International Journal of Homoeopathic Sciences

**E-ISSN:** 2616-4493
**P-ISSN:** 2616-4485
www.homoeopathicjournal.com
IJHS 2024; 8(1): 101-106
Received: 29-11-2023
Accepted: 02-01-2024

**Dr. Divya Pandey**
PG Scholar, Department of Materia Medica, Pt. Jawahar Lal Nehru State Homoeopathic Medical College & Hospital, Kanpur, Uttar Pradesh, India

**Dr. Firdaus Jahan Rahman**
PG Scholar, Department of Materia Medica, Pt. Jawahar Lal Nehru State, Homoeopathic Medical College & Hospital, Kanpur, Uttar Pradesh, India

**Corresponding Author:**
**Dr. Divya Pandey**
PG Scholar, Department of Materia Medica, Pt. JawaharLal Nehru State Homoeopathic Medical College & Hospital, Kanpur, Uttar Pradesh, India

# A comparative study of *Fucus vesiculosus* and Phytolacca berry mother tincture in the management of obesity

**Dr. Divya Pandey and Dr. Firdaus Jahan Rahman**

**DOI:** https://doi.org/10.33545/26164485.2024.v8.i1b.1055

**Abstract**
**Background:** Obesity is one of the most important public health problems the world is facing today. The worldwide obesity has nearly tripled since 1975. About 39% of adults aged 18 years were overweight and 13% were obese in 2016. One-third of the world's population is now overweight or obese. Recently, in the COVID -19 pandemic, most fat persons were impacted due to co-morbidities and weakened immunity. Homoeopathic management of obesity, along with lifestyle changes and diet management, is being studied to determine the efficacy of homoeopathic drugs, as mentioned in this review. This study revealed that maximum incidence of obesity subjects of middle age was seen in the age group 31-40 years and females were found more prone to develop obesity than males.
**Conclusion:** In this study, Statistical analysis for Changes in BMI level before and after treatment was done by using ANOVA test and found to have significant improvement in BMI level by *Fucus vesiculosus* in 40% cases and 23% in *Phytolacca berry*. Hence, *Fucus vesiculosus* was found to be more useful in the management of obesity.

**Keywords:** Overweight, Obesity, BMI, Low calorie diet, Non-communicable disease, weight loss

## 1. Introduction
Obesity is defined as "an excess of adipose tissue that imparts health risk; a body weight of 20% excess over ideal weight for age, sex and height is considered a health risk" [1]. Obesity is considered when there is 25 % or more total body fat in men and 35 % or more body fat in women. Although percentage of body fat can also be estimated by various methods, such as measuring skin-fold thickness, bioelectrical impedance, or underwater weighing but these methods are rarely used in clinical practice whereas Body Mass Index (BMI) is commonly used to assess obesity.

### 1.1 Etiology
An increased intake of energy-dense foods that are high in fat, salt and sugars but low in vitamins, minerals and other micronutrients and decrease in physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization are the major causes of obesity.

➢ Obesity usually results from a combination of causes and contributing factors, including:

- Genetics
- Physical Inactivity
- Unhealthy diet and eating habits
- Family lifestyle
- Quitting smoking
- Pregnancy
- Lack of sleep
- Certain medications
- Age
- Social and economic issues
- Medical problems

