

## BIRD'S EYE VIEW ON HERBAL MARKET PRODUCTS IN INDIA FOR THE TREATMENT OF OBESITY

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### ABSTRACT

Along with advancements in technology, herbal preparations are attracting the pharmaceutical markets due to their wider acceptance and increasing demand. Many herbal preparations and raw herbs are being used for the treatment of obesity since centuries. Main objective of the present review is to focus on the commonly used herbs and their formulations in Indian market for the treatment of obesity. For the review of different formulations available online, a famous website [www.alibaba.com](http://www.alibaba.com) has been searched for 'herbals for weight loss' especially in India. List of some herbal drugs manufacturers, suppliers and exporters has also been provided for the convenience of researchers in this area. Anti-obesity herbal formulations are available in the form of tablets, capsules, softgel capsules, powders, extracts, oil, ointments, creams, gel, and tea bags etc. From the present review it is concluded that there is great market potential for the herbal preparations used for weight loss.

**Key words:** *Guggulu, herbal market, hyperlipidemia, metabolic syndrome, obesity*

### INTRODUCTION

Obesity and the metabolic syndrome are the most common nutritional disorders in developed countries. Worldwide, it is the result of modernization and urbanization. It has been reported that obesity and its metabolic complications cause both substantial socio-economic and physical burden on society<sup>1, 2</sup>. Obesity is the accumulation of the fat in the body over the limit leading to serious adverse effects on body as well as on mind. The energy intake coming from food that the body does not use is stored as fat and leads to overweight. Two main factors responsible for this are: 1) an increased intake of energy rich foods that are high in fat, salt and sugars but low in vitamins, minerals and other micronutrients; and, 2) a decrease in physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization. Obesity increases the risk of developing many health problems which include ischaemic heart disease, myocardial infarction, stroke, type 2 diabetes, hypertension, hypercholesterolemia, certain cancers, sleep apnea, osteoarthritis, gout and psychological and emotional effect<sup>3</sup>.

Overweight and obesity are the fifth leading risk for global deaths. At least, 2.8 million adults die each year as a result of being overweight or obese. WHO global estimates for the year 2008, reported 1.5 billion people were overweight, of these, over 200 million men and nearly 300 million women were obese. Overall, more than one in ten of the world's adult population was obese<sup>4, 5</sup>.

The important measures to be undertaken for the treatment of obesity include dietary changes, exercise and activity, behavior changes, prescriptions of weight loss medications and weight loss surgery<sup>6</sup>. But due to busy schedules and sedentary lifestyle follow-up the first two methods never

seems to be practiced in a regular manner. Considering the cost involved the weight loss surgery is not preferred by many. There is a gradual shift towards an increased use of drugs treatment for weight loss but unfortunately, despite short term benefits, it is often associated with rebound weight gain after the cessation of drug use, side effects from the medication, and the potential for drug abuse<sup>7</sup>. In such a scenario, an inexpensive option to help weight reduction in the weight management programme is an intervention which is based on nutritional<sup>8</sup>.

Herbal medicines have played a significant role in the management of both minor and major health problems. From recent few decades, they are being extensively utilized worldwide due to their cost effectiveness, less to no toxic side effects in comparison with many chemically synthesized drugs<sup>9</sup>. The World Health Organization (WHO) estimates that 80 percent of the world's population presently uses herbal medicine for some aspect of primary health care. Many Complementary and Alternative Medicine (CAM) therapies used across the different countries contain the plants based dietary supplements which have potential to reduce increased weight<sup>10</sup>. Some recent preliminary reports suggested that some herbs and other natural substances are effective in appetite reduction and promotion of significant weight loss is encouraging<sup>11</sup>. There are some reviews that examined the efficacy of herbal medicines used in the treatment of obesity on experimental models, humans, including clinical trials<sup>12, 13, 14, 15</sup>. In the present study, some herbal plants commonly utilized in the treatment of obesity and various market products for obesity have been presented. This will give a precise idea to researchers as well as to producers and suppliers of herbal products regarding the potential of these herbal gems.

