

Effect of Integrated Yoga Modules and Satvic Diet on Selected Risk Factors Among Men Cancer Patients

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Cite this paper as: V. Duraisami, Prof. R. Mohana Krishnan, (2025) Effect of Integrated Yoga Modules and Satvic Diet on Selected Risk Factors Among Men Cancer Patients. *Journal of Neonatal Surgery*, 14 (3s), 67-71.

ABSTRACT

Finding the impact of combined yoga modules and a sattvic diet on specific risk variables in male cancer patients was the aim of the current investigation 40 male cancer patients were divided into two groups for the study: the experimental group and the control group. There were twenty male cancer patients in the experimental group while the control group received no training of any kind; they practiced the Pawanamuktasana series, asana, pranayama, meditation, and relaxation for six weeks. Standardized tests were used to measure the physiological variable (systolic blood pressure) before and after the experiment. After analyzing the data using Analysis of Covariance (ANCOVA), it was determined that among male cancer patients, the Pawanamuktasana series, asana, pranayama, meditation, and relaxation had a significant ($P < 0.05$) impact on the physiological variable (systolic blood pressure).

Keywords: *sattvic diet; Yoga; control group; experimental group;*

1. INTRODUCTION

Yoga is a family of ancient spiritual practices and a school of spiritual philosophy that began in India, where it remained a vital living tradition and was regarded as a path to enlightenment. The word yoga means union in Sanskrit. It was thought that yoga originated in ancient India. Artifacts from the Indus Valley Civilization between 4000 and 2000 B.C. depicted people sitting and crossing their legs, along with symbols later linked to yoga. "One definition of yoga is "mindfulness," which is the practice of focusing attention on whatever we are doing at the time. People were guided toward the present moment by breath in yoga poses [1, 2]. "Yoga is a complete system of life, its magnitude vast, and its benefits limitless". "A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" was the more expansive definition of health given by the World Health Organization in 1946. According to this concept, physical, mental, and social well-being are all necessary for good health. Yoga has evolved into an ancient health culture in modern times. Yoga, a calming and soothing activity, has emerged as one of the newest body-building trends and is highly favored by young people. Yoga is a static activity that helps us maintain good physical, mental, spiritual, and emotional health by regulating our bodies through breathing, posture, meditation, and other techniques. Yoga is used as a treatment for a number of illnesses in many nations, including dyspepsia, arthritis, diabetes, hypertension, and asthma.

Malignant neoplasm, the medical term for cancer, is a broad category of disorders that all include unchecked cell proliferation. Uncontrolled cell division and growth result in cancerous tumors that spread to neighboring bodily sections. Through the circulation or lymphatic system, the cancer may also travel to other, farther-flung areas of the body. Not every tumor is malignant. Benign tumors do not spread throughout the body, develop out of control, or infiltrate nearby tissues. Humans can develop more than 200 distinct types of cancer. It is difficult to identify the causes of cancer. Numerous factors, such as smoking, some diseases, radiation, inactivity, obesity, and environmental contaminants, are known to raise the risk of developing cancer. These may cause the disease by directly harming genes or by combining with pre-existing genetic flaws in cells. Five to ten percent of malignancies are completely inherited [3].

STATEMENT OF THE PROBLEM

The study's goal is to determine how a sattvic diet and integrated yoga modules affect specific risk variables in male cancer patients

2. LITERATURE REVIEW

We questioned individuals about friendships, living circumstances, parenthood, and marital status in order to gauge the size of social networks. Additionally, we inquired about the frequency of interactions with friends, family, and children as well as the participants' level of satisfaction with such interactions. We divided the participants into three social network categories based on their responses: wealthy, moderate, and limited or poor [4]. Those who were married and lived with someone, had children they were in daily to weekly contact with and found this level of contact satisfactory, and had friends or family they were in daily to weekly contact with and found this level of contact satisfactory were all included in the group with a rich social network. Any two of the three characteristics were present in the group with a moderate social network. Those who possessed one or none of the three components were included in the group with a small or inadequate social network.

Yoga is an ancient Indian science that promotes mental and physical health as well as spiritual well-being [5]. Yoga combines physical exercises (asanas), breathing methods (pranayama), meditation, and relaxation techniques to balance mind-body connection. Numerous studies have shown how beneficial yoga is for a variety of medical diseases, including lung cancer, insulin resistance, epileptic seizures, the illness, stroke, allergies, and heart disease. Nevertheless, a large portion of the research that these numbers are based on was done in Western Europe and North America, and therefore might not apply to the MS people worldwide. The incidence or frequency of numerous autoimmune illnesses, malignancies, ischemic heart disease, and stroke in MS patients has only been evaluated in a small number of carefully planned population-based researches.