### 1.2 Classification of Obesity

**A.** There are mainly two distinct **Phenotypes** of Obesity [2].

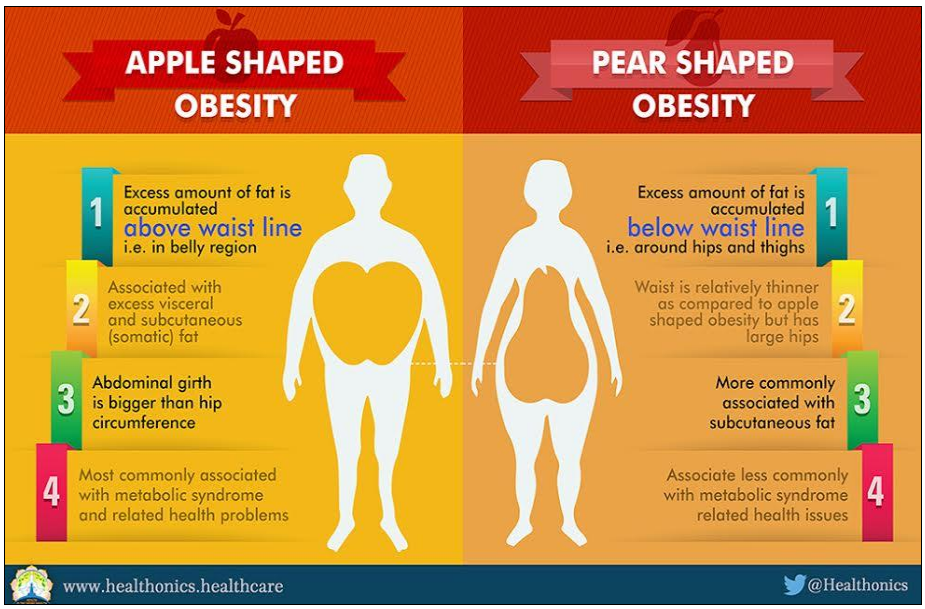



**Fig 1:** Phenotype of Obesity

**B)** According to BMI {weight (kg) divided by height (meters square)}

- Optimal weight = BMI 18.5 to 24.9 kg/m$^2$
- Overweight = BMI 25 to 29.9 kg/m$^2$
- Obese = BMI 30 kg/m$^2$ and above

**C)** There are three classes of obesity based on BMI. These are:

- Class 1 Obesity = BMI 30 to 35 kg/m$^2$
- Class 2 Obesity = BMI 35 to 40 kg/m$^2$
- Class 3 Obesity = BMI 40 kg/m$^2$ and above; Also known as morbid or severe obesity.

**D)** Three forms of obesity according to the area of fat distribution

1. **Peripheral obesity:** Excessive fat accumulation in the hips, thighs and buttocks
2. **Central obesity:** Excessive fat accumulation around the abdomen. It increases the risk factors of obesity, such as diabetes, high blood pressure, heart disease, kidney disease and some cancers.
3. **Combination obesity:** Accumulation of excess fat in both the peripheral and central regions.
4. **Combination obesity:** Accumulation of excess fat in both the peripheral and central regions.

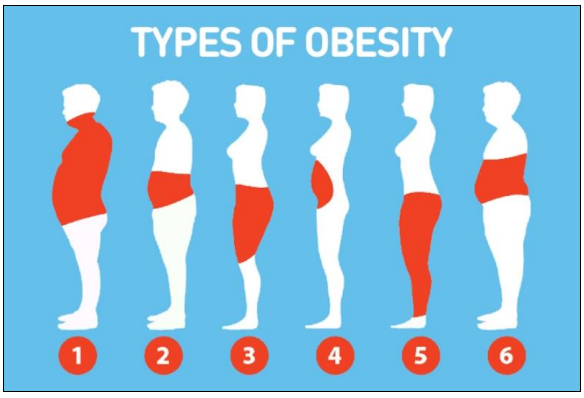



**Fig 2:** Types of Obesity – according to fat accumulation site

**E) Types of obesity that occur due to diseases**

Obesity is also classified based on its association with other diseases:

**i) Type 1 obesity:** This type of obesity is caused more commonly due to the excessive intake of calories and a lack of physical activity.

**ii) Type 2 obesity:** This type of obesity is a result of diseases such as hypothyroidism (a condition characterised by an underactive thyroid), Cushing's syndrome (a condition associated with high cortisol levels), polycystic ovary syndrome (an imbalance of female reproductive hormones) and insulinoma (a type of pancreatic tumour).

**F) Obesity based on the size and number of fat cells**

1. **Hypertrophic obesity:** This type of obesity occurs due to the increase in the size of adipose cells (fat cells). It predominant in adults.
2. **Hyperplastic obesity:** This type of obesity occurs due to an increase in the number of fat cells. This type is predominant among children.

