

A Clinical Study to Evaluate the Efficacy of *Garcinia cambogia Q* in Weight Loss Management in Patients with Obesity Using BMI and BRI Tools

Dr. Ambala Sriharitha.¹, Avantika Selote²

¹Professor, Department of Homoeopathic Materia Medica, MNR Homoeopathic Medical College and Hospital, Fasalwadi, Sangareddy, Telangana, India

²Intern, MNR Homoeopathic Medical College and Hospital, Sangareddy, Telangana, India

Corresponding Author: Dr. Ambala Sriharitha.

DOI: <https://doi.org/10.52403/ijrr.20260318>

ABSTRACT

Obesity is a major health condition carrying significant risks to both physical and psychological well-being across all age groups. High rates of obesity are linked to factors such as the sedentary lifestyles, consumption of energy-dense foods, limited healthcare access, and financial constraints. While addressing these issues through dietary improvements and regular exercise may help reduce obesity and improve health, some individuals experience no weight reduction despite these interventions. In Homoeopathy, there are several remedies for managing obesity; one such drug is *Garcinia cambogia Q*, which aids in weight loss. This clinical study evaluates the efficacy of this remedy in weight loss management using BMI and BRI tools.

KEY WORDS: Obesity, Sedentary lifestyle, *Garcinia cambogia*, BMI, Overweight.

INTRODUCTION

Obesity is a complex, multifactorial chronic disease characterized by excessive accumulation of body fat that presents a risk to health. The World Health Organization (WHO) defines overweight and obesity as abnormal or excessive fat accumulation that may impair health, commonly measured using the Body Mass Index (BMI), with a

BMI of ≥ 25 considered overweight and ≥ 30 as obese. The worldwide prevalence of overweight and obesity has doubled since 1980 to an extent that nearly a third of the world's population is now classified as overweight or obese. Obesity rates have increased in all ages and both sexes irrespective of geographical locality, ethnicity or socioeconomic status, although the prevalence of obesity is generally greater in older persons and women. While BMI is a convenient and non-invasive method, it does not directly measure body fat and may not accurately reflect body composition, especially in athletes or older adults. The Body Roundness Index (BRI) is a novel anthropometric measurement used to assess body fat distribution and visceral adiposity, offering a more accurate estimation of body shape and health risks than BMI alone.

Garcinia cambogia, commonly known as Gummi Gutti, belongs to the family Guttiferae. The mother tincture (Q) is prepared from the resinous gum obtained from the tree. Recent clinical trials have demonstrated that homoeopathic potencies of *Garcinia cambogia* significantly reduce body weight and improve lipid profiles by inhibiting lipogenesis. Modern pharmacological studies focus on its active constituent, Hydroxycitric Acid (HCA), which regulates serotonin levels to suppress appetite and reduce visceral fat

accumulation. Furthermore, recent systematic reviews emphasize the effectiveness of *Garcinia* in reducing BMI and waist circumference, supporting its role as a safe, natural adjuvant in obesity management.

AIMS AND OBJECTIVES:

AIM: To find out the efficacy of *Garcinia cambogia Q* in Obesity.

OBJECTIVE:

1. To identify the patients suffering with obesity even with regular exercise and diet management.
2. To study the effectiveness of *Garcinia cambogia* in obesity using BMI & BRI tools.

HYPOTHESIS:

NULL HYPOTHESIS (H₀): *Garcinia Cambogia Q* is not effective in the treatment of Obesity.

ALTERNATIVE HYPOTHESIS (H₁): *Garcinia Cambogia Q* is effective in treatment of Obesity.

SELECTION CRITERIA:

INCLUSION CRITERIA:

- 1) The individuals aged between 16 and 45 years. (Young and early middle age adults)
- 2) Both males and females are included in study.
- 3) BMI 25 to 29.9 kg/m², 30 kg/m² and more (over weight category & Obesity).
- 4) Patients with normal lipid profile are only included in study.
- 5) Patients with sedentary life style, stress eating, are taken into study.
- 6) Patients who used medication for obesity without any result are included in study.