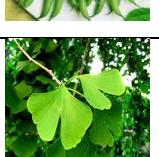
## HERBAL PLANTS USED FOR OBESITY

The materials like vegetables, spices, fruits, pulses, tea etc which are used as a nutrient or as a source of food can prove to be useful in the treatment of obesity [Table 1]. These drugs have their own importance with regards to their local availability, lesser side effects, economically cheapness and faith of the people in traditional medicine. Some of the phyto constituents present in these herbs such as inulin, pectin, flavonoids, saponins, tannins, dietary

fibres, phytosterols/stanols, dietary carotenoids, polyphenols, plant indoles etc, have potential hypolipidemic properties by different mechanisms such as reducing atherosclerosis by inhibiting platelet aggregation, increasing fibrinolysis, enhancing antioxidant activity, reducing serum lipids in general to lower cholesterol levels, controlling appetite, fat metabolism, adipocyte differentiation, fat absorption, energy metabolism, thermogenesis (generation of heat) etc. , which may lead to weight loss<sup>16</sup>.

**Table 1: List of some herbal plants being utilized for the treatment of obesity**

Botanical name	English/Common name	Photograph
<i>Allium sativum</i> L.	Garlic	
<i>Anacardium occidentale</i> L.	Cashew nut	
<i>Capsicum frutescens</i> L.	Red pepper, Chili	
<i>Chicorium intybus</i> L. (seed)	Common chicory	
<i>Cucurbita maxima</i> Duchesne (seed)	Pumpkin, Winter squash	
<i>Foeniculum vulgare</i> (Gaert.) seeds	Fennel, sweet fennel	
<i>Panax quinquefolium</i> L.	American ginseng	
<i>Zingiber officinale</i>	Ginger	
<i>Thymus vulgaris</i>	Common thyme	

<i>Commiphora mukul /wightii</i>	Gum guggul, Indian bedellium	
<i>Cynara scolimoides L.</i>	Artichoke	
<i>Ganoderma lucidum</i> (W. Curt.:Fr.) Karst.	Reishi / Lingzhi mushroom	
<i>Coriandrum sativum L.</i>	Coriander	
<i>Coccinia grandis L.</i>	Ivy Gourd	
<i>Garcinia cambogia</i> Desr.	Malabar Tamarind, Brindall Berry, Chikana Red Mango, Mangosteen, <i>Vrikshamla / Kokum</i>	
<i>Citrullus lanatus</i> Thunb (seed)	Tsamma melon, watermelon	
<i>Linum usitatissimum L.</i>	Flax seed oil	
<i>Cymbopogon cytratus</i> stapf.	Lemon grass oil	
<i>Magnolia officinalis</i> Rehd. et Wils. Bark	Beaver Tree	
<i>Phaseolus vulgaris L.</i>	Garden bean	
<i>Ginkgo biloba L.</i>	Ginkgo	

<i>Caralluma fimbriata</i> Wall.	Caralluma	
<i>Lagenaria siceraria</i> L.	Bottle Gourd, trumpet gourd	

### HERBAL BASED ANTI-OBESITY PREPARATIONS AVAILABLE IN INDIAN MARKET

India is have well-recorded and traditionally well-practiced knowledge of herbal medicine. Many herbs of medicinal importance have been in use in one form or another, under indigenous systems of medicine like Ayurveda, Siddha and Unani. Seeking the economic growth potential and the

global importance, Indian pharmaceutical companies are now producing, supplying and marketing the herbs, their derivatives like extracts and formulations. In India, there are about 7000 firms manufacturing traditional medicines<sup>17</sup>. Table 2 enlisted the companies associated with manufacturing, supplying and exporting the herbs, herbal preparations based on them and their derivatives<sup>18</sup>.

