

# Antioxidant Activity of Biofield Energy Healing (The Trivedi Effect®) Based Formulation in Sprague Dawley Rats

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#### **Research Article**

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#### Abstract

The aim of the present study was to investigate the antioxidant activity of Consciousness Energy Healing (The Trivedi Effect<sup>®</sup>) based novel proprietary formulation in male Sprague Dawley (SD) rats. The formulation was divided into two parts. One part received the Biofield Energy Healing Treatment by renowned Biofield Energy Healer, Mahendra Kumar Trivedi, defined as the Biofield Energy Treated sample. Another part did not receive any treatment and referred as a control. Additionally, three groups of animals were also received Biofield Energy Healing Treatment at day -15 per se. The tissue lipid peroxidation data exhibited that the level of malondialdehyde (MDA) was reduced by 22.75% and 19.57% in the Biofield Energy Treated test formulation (G5) and Biofield Energy Treatment per se plus Biofield Energy Treated test formulation from the day -15 (G8), respectively compared to the disease control group (G2). Antioxidant enzyme like superoxide dismutase (SOD) was significantly increased by 35.35% and 37.53% in the G7 and G8 groups, respectively as compared to the G2 group. Additionally, the level of catalase was significantly ( $p \le 0.05$ ) increased by 85.29%, 78.84%, 135.87%, 130.08%, 102.15%, and 66.45% in the G4, G5, G6, G7, G8, G9 groups, respectively compared to the G2 group. Further, hematology data showed that the platelet count was significantly increased by 17.09% and 9.42% in the G6 and G8 groups, respectively as compared to the G2 group. Biochemical results showed that the level of blood urea was reduced by 26.26%, 28.51%, 26.88%, 17.19%, and 18.05% in the G3, G4, G6, G7, and G9, groups respectively compared to the G2 group. The level of uric acid level was significantly reduced by 31.25% in the G6 group, while phosphorus was significantly increased by 20.57% and 33.03% in the G7 and G8 groups, respectively compared to the G2 group. Further, the change in body weight and feed consumption did not suggest any statistical difference, which depicts that the Biofield Energy Treated test formulation was found to be safe. Thus, the Biofield Treated test formulation has shown sigificant antioxidant activity and can be used for autoimmune and inflammatory diseases, stress management and prevention, and act as anti-aging therapy for the improvement of overall health.

**Keywords:** Biofield Energy Healing Treatment; Consciousness Energy Healing; Antioxidant; Herbomineral formulation; The Trivedi Effect<sup>®</sup>; Hematology; Biochemistry

#### Introduction

hypertension. Oxidative stress can lead to atherosclerosis, diabetes, and chronic renal disease. The current work was designed to investigate the potentials of Biofield Energy Healing (The Trivedi Effect®) Treated nanocurcumin based formulation additionally supplemented with minerals and vitamins in Sprague Dawley rats. The newly formulated herbomineral formulation, which was a combination of nanocurcumin along with multiple minerals such as iron sulfate, copper chloride, zinc chloride, magnesium (II) gluconate hydrate, sodium selenate and vitamins like cholecalciferol (vitamin D<sub>3</sub>) and ascorbic acid (vitamin C). Literatures reported that every selected ingredient has been used as nutraceutical supplements [1-4]. Due to the poor oral bioavailability of curcumin (1% in rat), is one of the main problems for its wide ranges of application [5]. Although curcumin has specific properties such as anti-oxidant, anti-cancer, anti-inflammatory, anti-bacterial, woundhealing, lipid-lowering, and hepato-protective activities [6]. To improve a further wide array of biological functions, authors selected nanocurcumin instead of curcumin in this formulation. Vitamins are essential for general heath and normal functioning of any living organism. Vitamin C (ascorbic acid) is very much essential for the synthesis of collagen and inhibition of oxidative damage by scavenging reactive oxygen species (ROS) [7]. Local application of vitamin C with magnesium salt improves the collagen synthesis and decrease ROSinduced inflammation of gingival fibroblasts in *in vitro* [8]. Indeed, clinical trial data showed that a dentifrice containing vitamin C-containing magnesium salt has been used successfully to reduce gingival inflammation by Shimabukuro, et al. [9]. Additionally, the vitamin Ccontaining dentifrice exhibited a significantly higher anti-ROS activity compared to the conventional dentifrice. An ascorbate compound are potent for scavenging free radicals [10] and also helps the smokers to diminish the breakdown of periodontal tissues by its antioxidant action [11]. Vitamin D is required for many essential functions in the body. It enhances the absorption of minerals including calcium, magnesium, iron, phosphate, and zinc in the intestine. In humans, there are two important groups of vitamin D viz. vitamins D2 (cholecalciferol) and D3 (ergocalciferol) [12,13].

