

INTRODUCING

# OBEPPARALPHA



# Win

WHEN

# Loose



# Obepparalpha

YAGONA 285 mg Capsules  
(A Patented blend of Oleoylethanolamide, Pantethine and Valine)

# Oleoylethanolamide (OEA) Increases the Expression of PPAR- $\alpha$ and Reduces Appetite and Body Weight in Obese people: A Clinical Trial

- A randomized, double-blind, placebo-controlled clinical trial was carried out on 60 healthy obese people.

- Analysis was done on 56 participants who continued intervention until the end of the study.

- **Two Groups:**

**Group-1** Intervention Group (N=27)

**Group-2** Placebo Group (N=29)

- **Dosage:**

*Intervention group* received two 125 mg OEA capsules daily.

*Placebo group* received the same amount of starches.

- **Duration of Study:** 60 days

PPAR- $\alpha$  gene expression, Weight, body mass index, waist circumference, and fat percent were observed after 60 days.

- **Results:**

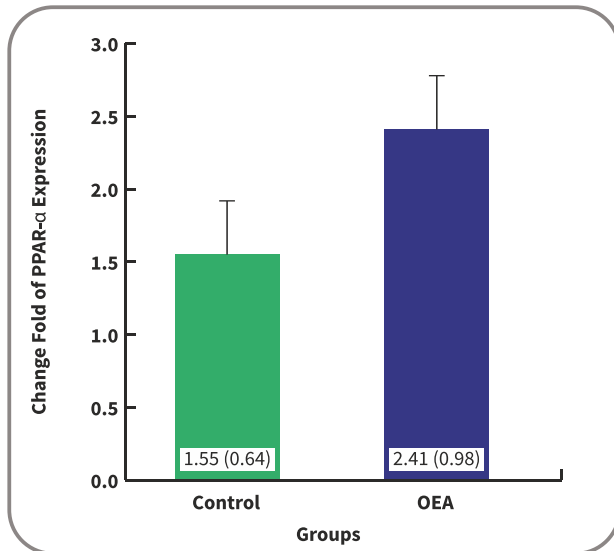
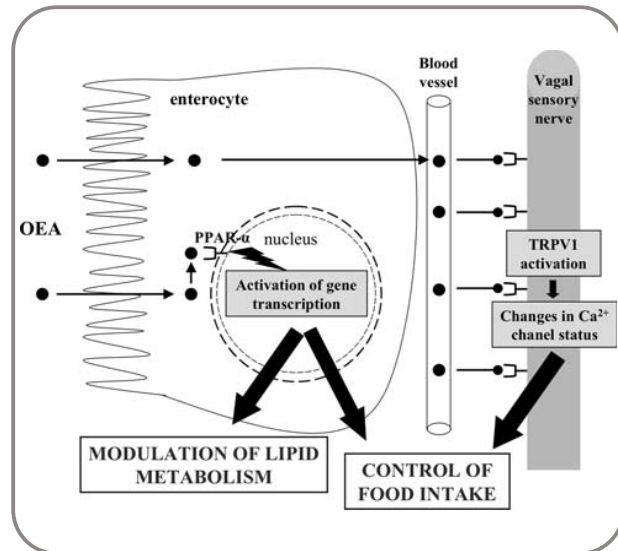


Fig: Mean (SD) difference in fold-change of PPAR- $\alpha$  expression in OEA and control groups



Possible mechanisms of the actions of OEA in the management of Obesity

- PPAR- $\alpha$  gene expression was increased (mean  $\pm$  SD) 2.41  $\pm$  0.98 fold in the intervention group vs. 1.55  $\pm$  0.644 fold in the placebo group.

Table : The effect of OEA supplementation on the anthropometric measurements and body composition in obese people (n=56)

| Variables                       | OEA group (n=27)      | Placebo Group (n=29)  | F (df, Error), ηp <sup>2</sup> | p**    |
|---------------------------------|-----------------------|-----------------------|--------------------------------|--------|
| <b>Weight (kg)</b>              |                       |                       |                                |        |
| Before                          | 93.0(13.2)            | 91.2 (13.6)           |                                |        |
| After                           | 91.8 (13.1)           | 91.7 (13.5)           | F (1, 49)= 14.512, 0.228       | <0.001 |
| t (df), p*                      | t (26) = 3.24, 0.003  | t (28) = -1.93, 0.063 |                                |        |
| <b>BMI (kg/m<sup>2</sup>)</b>   |                       |                       |                                |        |
| Before                          | 34.7 (2.4)            | 35.1 (2.8)            |                                |        |
| After                           | 34.4 (2.5)            | 35.4 (2.8)            | F (1, 49)= 9.666, 0.165        | 0.003  |
| t (df), p*                      | t (26) = 1.91, 0.067  | t (28) = -2.71, 0.011 |                                |        |
| <b>Waist circumference (cm)</b> |                       |                       |                                |        |
| Before                          | 105.3 (13.8)          | 102.5 (10.5)          |                                |        |
| After                           | 100.6 (14.5)          | 103.0 (11.6)          | F (1, 49) = 18.671, 0.276      | <0.001 |
| t (df), p*                      | t (26) = 5.03, <0.001 | t (28) = -0.59, 0.559 |                                |        |
| <b>Hip circumference (cm)</b>   |                       |                       |                                |        |
| Before                          | 118.8 (9.0)           | 119.4 (7.6)           |                                |        |
| After                           | 116.7 (9.2)           | 119.0 (7.6)           | F (1, 49)= 2.979, 0.057        | 0.091  |
| t (df), p*                      | t (26) = 2.88, 0.008  | t (28) = 0.63, 0.545  |                                |        |
| <b>Fat mass (kg)</b>            |                       |                       |                                |        |
| Before                          | 36.3 (7.6)            | 34.5 (6.2)            |                                |        |
| After                           | 35.1 (7.5)            | 35.2 (6.6)            | F (1,49) = 14.089, 0.223       | <0.001 |
| t (df), p*                      | t (26) = 3.99, <0.001 | t (28) = -2.24, 0.033 |                                |        |
| <b>Fat-free mass (kg)</b>       |                       |                       |                                |        |
| Before                          | 57.3 (14.3)           | 55.5 (13.2)           |                                |        |
| After                           | 58.0 (14.6)           | 57.7 (13.0)           | F (1, 48)= 3.023, 0.059        | 0.088  |
| t (df), p*                      | t (25) = -0.46, 0.646 | t (28) = -2.08, 0.046 |                                |        |
| <b>Fat percent (%)</b>          |                       |                       |                                |        |
| Before                          | 39.1 (6.9)            | 37.7 (8.4)            |                                |        |
| After                           | 38.1 (6.9)            | 38.0 (5.7)            | F (1,49) = 0.009, <0.001       | 0.923  |
| t (df), p*                      | t (26) = 4.49, <0.001 | t (28) = -2.08, 0.766 |                                |        |

