



LIPOKON™ BERBERINE

THE BRILLIANT BERBERINE

An extensive Clinical Trial on 86 patients for 90 days was conducted.

Lipokon® Berberine was found to be more Effective & **Efficient in efficacy** as compared to Standard Berberine in the management of Type 2 diabetes and associated weight loss.

Lipokon® Berberine is a proprietary brand of Konark Herbals and Healthcare, produced from the roots of *Berberis aristata*.

Lipokon® Berberine is a scientifically validated, liposome-encapsulated formulation that has been found to be around **Three times more effective than Standard Berberine**.

A brief take - through into the Product USPs & Clinical findings is as below.

A. **Product Attributes**

Lipokon® Berberine is encapsulated in phospholipid bilayers using the Liposomal Encapsulation Technology. This assures enhanced and protected delivery and ultimately ensures appreciably augmented cellular uptake.

Lipokon® Berberine is standardised to contain **30% of Berberine** by HPLC.

Superior to Standard Berberine

Standard Berberine is limited by low bioavailability (<1%), primarily due to its rapid metabolism, and minimal absorption.

Lipokon® Berberine is a next-generation solution that uses liposomal encapsulation to significantly enhance absorption, stability, and efficacy.

🌿 Reduced Dosage, Enhanced Efficacy

Conventional dosage of Standard Berberine: 1500 mg/day.

Lipokon® Berberine: dosage is just **450 mg/day** with equivalent or better outcomes.

🌿 Nano Particle size -- adds to Superior Absorption

Specially made Nano particle size (~89 nm) facilitates enhanced absorption through cell membranes via endocytosis or fusion, mimicking natural vesicles like exosomes.

B. Key Clinical Findings on Lipokon® Berberine

a) Intervention with Lipokon® Berberine in individuals with Type 2 diabetes over a period of 90 days resulted in significant reduction of

🌿 Glycemic control markers:

- i) Fasting plasma glucose
- ii) Postprandial blood glucose and
- iii) HOMA-IR

in comparison to a control group administered Standard Berberine, supporting the investigation of its use to delay progression of diabetes.

Results: Lipokon® Berberine is safe and effective in glycemic control in Type 2 diabetes.

b) Superior Weight Management Lipokon® Berberine brought about reduction in BMI by 2.67% by the end of 90 days as against the control group that reduced by only 0.85%.

c) Normalisation of Fasting Plasma Glucose

A normal fasting plasma glucose level for adults is generally between 70 - 99 mg/dL and **Lipokon® Berberine could bring down the levels to 100mg/dL by day 90.** The percentage reduction observed in the Standard Berberine group was 44.64% and **43.47%** in the Lipokon® Berberine group.

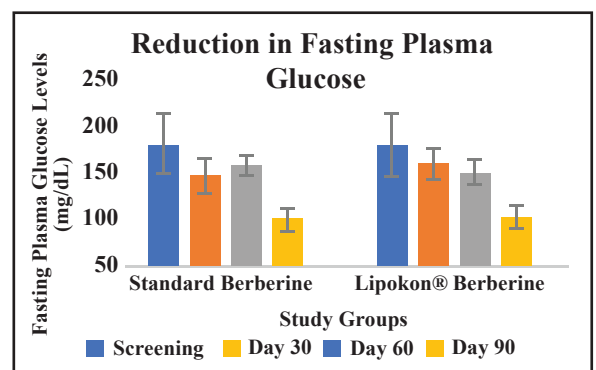


Fig. 1. Reduction in Fasting Plasma Glucose

d) Regularisation of Post-Meal Plasma Glucose (PPG)

Lipokon® Berberine could bring down the levels to **131mg/dL by day 90 very much within the ideal range of healthy individuals.**

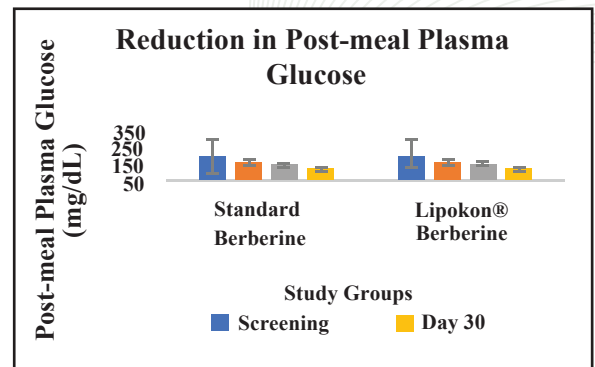


Fig 2. Reduction in Post-Meal Plasma Glucose

e) Transition to the Pre diabetic stage

By day 90, improvements in HbA1c values were seen in the Lipokon® Berberine group by **23.49%** and in the Standard Berberine group by 23.16%. The observed reduction in HbA1c levels among diabetic participants suggests a transition toward the prediabetes range, reflecting **significant glycemic control.**