**Table 2: List of herbal medicines manufacturers, suppliers, and exporters**

S No.	Manufacturers	Suppliers	Exporters
1	Harshal Ayur Pharma, Nanital, Uttaranchal	Yashco Industries Private Ltd, Mumbai, Maharashtra	Turab H V Herbals (P) Ltd, Nagpur, Maharashtra
2	Shiva International, Bellary, Karnataka	Trient Creation, Mumbai, Maharashtra	Ganga Corporation, , Kochi, Kerala
3	Ayrumed Biotec (p) Ltd, Mumbai, Maharashtra	General Commodities Ltd, Bengaluru, Karnataka	Mehta Trading Company, Ahmedabad, Gujarat
4	Swati Ayurvedic Products, Ghaziabad, Uttar Pradesh	Swarita Exports, Gurgaon	Shree Baidyanath Ayurved Bhawan (p) Ltd, Jhansi, Uttar Pradesh
5	Garlico Herbal Concentrate, Mandsaur, Madhya Pradesh	Shushtri Industries, Navi Mumbai, Maharashtra	Cochin Ayurvedic Center,
6	Turab H V Herbals (p) Ltd, Nagpur, Maharashtra	Himalaya Herbal Healthcare, Makali, Bangalore	Herb India.com
7	Varun Biocel (p) Ltd, Varanasi, Uttar Pradesh	-	Krishna Herbal Company
8	PrakrutiCare Private Ltd., Mumbai, Maharashtra	-	Lotus Herbals Ltd, New Delhi
9	Himalaya Herbal Product, Nurpur, Himachal Pradesh	-	White Lotus Herbals
10	Taj Pharmaceuticals Ltd, Mumbai, Maharashtra	-	-
11	Indichem, Mumbai, Maharashtra	-	-
12	Ind Swift limited, Chandigarh	-	-
13	Admark Herbals Limited, Ahmedabad, Gujarat	-	-
14	Dave Pharmaceuticals, New Mumbai, Maharashtra	-	-

Very large numbers of anti-obesity formulations are available in the market. They are freely accessible through

internet and can be ordered online also. List of various formulations and their details are given in Table 3.

Table 3: Detailed herbal based fat reducing market preparations in Indian market <sup>19</sup>