Complementary and Alternative Medicine (CAM) therapies like "Biofield Therapy" are now considered as a preferred model remedy for various chronic metabolic and life-styled disorders. The National Center of Complementary and Integrative Health (NCCIH) has recognized and accepted Biofield Energy Healing Therapy as a CAM health care approach in addition to other alternative therapies like Reiki, acupressure, acupuncture, Oi Gong, Tai Chi, deep breathing. yoga, chiropractic/osteopathic manipulation, cranial sacral therapy meditation, naturopathy, massage, hypnotherapy, homeopathy, aromatherapy, healing touch, movement therapy, rolfing structural integration, Ayurvedic medicine, traditional Chinese herbs and medicines, Human Biofield Energy has subtle energy that can work effectively [14,15]. This energy can be harnessed and transmitted by individuals into living and non-living things through unique process. The Trivedi Effect<sup>®</sup> has been shown excellent outcomes in various scientific research fields such as cancer research [16,17], microbiology [18-21], genetics [22,23], pharmaceutical science [24-27], agricultural science [28-31], and materials science [32-35]. Based on the outcome of the Trivedi Effect® authors planned to evaluate the impact of the Biofield Energy Treated novel test formulation for its antioxidant activity in male Sprague Dawley (SD) rats.

#### **Materials and Methods**

#### **Chemicals and Reagents**

Iron sulfate, copper chloride, cholecalciferol, streptozotocin, cyclophosphamide, and sodium carboxymethyl cellulose were obtained from Sigma Chemical Co. (St. Louis, MO). Nanocurcumin was purchased from Sanat Products Ltd., India. Quercetin dihydrate was procured from Central Drug House Pvt. Ltd., India. Magnesium (II) gluconate and zinc chloride were obtained from TCI, Japan. Sodium selenate and ascorbic acid were procured from Alfa Aesar, USA.

#### **Laboratory Animals**

The male Sprague Dawley (SD) rats approximately 200 to 280 gm body weight were obtained from Vivo Bio Tech Ltd., Hyderabad, India. The animals were acclimatized for five days before commencement of experiment. The animals were housed with specified controlled condition (temperature  $22 \pm 3^{\circ}$ C, humidity 30% to 70%, and 12-hour light/12-hour dark cycle) with normal pellet diet (NPD) drinking water *ad libitum*. The animals used in this experiment were subjected to prior approval of the Institutional Animal Ethics Committee (IAEC) to carrying out the animal experiment.

#### **Study Design**

The animals were assigned in nine groups according to their body weight as random basis. Group 1 (G1) was

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served as a normal control (*i.e.*, vehicle control), and G2 was served as a disease control; both the groups were received 0.5% Na-CMC, while G3 group animals received quercetin dihydrate as positive control (100 mg/kg; *p.o.*). G4 group animals were received the untreated test formulation, and G5 group received Biofield Energy Treated test formulation at a dose of 624.12 mg/kg. Similarly, G6 animals received Biofield Energy Treatment at day -15 *per se;* G7 animals received Biofield Energy Treated test formulation at day -15; G8 group defined as Biofield Energy Treated test formulation at day -15 and G9 group denoted as Biofield Energy Treatment *per se* to animals plus untreated test formulation.

