## **Case Report**



# A Case Report on the Effectiveness of Plant Based Weight Loss Support Supplement for Weight Management

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## Abstract

**Introduction:** Obesity is a common health problem and it is increasing around the world. Herbal medicines are the mostly used alternative treatment for weight reduction. The aim of this study was to assess the efficacy of weight loss support for the treatment of obesity. **Case Presentation:** A total of 44 cases were analyzed over a 30-day treatment period. Participants received one tablet of the weight loss support product twice daily. The study assessed changes in body weight, inch loss, and constipation. Participants were provided with dietary counseling and encouraged to exercise daily. Co- morbidities, concomitant medications, and adverse events were monitored throughout the study period. **Result and Discussion:** The treatment resulted in significant weight reduction, with a mean 1.55 kg decrease after 15 days and a 2.84 kg decrease after 30 days (p<0.001). Notably, there was a 90% reduction in subjects experiencing constipation by day 30, indicating improved digestive health. Furthermore, 43.18% subjects experienced an inch loss >1 inch, while 56.81% had an inch loss of ≤1 inch. The product was well-tolerated, with no adverse events reported. **Conclusion:** This case study suggests that GPlife Healthcare's natural plant-based weight loss support product may be effective in supporting weight management. The herbal supplements should be used as part of a comprehensive weight management strategy that includes proper diet and exercise. Further research with larger sample sizes and longer durations is needed to confirm these findings and establish the long-term safety and efficacy of the product.

Keywords: Obesity, Weight loss, Herbal, Plant based, Green tea, Cinnamon

# Introduction

Obesity is a serious and growing health problem around the globe. Its medical burden includes multiple comorbidities, including insulin resistance, hypertension, and dyslipidemia, is associated with complications such as type 2 diabetes, cardiovascular disease, and nonalcoholic fatty liver disease, and it significantly reduces life expectancy <sup>[1]</sup>. In 2022, more than 1 billion people worldwide are obese – 650 million adults, 340 million adolescents and 39 million children. In addition, this number continues to rise. Approximately 167 million people will be overweight or obese by 2025, according to the World Health Organization. Obesity is a condition in which excessive fat is accumulated that may adversely affect health. For adults WHO defines obesity is a BMI greater than or equal to 30; and overweight is a BMI greater than or equal to 25<sup>[2]</sup>.

The cornerstone of weight management is lifestyle modification (diet and exercise), antiobesity medications, endoscopic interventions, and surgical procedures; however, maintaining weight loss over the long-term is difficult <sup>[3]</sup>. The US Food and Drug Administration (FDA) has approved only five medications for long-term use - Orlistat, Phentermine plus

Topiramate, Naltrexone plus Bupropion, Liraglutide, and Semaglutide. It is well known that obesity has adverse health effects, and anti-obesity drugs can assist people in losing weight, but only few patients actually use these medications due to concerns about safety and efficacy, as well as inadequate health insurance coverage<sup>[4]</sup>.

Health experts agree that a healthy eating pattern, reduction in caloric intake, and physical activity are the basis for achieving long-term weight loss. Despite this, weight loss and weight management regimens have frequently proven ineffective <sup>[5]</sup>. Consequently, effective medical interventions are required to manage weight gain and slow or prevent the progression of obesity. The control of diet and exercise is one of the cornerstones of weight management. It has been recommended to follow a variety of nutritional approaches and diets that contain different proportions of lipids, proteins, and carbohydrates in order to lose weight. A reduction in saturated fats was initially recommended as a weight loss strategy, but that unfortunately did not necessarily result in weight loss. Recently, a shift towards a reducing refined carbohydrates has been a new approach to lose weight.