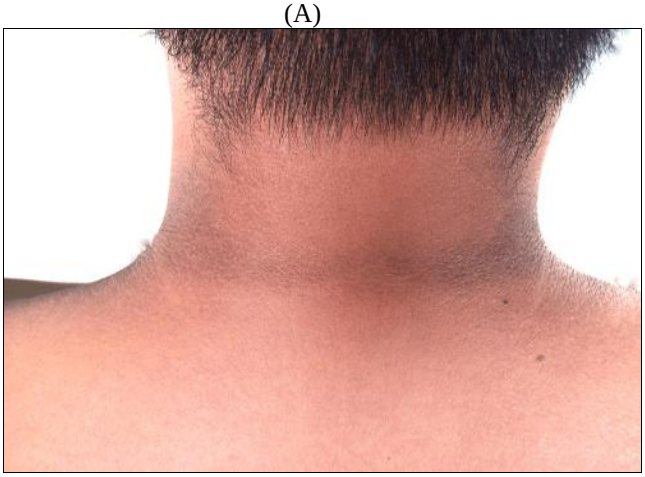
### 1.3 Common symptoms and signs

- Breathing difficulty
- Sweating more than usual
- Snoring
- Difficulty while sleeping
- Skin rashes from moisture accumulating in the folds
- Lassitude, fatigue
- Backache and joint pain
- Intolerance of heat
- Constipation
- Psychological issues such as negative self-esteem, depression, shame, and social isolation

➢ **Signs**

- Stretch marks on stomach, hips and back.
- Acanthosis nigricans

(A)



(B)

**Fig 3:** Signs of Obesity (A) Stretch marks and (B) Acanthosis nigricans

### 1.4 Complications of obesity

Different types of obesity increase the risk of several chronic diseases. These are:

1. **Type 2 diabetes:** Due to excess fat, body become resistant to insulin which leads to high blood sugar levels or type 2 diabetes.
2. **Heart disease and stroke:** There is accumulation of fat cells in arteries causing narrowing or hardening arteries that block the blood flow and increases risk of heart disease and stroke.
3. **Sleep apnea:** Excess fat makes airways narrow. This causes breathing to stop for short periods during sleep. Low blood oxygen can cause an irregular heartbeat.
4. **Liver disease:** Excess fat build-up around the liver leads to liver damage or failure.
5. **Gallbladder disease:** Obesity increases risk of gallstones due to high cholesterol levels in the bile.
6. **Osteoarthritis:** Excess weight due to obesity puts pressure on joints, like knees, hips and ankles, and causes pain, swelling and stiffness.
7. **Cancers:** An accumulation of fat cells around vital organs increases the risk of developing cancer especially of uterus, cervix, breast, ovary, colon, rectum, Oesophagus, gallbladder, kidney, liver, pancreas and prostate.
8. **Infertility:** Different types of obesity can lead to hormonal imbalances. It disrupts the menstrual cycle and ovulation and leads to reduced fertility.

### 1.5 Management of obesity

The two basic goals of weight management are to reduce body weight by creating a negative energy balance and to sustain a reduced body weight over an extended period of time. A 5–15% decrease in starting weight has been proposed as the new success criterion by the WHO. As a result, the initial objective of weight reduction therapy should be to lower body weight by roughly 10% over the course of six months. If this goal is met, further weight loss may be taken into account. However, most patients find it challenging to continue losing weight after a six-month period, thus the patient's aim should be to maintain the lower body weight. Only if the patient stays committed to an ongoing program of behavior therapy, physical activity, and diet weight loss is possible.

The objectives of the dietary approaches are twofold: first, to achieve an energy balance deficit of 500–600 kcal/day (2100–2520 kJ/day), which would lead to a weight loss of 0.5–1.0 kg/week; second, to make sure that obese people are eating a healthy, balanced diet that is low in saturated fat and high in complex carbohydrates. It is crucial that the counsel is created specifically for the patient, considering their energy needs. The dietary history should serve as the starting point for any discussions with each patient about potential modifications. Traditionally, patients have been instructed to "go on a diet" or given "a diet sheet" as a treatment method. This is no longer appropriate because it implies that changes are just temporary. It is clearly obvious that long-term adjustments to eating habits, food preferences, and lifestyle are required for proper weight management. Low calorie diets (LCDs) and low-fat diets (LFDs) are the two main dietary alternatives. According to several researches, energy intake, not the makeup of the nutrients, was the main factor in weight loss on calorie-restricted diets. The initial weight reduction produced by very low-calorie diets, which provide roughly 400–500 kcal/day (1680–2100 kJ/day), is more than that of LCDs, but the weight loss over the long run (more than a year) is similar to that of LCDs.