EXCLUSION CRITERIA:

- 1) Individuals below 16 years and above 45 years.
- 2) Pregnant or lactating women (due to physiological weight fluctuations and safety considerations)

- 3) Individuals with secondary obesity (obesity due to endocrine disorders such as Cushing's syndrome, hypothyroidism, or polycystic ovarian syndrome)
- 4) Patients with major systemic illnesses such as uncontrolled diabetes mellitus, severe hypertension, cardiovascular disease, renal or hepatic impairment.
- 5) History of hypersensitivity or allergic reaction to *Garcinia Cambogia* or any of its components.
- 6) Individuals currently on steroid medications or supplements.
- 7) Patients undergoing bariatric surgery or any weight loss procedures.
- 8) Patients with psychiatric illness like depression, anxiety, bipolar disorders, eating disorders like bulimia nervosa, Alcohol use disorder etc. are not included in study.

MATERIALS AND METHODS

Twenty cases were selected for the study on a simple random basis from the patients attending the IPD, peripheral OPD, and camps of MNR Homoeopathic Medical College and Hospital. The study was carried out over a period of 9 months. It was ensured that patients are made aware of the study in their own language and an informed consent letter will be taken from every individual. The case was taken in standardized case format of MNR. The case history is taken with holistic concept (etiological factors, mental generals, physical generals, concomitants, characteristics particulars).

Type of study: Clinical study.

Ethical consideration: Ethical clearance to this research topic was taken from the institutional ethical committee.

Quality control: *Garcinia cambogia Q* is procured from GMP certified pharmaceutical companies approved by the IEC. Drugs are stored as per the rules of Homoeopathic pharmacopoeia of India.

METHODOLOGY

All patients were administered *Garcinia cambogia Q* for a span of six months, with a

dosage of 10 drops taken in lukewarm water twice daily on alternate days.

Effectiveness was measured through a dual-tool approach: the Body Mass Index (BMI) was utilized as the primary quantitative variable for statistical analysis in adherence to WHO standards, while the Body Roundness Index (BRI) was employed as a qualitative screening tool during initial and follow-up clinical examinations to observe visceral fat distribution and body shape changes.

Patients were advised to report at 15-day intervals for regular follow-ups.

To evaluate the therapeutic effect of the mother tincture, the weight parameters collected before and after the intervention were subjected to a Paired T-test for statistical significance.

OBSERVATION AND RESULTS

A total of 20 individuals sample size has been taken; the statistical data of observations and results are as follows.

Table.1. Distribution of cases according to age group

Sl. no	Age group	No. of patients	Percentage
1	16 - 30	09	45%
2	31 - 45	11	55%
	Total	20	100%

Pie Chart Showing Age-wise Distribution of Study Subjects

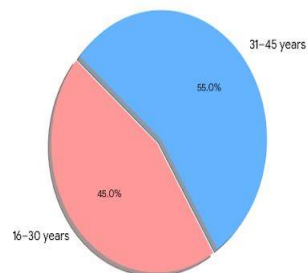


Figure: Age Incidence of Obesity

Table.2. Distribution of cases according to Gender

Sl. no	Gender	No. of patients	Percentage
1	Male	10	50%
2	Female	10	50%
	Total	20	100%

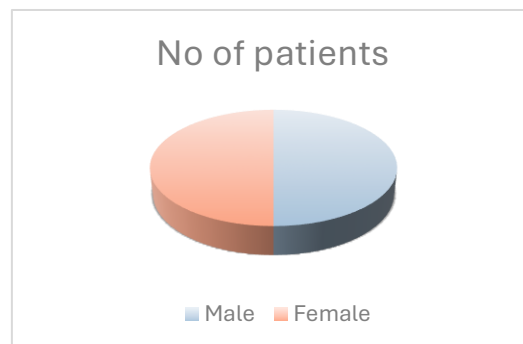


Figure.2. Gender Incidence of Obesity.

