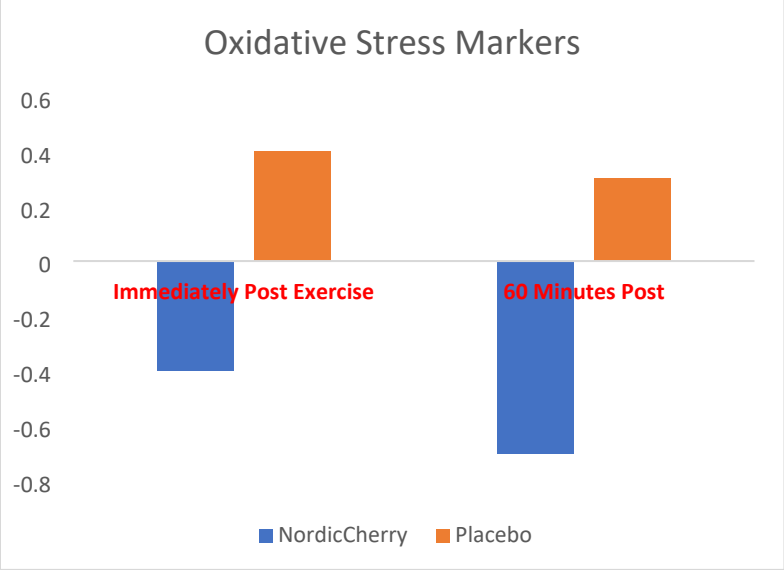
Spirulina study 7

The aim of the present study[16] was to investigate the possible effects of Spirulina Platensis (SP) on anthropometric measures, appetite and metabolic parameters in obese or overweight individuals. A total of 52 obese and overweight subjects (25 kg/m2 ≤ body mass index (BMI) <40 kg/m2) were randomly selected to be allocated to SP (4 × 500 mg daily tablets along with restricted calorie diet (RCD)) or placebo (placebo tablets along with RCD) for 12 weeks of intervention. Anthropometric measurements and appetite score were assessed at baseline, weeks 6 and 12. Biochemical assessments were performed at baseline and week 12. The results were that 38 participants completed the intervention. Body weight, waist circumference, body fat and BMI significantly reduced in the SP group compared to the placebo group ($p < 0.001$, $p = 0.049$, $p = 0.049$ and $p = 0.02$, respectively). In the SP group, the reduction triglycerides (TG) and high sensitivity C-reactive protein levels was considerably significant compared to the placebo group ($p = 0.03$, $p = 0.02$, respectively). Appetite score was significantly reduced in the SP group compared to the baseline ($p < 0.001$). In conclusion, this study suggests that spirulina platensis, as a complementary therapy may have beneficial effects on adherence to RCD, management of weight loss and also reduction in TG levels through possible modulatory effects on anti-inflammatory pathways.

