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Impact of Classical Yoga Therapy and Naturopathy Nutraceutical Supplementary Food Among Adults with Insomnia

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Abstract: To achieve the purpose of the Random group Experimental design, 120 adults littered with insomnia problems came forward from Chennai city, 90 were screened and 30 were selected randomly by using the Random sampling method between 35 years to 50 years of age. The subjects were divided into an experimental group and the control group of 15 subjects each. Experimental groups were imparted yoga training for 12 weeks (six days a week for a maximum of one hour in the morning) with naturopathy diet. The control group was imparted with yoga training alone. The pre-test and post-test were conducted before and after the training for the experimental and control group and the scores on Pittsburgh Sleep Quality Index (PSQI) and cortisol were measured, 't' test was used to find out the significant differences among the groups. The result of the study proved that Pittsburgh Sleep Quality Index (PSQI) and cortisol reduced as a result of Classical yoga therapy practices and Naturopathy supplementary food in the Experimental Group. Hence, the hypothesis was accepted at a 0.05 level of confidence. The conclusion is that the Classical yoga therapy practices and Naturopathy supplementary food helped to reduce Pittsburgh Sleep Quality Index (PSQI) and cortisol among adults suffering with insomnia.

Keywords: Yoga therapy, Naturopathy food, Nutraceutical Functional Supplementary Diet, Cortisol, Pittsburgh Sleep Quality Index Test

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Introduction

Classical Yoga therapy and Naturopathy Nutraceutical Supplementary food brings numbers of benefits to people suffering from the

trauma and insomnia. Various techniques of yoga and Naturopathy food, Nutraceutical Supplementary food are available. Patients receive total

Table 1: Breakfast Menu

DAY	BREAKFAST
MONDAY	Kichadi/Pongal+Chutney
TUESDAY	Kichadi/Uppuma with Vegetables+Mint Chutney
WEDNESDAY	Kichadi/Ragidosa+Chutney
THURSDAY	Kichadi/Poha
FRIDAY	Kichadi/Beaten Rice
SATURDAY	Kichadi/Dosa(Vegetables)+Sambar
SUNDAY	Kichadi/RavaIdli (Vegetables)+Corriander Leaves Chutney+Sambar

Table 2: Lunch Menu

DAY	MAIN MENU	RAITHA	SABJI	SOUP	FRUIT
MONDAY	Palakrice/Chapathi	Cucumber Tomato Raitha	Cho-Cho Sabji	Tomatosoup	Papaya
TUESDAY	Rice+Dhal+Rasam+Sambar+Buttermilk+Chapathi	-----	Cabbage Sabji	-----	Orange
WEDNESDAY	Vegpulao/Curdrice+Chapati	Beet Root Raitha	Channa Gravy	Palaksoup	Apple
THURSDAY	Corrianderice+Chapathi	Carrot Raitha	Tomato Sabji	Dhalsoup	Watermelon
FRIDAY	Rice+Dhal+Rasam+Sambar+Buttermilk+Chapathi	-----	Ashgourd Sabji	-----	Guava
SATURDAY	Tomatorice+Chapathi	Cucumber Tomato Raitha	Dhal sabji	Carrotsoup	Musambi
SUNDAY	Bisebelabath	Mixture	-----	Beetrootsoup/Mixed vegetable soup	Banana/Papaya

Table 3: Dinner Menu

DAY	MAIN MENU	VEGETABLESABJI	CHUTNEY	SALAD
MONDAY	Chapathi+Rice+Rasam+Sambar+Buttermilk	Carrot Beans Sabji	Corriander	Cucumber Crimson
TUESDAY	-Do-	Drumstick Leaves/Ladiesfinger	Mint	Raw papaya
WEDNESDAY	-Do-	Knolkhol	Curry Leaves	Tri-Colored Salad
THURSDAY	-Do-	Bottle Gourd	Tomato	Summer Retreat
FRIDAY	-Do-	Palak	Groundnut	Guava Delight
SATURDAY	-Do-	Bittergourd Chips	Methi	Grated Salad
SUNDAY	-Do-	Cho-Cho Sabji	Ginger	Cabbage Kosambari

relaxation and positivity through classical yoga therapy. Although sleeping tablets may help to induce sleep, there may be risks of side effects. In addition, they work on the “symptom” of the body, but not eliminate the “cause” of it. On the other hand, yoga has no side effects, but good ones only. It is also possible to change the lifestyle through yoga. The causes of insomnia will be removed by the continuous practices of yoga and Naturopathy Nutraceutical Supplementary food. Insomnia is a common sleep disorder that can make it hard to fall asleep, hard to stay asleep, or cause to wake up too early and not be able to get back to sleep.