Table 3: Showing occupation of patients

SL.no	Name	Age	Sex	Occupation
1	Mrs. NR	45	F	Home maker
2	Mrs. AV	35	F	Teacher
3	Mrs. SP	28	F	Fashion designer
4	Mr. AD	31	M	Marketing executive
5	Mr. IS	38	M	Software engineer
6	Mr. RS	36	M	Civil engineer
7	Mrs. MJ	40	F	Teacher
8	Mr. RI	42	M	Bank manager
9	Mrs. PK	34	F	Interior designer
10	Mrs. AS	29	F	Business
11	Mr. KD	21	M	Student
12	Mrs. KN	32	F	H R Manager
13	Mrs. MJ	20	F	Student
14	Mrs. AT	22	F	Student
15	Mr. VT	30	M	Bank officer
16	Mr. AR	24	M	Student
17	Mr. AS	38	M	Software engineer
18	Ms. SP	19	F	Student
19	Mr. YR	23	M	Student
20	Mr. RA	35	M	Software engineer

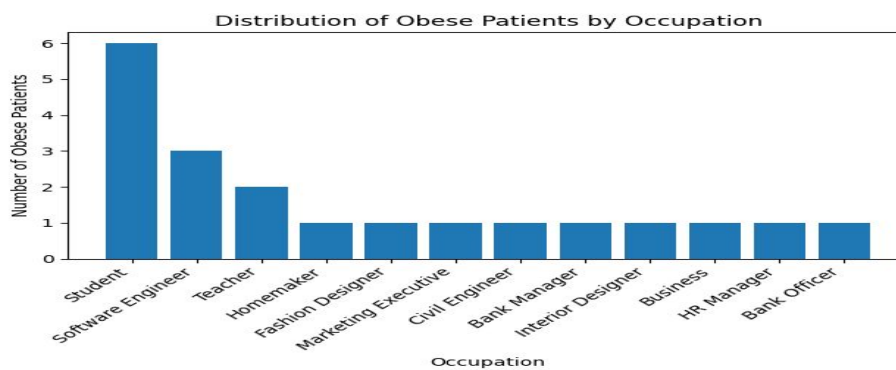


Figure 3: Occupation of patients

Table 4: Showing the diet of patients

SL.no	Name	Age	Sex	Diet
1	Mrs. NR	45	F	VEG
2	Mrs. AV	35	F	MIXED
3	Mrs. SP	28	F	MIXED
4	Mr. AD	31	M	VEG
5	Mr. IS	38	M	MIXED
6	Mr. RS	36	M	MIXED
7	Mrs. MJ	40	F	VEG
8	Mr. RI	42	M	MIXED
9	Mrs. PK	34	F	VEG
10	Mrs. AS	29	F	VEG
11	Mr. KD	21	M	VEG
12	Mrs. KN	32	F	MIXED
13	Mrs. MJ	20	F	VEG
14	Mrs. AT	22	F	MIXED
15	Mr. VT	30	M	MIXED
16	Mr. AR	24	M	MIXED
17	Mr. AS	38	M	VEG
18	Ms. SP	19	F	MIXED
19	Mr. YR	23	M	MIXED
20	Mr. RA	35	M	MIXED