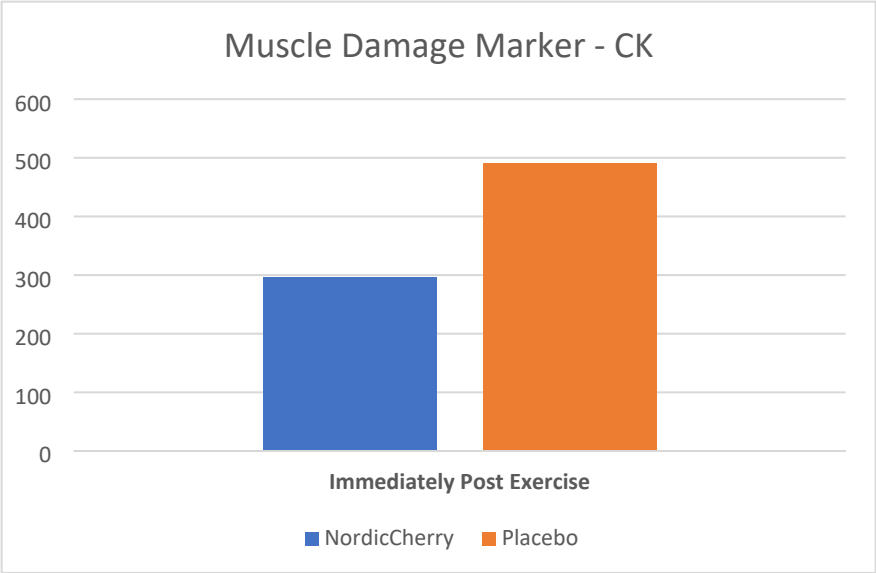
NordicCherry® study

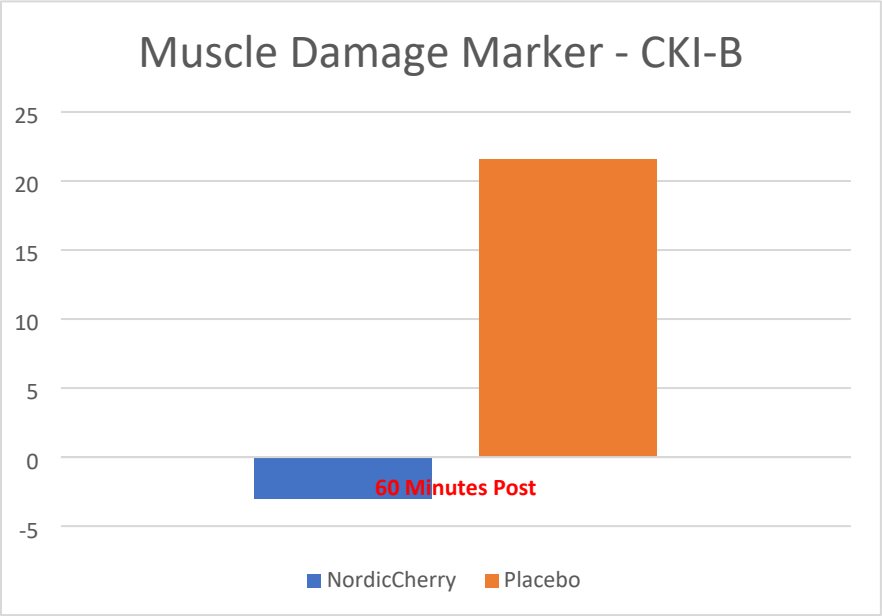
A randomized, double-blind, cross-over, placebo-controlled trial[17] was conducted to examine the efficacy of 500 mg/day NordicCherry® extract compared to placebo in subjects performing upper and lower body resistance training. Thirteen men, all of whom had a minimum of 6 months of prior experience in the barbell back squat completed the study (due to the cross-over design, 13 subjects is equivalent to 26 subjects in a non-cross-over design). Subjects initially attended familiarization and preliminary testing. During this visit, subjects were introduced to the facility and walked through the basic procedures, including muscle soreness assessment, the warm-up protocol, and the vertical jump and handgrip dynamometer procedures, followed by a 1-repetition maximum assessment on the barbell back squat. The barbell was loaded with a weight corresponding to 75% of their predetermined 1-repetition maximum. The subject then aimed to perform 10 repetitions of the barbell back squat for 6 sets interspersed with 2 minutes of rest. The results were as follows:

- NordicCherry® significantly reduced markers of oxidative stress (p=0.019), while there was a corresponding increase in oxidative stress markers in the placebo group

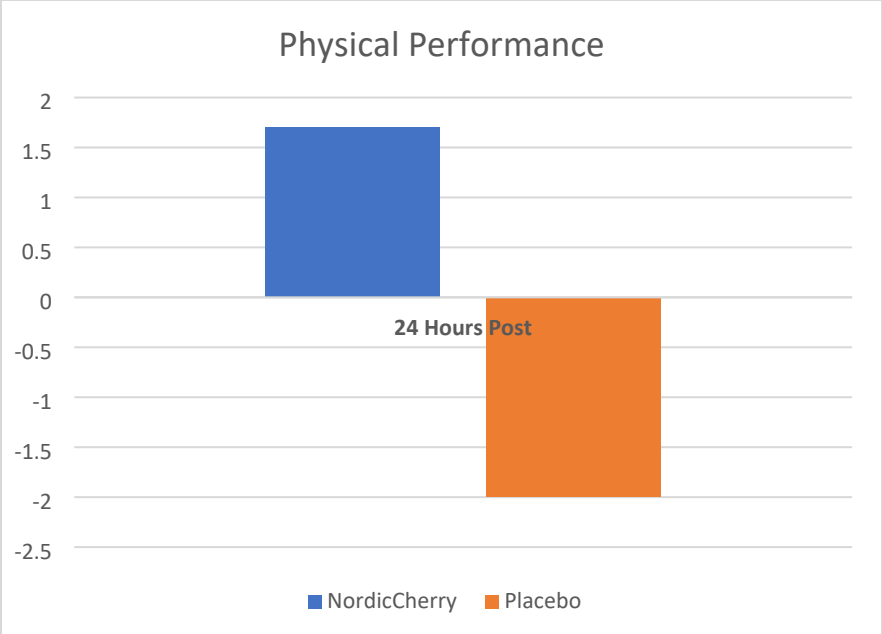


- Creatine kinase activity (a marker for muscle damage) was significantly lower with NordicCherry® compared to the placebo group immediately post-exercise (p=0.008). Likewise creatine kinase isoenzyme B (CKI-B) another marker for muscle damage) was significantly lower with NordicCherry® compared to the placebo group at 60 minutes post-exercise (p=0.003).