Data were presented as Mean (SD)

\*paired t-Test

\*\* ANCOVA test after adjusting for baseline measurements and confounder factors including age, sex, occupational and educational status.

Supplementary data for Paired t-Test presented as t (df), p.

Supplementary data for ANCOVA test presented as F (df, Residual or Error), Partial Eta Squared or ηp<sup>2</sup>.

- Weight, body mass index, waist circumference, and fat percent decreased significantly at the end of the study in the intervention group.
- Hunger, the desire to eat, and cravings for sweet foods decreased significantly and fullness increased significantly by the end of study in the intervention group at the end of study.
- Participant reported **no side effect or symptoms** either during OEA treatment or at the end of Intervention.
- **Conclusion:** Use of OEA as a complementary approach could be effective in suppressing appetite and modulating energy balance in obese people.

# Obepparalpha

YAGONA 285 mg Capsules

(A Patented blend of Oleoylethanolamide, Pantethine and Valine)

## Description-

**Obepparalpha** is novel approach to manage Body mass index. It is a patented blend that contains Oleoylethanolamide, Pantethine and Valine.

## Indication-

**Obepparalpha** due to its lipid modulating and anti-inflammatory activity has been indicated mainly for Metabolic Syndromes including obesity management resulting in weight loss and weight maintenance.

**Obepparalpha** is also indicated in obese patients with NAFLD due to weight loss property.

## Mechanism of action-

**Obepparalpha** works by the following mechanisms in the Obesity conditions:

### 1. Induces satiety via peripheral nervous system stimulation

### 2. Modulates the fatty acids in the body by -

- By increasing the fatty acid uptake
- By increasing the fatty acid  $\beta$ -oxidation
- By reducing the synthesis of lipogenesis

### 3. Exerts anti-inflammatory effect

### 4. Helps in the Inhibition of cholesterol synthesis

Thus, **Obepparalpha** presents a NOVEL and SAFER APPROACH towards OBESITY related METABOLIC DISORDERS by modulating  $\beta$ -oxidation of Fats and reducing de-Novo lipogenesis. Further, it regulates many co-factors involved in obesity like inducing satiety- leading to fed state scenario- so there is no excessive dietary fat, attenuating the liver inflammatory cytokines- making the condition less severe and inhibition of cholesterol synthesis which is the main complication in Obesity related Metabolic disorder

## Dosage-

Recommended dose is 1-2 capsules in a day or as suggested by Healthcare professional.

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# USA PATENT CERTIFICATE

United  
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America



To Promote the Progress  
of Science and Useful Arts

The Director

of the United States Patent and Trademark Office has received  
an application for a patent for a new and useful invention. The title  
and description of the invention are enclosed. The requirements  
of law have been complied with, and it has been determined that  
a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making,  
using, offering for sale, or selling the invention throughout the United States of America or  
importing the invention into the United States of America, and if the invention is a process,  
of the right to exclude others from using, offering for sale or selling throughout the United  
States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(4)  
or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the  
Maintenance Fee Notice on the inside of the cover.

Andrew Iken

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



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(54) **PHARMACEUTICAL COMPOSITION FOR PREVENTION OF DIET INDUCED OBESITY** (58) Field of Classification Search  
None  
See application file for complete search history.

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(72) Inventors: **Anshu Shyam Singh, Gurgaon (IN); Vedprakash Mishra, Gurgaon (IN); Neelima T., Rajasthan (IN)** (56) **References Cited**  
U.S. PATENT DOCUMENTS  
4,042,687 A \* 8/1977 Guss A2M 3/642 51448

(73) Assignee: **FRIMLINE PRIVATE LIMITED, Gurgaon (IN)** FOREIGN PATENT DOCUMENTS

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days. CN 02257844 A 7/2012  
WO 02060650 A2 10/2002 (Continued)

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(51) **Int. Cl.**  
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(57) **ABSTRACT**

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12 Claims, 3 Drawing Sheets