Market preparation (Brand name)	Form available	Supplier	Details
Nutri Slim Capsules	Capsule	Nutri Thera Laboratory Pvt Ltd	Extract from the Acai Berry is an anti-oxidant which increases energy, improves digestion system and also linked to aiding a healthy and quiet sleep. The pigment of the berry stimulates fat burning process by combining the body's natural fatty acids, phytosterols and amino acids together, boosts energy levels and metabolism, replenishes the skin and postpones aging.
Trimohills	Tablets	Isha Agro Developers Pvt Ltd	Ingredients not mentioned. 1) Helps preventing fat absorption and deposition thus help achieve healthy weight; 2) Maintain a healthy blood lipid level and supports weight management; 3) Improves gastric functions; 4) Helps fighting fatigue and stress experienced in diet regime.
Anti-Cellulite Slim oil, gel and cream	Cream, Gel, Oil	V. J. S. Pharmaceuticals Private Limited	It contains Grapefruit oil and Rosemary oil as fat metabolism stimulator, Juniper oil and Avocado oil as cell metabolism stimulator, and diuretic; Vitamin E Oil for cell repair enhancing etc. The combination acts as a diuretic and helps reduce the fluid build-up in the body.
Vilayati Imli	Capsule	Wilson Drugs & Pharmaceuticals Pvt Ltd	Processed extracts of <i>Garcinia cambogia</i> is known to interrupt the synthesis of various lipids, fatty acids, LDL cholesterol and triglycerides. The herb is best as an appetite suppressor. The appetite is suppressed by promoting synthesis of glycogen, thus sending the brain signals of satisfaction and fullness sooner. The organic acid known as HCA is the primary acid found in the fruit and rind of <i>G. cambogia</i> . It inhibits lipogenesis, lowers the production of cholesterol and fatty acids, increases the production of glycogen in the liver, suppresses appetite, increases body's production of heat by activating the process of thermogenesis. Specifically, HCA prevents the enzyme from catalyzing the cleavage of citrate to acetyl coenzyme A and oxaloacetate. This inhibition significantly reduces the synthesis of triglycerides, cholesterol and body fat, without diminishing energy production. The result is significant loss of body weight in animals made obese genetically and by hypothalamic lesions.
Trimohills	Tablets	Isha Agro Developers Pvt Ltd	Contains <i>Shuddha Guggul</i> , <i>Trikatu Churna</i> , <i>Triphala Churna</i> , <i>Trimad Churna</i> . <i>Trimad</i> and <i>Triphala</i> help to prevent water retention, a common phenomenon in obesity. <i>Triphala</i> helps to remove excess fat from the body. <i>Trikatu</i> improves digestive enzyme action and thus improves fat metabolism. <i>Shuddha Guggul</i> helps scrap excess fat.
Medohar Guggul	Capsule	Wilson Drugs & Pharmaceuticals Pvt Ltd	Each capsule contains processed extracts of <i>Zingiber officinale</i> , <i>Piper nigrum</i> , <i>Piper longum</i> , <i>Plumbago zeylanica</i> , <i>Cyperus rotundus</i> , <i>Terminalia chebula</i> , <i>Terminalia bellerica</i> , <i>Emblica officinalis</i> , <i>Embelia ribes</i> , <i>Commiphora mukul</i> . Good for controlling Obesity and increased cholesterol levels. Based on stimulating the general metabolism and digestive fire, brings the functioning of the digestive and biliary systems at their optimum and lowering the lipid levels in the blood without causing susceptibility to gall stones.
Herbline	Cream	Combii Organochem Pvt Ltd	A very potent blend of natural fruit oils that helps break the stubborn fat built up under the dermis. The combination acts as a diuretic and helps reduce the fluid build-up in the body. to be used along with Cellulite Gel.
Trimayu Capsules	Capsule	Laxmi Arogyam Pvt Ltd	Contains premium quality standardized herbal extracts. Thermo nutrient blends: special herbal factors help enhance the body's ability to produce energy by metabolizing fats. Adrenal support blends: A special blend of rare herbs energizes and further support healthy adrenal functions. This helps to achieve and maintain thermogenic potential. Appetite control blends: It contains naturally occurring metabolic factors that support the brain's "food intake control center".