#### **Biofield Energy Treatment Strategies**

The test formulation was divided into two parts. One part of each ingredient was considered as control, where no Biofield Energy Treatment was provided. Another part of each ingredient was received Biofield Energy Treatment by Mr. Mahendra Kumar Trivedi (known as The Trivedi Effect®) under laboratory conditions for ~3 minutes. Besides, three groups of animals were also received the Biofield Energy Treatment under laboratory conditions for  $\sim$ 3 minutes. The energy transmission was done without touching the samples or animals. Similarly, the control samples were subjected to "sham" healer under the same laboratory conditions for 5 minutes. The sham healer did not have any knowledge about the Biofield Energy Treatment. After that, the Biofield Energy Treated samples were kept in the similar sealed condition and used as per the study plan. The Biofield Energy Treated animals were also is taken back to the experimental room for further proceedings.

#### **Experimental Procedure**

Five days after acclimatization, animals were randomized and grouped based on their body weight. After 15 days pre-study period, G6 group was received vehicle; while G7 and G8 groups were received the test formulation. The animals were fasted for 15 – 18 hours and were injected with streptozotocin (STZ 45 mg/kg, *i.p.* single dose). After one week of post-STZ injection, basal glucose levels (tail cut method) were measured for confirmation of diabetes (day 1). The animals were treated with test formulation/vehicle/standard daily for up to 56 days. Body weight was recorded daily throughout the experiment, and feed consumption was measured weekly once throughout the experimental period. On day 56, 50% of the animal population was kept for overnight fasting and day 57 animals were bled and

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the samples were subjected to hematology, biochemistry, and electrolytes analysis. After bleeding, animals were humanely sacrificed to collect organ, *i.e.*, liver. A portion of liver samples was weighed and transferred to the prescribed homogenizing buffer. Liver was homogenized and stored in -80°C for the estimation of various antioxidant parameters (LPO, SOD, and Catalase) using commercially available kit.

#### **Antioxidant Assay Using ELISA Method**

#### **Tissue (liver) Lipid Peroxidation**

Measurement of thiobarbituric acid reactive species (TBARS) levels was considered as an index of malondialdehyde (MDA) production [36]. The details methodology is based on the formation of MDA as an end product of lipid peroxidation, which reacts with TBARS a pink chromogen was produced, which was measured spectrophotometrically at 532 nm. An MDA standard was run to construct a standard curve against which readings of the samples were plotted [37].

## Estimation of Enzymic antioxidants - Superoxide dismutase (SOD) and Catalase (CAT)

The liver homogenate was used as a matrix for the estimation of antioxidant enzymes by a colorimetric method with slight modification for SOD [38] and CAT [39]. Briefly, the formation of chromic acetate from dichromate and glacial acetic acid in the presence of hydrogen peroxide was measures colorimetrically at 570 nm. One enzyme unit was represented as the amount of enzyme that catalysed the oxidation of 1  $\mu$ M H<sub>2</sub>O<sub>2</sub> per minute under assay conditions [40].

#### Hematological and Biochemical Parameters

Blood was collected from the retro-orbital plexus in a heparinized and non-heparinized capillary tubes after fasting for 12 to 16 hours. Non-heparinized portion of the blood was kept in plain bottles from which serum was collected and stored for biochemical analysis viz. creatinine, uric acid, urea, potassium, magnesium, phosphorus, calcium, sodium, and chloride ion concentration were analyzed using Hematology analyzer (Abbott Model-CD-3700) [41]. The heparinized blood was subjected for the estimation of hematological parameters viz. platelets, red blood cell count (RBC), hemoglobin (Hb), Red cell distribution width and volume (RDW-CV), packed cell volume (PCV), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), and mean corpuscular hemoglobin concentration (MCHC). Further, biochemical parameters like.

#### **Determination of Body Weight and Feed Intake**

The body weight and feed intake were measured once daily before the test item administration throughout the experiment. In brief, the daily feed intake was calculated from the difference between the weight of daily feed supply and the left-over feed was taken as the daily feed intake [42].

#### **Clinical Sign and Symptoms**

The clinical signs and symptoms were recorded daily in all the groups as per in-house standard protocol throughout the experiment. Animals found in a moribund condition or severe distress was humanely euthanized [43].