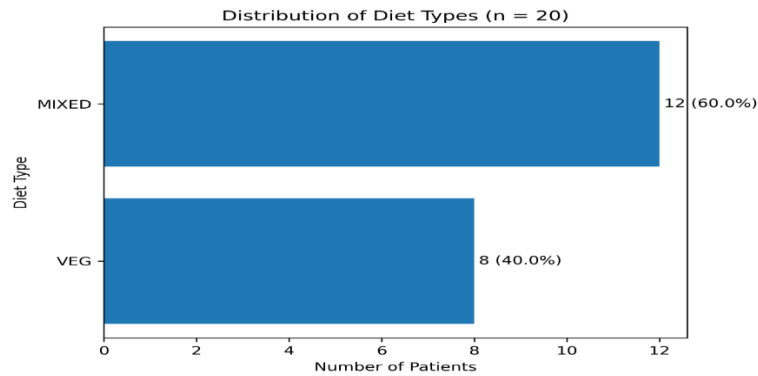


Figure 4: Diet of patients

Table.5. Weights before and after treatment

SL.no	Name	Age	Sex	Weight before	Weight after	Weight Difference
1	Mrs. NR	45	F	82	80.6	1.4
2	Mrs. AV	35	F	94	93.1	0.9
3	Mrs. SP	28	F	88	86.6	1.4
4	Mr. AD	31	M	99	97.2	1.8
5	Mr. IS	38	M	102	100.8	1.2
6	Mr. RS	36	M	92	89.1	2.9
7	Mrs. MJ	40	F	83	81.3	1.7
8	Mr. RI	42	M	96	94.1	1.9
9	Mrs. PK	34	F	86	84.8	1.2
10	Mrs. AS	29	F	77	75.1	1.9
11	Mr. KD	21	M	85	84.8	0.2
12	Mrs. KN	32	F	80	77.9	2.1
13	Mrs. MJ	20	F	72	71.2	0.8
14	Mrs. AT	22	F	78	75.5	2.5
15	Mr. VT	30	M	94	92.8	1.2
16	Mr. AR	24	M	88	87.2	0.8
17	Mr. AS	38	M	118	116.2	1.8
18	Ms. SP	19	F	71	70.1	0.9
19	Mr. YR	23	M	94	92	2
20	Mr. RA	35	M	88	86.2	1.8

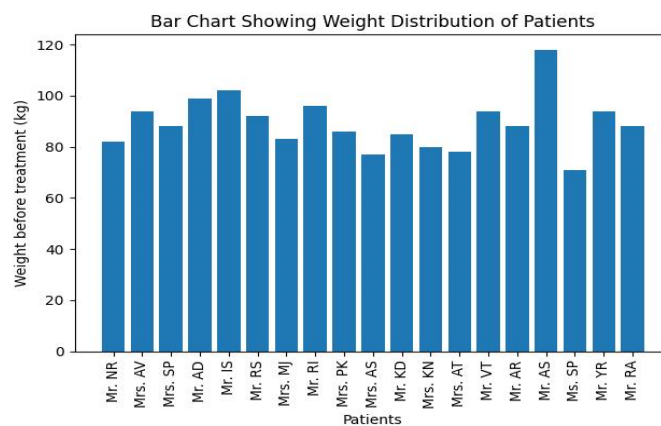


Fig – 5: Weight distribution of patients before treatment

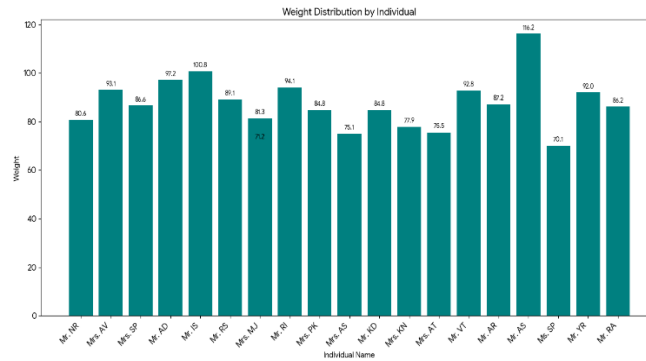


Fig – 6: Weight distribution of patients after treatment

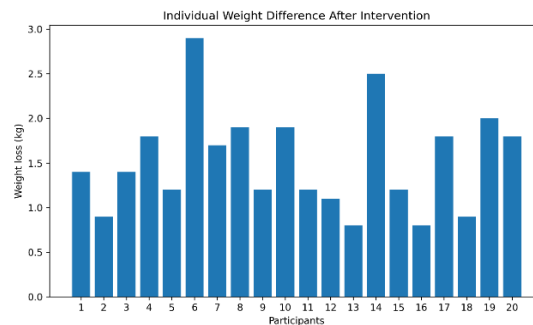


Fig – 7: Weight difference of patients before and after treatment

Statistical Analysis

- Number of subjects (n) = 20
- Mean weight before treatment = 88.35kg
- Standard deviation weight before treatment = 11.02 kg
- Standard error of mean weight before treatment = 2.46 kg
- 95% confidence interval before treatment = 83.19 kg – 93.51 kg
- Mean weight after treatment = 86.83 kg
- Standard deviation weight after treatment = 10.94 kg
- Standard error of mean weight after treatment = 2.45 kg

- 95% confidence interval after treatment = 81.71 kg – 91.95 kg
- Mean weight before & after treatment = 1.52 kg
- Standard deviation weight before & after treatment = 0.64 kg
- Standard error of mean weight before & after treatment = 0.14 kg
- 95% confidence interval before & after treatment = 1.22 kg – 1.82 kg

Test Results

- t value = 8.1
- Degrees of freedom (df) = 19
- p value (two- tailed) = 0.0000000022
P < 0.001

Table 6: Paired t test before & after treatment

PAIRED T TEST BEFORE & AFTER TREATMENT	VALUES
Mean weight	1.52 kg
Standard deviation	0.64 kg
Standard error of mean	0.14 kg
No. Of subjects (N)	20
95% confidence interval	1.22 kg – 1.82 kg

Interpretation of statistical test: The paired t-test shows a statistically highly significant reduction in body weight after treatment when compared to before treatment (p < 0.001).