Several studies have demonstrated that fiber-rich foods and fiber supplements can have a moderate impact on weight loss and can also improve one's lipid profile in overweight and obese individuals <sup>[6,7]</sup>. Today, there are hundreds of products available over the counter that are designed to help you lose weight. Typically, these over-the-counter supplements have not been clinically tested, can cause unwanted side effects, and not yield successful results in helping people to weight loss. It is evident that the development of additional and alternative treatments is extremely important for weight management. Gplife Healthcare Pvt. Ltd. assess the need for strong alternatives in the management of obesity and overweight and developed weight loss support products. The natural plant based product, used in this case study consists of a unique combination of natural ingredients: Vrikshamla, Hirda, Green coffee, Ginger, Green tea, Cinnamon, Guggul, and Gudmar. We have used all standardized and potential extracts to develop weight loss support product. A proprietary technology called "Synergistic Optimized Blend Technology" is used to develop and manufacture our weight loss support product.

## **Case Presentation and Methodology**

A case study was conducted to evaluate the effectiveness of GPlife Healthcare's weight loss support product in obese to overweight subjects. The study included 44 cases treated with the product for a duration of 30 days. Only cases with complete adherence to the

## Table 1: Demographic details

 Demographic Details
 Male
 Female
 Total

 No. of subjects
 13
 31
 44

 Age (Average ± SD)
 37.92 ± 11.84
 34.06 ± 9.42

Data is represented as Mean  $\pm$  S.D.

### Assessment of reduction in body weight (kg)

The initial body weight of the subjects was  $80.34 \pm 11.67$  kg. After treatment with Weight Loss Support, there was a mean weight reduction of around 1.55 kg by day 15. This trend continued to day

treatment regimen were considered for analysis. The sample comprised 13 male and 31 female participants.

Prior to treatment initiation, co-morbidities were assessed. Of the 44 cases, 31% (n=14) were without co-morbidities, while 69% (n=30) were diagnosed with various co-morbidities including diabetes, fatty liver, high blood pressure and high cholesterol levels. The study evaluated multiple parameters to assess the product's efficacy, including weight loss (kg), inch loss, and reduction in constipation. As part of the intervention, participants received counselling on dietary modifications and were encouraged to engage in daily exercise. Throughout the evaluation period, concomitant drug doses were monitored. Additionally, adverse events and compliance with the weight loss treatment were tracked.

#### Treatment

The treatment protocol consisted of administering one tablet of the weight loss support product twice daily to all subjects involved in the case studies. This regimen was maintained consistently throughout the 30-day treatment period.

## Result

### **Demographic characteristics**

There were 44 male and female patients enrolled into study. There were 13 evaluable males and 31 females. The average age in males was  $37.92 \pm 11.84$  years and in females was  $34.06 \pm 9.42$  years. The details are presented in table 1.

30, with mean weight reduction of around 2.84 kg. The reduction in body weight observed in the case study was statistically significant (p<0.001). A significant reduction was seen in just 15 days, and the trend continued until day 30 (Table 2 & Figure 1).

Table 2: Assessment of reduction in body weight			
Duration	Reduction in body weight (kg) (Average ± SD)		
	Screening	Day 15	Day 30
Body weight in kg	$80.34 \pm 11.67$	$78.80 \pm 12.16$	$77.50 \pm 11.80$
Mean difference	-	$1.55 \pm 1.27$	$2.84 \pm 1.72$
% Change	-	1.92 %	3.53 %
P value	-	<0.001	<0.001

Data analyzed by dependent student t-test. Significant at p < 0.05. Values represent mean score  $\pm$  SD.



Figure 1: Reduction in body weight

## Assessment of reduction in constipation

As shown in Table 3, at the screening, 45.5% reported experiencing constipation. By Day 30, this number had significantly decreased to 4.5%. This represents a substantial reduction of 95.4% in the number

of subjects suffering from constipation till day 30. These results suggest a marked improvement in bowel function among the study participants, with the vast majority experiencing relief from constipation by the end of the 30-day period (Figure 2).

## Table 3: Assessment of change in constipation

Duration	Reduction in no. of subjects having constipation	
	Screening	Day 30
Yes	20 (45.5%)	2 (4.5%)
No	24 (54.5%)	42 (95.4%)
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Analyzed by chi-square test (significant at p < 0.05).