#### **Statistical Analysis**

Sigma-plot (v11.0) statistical software was used for statistical analysis. Data are shown as mean  $\pm$  standard error of mean (SEM) and analyzed by one-way ANOVA and Student's *t*-test; *p*≤0.05 was considered statistically significant.

#### **Results and Discussion**

#### **Measurement of Tissue Lipid Peroxidation**

The effect of the test formulation on the lipid peroxidation in the liver tissue is shown in Figure 1. From the Figure 1, it was observed that the tissue (liver) lipid peroxidation level of the TBARS significantly ( $p \le 0.001$ ) increased by 193.83% in the disease control group (G2) compared to the normal control group (G1). Positive control group (G3) data showed reduction of MDA level compared to the G2 group. Further, the level of MDA was reduced by 22.75% and 19.57% in the Biofield Energy Treated test formulation (G5) and Biofield Energy Treatment per se plus Biofield Energy Treated test formulation from day -15 (G8), respectively compared to the G2 group. Moreover, MDA level was reduced by 17.85% and 14.48% in the G5 and G8 groups, respectively compare to the untreated test formulation (G4) group (Figure 1). According to Hassan, et al. [44] the increased levels of TBARS could be a tumour burden in the disease control group induced by streptozotocin [44]. After posttreatment with the nanocurcumin based formulation the level of lipid peroxidation end product malondialdehyde (MDA) was significantly reduced in the Biofield Energy Treatment groups compared to the disease control group, which could be due to The Trivedi Effect® - Consciousness Energy Healing Treatment attributed to the scavenging of the reactive free radicals involved in the peroxidation [45].



**Figure 1:** Lipid peroxide activity of the test formulation after 56 days of treatment in male Sprague Dawley rats. Data are shown as mean  $\pm$  SEM, n=10 in each group. G: Group; G1: Normal control; G2: Disease control; G3: Positive control (Quercetin dihydrate); G4: Untreated test formulation; G5: Biofield Energy Treated test formulation; G6: Biofield Energy Treatment per se to animals from day -15; G7: Biofield Energy Treated test formulation from day -15; G8: Biofield Energy Treatment per se plus Biofield Energy Treated test formulation from day -15; G8: Biofield Energy Treatment per se plus Biofield Energy Treated test formulation from day -15; untreated test formulation from day -15 and G9: Biofield Energy Treatment per se animals plus Untreated test formulation. \*\*\*p $\leq$ 0.001 vs. G1.

#### Estimation of Enzymic antioxidants -Superoxide dismutase (SOD) and Catalase (CAT)

The effect of the test formulation on the enzymic antioxidant level in the liver tissue is shown in Figure 2A and 2B. The level of SOD was significantly ( $p \le 0.01$ ) reduced by 34.15% in the G2 group compared to the G1 group. However, the SOD level was increased by 18.43% in the positive control group (G3) compare to the G2 group. Further, SOD level was significantly increased by 35.35% and 37.53% in the G7 and G8 groups, respectively compared to the G2 group. Additionally, the level of SOD was significantly increased by 16.69%, 18.56%, and 9.52% in the G7, G8, and G9 groups, respectively compared to the G4 group (Figure 2A).

Besides, the level of catalase was significantly ( $p \le 0.001$ ) reduced by 63.92% in the G2 group compared to the G1 group. The positive control group showed 123.64% increased of catalase enzyme compared to the G2 group. Further, the catalase level was significantly ( $p \le 0.05$ ) increased by 85.29%, 78.84%, 135.87%, 130.08%, 102.15%, and 66.45% in the G4, G5, G6, G7, G8,

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G9 groups, respectively compared to the G2 group. However, catalase level was significantly increased by 27.31%, and 24.17% in the G6, and G7 groups, respectively compared to the G4 group (Figure 2A).