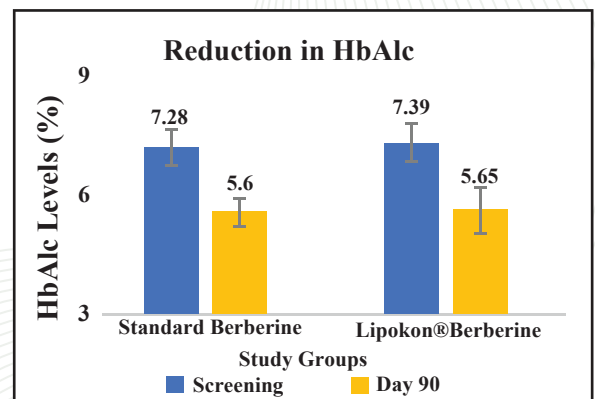


Fig 3. Reduction in HbA1c levels

f) Reduction of Fasting Insulin Levels

Reduced fasting insulin levels can be beneficial to individuals with insulin resistance or Type 2 diabetes, indicating improved insulin sensitivity and better blood sugar control. **A reduction of fasting insulin level of up to 14.5 mIU/L was achieved by day 90 with Lipokon® Berberine.** A good decrease was also observed in the Standard Berberine group by 36.94% and **32.93%** in the Lipokon® Berberine group.

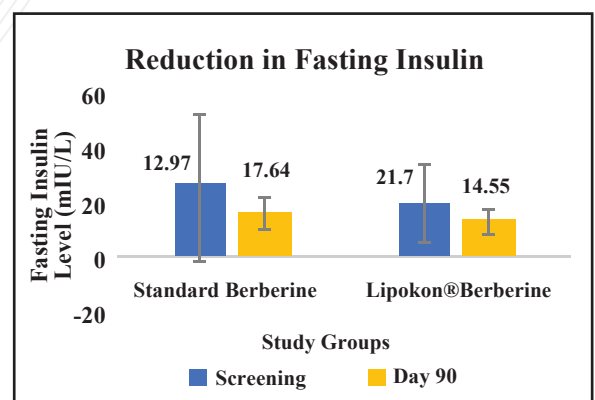


Fig 4. Reduction in Fasting Insulin

g) Improvement in Insulin Sensitivity

There were significant reductions in HOMA-IR values from screening, indicating improved insulin sensitivity. Standard Berberine showed a reduction by 65.75%, while **Lipokon® Berberine showed a very comparable reduction by 64.45%.**

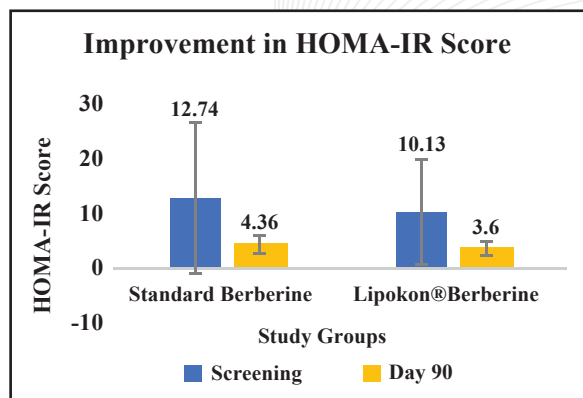


Fig 5. Improvement in HOMA-IR

h) Stabilisation of Lipid Profile

Lipokon® Berberine also significantly reduced **total cholesterol, LDL cholesterol, VLDL cholesterol, and triglyceride levels by 28.18%, 38.24%, 23.71%, and 23.6% respectively by day 90.**

Conclusion

- Lipokon® Berberine outperformed Standard Berberine in reducing Body Weight and BMI is 90 days
- On other crucial parameters of Management of Type 2 diabetes, Lipokon® Berberine has almost equivalent or higher efficacy compared to Standard Berberine.
- Lipokon® Berberine dose requirement is almost One third of that of Standard Berberine

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is thus - THE BRILLIANT BERBERINE