Introduction	**Brand Name : Binthin** **Therapeutic Category – Nutraceutical [for Weight Loss]** Overweight and obesity has reached epidemic proportions globally. According to the recent estimates in 2010, approximately 1.0 billion adults were overweight and 475 million were obese. Increasing prevalence of obesity, seen both in the developed and developing countries, is primarily driven by imbalanced diets and sedentary lifestyles. The rising prevalence of overweight and obesity in India too is largely due to an increase in energy intake, owing to increased purchasing power and availability of high fat, energy-dense foods, along with reduction in the energy expenditure consequent to urbanization and mechanization. Obesity is an important factor for the development of metabolic syndrome (MS), type 2 diabetes mellitus (T2DM) and cardiovascular disease (CVD); conditions increasingly observed in Asian Indians. Rapidly increasing prevalence of T2DM in India may be substantially contributed by generalized and abdominal obesity. Increasingly, it has become apparent that generalized and abdominal obesity is prevalent in Asian Indian women. Consequently, these women have a clustering of risk factors (hypertension, dyslipidemia and MS), equivalent to or more often than men. It appears that this subset of Indian population is particularly susceptible to develop a cluster of these diseases. The alarming rise in obesity during the past few decades has led physicians, parents, life-style specialists and individuals to pay increasing attention to changes in the nutritional status of themselves and and their families. Scrutiny has been focused primarily on four culprits, namely sugar, fat, junk-food, aerated colas, sedentary lifestyles, inactivity and more recently television. Can a parallel be drawn between the exponential rise in sales of junk food, aerated colas and electronic screens of all kinds, including televisions, game consoles and hand held electronic games and the increase in obesity ? Surveys conducted have shown that prevalence of obesity, defined as a body mass index (BMI) of greater than 30 kg/m2, is increasing, among women , men and adolescents. The active nutraceutical ingredients, in combination can be loaded into a single capsule, capable of exerting multiple actions, with least adverse effects, thereby improving patient compliance battling obesity. The ease of administration and the availability of these medications, with scientific and documented evidence, has encouraged a number of healthcare givers, physicians and life-style specialists to try out these
Garcinia cambogia	**Garcinia cambogia** Hydroxy Citric Acid [HCA], was identified by Watson and Lowenstein, in the late 1960's as a potent competitive inhibitor, of the extra mitochondrial enzyme adenosine-triphosphate-citrate (pro3S) lyase. These investigators and others subsequently, demonstrated both in-vitro and in-vivo, HCA in experimental animals, not only inhibited the actions of citrate cleavage enzyme and suppressed de novo fatty acid synthesis, but also increased rates of hepatic glycogen synthesis, suppressed food-intake and decreased body weight gain. HCA is a derivative of citric acid and can be found in plant species native to South Asia such as Garcinia cambogia, Garcinia indica, and Garcinia atroviridis. HCA is usually marketed as a weight loss supplement either alone or in combination with other supplements. Some authors have suggested that HCA causes weight loss by competitively inhibiting the enzyme adenosine triphosphatase-citrate-lyase, a cytosolic enzyme that plays a crucial role in energy storage. The role of HCA, is that of an inhibitor in the production of acety-CoA and therby may induce weight loss via 2 mechanisms: 1. **Inhibition or limitation of the capacity of for de novo lipogenesis and** 2. **Inhibition of malonyl CoA formation, which in turn would activate carnitine palmitoyl transferase I activity and increase β oxidation** Recently, it has been reported that Garcinia extract decreased, body weight, BMI [Body Mass Index] and fat in the abdominal area along with dietary intervention.HCA has also been reported to increase the release or availability of serotonin in the brain, thereby leading to appetite suppression. Other proposed weight loss mechanisms include inhibition of pancreatic alpha amylase and intestinal alpha glucosidase, thereby leading to a reduction in carbohydrate metabolism
Trigonella foenum	**Trigonella foenum** Fenugreek has a long history of medical uses in Indian and Chinese medicine, and has been used for numerous indications, including labor induction, aiding digestion, and as a general tonic to improve metabolism and health.Fenugreek (Trigonella foenum-graecum) being rich in phytochemicals has traditionally been used as a food, and medicinal component Fenugreek seeds contain lysine and L-tryptophan rich proteins, mucilaginous fibre and other rarechemical constituents such as saponins, coumarin, fenugreekine, nicotinic acid, sapogenins, phytic acid, scopoletin and trigonelline, which are thought to account for many of its presumed therapeutic effects. Various components of the seeds have varying activities **Suggested Mechanism of Action** 1. Delay's gastric emptying 2. Slow carbohydrate absorption, and inhibits glucose transport in humans 3. A slight decreasein in Total Cholesterol, Triglycerides, 4. Improvement in Insulin Sensitivity 5. Flavanoids from the seeds exhibit anti-oxidant activity
Allium sativum	**Allium sativum** Recent years have seen an increasing emphasis on foods and food components in disease prevention. Garlic one o the best-researched herbal remedies, holds a unique position in history, traditionally employed to treat infection, colds, diabetes, heart disease, and a host of other disorders. Clinically, it has been evaluated for lowering blood-pressure, cholesterol, and glucose concentration, as well as for the prevention of arteriosclerosis.The unique flavor and health-promoting functions of garlic are generally attributed to its rich content of sulfur containing compounds, i.e., alliin, γ-glutamylcysteine, and their derivatives Experimental studies have shown, that administration of Allium acts as a hypoglycaemic agent. It also promotes conversion of glucose to glycogen. Other effects that have been observed are anti-hypertensive effect and also anti-platelet activity.
Binthin Summary	**Binthin acts naturally, and assists weight loss by:** 1. Appetite Suppression [Satiety or feeling of fullness] 2. Promotes Thermogenesis 3. Inhibits Fat Production 4. Promotes Energy Utilization [Increases Glycogenesis, as a result better utilization of carbohydrates]