**Figure 2:** Enzymic antioxidant levels A) Superoxide dismutase (SOD) and B) Catalase of the test formulation after 56 days of treatment in male Sprague Dawley rats. Values are expressed as mean  $\pm$  SEM, n=10 in each group. \*\*p<0.01 vs. G1; \*p<0.05 vs. G2; \*\*\*p<0.001 vs. G1.

#### **Hematological Analysis**

The hematological parameters after treatment with the test formulation is shown in Table 1. The platelet count was increased by 6.32% in the quercetin group (G3) compared to the G2. The platelet count was significantly increased by 17.09% and 9.42% in the G6 and G8 groups, respectively concerning the disease control group (G2). It was indicated that the Biofield Energy Treatment *per se*  group improved platelets counts than untreated test formulation; which might be due to the Consciousness Energy Healing Treatment. Additionally, level of hemoglobin was increased by 8.94% in the G5 group compared to the G2 group. Rest of the parameters such as MCH, PCV, RBC, MCV, MCHC, and RDW-CV were altered minimally than G2 group.

Crown	RBC	Hb	PCV	MCV	MCH	MCHC	<b>Platelet</b> Count	DDW CV
Group	(10 <sup>6</sup> /μL)	(gm/dL)	(%)	(fl)	(pg)	(%)	(thou/mm <sup>3</sup> )	RDW-CV
G1	$10.28 \pm 0.28$	$17.58 \pm 0.39$	55.86 ± 1.07	$54.59 \pm 0.69$	$17.16 \pm 0.41$	$31.49 \pm 0.54$	1012.90 ± 71.06	$0.14 \pm 0.01$
G2	10.16 ± 0.33	$17.68 \pm 0.71$	56.38 ± 2.65	55.39 ± 1.31	$17.36 \pm 0.31$	$31.44 \pm 0.61$	765.13 ± 71.06	$0.16 \pm 0.00$
G3	$10.34 \pm 0.34$	17.88 ± 0.39	54.48 ± 1.20	52.84 ± 0.72	17.33 ± 0.36	$32.80 \pm 0.44$	813.50 ± 70.31	$0.14 \pm 0.00$
G4	$10.75 \pm 0.37$	18.36 ± 0.25	56.58 ± 1.82	52.83 ± 1.11	$17.12 \pm 0.41$	$32.44 \pm 0.23$	865.00 ± 41.99	$0.15 \pm 0.00$
G5	$10.71 \pm 0.35$	19.26 ± 0.65	59.00 ± 1.99	$55.14 \pm 0.71$	$17.98 \pm 0.33$	32.64 ± 0.33	791.38 ± 46.26	$0.15 \pm 0.00$
G6	$10.34 \pm 0.44$	$17.56 \pm 0.47$	54.14 ± 1.46	52.64 ± 1.19	$17.07 \pm 0.60$	$32.44 \pm 0.63$	895.86 ± 98.34	$0.14 \pm 0.00$
G7	10.71 ± 0.26	$18.77 \pm 0.44$	59.99 ± 1.32	56.24 ± 1.68	$17.51 \pm 0.22$	31.29 ± 0.60	787.43 ± 76.75	$0.15 \pm 0.01$
G8	$10.70 \pm 0.34$	$18.54 \pm 0.44$	58.70 ± 1.21	55.06 ± 0.83	17.33 ± 0.28	31.52 ± 0.36	837.22 ± 76.6	$0.15 \pm 0.01$
G9	$10.50 \pm 0.36$	$18.57 \pm 0.46$	56.50 ± 1.78	53.88 ± 0.56	$17.72 \pm 0.29$	$32.90 \pm 0.29$	783.22 ± 68.31	$0.14 \pm 0.00$

**Table 1:** Determination of hematology parameters after treatment with the test formulation in Sprague Dawley rats.

Data are assigned as the mean ± SEM. Hb: Hemoglobin; RBC: Red blood count; PCV: Packed cell volume; MCV: Mean corpuscular volume; MCH: Mean corpuscular hemoglobin; MCHC: Mean corpuscular hemoglobin concentration; RDW-CV: Red cell distribution width and volume.