Figure Care	Caplet	BAN Labs Ltd	<p>It contains herbs like <i>Garcinia cambogia</i>, <i>Premna mucronata</i>, <i>Zinziber officinale</i> and <i>Plumbago zeylanicum</i>. These help to regularize fat metabolism, improve liver function &amp; decrease fat accumulation. Hydroxy-citric-acid (HCA) which is an active ingredient in <i>Garcinia cambogia</i> converts blood sugar to glycogen instead of fat, and also reduces appetite by keeping the blood sugar levels under control.</p>
Moringa tea bags	Tea bags/sachets	Genius Nature Herbs Private Limited	Instant mix of Moringa into blood stream. Useful in Diabetes since Moringa has Hypoglycemic activity. Abundant in crude fiber and Protein, can also be used for controlling blood pressure. Used to control the proportion of sugar and weight and in their appropriate management, Rich in Antioxidants.
Khadi herbal anticellulite oil	Oil	Gramodaya Ashram	Cellulite Oil is specifically formulated to stimulate metabolism in the skin to dissolve fat and remove toxins. All the herbs in combination perform various functions to generate heat for proper blood circulation in the affected areas and activate the sluggish lymph system.
Slim- trim	Capsule	Vitromed Healthcare	<p>It contains the pure extracts of Chitosan, <i>G. Cambogia</i>, with Folic along with Psyllium husk, Green Tea extract and <i>Piper nigrum</i> in addition to <i>Aloe vera</i>. It offers a synergistic and balance approach to diet by cutting the fat intake, reducing the production and storage of fat while maintaining physical energy, promotes steady energy levels, &amp; helps to reduce appetite, increasing lean muscle, stimulating metabolism and detoxifying the body system.</p>
Jatan capsules	Capsule	Sudha Herbal	<p>It helps in controlling and normalizing the appetite; as well as providing energy and a satisfying feeling so that one does not feel constantly hungry. It dissolves the excess fat gradually.</p>
Slim Tea	Medicina 1 tea	Sushilodaya Inc	Herbal Slimming Tea, contains no caffeine. Natural way to weight loss.
Obescure	Capsules	Algen Exports	Contains standardized extracts of <i>Garcinia</i> , <i>Methi (Trigonella foenum graecum)</i> and Garlic. It is a real fat and calorie burner. <i>Garcinia</i> prevents the accumulation of body fat and deactivates the enzyme that converts excess carbohydrates to fat. Garlic and <i>methi</i> help in burning risky cholesterol.
SlimFast	Capsule	V-Care Surgical Pvt. Ltd	<p>It is used as an appetite suppressant and for the weight loss. It increases metabolism, suppresses appetite, burns calories and increases energy.</p>
Fit and Glow	Softgel Capsule	Deccan Healthcare Pvt. Ltd.	<p>Contains the best source of nature's most vital and essential Omega – 3, 6, and 9 fatty acids. It is important for the body's biochemistry and assists fat metabolism for weight loss, Supports healthy blood circulation, Protects against heart diseases, Helps to fight arthritis &amp; osteoporosis, Improves joint mobility and bone density, Lowers blood pressure in hypertension, Supports healthy brain and memory function, Improves immunity, reduces fatigue.</p>
Slim-XL Capsule	Capsule	Hashmi Ayurved	<p>It helps to reduce <i>Kapha</i>, which is the basis of fat accumulation, so further fat deposition will not take place.</p>
Raw Moringa	Capsules	V. J. S. Pharmaceuticals Private Limited	<p>Contain 100% pure moringa leaf powder. Moringa leaves are the most nutrient rich part of the plant. It contains: 7 times the vitamin c found in oranges; 4 times the calcium found in milk, and twice the protein; 4 times the vitamin a found in carrots, thrice the potassium found in bananas, and thrice the iron found in almonds.</p>
LOMOTO Capsules & Food Supplement	Capsule and powder	VXL Drugs and Pharmaceuticals Pvt. Ltd.	<p>Support healthy slimming efforts along with a balanced lifestyle, Encourage healthy weight goals without the use of artificial stimulants or ephedra, Promote efficient metabolism in the body, Support the digestive system by maintaining the natural breakdown of fats, Promote healthy energy levels through nutrient absorption, Support balanced sugar levels to prevent cravings.</p>
OBE Herb	Tablets	Prasad Bhavsar, Ahmedabad, Gujarat	<p>Capsule contains <i>Garcinia</i>, an herb which has an enormous power to fight fats. Its main constituent Hydroxycitric Acid (HCA) comes from the rind of <i>Garcinia</i> fruit. It brings the excessive weight under control by burning fats quickly. It helps losing weight in a natural way by accelerating the breakdown and dispersal of fat already laid down. It acts directly on the brain and switch offs appetite.</p>