Materials and Methods

To achieve the purpose of the study, 120 adults littered with insomnia problems came forward from Chennai city, 120 were screened and 30 were selected randomly by using sampling method between 35 years to 50 years of age. The subjects were divided into an experimental group and control group of 15 subjects each. The Experimental Group imparted training for 12 weeks (six days a week for a maximum of one hour in the morning) with naturopathy diet. The control group was imparted with yoga training alone. The pre-test and post-test were conducted before and after the training for two groups and

Table 4: Independent t test for Yoga group (control) and Yoga with diet (Experimental) group

		Yogagroup (n=15)	Yogawithdiet (n=15)	t-Value and p-value
Pre-testcortisol	Mean	268.60	266.67	t=0.443 p=0.661 (NS)
	Std.Dev	10.835	12.982	
Posttestcortisol	Mean	213.53	259.80	t=-5.711 p=0.000***
	Std.Dev	29.69	10.16	
Pre-testPSQ	Mean	18.67	2.440	t=-0.383 p=0.705(NS)
	Std.Dev	2.44	2.33	
PosttestPSQ	Mean	11.60	17.80	t=-5.889 p=0.000***
	Std.Dev	3.46	2.15	

***-Significant at p<0.001 level, NS- Not significant

Table 5: Paired t-test for yoga group and yoga with diet group on cortisol

Group	Pre-test		Post Test		Difference Mean (S.D)	Paired 't' Testandpvalue
	Mean	S.D	Mean	S.D		
Yoga group	266.67	12.98	259.80	10.15	6.86 (4.121)	t= 6.454 p= 0.000***
Yoga with diet	268.60	10.84	213.53	29.68	55.067 (26.1680)	t= 8.150 p= 0.000***

***-Significant at p<0.001 level

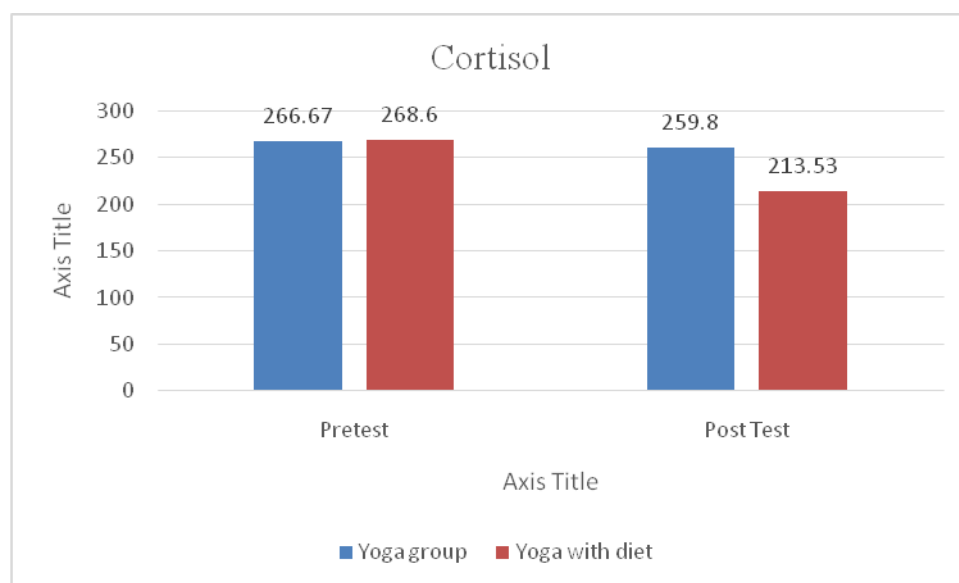


Fig. 1: Paired t test for yoga group and yoga with diet group on Cortisol.

the scores on Pittsburgh Sleep Quality Index (PSQI) and cortisol were measured. 't' test was used to findout the significant differences among the groups. Classical yoga therapy Practices trained were Sukshma Vyayama (Subtle Exercises), Suryanamakar, Uttanasana (Squatpose), sputa baddha konasana (reclining

butter fly pose), Sashankasana (moon pose), Viparitakarani (inverted pose), Halasana (Ploughpose). Shavasana-Corpse Pose, Pranayamas given were Bhramari-Humming Bee Breath, Ujjayi-Psychic Breath, Nadi Shodhana-Psychic Network, Yoga Nidra (Psychic Sleep) and Naturopathy Nutraceutical Supplementary Food

Table 6: Paired t-test for yoga group and yoga with diet group on PSQI

Group	Pretest		PostTest		DifferenceMean(S.D)	Paired 't' Test and p value
	Mean	S.D	Mean	S.D		
Yoga group	19	2.33	17.80	2.145	1.20(0.676)	t=6.874 p=0.000***
Yoga with diet	18.67	2.44	11.60	3.46	7.067(1.750)	t=15.629 p=0.000***