Physical exercise should be introduced gradually for the majority of obese people (for instance, slow walking or swimming). Three days a week, the patient can begin a 10-minute stroll. The length of the workout could be raised to 30 to 45 minutes at least five days a week with time and based on capacity and progress. This routine allows for an additional 100–200 kcal/day (840 kJ/day) of energy expenditure.

Homoeopathic treatment is based on "similia similibus curanter'', [5] which means like is cured by like. It is a holistic approach in which we treat the patient as a whole, considering his pathological conditions, to make the totality of symptoms for similimum, as mentioned in aphorism 7 – "the only thing that can determine the choice of the most appropriate remedy- and thus, in a word, the totality of symptoms must be the principle, indeed the only , thing the physician has to take note of in every case of disease and to remove by means of his art, in order that the disease shall be cured and transformed into health"[5].

#### 1.5.1 Medicines used

***A) Fucus vesiculosus*:** It is a seaweed commonly known as bladder wrack, belong to the family of Fucaceae and is generally found on coasts of the North Sea, the western Baltic Sea, and Atlantic and Pacific oceans. It is used to treat obesity and non-toxic goiter and is also useful in exophthalmia. Obese people have enlarged thyroid glands. It

is a powerful tissue remedy that should be compared to Iodine, which it contains in significant quantities. The symptoms were acquired from people taking the obesity-reduction medication. In this, the rate of digestion is accelerated and flatulence is reduced. The stomach works more rapidly and the mealtime is anticipated more eagerly. Digestion is no longer accompanied with flushing of the cheeks, fullness, weight in the epigastric region, and bursts of heat towards the head.

**B) *Phytolacca berry*:** *Phytolacca Berry* is a pure extract of the plant Poke Root and is known to regulate hunger and aid in proper digestion. It helps to lower the intake of food and hence increases the activity of the mind and body by increasing the metabolism. It has been shown to regulate hunger and improve digestion. It has a beneficial effect on digestion and absorption, lowering food intake, mental levels of stupor, and exhaustion. Hyperacidity and a sense of weakness are reduced. Fat metabolism is boosted. It suppresses hunger through affecting digestion. It ensures appropriate food absorption and lowers hyperacidity and weakness induced by insufficient food intake.

## 2. Materials and Methods

This was a prospective observational study conducted at the outpatient department of Pt. Jawaharlal Nehru State Homoeopathic Medical College and Hospital, Kanpur. Total period of study was of 18 months. Total sample size taken was 60. Patients were enrolled on the basis of inclusion and exclusion criteria. Case taking was done according to the guidelines given by Dr. Hahnemann in Organon of Medicine in aphorism 83-104.

### 2.1 inclusion / exclusion criteria

| 1. Inclusion criteria | 2. Exclusion criteria |
|---|---|
| | 7. Person with age below 20 years and above 60 years were excluded. |
| | 8. Pregnant or lactating women. |
| 3. Participants having BMI > 25. | 9. Participants diagnosed with major health diseases such as chronic kidney disease, chronic liver disease and cardiac diseases were excluded. |
| 4. Participants aged from 20 years to 60 years were included. | |
| 5. Participants of all sex group such as male, female and others were included. | 10. Participants using conventional psychological or drug therapies, or herbal, or homoeopathic medication for any disease were excluded. |
| 6. Persons willing to participate in the study | 11. Participants dropped out in the middle of the study period. |
| | 12. The participants were requested to continue with their daily routine for the duration of the study. |

**2.2: Intervention:** Detailed case-taking as per the homoeopathic principles was being done for all the patients enrolled. After case-taking, a complete process of repertorization was followed, and medicine was prescribed on each occasion, taking into consideration presenting symptom totality, clinical history details, constitutional features, repertorization as and when required, and due consultation with Materia Medica, the most suitable single remedy was prescribed. The remedy prescribed was in mother tincture. Medicine was given in calculated drops in half a cup of water before meals two or three times a day, and subsequent follow-ups were taken every 2 weeks, preferably. Lifestyle modifications were introduced, like oily and junk food restrictions, alcohol restrictions, smoking, some physical activity, and a healthy diet including fruits and vegetables.