DISCUSSION

The clinical study shows a significant prevalence across young and middle-aged adult groups, with 55% of participants aged 31–45 and 45% aged 16–30, with an equal

distribution between genders. Occupational analysis reveals a high prevalence among students (30%) and sedentary professionals such as software engineers and managers, suggesting that physical inactivity is a primary contributing factor. Dietary patterns were diverse, with 60% of subjects following a mixed diet and 40% being vegetarian; however, *Garcinia cambogia Q* showed consistent efficacy regardless of dietary habits. Clinical results revealed a 75% positive response rate, with 50% of patients achieving marked relief and 25% showing partial improvement. These findings are supported by a highly significant p-value ($p < 0.001$), confirming the remedy's role in weight reduction.

CONCLUSION

This study provides clinical evidence of a significant reduction in body weight and BMI following treatment confirming that *Garcinia cambogia Q* is a safe and effective homoeopathic intervention for obesity management.

Limitations Of Study

This study was designed to evaluate the clinical efficacy of *Garcinia cambogia Q* as a primary intervention for weight management. However, as the research focused on this single mother tincture, the full symptomatic profile of each patient was not the primary basis for prescription. Furthermore, the six-month study duration may not have been sufficient to observe the long-term sustainability. Given the small sample size of 20 cases, these findings serve as a preliminary assessment, indicating that larger-scale clinical trials are necessary to further validate the impact of this remedy on BMI and BRI parameters.

Declaration by Authors

Ethical Approval: Approved

Acknowledgement: None

Source of Funding: None

Conflict of Interest: No conflicts of interest declared.

REFERENCES

1. World Health Organization. Obesity and overweight. [Internet]. 2021 [cited 2026 Feb 25]. Available from: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
2. Ng M, Fleming T, Robinson M, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis. *Lancet*. 2014;384(9945):766–781.
3. Ahirwar R, Mondal PR. Prevalence of obesity in India: A systematic review. *Diabetes Metab Syndr*. 2019;13(1):318-321.
4. Manoharan R, Rais Mohiuddin MI, Rath P, et al. Effect of Homoeopathic Preparation of *Garcinia Cambogia* on Weight and Lipid Profiles of Obese Individuals: A Prospective Open Level Randomised Control Trial. *J Obes Weight Loss Ther*. 2022; 12:508.
5. Sripradha R, Magadi SG. Efficacy of *Garcinia cambogia* on body weight, inflammation and glucose tolerance in high fat fed male wistar rats. *J Clin Diagn Res*. 2015;9(2):BF01-4.
6. Preuss HG, Bagchi D, Bagchi M, et al. Effects of a natural extract of (-)-hydroxycitric acid (HCA-SX) on weight loss. *Diabetes Obes Metab*. 2004;6(3):171-80.
7. Lee KX, Quek KF, Ramadas A. Dietary and Lifestyle Risk Factors of Obesity Among Young Adults: A Scoping Review. *Curr Nutr Rep*. 2023;12(4):733-743.
8. Boericke, W. (n.d.). Pocket Manual of Homoeopathic Materia Medica and Repertory.
9. Clarke, J. H. (1991). A Dictionary Of Practical Materia Medica. Homoeopathic Book Service.
10. Hahnemann, S. (2023). Organon of medicine. B Jain.
11. Hering, C. (2024). Guiding symptoms of our materia medica: 10-Volume set. B Jain.
12. Després JP. Body fat distribution and risk of cardiovascular disease: an update. *Circulation*. 2012;126(10):1301-13.

How to cite this article: Ambala Sriharitha., Avantika Selote. A Clinical Study to Evaluate the efficacy of *Garcinia cambogia Q* in weight loss management in patients with obesity using BMI and BRI tools. *International Journal of Research and Review*. 2026; 13(3): 153-159. DOI: <https://doi.org/10.52403/ijrr.20260318>