The participants underwent detoxification, which included abstaining from all other substances and taking medicine to replace the narcotics in their bodies. The withdrawal phase usually follows this. Participants were assigned to the permanent program when withdrawal was controlled [6]. The 12-step program was used by the rehabilitation facility as a method of addiction recovery. The subjects were diagnosed using DSM-V-TR criteria by a qualified psychiatrist. A Registered Psychologist who also practices yoga therapy taught the intervention. Participants had to be between the ages of 18 and 40 and have moderate, severe, or mild SUD. Only those who had never done yoga before were taken into consideration. The study eliminated participants who had recent surgery, unexpected withdrawal symptoms, persistent neurological conditions, psychotic illnesses, or suicidal thoughts. Participants were asked to rate the session on a scale of 1 to 5 at the conclusion of each session in order to express how satisfied they were with the treatment.

According to their research, in both experimental and clinical contexts, experience with frequency domain analysis of heart rate variability offers a useful non-invasive method for cardiac risk stratification and autonomic function evaluation, such as in diabetes and hypertension. The suggested approach could be utilized to evaluate the short-term, mild effects of yoga and exercise on autonomic cardiac control. Following yoga, they showed an instantaneous drop in sympathetic and an increase in parasympathetic activity. Analysis was done [7] on the method based on the permutation entropy algorithm to heartbeat interval time series. Compared to the pre-meditation condition, the entropy of these oscillations was substantially lower during meditation. The findings indicate that it is viable to examine the impact of yoga and chi on reducing HRV using the permutation entropy (PE) index.

Important information about a healthy diet, including essential vitamins, minerals, and nutrients, is provided in this chapter. Maintaining health requires eating "Satvik," or balanced food, in moderation and with joy.) A woman's reproductive years make up a significant amount of her life. As a result, it is critical to comprehend the nutritional requirements at various stages of being pregnant. A woman's dietary needs change according to her age, level of physical activity, whether she is nursing or not, and whether she is gravid or not. Malnutrition is a common issue for women in underdeveloped nations because of iron and vitamin deficiencies. In addition, the prevalence of female obesity is rising. The periods and the result of pregnancy may be negatively impacted by either of these extremes [8].

3. METHODS AND MATERIALS

History of Satvik food

Ancient Indian customs, especially those related to Ayurveda and Hinduism, are the foundation of the history of Satvik cuisine. The roots of Satvik dietary concepts can be found in Ayurveda, one of the oldest medical systems in the world, which dates back over 5000 years to India. Ayurveda emphasizes the significance of the body, mind, and spirit. For anyone looking to achieve a peaceful and harmonious state of mind, satvik cuisine was recommended. In ayurveda, satvik food is categorized into three varieties and is thought to be healthy, pure, and calming to the mind.

- Satvik (unadulterated and easily absorbed)
- Rajasic (thrilling and invigorating)
- Tamasic (hefty and difficult to process)

Good foods including fruits, vegetables, grains, and nuts are considered Satvik food. The salty or spicy foods that give you energy are known as rajasic foods [9, 10]. Foods that are heavy, fried, or processed are considered tamasic. People who

follow the Satvik diet believe that eating Satvik food helps them to relax and cleanse their minds. They also practice yoga and meditation. It also benefits their spiritual and physical well-being. Satvik cuisine is about how it makes you feel, not about how it tastes. They had therapeutic properties. These components not only made food delicious, but they also added depth and complexity, which significantly improved the flavor. The concept of Satvik eating first arose thousands of years ago in two ancient Indian texts, the Vedas and the Upanishads. These pieces emphasize how important it is to eat natural, healthful, and environmentally friendly food.

Ayurvedic Influence:

The traditional Indian medical system known as Ayurveda had a significant impact on Satvik food. This philosophy, which advocates a diet that balances the body and the mind, is in line with Satvik cuisine [11].

The study's goal was to determine how a satvic diet and integrated yoga modules affected a few risk factors in male cancer patients. Forty male cancer patients were selected at random from Chennai exclusively for this study. They are in the 40–50 age brackets. There were two groups of forty subjects each. Pretests and posttests would be administered before and after the training, with the experimental group participating in yoga practices and the second group serving as the control group. Eight weeks of training would be provided [12]. Finally, using the scientific technique, the impact of combined yoga modules and a satvic diet on the systolic blood pressure of male cancer patients would be determined. Analysis of covariance (ANCOVA) was used to statistically examine the gathered data.