Indications & Dosage	A nutraceutical agent for weight loss along with dietary restrictions, exercise and other life-syle modifications as suggested by the Physician.All weight loss methods or medications must be under the strict supervision of a qualified Physician or certified life-style intervention specialists with medical qualifications, 1 Veg, capsule TID atleast 1 hour prior to meals for atleast 4-6 months or as advised by the treating Physician
Precautions	The ingredients in Binthin, have not been evaluated in pregnancy and lactation. It is advisable to consult your healthcare practitioner before using Binthin The ingredients have also not been studied in the following populations • Children below the age of 18 years of age • Renal & Hepatic Disease • Geriatric age group over 60 years of age • Individuals with Diabetes, alzheimer's disease and senile dementia. Before consuming Binthin, it is always advisable to inform your healthcare practitioner regarding any chronic disease, surgery, or recent illness you have had.
Storage	The capsules must be stored away from direct sunlight and kept in a cool dry place, out of reach from children
Composition	Each Vegetarian capsule contains extracts of 1. Garcinia cambogia – 600 mg 2. Allium Sativum – 250 mg 3. Trigonella foenum – 100 mg
Presentation	Each strip contains 1x10 vegetable capsule and each box contains 10 strips

FAQ's

What is Obesity

Obesity means having excess body fat, defined by genetic and environmental factors that are difficult to control when dieting. The most common measure of obesity is the body mass index or BMI. A person is considered overweight if his or her BMI is between 25 and 29.9; a person is considered obese if his or her BMI is over 30.

What Causes Obesity

Obesity occurs when a person consumes more calories than he or she burns. For many people this boils down to eating too much and exercising too little. But there are other factors that also play a role in obesity.

Age. As you get older, your body's ability to metabolize food slows down and you do not require as many calories to maintain your weight. Muscle loss can slow down the rate at which your body burns calories. If you don't reduce your calorie intake as you get older, you may gain weight.

Gender. Women tend to be more overweight than men. Men have a higher resting metabolic rate (meaning they burn more energy at rest) than women, so men require more calories to maintain their body weight. Additionally, when women become postmenopausal, their metabolic rate decreases. That is partly why many women gain weight after menopause.

Genetics. Obesity (and thinness) tends to run in families. Genes affect a number of weight-related processes in the body, such as metabolic rate, blood glucose metabolism, fat-storage, hormones.

Health Conditions

Some hormone problems may cause overweight and obesity, such as underactive (hypothyroidism), Cushing's syndrome, and polycystic ovarian syndrome (PCOS).

Environmental factors. Although genes are an important factor in many cases of obesity, a person's environment also plays a significant role. Environmental factors include lifestyle behaviors such as what a person eats and how active he or she is.

Physical activity. Active individuals require more calories than less active ones to maintain their weight. Additionally, physical activity tends to decrease appetite in obese individuals while increasing the body's ability to preferentially metabolize fat as an energy source. Much of the increase in obesity in the last 20 years is thought to have resulted from the decreased level of daily physical activity.

Psychological factors. Psychological factors also influence eating habits and obesity. Many people eat in response to negative emotions such as boredom, sadness, or anger. People who have difficulty with weight management may be facing more emotional and psychological issues; about 30% of people who seek treatment for serious weight problems have difficulties with binge eating. During a binge-eating episode, people eat large amounts of food while feeling they can't control how much they are eating.

Medication. Certain drugs, such as steroids and some antidepressants, may cause excessive weight gain.

BMI (Body Mass Index) ?

Body Mass Index (BMI) is one of the ways to determine when extra fat accumulation translates into health risks. Body mass index is a measure which takes into account a person's weight and height to gauge total body fat in adults. The higher the body mass index, the greater the risk of developing additional health problems. The following chart describes the various categories of obesity based on body mass index:

BMI	Weight Category
Bellow 18.5	Underweight
18.5- 24.9	Healthy Weight
25 - 29.9	Overweight
30 or over	Obese