#### **Biochemical Analysis**

The biochemical parameters after treatment of the test formulation is shown in Table 2. The level of blood urea was reduced by 26.26%, 28.51%, 26.88%, 17.19%, and 18.05% in the G3, G4, G6, G7, and G9, groups respectively compared to the disease control group (G2). Moreover, the uric acid level was significantly reduced by 31.25% in the G6 group compared to the G2 group. Phosphorus level was significantly increased by 20.57% and 33.03% in the G7 and G8 groups, respectively than G2. The results could be due to the positive response of the Biofield Energy Healing Treatment to the novel test formulation, which could be very helpful to the immunocompromised

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patients in the near future. Allover, serum chemistry profile exhibited a significant increase in the level of

phosphorus and decreased blood urea and uric acid in the Biofield Energy Treated group compared to the G2 group.

Group	Magnesium	Blood Urea	Creatinine	Uric Acid	Calcium	Phosphorus	Na+ (Meg/L)	K+	Cl <sup>.</sup>
•	(mg/dL)	(mg/dL)	(mg/dL)	(mg/dL)	(mg/dL)	(mg/dL)		(mEq/L)	(mEq/L)
G1	$4.93 \pm 0.07$	37.22 ± 1.42	$0.32 \pm 0.02$	$1.32 \pm 0.11$	10.19 ± 0.22	$7.13 \pm 0.21$	146.96 ± 0.39	$4.62 \pm 0.01$	108.13 ± 1.01
G2	$5.13 \pm 0.16$	164.41 ± 1.83	$0.22 \pm 0.02$	$1.76 \pm 0.13$	8.96 ± 0.44	6.66 ± 0.64	$144.86 \pm 0.46$	$4.68 \pm 0.06$	107.76 ± 1.27
G3	5.09 ± 0.16	121.24 ± 2.24	0.29 ± 0.06	2.31 ± 0.12	9.39 ± 0.32	7.21 ± 0.32	146.29 ± 0.94	4.88 ± 0.11	107.55 ± 1.81
G4	4.96 ± 0.21	117.53 ± 0.66	$0.24 \pm 0.02$	1.54 ± 0.16	8.89 ± 0.36	6.13 ± 0.36	146.89 ± 0.86	4.69 ± 0.07	107.62 ± 1.15
G5	5.03 ± 0.15	154.54 ± 1.65	$0.33 \pm 0.05$	$2.06 \pm 0.08$	9.08 ± 0.15	7.29 ± 0.59	146.29 ± 0.90	4.70 ± 0.06	107.80 ± 1.32
G6	4.66 ± 0.13	120.21 ± 1.65	$0.24 \pm 0.04$	$1.21 \pm 0.08$	9.29 ± 0.31	6.80 ± 0.36	$145.57 \pm 0.82$	4.63 ± 0.09	107.44 ± 0.68
G7	5.00 ± 0.13	136.14 ± 1.65	$0.24 \pm 0.02$	$1.73 \pm 0.08$	9.60 ± 0.26	$8.03 \pm 0.40$	144.73 ± 1.03	$4.54 \pm 0.04$	107.30 ± 1.15
G8	5.04 ± 0.11	163.56 ± 1.65	$0.26 \pm 0.04$	$2.18 \pm 0.08$	9.37 ± 0.24	8.86 ± 0.75	$146.24 \pm 0.65$	4.67 ± 0.05	$108.56 \pm 0.34$
G9	$4.83 \pm 0.17$	$134.74 \pm 1.65$	$0.27 \pm 0.03$	$1.58 \pm 0.08$	9.36 ± 0.13	6.58 ± 0.59	$145.33 \pm 0.74$	$4.61 \pm 0.06$	$108.43 \pm 0.34$

**Table 2:** Estimation of biochemical parameters after the treatment with the test formulation in experimental rats. Data are assigned as the mean ± SEM (n=10). G1: Group

#### Assessment of Body Weight and Feed Intake

The results of body weight and feed intake are presented as mean values throughout the study period in Table 3. There was no changes were observed in the body weight and feed intake in all the groups. The feed intake was gradually increased in across to all the groups throughout the experiment as shown in Table 3. These findings suggest that there were no significant changes observed regarding body weight as well as feed intake and the test formulation was found to be safe.