**2.3: Advise to Patient:** A proper diet chart was given to all the patients according to their BMI. All patients were advised to have a proper sleep of at least 6-7 hours. Also, drink lukewarm water at least 3–4 liters per day**.**

**2.4: Data Analysis:** After the first prescription, every patient was followed up at a 15-day or 1-month interval according to the case. The response to the prescription, which is aggravation, amelioration, or no change, was analyzed at the end of the study. BMI was assessed at baseline and thereafter at weeks during follow-ups.

**2.5: Diagnostic criteria** for obesity:

- Body weight >20% above the ideal body weight.
- Waist circumference- women >35 inch & men >40 inch were considered as obese.
- Body mass index [BMI] = $\frac{M}{H^2}$ kg/m$^2$ (M = mass, H = height)

### 2.6 Criteria for results [4]

A) **Significant Improvement:** Decrease in weight with feeling of physical well-being, increase in physical activities.

- Reduction in BMI > 4-5, 8-10% weight loss

B) **Moderate Improvement:** Less reduction in weight, low physical activity

- Reduction in BMI > 2-3, 4-6% weight loss

C) **Mild improvement:** Very less reduction in weight

- Reduction in BMI < 0-1, 1-2% weight loss

## 3. Results

**3.1 Age**: Patients of age more than 20 years and less than 60 years were taken into the study. Patients belong to the middle age (30 years- 40 years) were the commons:

**Table 1:** Showing number of patients in different age group

| Age group | No. of people |
|---|---|
| 20-30 | 16 |
| 31-40 | 23 |
| 41-50 | 14 |
| 51-60 | 7 |

### 3.2 *Fucus vesiculosus*

**Table 2:** represents pre- and post-details of "FUCUS" patients

| S. No | Weight (Kg) | | BMI | | Result Criteria |
|---|---|---|---|---|---|
| | Before Treatment | After Treatment | Before Treatment | After Treatment | |
| 1 | 68.7 | 54.5 | 28.6 | 22.7 | Significant Improvement |
| 2 | 88.3 | 72.1 | 29.8 | 24.4 | Significant Improvement |
| 3 | 75.5 | 64 | 30.6 | 26 | Significant Improvement |
| 4 | 77.9 | 65.2 | 31.6 | 26.5 | Significant Improvement |
| 5 | 70.9 | 61.8 | 29.5 | 25.7 | Moderate Improvement |
| 6 | 83.4 | 72.2 | 34.7 | 30.1 | Significant Improvement |
| 7 | 56.8 | 50.6 | 28.2 | 25.1 | Moderate Improvement |
| 8 | 67.4 | 58.4 | 26.3 | 22.8 | Moderate Improvement |
| 9 | 87.1 | 67.5 | 29.1 | 22.7 | Significant Improvement |
| 10 | 89.8 | 74.8 | 31.1 | 25.9 | Significant Improvement |
| 11 | 74.3 | 66.8 | 29 | 26.1 | Moderate Improvement |
| 12 | 73.4 | 64.2 | 28.7 | 25.1 | Moderate Improvement |
| 13 | 106.3 | 88.5 | 32.8 | 27.3 | Significant Improvement |
| 14 | 74.5 | 65.4 | 28.4 | 24.9 | Moderate Improvement |
| 15 | 77.8 | 72.2 | 26.3 | 24.4 | Mild Improvement |
| 16 | 64.5 | 54.8 | 27.9 | 23.7 | Significant Improvement |
| 17 | 75.8 | 69.8 | 26.2 | 24.2 | Mild Improvement |
| 18 | 69.3 | 57.4 | 28.1 | 23.3 | Significant Improvement |
| 19 | 70.4 | 62.3 | 29.3 | 25.9 | Moderate Improvement |
| 20 | 71.3 | 61.8 | 27.9 | 24.1 | Moderate Improvement |
| 21 | 90.2 | 80 | 30.5 | 27 | Moderate Improvement |
| 22 | 86.6 | 77.1 | 28.3 | 25.1 | Moderate Improvement |
| 23 | 77.1 | 69.3 | 32.1 | 28.8 | Moderate Improvement |
| 24 | 74.3 | 69.8 | 25.7 | 24.2 | Mild Improvement |
| 25 | 84.3 | 76.9 | 28.5 | 26 | Moderate Improvement |
| 26 | 88.3 | 72.3 | 28.8 | 23.6 | Significant Improvement |
| 27 | 80.3 | 71.2 | 27.8 | 24.6 | Moderate Improvement |
| 28 | 67.3 | 59.4 | 27.3 | 24.1 | Moderate Improvement |
| 29 | 76.3 | 62.6 | 27.4 | 22.4 | Significant Improvement |
| 30 | 68.8 | 60.4 | 26.9 | 23.6 | Moderate Improvement |