- NordicCherry® significantly increased handgrip strength (a measure of physical performance) compared to the placebo group at 24 hours post-exercise (p=0.017).



3. References

[1] Hsu MC, Chien KY, Hsu CC, et al. Effects of BCAA, arginine and carbohydrate combined drink on post-exercise biochemical response and psychological condition. Chin J Physiol 2011;54(2):71-8.
[2] Nemzer B, Chang T, Xie Z, Pietrzkowski Z, Reyes T, Ou B.Decrease of free radical concentrations in humans following consumption of a high antioxidant capacity natural product. Food Sci Nutr. 2014 Nov; 2(6): 647–654.
[3] Nemzer BV, Fink N, Fink B. New insights on effects of a dietary supplement on oxidative and nitrosative stress in humans. Food Sci Nutr. 2014 Nov;2(6):828-39.
[4] Red Leaf Lettuce (Freeze Dried). Database for ORAC 5.0 and Cellular Antioxidant Assay (CAA). Brunswick Laboratories: Southborough, MA. Retrieved August 1, 2015 from http://www.brunswicklabs.com/tech-library/orac-database/red-leaf-lettuce.
[5] USDA National Nutrient Database for Standard Reference Release 27. Basic Report 11257, Lettuce, red leaf, raw. Retrieved August 1, 2015 from http://ndb.nal.usda.gov/ndb/foods/show/3041?fgcd=&manu=&lfacet=&format=&count=&max=35&offset=&sort=&qlookup=Lettuce%2Cred+leaf.
[6] Red Leaf Lettuce (Freeze Dried). Database for ORAC 5.0 and Cellular Antioxidant Assay (CAA). Brunswick Laboratories: Southborough, MA. Retrieved August 1, 2015 from http://www.brunswicklabs.com/tech-library/orac-database/red-leaf-lettuce.
[7] The Complete ORAC 5.0 Analysis: ORAC 5.0 and Why All 5 Radicals Matter. Brunswick Laboratories. Retrieved May 27, 2014 from http://www.brunswicklabs.com/Portals/153979/docs/ORAC50-and-Why-5-Radicals-Matter.pdf.
[8] The Complete ORAC 5.0 Analysis: ORAC 5.0 and Why All 5 Radicals Matter. Brunswick Laboratories. Retrieved May 27, 2014 from http://www.brunswicklabs.com/Portals/153979/docs/ORAC50-and-Why-5-Radicals-Matter.pdf.
[9] El-Bahr SM. Biochemistry of free radicals and oxidative stress. Sci Inter. 2013;1(5):111-117.
[10] Parikh P, et al. Role of Spirulina in the Control of Glycemia and Lipidemia in Type 2 Diabetes Mellitus. J Med Food. 2001 Winter;4(4):193-199.
[11] Mazokopakis EE, Starakis IK, Papadomanolaki MG, et al. The hypolipidaemic effects of Spirulina (Arthrospira platensis) supplementation in a Cretan population: a prospective study. J Sci Food Agric . 2014 Feb;94(3):432-7.
[12] Cingi C, Conk-Dalay M, Cakli H, Bal C. The effects of spirulina on allergic rhinitis. Eur Arch Otorhinolaryngol 2008;265:1219-23.

[13] Mao TK, Van de Water J, Gershwin ME. Effects of a Spirulina-based dietary supplement on cytokine production from allergic rhinitis patients. J Med Food . Spring 2005;8(1):27-30.
[14] Genazzani AD, Chierchia E, Lanzoni C, et al. [Effects of Klamath Algae extract on psychological disorders and depression in menopausal women: a pilot study]. Minerva Ginecol 2010;62:381-8.
[15] Zeinalian R, Farhangi MA, Shariat A, Saghafi-Asl M. The effects of Spirulina Platensis on anthropometric indices, appetite, lipid profile and serum vascular endothelial growth factor (VEGF) in obese individuals: a randomized double blinded placebo controlled trial. BMC Complement Altern Med. 2017 Apr 21;17(1):225.
[16] Yousefi R, Mottaghi A, Saidpour A. Spirulina platensis effectively ameliorates anthropometric measurements and obesity-related metabolic disorders in obese or overweight healthy individuals: A randomized controlled trial. Complement Ther Med . 2018 Oct;40:106-112.
[17] Hooper DR, Orange T, Gruber R, et al. Broad Spectrum Polyphenol Supplementation from Tart Cherry Extract on Markers of Recovery from Intense Resistance Exercise. Center for Health and Human Performance, Jacksonville University. Submitted for publication.