Crown	Body V	Veight (g)	Feed Intake (g)		
Group	Initial	Final	Initial	Final	
G1	283.49 ± 4.39	498.36 ± 12.53	34.83 ± 1.15	31.67 ± 1.00	
G2	285.37 ± 6.02	261.41 ± 19.06	40.97 ± 0.65	43.66 ± 0.99	
G3	285.51 ± 5.99	282.90 ± 25.33	42.84 ± 0.61	41.91 ± 1.02	
G4	284.65 ± 5.25	$304.34 \pm 10.12$	40.46 ± 0.70	43.89 ± 1.45	
G5	282.80 ± 4.95	282.75 ± 17.98	38.66 ± 0.78	44.53 ± 2.04	
G6	285.71 ± 4.19	334.08 ± 15.03	39.50 ± 0.58	41.32 ± 2.75	
G7	280.95 ± 5.06	296.10 ± 21.56	40.94 ± 0.56	43.51 ± 1.61	
G8	282.82 ± 6.25	268.24 ± 16.09	39.87 ± 0.60	41.55 ± 1.69	
G9	280.64 ± 5.61	297.97 ± 10.36	39.97 ± 0.56	$40.44 \pm 1.78$	

**Table 3:** The effect of the test formulation on body weight and feed intake in male Sprague Dawley rats. Data are assigned as mean ± SEM (n=10). G: Group

The National Center for Complementary/Alternative Medicine (NCCAM,) reported that about 34% U.S. populations depend on some forms of complementary health approach, among which energy medicine is one of them. Complementary and alternative medicine has huge positive aspect as compared to the conventional treatment strategy [46]. Another report suggested that multivitamin/mineral (MVMM) supplements are the most common dietary supplements consumed about 51% in the United States [47]. Overall data suggest that the novel formulation could be immunomodulatory, antioxidant, and anti-inflammatory effect and might produce as a better immunomodulatory medicine in the near future.

#### Conclusions

Results of the study revealed that the lipid peroxidation end point product, malondialdehyde (MDA) level was significantly reduced by 22.75% and 19.57% in the Biofield Energy Treated test formulation (G5) and Biofield Energy Treatment *per se* plus Biofield Energy Treated test formulation from day -15 (G8) groups, respectively compared to the disease control group (G2). An antioxidant enzyme like superoxide dismutase (SOD) was significantly increased by 35.35% and 37.53% in the G7 and G8 groups, respectively compared to the G2 group. Furthermore, catalase was significantly ( $p \le 0.05$ )

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increased by 85.29%, 78.84%, 135.87%, 130.08%, 102.15%, and 66.45% in the G4, G5, G6, G7, G8, G9 groups, respectively compared to the G2 group. The platelet count was significantly increased by 17.09% in the G6 group concerning the G2 group. Blood urea was reduced by 26.26%, 28.51%, 26.88%, 17.19%, and 18.05% in the G3, G4, G6, G7, and G9, groups respectively compared to the G2 group. The level of the uric acid level was significantly reduced by 31.25% in the G6 group compared to the G2 group. However phosphorus was significantly increased by 20.57% and 33.03% in the G7 and G8 groups, respectively than G2. Further, no treatment-related changes were observed in the Biofield Energy Treated groups related to the body weight and feed consumption. Overall, the change in above weight parameters was consistent throughout the study, which suggests that the Biofield Energy Treated test formulation has safe concerning the physiological and metabolic changes. Therefore, the current findings conclude that the Biofield Energy Healing based formulation and The Trivedi Effect® enhanced the antioxidant, anti-inflammatory and immunomodulatory properties in rat model under stress condition. Thus, the novel Biofield Treated test formulation and Biofield Energy Healing per se could be used against different disease conditions viz. rheumatoid arthritis, type 1 diabetes, anemia, asthma, Alzheimer's disease, hepatitis, Parkinson's disease, ulcerative colitis, aging, stress, and organ transplant.

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