Dudhi Power	Tablets	Isha Agro Developers Pvt Ltd	<p>Hepato tonic / diuretic, Helps digestion, dietary fiber, Reduce hunger pangs, Weight loss.</p> <p>Bottle gourd is high in dietary fibre, Vitamin C, Riboflavin, Zinc, Thiamine, Iron, Magnesium, Manganese etc. It is also low in saturated fat and cholesterol. It is considered to be useful in conditions of constipation, urinary disorders, excessive thirst due to severe diarrhoea, diabetes. It is also said to help control cholesterol and considered effective on joint pain and weight loss.</p>
Guggulhills	Tablets	Isha Agro Developers Pvt Ltd	Contains 1% Guggulsterone. Guggul is a very effective herb for maintaining healthy weight and healthy cholesterol levels. It is considered possessing purifying and rejuvenating properties. It is also useful in reducing symptoms associated with arthritis, helps maintaining healthy blood circulation etc.
Triphalahills	Tablets	Isha Agro Developers Pvt Ltd	Contain 32% Tannins. <i>Triphala</i> is considered to be a wonder herb that is comprehensively used by Ayurvedic physicians to treat various disorders. Though it is widely used as a laxative. It is also considered to be a powerful body stimulant that helps promote health and assist in managing overall conditions of the body. It helps maintain healthy blood circulation. Helps to promote good colon health. Helps in removing toxins from the body & increases energy. Helps to accelerate cleansing activities in the digestive system against gas, bloating, constipation. Helps to provide overall support for the digestive functions.
Guggul extract	Extract of Resin	Mother Herbs Pvt Ltd	It is carminative, antispasmodic, disphoretic, ecobolic, anti-suppurative and emmenagogue. Gum resin used for treatment of rheumatoid arthritis. It is a potent drug for cardiac disorders high cholesterol. It is widely promoted as a weight loss agent that supposedly enhances thyroid function.
Garcinia Combogia extract	Powder	Alokik Herbal Extract	The rind of this pumpkin like fruit is rich in a substance called hydroxycitric acid (HCA). It is used as an appetite suppressant and to inhibit the absorption and synthesis of fat, cholesterol and triglycerides. In other words, it is a dietary aid.
Hyaluronic acid	Tablets	Chandigarh Medical Corporation	Hyaluronic acid tabs are can be taken at any time of the day. It is useful for fat loss, glowing skin, rejuvenate skin and body, anti ageing.
Curvy	Oil	Healing Herbs	<p>Key ingredients: Extracts of <i>Calendula officinalis</i> (Zergul), <i>Foeniculum vulgare</i>, <i>Piper nigrum</i>, <i>Zingiber officinale</i> and Rose oil, <i>Sesamum indicum</i> Oil.</p> <p>This oil helps get rid of cellulite. Cellulite is a series of ripples of fat cells and fibrous connective tissue under the skin. Usually found on the thighs and butt, especially in women, it has a characteristic pucker or 'orange peel' appearance. Cellulite is alleged to be a special type of "fat gone wrong," a combination of fat, water, and "toxic wastes" that the body has failed to eliminate. With massaging, the cellulite areas are targeted to stimulate circulation, especially for areas not very well worked with exercise, such as the inside of the knee and upper thigh.</p>
Lean Care	Capsules	Sriram Herbals	Lean Care is a complete natural product and is an extract of quality herbal ingredients. It does not contain Ephedra and is safe and effective as a weight regulator through specific ingredients and their unique herbal characteristics. It helps inhibit the synthesis of fatty acids thereby reducing the fat levels (lipids). It is highly effective against obesity, hyperlipidemia control, craving for fatty and sugary foods.
BarleyGra ss	Tablets	Isha Agro Developers Pvt Ltd	Reduces levels of low density lipoprotein (LDL) cholesterol (the 'bad' cholesterol). Helps in reducing fatigue.
Phaselous vulgaris	Powder (Extract)	Alokik Herbal Extract	<p>Active Ingredients: Phaseolin (1%, 3% HPLC)</p> <p>The seeds of the White Kidney Bean plant (<i>Phaseolus vulgaris</i>) are most commonly used in the extract. This extract acts as an amylase inhibitor, interfering with the enzyme that breaks down carbohydrates into glucose. Thus eventually converted to fat - they are removed from the body before entering the blood stream.</p> <p>Thus this extract promote weight loss by anti-alpha amylase activity (neutralize the digestive enzyme)</p>
Curry leaf	Powder	Genius	Curry leaves help to flush out fats from the body. They can reduce the level of