***-Significant at $p < 0.001$

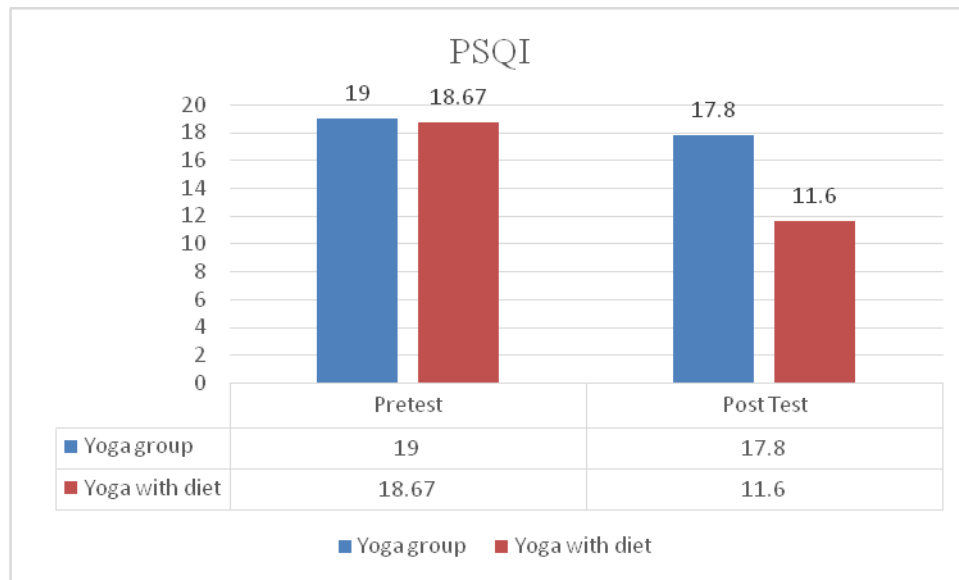


Fig. 2: Paired t test for yoga group and yoga with diet group on PSQI.

(Tables 1, 2, 3) which include antioxidant-rich foods like berries, leafy greens, and nuts, chia seeds can support overall well-being. Consider turmeric, ginger, and garlic for their potential anti-inflammatory properties. Grains like oatmeal provides calcium, magnesium, phosphorous, and potassium, which are all, sleep-promoting nutrients. Go easy on sweeteners as they sabotage sleep was given.

The data pertaining to the variables collected from two groups before and after the training period were statistically analyzed by using 't' test to determine the significant difference and tested at 0.05 level of significance.

Results and Discussion

The data pertaining to the variables collected from two groups before and after the training

period were statistically analyzed by using 't' test to determine the significant difference and tested at 0.05 level of significance (Tables 4, 5, 6; Figs. 1, 2).

Thirthalli *et al.* (2013) investigated the role of yoga as an antidepressant and its effect on lowering serum cortisol levels. Out-patient depressives were offered yoga as a possible therapy, with a validated yoga module taught over a month and practiced at home daily. Patients were rated on the Hamilton Depression Rating Scale (HDRS) and serum cortisol measurements were taken at baseline and after 3 months. The study found that depressives had higher serum cortisol levels than controls, and the yoga-only group experienced a drop in cortisol levels. The findings suggest that yoga may act at

the hypothalamus level by reducing cortisol, providing relief in depression.

Zhai *et al.* (2021) reported the mediating effect of stress on the association between physical activity and sleep quality in Chinese college students. The sample consisted of 6973 students from three Chinese universities. Results showed that stress mediated the association between physical activity and sleep quality in both males and females, with 42.4% and 306.3% mediating effects, respectively. The study suggests that physical activity can improve sleep by aiding stress coping and suggests stress management as an effective non-pharmaceutical therapy for sleep improvement.

Conclusion

It was proved that yoga may act at the level of the hypothalamus by its 'anti-stress' effects (reducing the cortisol), to bring about relief in Insomnia. Involvement of Stress causes increase in Stress level hormones which in turn produces Physiological and Psychological changes. The Hypothalamus (HPA) for Stress is activated

causing Insomnia. Various Coping Mechanisms are employed and out of them Yoga Therapy and Naturopathy Supplementary Food is important.

Yoga Therapy reverses HPA (Hypothalamic Pituitary Axis), reduces Cortisol levels and increases Sleep Cycle. Yoga Therapy and Naturopathy Supplementary Food is an effective adjuvant in reducing Stress and anxiety along with improving the normal Homeostasis with good Sleep for Insomnia Patients.

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