### 3.3 Phytolacca Berry

**Table 3:** Represents pre- and post-details of "PHYTOLACCA" patients

| S. No | Weight (Kg) | | BMI | | Result Criteria |
|---|---|---|---|---|---|
| | Before Treatment | After Treatment | Before Treatment | After Treatment | |
| 1 | 79.3 | 68.3 | 32.2 | 27.7 | Significant Improvement |
| 2 | 70.5 | 61.4 | 29.3 | 25.6 | Moderate Improvement |
| 3 | 92.2 | 86.5 | 31.2 | 29.2 | Significant Improvement |
| 4 | 85.5 | 74.4 | 33.4 | 29 | Significant Improvement |
| 5 | 66.9 | 58.5 | 29 | 25.3 | Moderate Improvement |
| 6 | 67.4 | 57.3 | 25.1 | 21.3 | Moderate Improvement |
| 7 | 72.3 | 66.2 | 29.3 | 26.9 | Moderate Improvement |
| 8 | 66.4 | 59.5 | 27.6 | 24.7 | Moderate Improvement |
| 9 | 64.1 | 56.3 | 28.5 | 25 | Moderate Improvement |
| 10 | 72.3 | 64.7 | 28.2 | 25.3 | Moderate Improvement |
| 11 | 99.1 | 83.4 | 34.3 | 28.9 | Moderate Improvement |
| 12 | 68.8 | 59.3 | 27.9 | 24.1 | Significant Improvement |
| 13 | 86.5 | 79.1 | 27.6 | 25.2 | Moderate Improvement |
| 14 | 85.1 | 76.4 | 34.5 | 31 | Moderate Improvement |
| 15 | 87.5 | 79.3 | 36.5 | 33 | Moderate Improvement |
| 16 | 70.6 | 62.4 | 31.4 | 27.7 | Moderate Improvement |
| 17 | 72.3 | 64.7 | 26.9 | 24.1 | Moderate Improvement |
| 18 | 68.7 | 63.5 | 26.5 | 24.5 | Moderate Improvement |
| 19 | 70.4 | 60.4 | 28.6 | 24.5 | Mild Improvement |
| 20 | 85.4 | 78.4 | 28.9 | 26.5 | Significant Improvement |
| 21 | 76.3 | 68.4 | 33 | 29.6 | Moderate Improvement |
| 22 | 93.4 | 84.4 | 34.3 | 31 | Moderate Improvement |
| 23 | 68.5 | 60.9 | 27.8 | 24.7 | Moderate Improvement |
| 24 | 79.5 | 68.5 | 33.1 | 28.5 | Moderate Improvement |
| 25 | 68.5 | 60.3 | 29.6 | 26.1 | Significant Improvement |
| 26 | 92.3 | 82.6 | 39.9 | 35.8 | Moderate Improvement |
| 27 | 70.3 | 61.8 | 28.5 | 25.1 | Significant Improvement |
| 28 | 72.4 | 66.3 | 30.1 | 27.6 | Moderate Improvement |
| 29 | 64.6 | 58.8 | 28.7 | 26.1 | Moderate Improvement |
| 30 | 84.5 | 72.4 | 26.1 | 22.3 | Moderate Improvement |

**3.4 Anova test on BMI before treatment of *Fucus vesiculosus* and Phytolacca berry:**

| | | | |
|---|---|---|---|
| N | 30 | 30 | 60 |
| ∑X | 867.4 | 908 | 1775.4 |
| Mean | 28.9133 | 30.2667 | 29.59 |
| $\sum X^2$ | 25202.58 | 27812.5 | 53015.08 |
| Standard. Deviation | 2.0608 | 3.3752 | 2.8552 |

**Results**

| Source | Ss | Df | MS | |
|---|---|---|---|---|
| Between-treatment | 27.4727 | 1 | 27.4727 | F=3.51343 |
| Within treatment | 453.5213 | 58 | 7.8193 | |
| TOTAL | 480.994 | 59 | | |

The *f*-ratio value is 3.51343. The *p*-value is .065912. The result is *not* significant at $p < .05$.