powder		Nature Herbs Private Limited	bad cholesterol in the body. Obese people could liberally consume curry leaves, which along with healthy diet and exercises could help to reduce weight.
Caralluma extract	Powder	Navchetana Kendra	<i>Caralluma fimbriata</i> is a succulent plant within the cactus family. It has been consumed in rural India for hundreds of years in many alternative ways like in raw type, with a vegetable with spices, or preserved in chutneys and pickles. It suppresses appetite or hunger throughout operating hours all day. Additionally in Southern India it is used to enhance endurance.
Cell-U-Loss	Tablets	Herbal-Nutrition4u	<p>It is an herbal blend that includes corn silk, dandelion, parsley and asparagus, traditionally used to eliminate excess body fluid.</p> <p>It reduces water retention associated with normal tissue swelling, by promoting fluid loss through healthy elimination of water. It supports the reduction of subcutaneous accumulation of water, which may improve appearance of skin. It also assists with natural detoxification processes.</p>
Real Slim Oil	Oil	Dhathri Ayurveda Private Limited	Oil for weight loss and slimming. Ingredients not mentioned.
Sunova Bioslim	Capsule	Pixeltech Solutions	It is an herbal fat and calorie burner. Garcinia prevents conversion of excess carbohydrates into fat in the body while Plumbago and Embella enhance the digestion of food. Trigonella reduces blood sugar and in addition also has a lipid lowering effect. Trikatu increases the bio-availability of above-mentioned ingredients and promotes the digestion of carbohydrates.
Trim formula	Capsule	Krishna Herbal Company	Trim formula correct functions of "Pitta" which functions to increase overall metabolism and burn the fats.
Xtrem Weight Loss Oil	Oil	Eye Max Corporation	For whole body weight reduction in inches which is made with a future herb called "Garcinia".
UD Anti Cellulite Gel and oil	Gel and oil	Sona Enterprises and Ujala Herbals	<p>Various pure herbs and natural ingredients visibly smoothes, tones, and retexturizes cellulite-prone skin while detoxifying and discouraging future fat storage. The Herbal extracts work synergistically to improve circulation, flush out fat cells, and stimulate the body's natural release of toxins. Body skin appears tighter, firmer.</p> <p>Key Ingredients: Polysorbate 80, Carbopol 940, Triethanolamine, Glycerine, Herbal Mix (Horsetail, Bladderwrack, Ivy, Laminaria), Herbal Mix (Birch, Yarrow, Horsetail, Common Nettle, Rosemary, Sage, Lime Tree), Aqua, Preservatives, Colour and Perfume.</p>
SLIMINA -G Gel	Cream	Bio valley	<p>It is the latest in our revolutionary line of potent fat burner. It is highly effective topical fat loss formula designed to quickly and safely eliminate fat from those stubborn areas that remain unaffected by diligent training and dieting.</p> <p>Ingredients: Extracts of <i>Fucus vesiculosus</i> and <i>Phytolacca berry</i>.</p>
Guggul	Capsule	Krishna Herbal Company	Extremely useful for all types of inflammation and weight loss. Higher amount of guggulostерone is responsible for the results.
INSTA TRIM	Cream	Health Sanctuary	It is an Anti-Cellulite slimming gel that travels deep into the skin where fat deposits form. INSTA TRIM dramatically helps breaking down these deposits and encourages collagen growth for smoother skin and reduces the look of stretch marks to significantly improve the overall appearance of the skin.
EVERSLIM Slimmin Tea	Powder	Teleone Consumers Product Pvt. Ltd.	Ever Slim Slimming teas designed to accelerate weight loss. Research shows drinking two cups of Slim tea every day not only helps shed stubborn pounds by boosting metabolism, but also blocks the fattening effects of carbohydrates; promotes strong, healthy teeth; improves cognitive functioning and mental well-being; clarifies skin, giving it a healthy, radiant glow and strengthens immune system.