Training Programme:

- Pawanamuktasana series
- Suryanamaskar (Bihar School of Yoga) - 12 counts

Yogasana

Ardhachakrasana, Salabasana, Bhujangasana, Dhanurasana, Viparethakarani, Sarvangasana, Halasana, Uttanapadasana, Padmasana, Vajrasana, Pascimottanasana, Tadasana, Trikonasana, Padahastanasana,

4. RESULT AND DISCUSSIONS

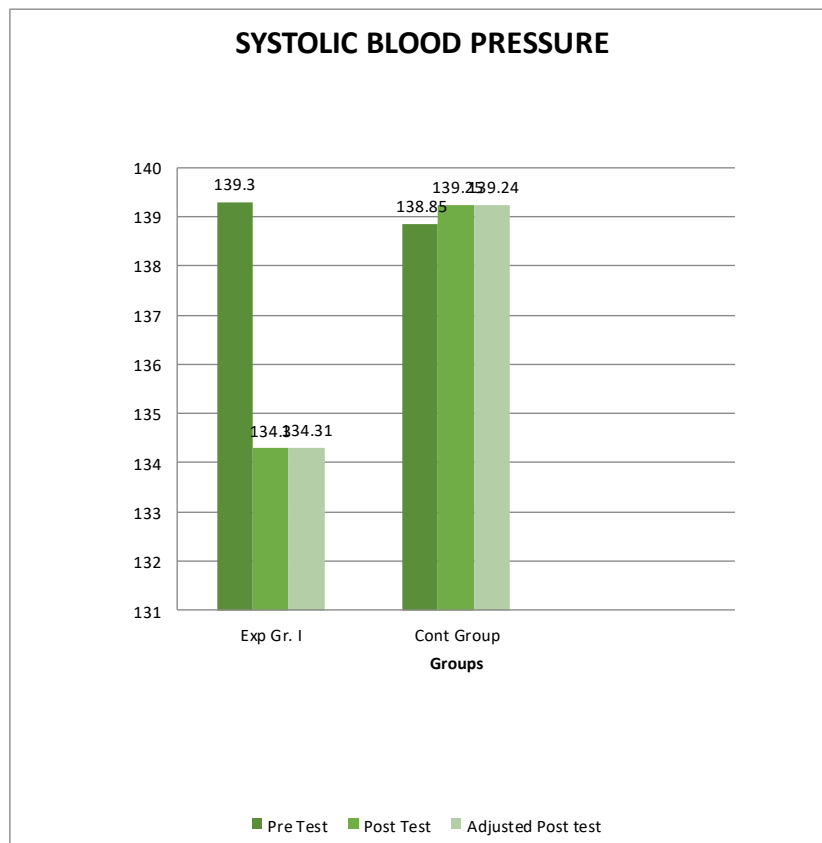
Due to the satvic diet and integrated yoga modules, male cancer patients' initial and final means of systolic blood pressure are statistically compared [13] in Table 1.

Table I: Analyzing the variance and computing the mean of the experimental and control groups' Systolic Blood Pressure (Scores in mm/hg)

Test	Ex. G	C.G	S.V	S.S	Df	M.S	"F"
Pre-test average	138.85	139.30	B	2.03	1	2.03	0.08
			W	934.75	38	24.60	
Post-test average	139.25	134.30	B	245.03	1	245.03	30.43*
			W	305.95	38	8.05	
Adjusted average	139.24	134.31	B	243.31	1	243.31	29.49*
			W	305.28	37	8.25	

For df 1 and 38, the table value was 3.21. For df 1 and 37, the table value was 3.22.

Figure 1 displayed the corrected mean values that were calculated using a bar diagram.

FIGURE – 1: BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF SYSTOLIC BLOOD PRESSURE

DISCUSSIONS ON THE FINDINGS OF PHYSIOLOGICAL VARIABLES

It was concluded that the combined yoga modules and satvik diet significantly improved (decreased) the systolic blood pressure of the male cancer patients after adjusting for pre-test and post-test means and performing a covariance analysis. The obtained F value of 29.49 was higher than the necessary value of 3.22 in Figure 1 [14, 15].

5. CONCLUSION OF THE RESEARCH

Learning about Satvik and holistic foods is crucial. Understanding Satvik cuisine is crucial because it benefits both the body and the psyche. While many people are aware of the notion of Satvik cuisine, nobody is aware of the proper way to prepare it. Fresh fruits, vegetables, sprouts, honey, dairy products, herbs, milk, sugar, turmeric, almonds, ginger, and so forth are all considered Satvik foods. The purpose of satvik diet is to maintain calmness and strengthen the immune system. In certain cases, Satvik food also acts as a medication. The research employs two distinct methodologies to arrive at its conclusions: both quantitative and qualitative techniques. The research, which included 118 male and 79 female respondents from a range of age groups and professions, yielded a number of conclusions. Compared to respondents from other age groups, those between the ages of 15 and 25 are more familiar with the idea of Satvik food. Respondents with monthly incomes between \$15,000 and \$20,000 believe that holistic/Satvik food is organic. Everyone is able to eat Satvik meals. For elderly people, Satvik cuisine has no negative consequences. Satvik cuisine might occasionally aid in shedding pounds.

The experimental group (integrated yoga modules and satvik diet) and group II (control group) showed a substantial improvement (reduction) in systolic blood pressure, according to the analysis of covariance of systolic blood pressure. It might be because of the combined effects of the satvik diet and yoga modules. The study's results demonstrated that among male cancer patients, the experimental group I (integrated yoga modules and satvik diet) improved (decreased) systolic blood pressure more than the control group (no training).

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