### Assessment of change in inch loss

Table 4 presents the data on inch loss among the study subjects after 30 days. Out of a total of 44 participants, 19 subjects (43.18%) experienced an inch loss greater than 1 inch, while 25 subjects

(56.81%) had an inch loss of less than 1 inch. This data suggests that the intervention had a measurable effect on inch loss for all participants, with a notable proportion experiencing reductions (Figure 3).

## Table 4: Assessment of change in inch loss

Duration	Inch loss in no. of subjects after 30 days	
>1 inch	19 (43.18%)	
≤1 inch	25 (56.81%)	



Figure 3: Inch loss in percent of subject

# Discussion

The results of this case study demonstrate the potential efficacy of Gplife Healthcare's natural plant-based weight loss support product in managing healthy weight. The product, which utilizes a proprietary "Synergistic Optimized Blend Technology," combines standardized extracts of Vrikshamla, Hirda, Green coffee, Ginger, Green tea, Cinnamon, Guggul, and Gudmar. These findings align with existing research on the individual components of the product.

The observed mean weight reduction of 1.55 kg after 15 days and 2.84 kg after 30 days (p<0.001) suggests a rapid and sustained effect on weight management. This aligns with previous studies on the active components. For instance, Hydroxycitric acid (HCA) found in Vrikshamla (Garcinia cambogia) has been shown to inhibit fat-producing enzymes and increase serotonin availability, potentially leading to appetite suppression <sup>[8]</sup>. Similarly, ginger has been associated with increased thermogenesis, enhanced lipolysis, and suppressed lipogenesis <sup>[9]</sup>.

The improvement in digestive health, evidenced by a 90% reduction in subjects experiencing constipation by day 30, is a noteworthy finding. This suggests that the product may have benefits beyond weight loss, potentially improving overall gastrointestinal function. The inclusion of Hirda in the formulation may contribute to this effect, as previous research has shown its efficacy in weight reduction when administered with honey <sup>[11]</sup>.

The observed inch loss in all participants further supports the product's effectiveness in body composition changes. This could be attributed to ingredients like green tea, which has been reported to enhance energy expenditure through mechanisms such as thermogenesis and fat oxidation <sup>[12]</sup>. Green coffee, another component of the product, contains chlorogenic acid, which has been associated with weight-loss properties <sup>[13]</sup>.

While these results are promising, it's important to note that herbs and supplements should be used as directed to avoid potential health risks. Founding head of the UCLA Centre for Human Nutrition, suggests, herbal remedies for weight reduction may be more widely accepted in some cultures than modern pharmaceuticals <sup>[14]</sup>. This product could potentially serve as a more approachable solution for individuals seeking weight management support. However, it's crucial to emphasize that herbal treatments for weight reduction should be considered as part of a long-term solution, incorporated with effective exercise and a healthy diet. The multifaceted benefits observed in this study - weight reduction, improved bowel function, and inch loss - suggest that this natural, plant-based product could be a promising adjuvant or complementary approach to conventional weight management strategies.

The product was well-tolerated, with no adverse events reported. Future research with larger sample sizes and longer durations would be beneficial to confirm these findings and explore the long-term effects and safety profile of the product. Additionally, comparative studies with other weight loss interventions could provide valuable insights into the relative efficacy of this herbal formulation.

# Conclusion

This case study demonstrates the potential efficacy of Gplife Healthcare's natural plant-based weight loss support product in reducing weight. The significant reductions in body weight, improvements in constipation, and inch loss observed across participants are promising. However, it's crucial to recognize that no single herb or combination can provide a miraculous weight loss solution. Instead, these natural supplements should be viewed as supportive elements in a comprehensive weight management strategy. When combined with proper diet and exercise, herbs can aid weight reduction by addressing factors such as stress, metabolism, and digestive function. Practitioners can leverage such herbal preparations to support therapeutic lifestyle modifications, offering a more natural approach to weight management. Further research is needed to confirm long-term safety and efficacy.

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# Data Availability

Not applicable.

# **Conflicts of Interest**

All authors declare that there is no conflict of interest regarding the publication of this paper.

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