

We claim,

1. A synergistic herbal composition comprising combination of first ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Theobroma cacao* and a second ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Citrus aurantifolia* for obtaining at least one health benefit selected from preventing, controlling or treating obesity and/or overweight; improving lean body mass, improving browning of White Adipose Tissue (WAT)/improving formation of brown adipose tissue (BAT), increasing basal metabolic rate (BMR)/resting energy expenditure, increasing thermogenesis, improving thyroid function, maintaining healthy body weight, increasing satiety, supporting weight loss, improving fat loss and maintaining a slim body..
2. The synergistic composition as claimed in claim 1, where in the extracts or fractions are standardized to at least one phytochemical reference marker compound or biological active marker in the extract or fraction; wherein phytochemical marker compound or group of phytochemical compounds is in the concentration range of 0.1% to 99% by weight of the extract.
3. The synergistic composition as claimed in claim 2, wherein the weight of *Theobroma cacao* seed derived ingredient varies in the range of 10% - 90% and the weight of *Citrus aurantifolia* fruit peel derived ingredient varies in the range of 90% - 10%.
4. The synergistic composition as claimed in claim 3, wherein said *Theobroma cacao* seed extract or fraction is standardized to theobromine; wherein theobromine is in the concentration range of 0.1% to 20% by weight of the composition.
5. The synergistic composition as claimed in claim 3, wherein said *Citrus aurantifolia* fruit peel extract or fraction is standardized to Limonin; wherein Limonin is in the concentration range of 0.1% to 10% by weight of the composition.

6. The synergistic composition as claimed in claim 1, optionally comprises at least one component selected from pharmaceutically or nutraceutically or dietically acceptable excipients, carriers and diluents.
7. The synergistic compositions as claimed in claim 6, wherein the pharmaceutically or nutraceutically or dietically acceptable excipients, carriers and diluents are selected from monosaccharides such as glucose, dextrose, fructose, galactose etc.; Disaccharides such as but not limited to sucrose, maltose, lactose, lactulose, trehalose, cellobiose, chitobiose etc.; Polycarbohydrates such as Starch and modified starch such as Sodium starch glycolate, pre gelatinized starch, soluble starch, and other modified starches; Dextrins that are produced by hydrolysis of starch or glycogen such as yellow dextrin, white dextrin, Maltodextrin, alginates etc.; Polyhydric alcohols or sugar alcohols such as but not limited to Sorbitol, mannitol, inositol, xylitol, isomalt etc.; cellulose based derivatives such as but not limited to microcrystalline cellulose, hydroxy propyl methyl cellulose, hydroxy ethyl cellulose etc.; silicates such as but not limited to neusilin, veegum, Talc, colloidal silicon dioxide etc.; metallic stearates such as but not limited to calcium stearate, magnesium stearate, zinc Stearate etc.; Organic acids such as citric acid, tartaric acid, malic acid, succinic acid, lactic acid, L-ascorbic acid etc.; Fatty acid esters and esters of poly sorbate, natural gums such as but not limited to acacia, carrageenan, Guar gum, Xanthan gum etc.; vitamin B group, nicotinamide, calcium pantothenate, amino acids, proteins such as but not limited to casein, gelatin, pectin, agar; inorganic metal salts such as but not limited to sodium chloride, calcium chloride, sodium hydroxide, potassium chloride, potassium hydroxide, dicalcium phosphate, zinc Sulphate, zinc chloride etc.; Natural pigments, flavors, Class I & Class II preservatives and aqueous, alcoholic, hydro-alcoholic, organic solutions of above listed ingredients alone or in combination.
8. The synergistic composition as claimed in claim 1, wherein the extract, fraction or phytochemical is obtained from at least one plant part selected

from the group comprising leaves, stems, tender stems, tender twigs, aerial parts, whole fruit peel, fruit peel rind, seed, flower heads, root, bark, hardwood or whole plant or mixtures thereof.