Amazing	Capsule	Amazing Herbal Remedies	<p>Main Ingredients: <i>Guggulu (Commiphora mukul)</i>: It is useful in removing fats from the body. It corrects the liver metabolism and helps the body in removing fat deposits. <i>Nisonth (Operculina turpethum)</i>: It is very useful in fatty liver and also corrects the fat metabolism in liver. Burns fat in the muscles and liver and also arrest its production. <i>Vacha (Acorus calamus)</i>: It reduces 'bad' LDL cholesterol and triglycerides, detoxifies the body and has a purgative action. <i>Punarnava (Boerhavia diffusa)</i>: It is diuretic, laxative and stomachic herb.</p> <p>Other ingredients: <i>Motha (Cyperus rotundus)</i>, <i>Shunthi (Zingiber officinale)</i>, <i>Marich (Piper nigrum)</i>, <i>Chitrak (Plumbago zeylanica)</i>, <i>Kutaki (Picrorhiza kurroa)</i>, <i>Lashuna (Allium sativum)</i>, <i>Pippali (Piper longum)</i>, <i>Vidang (Embelia ribes)</i>.</p>
Slim'n'Fit	Capsule	Adi Siddhi Sales Corporation - Aloevera Products Division	<p>Key ingredients: Aloe vera, Garcinia combogia extract, Stevia extract, Vitamin C.</p> <p>It lowers down cholesterol, removes deposited fat quickly. It helps to regulate the lipid metabolism. It is said to promote normal appetite, good digestion, increase red blood cells and hemoglobin. It has strong purifying and antioxidant qualities as well as reducing the overall water content in the body tissues. It also cleanses the toxins from the blood, tissues, lungs and lymphatic. It oxidizes fat, which is excreted out of body with stool. It suppresses excessive appetite thereby reducing weight and curbing extra sugar and food cravings.</p>
Hoodia Gordonii Plus	Capsule	Global Pharma	<p>Contains 400 mg of certified 100% pure South African Hoodia.</p> <p>Combined with a reduced calorie diet, it can help to reduce weight by decreasing your appetite.</p>
Sthaulyant ak	Powder	Krishna Herbal Company	Ingredients: <i>Agnimantha</i> , <i>Arjuna</i> , <i>Triphala</i> , <i>Ashok</i> : 20 gm each, <i>Kalmegh</i> , <i>Babool</i> , <i>Chitrak</i> , <i>Musta</i> , <i>Vidang</i> , <i>Dalchini</i> , <i>Neem</i> , <i>Brahmi</i> , <i>Shigru</i> , <i>Jamun</i> : 12 gm each
GARCINI CAPSULES	Capsule	P J Impex Traders	Blocks lipogenesis effectively. Helps burn more calories and excess fat. Reduces serum leptin levels. Arrests further weight gain.
Bio-Slim	Capsule	Indchromadex Neutraceuticals Pvt Ltd	Contains herbals for weight loss.

Though these formulations are covering all the forms of therapies, herbal products are at their top. They are available in the form of tablets, capsules, softgel capsules, powders, extracts, oil, ointments, creams, gel, and tea bags etc. These can be used as food supplements, drug intervention, and external applications. These therapies have led to the broader prospect and wider availability to the patients as well as to healthy people.

## CONCLUSION

Herbal weight loss products are a great safe option for the people who want to lose weight naturally. They are cheap, available easily, and have lesser side effects. There is great market potential for these products. Still more safe, efficacious and affordable products can be prepared on the basis of the traditional knowledge supported by

experimental base. Though considerable research on pharmacological and clinical aspect has been carried out on these plants, they may be further explore on the modern scientific approaches for better leads in the health care. This exercise will not only preserve the traditional knowledge but also lead to their increase in the health care system. Production of standardized herbal products will definitely lead India to emerge as major player in the global herbal market.

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**CONFLICT OF INTEREST:** None declared

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