**3.5 Anova test on BMI after treatment of *Fucus vesiculosus* and Phytolacca berry**

| N | 30 | 30 | 60 |
|---|---|---|---|
| ∑X | 750.3 | 806.3 | 1556.6 |
| Mean | 25.01 | 26.8767 | 25.943 |
| $\sum X^2$ | 18856.81 | 21953.39 | 40810.2 |
| Standard. Deviation | 1.7793 | 3.1224 | 2.6896 |

**Results**

| Source | SS | Df | MS | |
|---|---|---|---|---|
| Between-treatment | 52.2667 | 1 | 52.2667 | F=8.09383 |
| Within treatment | 374.5407 | 58 | 6.4576 | |
| TOTAL | 426.8073 | 59 | | |

The *f*-ratio value is 8.09383. The *p*-value is .006128. The result is significant at $p < .05$.

## 4. Discussions

The present study was conducted to compare the effectiveness of homeopathic medicines in overweight and obese patients between the age group of 20 to 60. This study consists of 60 cases of overweight and obese patients. The outcome of the study is briefly discussed, along with observations based on statistical analysis using ANOVA TEST (single factor). In this study, the reduced BMI levels were significantly improved towards normal after treatment to a great extent (p more than 0.001). After completion of the study, in *Fucus Vesiculosus*, out of 30, 12 cases showed 40% significant improvement in BMI levels, 15 cases showed 50% moderate improvement, and 3 cases showed 10% mild improvement. In *Phytolacca Berry*, out of 30 cases, 7 cases showed 23% significant improvement in BMI levels, 22 cases showed 73% moderate improvement, and 1 case showed 4% mild improvement.

## 5. Conclusion

On the basis of the above inference, it is concluded that between these two medicines, *Fucus Vesiculosus* was found to be more helpful in losing weight along with dietary management.

## 6. Ethical clearance

Ethical clearance has been obtained from the institution prior to the initiation of the study.

**7. Financial support and sponsorship:** Nil

**8. Conflict of interest**: None

## 9. References

1. Harsh M. Textbook of Pathology, 7th edition, New Delhi; c2015. p. 238.
2. Riddhi MJ. To study the efficacy of *Fucus vesiculosus*, phytolacca berry, *Calotropis gigantea* mother tincture in management of obesity with special emphasis on weight reduction, JETIR, 2022, 9(7).
3. Ralston SH, Penman ID, Strachan Mark WJ, Hobson RP. Davidson's Principles and Practice of Medicine, 19th edition; c2018.
4. Samuel B. Organon of Medicine, 6th Reprint Edition, B. Jain Publishers, New Delhi; c2002.
5. William H, Boericke's New Manual of Homoeopathic Materia Medica with Repertory including Indian Drugs, nosodes, uncommon rare remedies, mother tinctures, relationship, sides of body, 3rd revised and augmented edition B. Jain Publishers Pvt. Ltd, New Delhi; c2017.
6. Allen TF. The Encyclopedia of Pure Materia Medica, 4.
7. Allen HC. Allen's Keynotes, Rearranged and Classified with leading remedies of the Materia Medica & Bowel Nosodes, 10th edition, B. Jain Publisher Pvt. Ltd., New Delhi.
8. Yadubir S. Miracles of Mother Tinctures with Therapeutic Hints and Treatment of Diseases, B Jain Publishers Pvt. Ltd.
9. Jain A K. Textbook of Physiology Avichal Publishing Company; 7th edition; c2017.
10. Park K. Textbook of Preventive and Social Medicine.17 edition; c2002.

**How to Cite This Article**
Pandey D, Gupta A, Rahman FJ. A comparative study of *Fucus vesiculosus* and Phytolacca berry mother tincture in the management of obesity. International Journal of Homoeopathic Sciences. 2024;8(1):101-106.