9. The synergistic composition as claimed in claim 1, wherein the extract, fraction or phytochemical is produced using at least one solvent selected from the group comprising C1-C5 alcohols like ethanol, methanol, n-propanol, isopropyl alcohol; ketones like acetone, methyl isobutyl ketone, chlorinated solvents like methylene dichloride and chloroform, water, C1-C7 hydrocarbons such as hexane; esters like ethyl acetate and the like and mixtures thereof.
10. The synergistic composition as claimed in claims 1 to 9, where in the composition(s) are formulated into a dosage form selected from dry powder form, liquid form, beverage, water dispersible formulation, food product, dietary supplement or any suitable form such as a tablet, a capsule, a soft chewable or gummy bear.
11. The synergistic composition as claimed in claims 1 to 9, where in the compositions are formulated into nutritional/dietary supplements that can be contemplated/made into the dosage form of healthy foods, or food for specified health uses such as solid food like chocolate or nutritional bars, water dispersible beverage, semisolid food like cream, jam, or gel or beverage such as refreshing beverage, lactic acid bacteria beverage, drop, candy, chewing gum, gummy candy, yoghurt, ice cream, pudding, soft adzuki bean jelly, jelly, cookie, tea, soft drink, juice, milk, coffee, cereal, snack bar and the like.
12. The synergistic composition as claimed in claim 1, wherein said health benefit selected from preventing, controlling or treating obesity and/or overweight; improving lean body mass, improving browning of the White Adipose Tissue (WAT)/improving formation of brown adipose tissue (BAT), increasing basal metabolic rate (BMR)/resting energy expenditure, increasing thermogenesis, improving thyroid function, maintaining healthy body weight, increasing satiety, supporting weight loss, improving fat loss

and maintaining a slim body is achieved by at least one of; promoting lipolysis, inhibiting adipogenesis, lipid accumulation, Increase of Fibroblast growth factor-21 (FGF-21), increase of uncoupling protein (UCP-1) and increase of β 3-adrenoceptors (β 3-ARs).

13. A method of preventing, controlling or treating obesity and/or overweight; improving lean body mass, browning of White Adipose Tissue (WAT)/improving formation of brown adipose tissue (BAT), increasing basal metabolic rate (BMR)/resting energy expenditure, increasing thermogenesis, improving thyroid function, maintaining healthy body weight, increasing satiety, supporting weight loss, improving fat loss and maintaining a slim body in a human or animal, wherein the method comprises supplementing the subject with a suitable dose of a synergistic herbal composition comprising combination of first ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Theobroma cacao* and a second ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Citrus aurantifolia*; and optionally containing at least one additional ingredient selected from pharmaceutically acceptable excipient, diluent, and carrier.
14. A method of promoting lipolysis, inhibiting adipogenesis, inhibiting lipid accumulation, increase of Fibroblast growth factor-21 (FGF-21), increase of uncoupling protein (UCP-1) expression and increase of β 3-adrenoceptors (β 3-ARs) in a human or animal, wherein the method comprises supplementing the human or animal with a suitable dose of a synergistic herbal composition comprising combination of first ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Theobroma cacao* and a second ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Citrus aurantifolia*; and optionally containing at least one additional ingredient selected from pharmaceutically acceptable excipient, diluent, and carrier.
15. The method as claimed in claim 13 or claim 14, wherein supplementing the human or animal with a suitable dose is in the form of tablets, capsules,

controlled release tablets or using controlled release polymer-based coatings by the techniques including nanotechnology, microencapsulation, colloidal carrier systems and other drug delivery systems for obtaining the desired therapeutic benefit.

16. Use of a synergistic herbal composition comprising combination of first ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Theobroma cacao* and a second ingredient selected from the extracts, fractions, phytochemicals and mixtures thereof derived from *Citrus aurantifolia*; and optionally containing at least one additional ingredient selected from pharmaceutically acceptable excipient, diluent, and carrier for preventing, controlling or treating obesity and/or overweight; improving lean body mass, improving the browning of White Adipose Tissue (WAT)/improving formation of brown adipose tissue (BAT), increasing basal metabolic rate (BMR)/resting energy expenditure, increasing thermogenesis, improving thyroid function, maintaining healthy body weight, increasing satiety, supporting weight loss, improving fat loss and maintaining a slim body.