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(54) Title: USE OF THE PREGNANE GLYCOSIDES IN THE TREATMENT/MANAGEMENT OF OBESITY, OBESITY-RELATED AND OTHER DISORDERS

(57) Abstract: Doses containing pregnane glycosides alone, and in combination with several other compounds for treatment of disorders/conditions such as obesity, low BMR, hyperglycaemia, hypertension, hypercholesterolemia, Type (2) diabetes, migraine, osteo-arthritis and joint degradation/inflammation, clinical depression, menopausal syndrome, ageing syndrome, circulation syndrome, capillary degeneration, reduced cognitive and memory function, hearing loss, sexual dysfunction and others are disclosed. Doses are also provided for the regulation/improvement of various physiological parameters/conditions/functions associated with said disorders and others such as skin condition, joint mobility, mood, memory function and recall, lean body mass, stamina, libido and others. The preferred glycoside is a caralluma plant extract containing a synergical mixture of the pregnane glycosides, caratubersides and boucerosides containing 90-95% of the former. Combinations thereof with the extracts of Green tea, Fenugreek, Ashwagandha, Shilajith, Commiphora Mukul, Garcinia, Hibiscus Subdarifa, Coccinia, Bittergourd, Cinnamon, Liquorice, Red clover, Hops flowers, Pomegranate and with Glucosamine, Zinc monomethionine, Citrus bioflavonoids, Rutin, Bamboo silica, Shilajith, Saponin glycosides and the biders of caralluma, and selenium are disclosed.

USES OF THE PREGNANE GLYCOSIDES IN THE TREATMENT/MANAGEMENT OF OBESITY, OBESITY-RELATED AND OTHER DISORDERS

This invention relates to the uses of the pregnane glycoside(s), and the saponins and bitters of caralluma species of plants, in the treatment and management of symptoms/disorders such as obesity, overweight, high BMI(Body Mass Index), low BMR(Basal Metabolic Rate), hypertension, hyperglycaemia, hypercholesterolemia, osteo-arthritis, migraine, clinical depression, loss of hearing, sexual dysfunction, low stamina, endurance and energy levels, reduced cognitive and memory functions, capillary degeneration, joint inflammation/degeneration, circulation disorder, aging syndrome, menopausal syndrome and others; in the alteration/ improvement/ regulation of conditions/parameters/functions such as appetite level, weight, BMI, BMR, waist , arm and hip circumferences, fat levels, lean body mass, blood sugar, blood pressure(bp), total blood cholesterol, blood HDL/LDL ratio, stamina, energy and endurance levels, cognitive and memory function, hearing, aging, joint mobility, mood, sexual stamina and power, capillary health and others and in skin nourishment and as an anti-oxidant, anti-inflammation and anti-depressant agent. This invention further relates to methods of said treatment/management and of said alteration/improvement/ regulation and to pregnane glycoside compositions therefor, said compositions optionally further comprising additional therapeutical, nutraceutical or nutrition components. This invention also provides for processes for admixture for making said compositions.

Obesity is a major public health problem the world over in view of the direct and indirect economic and social costs of obesity. One of the major causes of obesity is the stressful and sedentary lifestyles of modern life and the widespread adoption of diets that contain large amounts of high calorie processed foods. The problem is particularly acute and widespread in some industrialised countries.

Obesity is a direct causal contributor to the pathophysiology of a number of diseases and causes exacerbation in several others. Some of said disorders/symptoms are: diabetes, hypertension, cardio-vascular disease, atherosclerosis, stroke and others.

Obesity is being increasingly combated medically by providing treatments for weight-reduction and for coping with, and management of associated symptoms/disorders such as high blood sugar, b.p., joint pains and others.

Weight reduction and related treatments such as regulation of BMI(Body Mass Index), increasing lean mass, increasing BMR(Basal Metabolic Rate), are also being increasingly adopted by people who are not

strictly clinically obese but do so for personal or social reasons such as the desire to feel and look good. The uses/methods/compositions of this invention are also relevant to said people.

These inventors have worked extensively on said problems/disorders and have developed novel uses of said pregnane glycoside(s) in the treatment and management of obesity and obesity-related disorders/symptoms and other disorders/symptoms. According to the invention, the pregnane glycosides for said uses may be caratuberside or bouceroside or others or mixtures thereof or may be one of the extracts of caralluma plants containing said pregnane glycoside(s) and may include therein the saponin glycoside(s), and/or the bitters, of caralluma. Said glycosides include their various isomers. Similarly, this invention provides for methods of treatment and management of obesity and said obesity related symptoms/disorders and for said alteration/improvement/regulation by the administration of effective doses of said pregnane glycoside(s) or said mixtures or said extracts. Further, this invention provides for pregnane glycoside compositions for said uses and methods. Still further, this invention provides for processes for making said compositions by the admixture of the constituents thereof. The uses, methods, compositions and processes of this invention relate also to disorders/symptoms and conditions/parameters/functions other than those related to obesity.

It is the observation of these inventors that the pregnane glycosides and other constituents of caralluma are highly effective for treatment and management of obesity and obesity-related disorders/symptoms and other said disorders. Said glycosides have been tested to be non-toxic and generally free of side effects. In cases where side effects were observed during the tests they were only gastro-intestinal(GI) in nature and were minimal and transient. Said side effects were generally found to cease within about a week of the commencement of treatment.

The principles of caralluma relevant to said uses and methods of this invention are said pregnane glycosides thereof. Preferably, said glycosides are caratuberside and/or bouceroside or mixtures thereof and includes the isomers thereof. More preferably, said compositions are mixtures of caratuberside and bouceroside which are found to exhibit strong synergy effects particularly with respect to their applications for treatment and management of obesity and obesity-related disorders/symptoms. Preferably, the ratio of caratuberside and bouceroside in compositions for said uses and said methods of the invention is from 9:1 to 19:1 by wt. Some compositions of this invention further comprise the saponin glycoside(s) and the bitters of caralluma and/or other additional therapeutical, nutraceutical or nutritional components.

The pregnane glycosides for said uses and methods may be isolated from materials of plant origin such as for example, the caralluma species of plants or they may have been produced by as yet apparently unknown chemical synthesis methods. Or they may be one of the extracts of the caralluma species of plants. As the caratuberside-bouceroside ratio(CBR) found in nature in the caralluma species of plants is almost equal to the value at which said synergy is a maximum it is advantageous to directly employ a caralluma plant

extract in said uses/methods of the invention. These inventors have developed said caralluma plant extracts and processes of making the same by the extraction of caralluma plant matter. This forms the subject-matter of their application for Indian patent No. 451/MAS/2003 dated 4th June 2003.

Thus, this invention provides for said treatment and management and said alteration/improvement/ regulation by the use of, that is, administration of said pregnane glycosides, preferably caratuberside and bouceroside. This invention, therefore, focuses on said caratuberside-bouceroside mixtures that offer considerable synergy and in particular, mixtures having caratuberside content from about 90% to about 95% w/w. for said uses, methods and compositions of the invention.

Caralluma plants also contain some saponin glycoside compounds which are present in small quantities and which are precursors of a number of useful products. However, their role in said uses and methods of the invention is insignificant except for one application discussed hereinbelow and could therefore be left substantially unextracted when preparing said caralluma pregnane glycoside extracts for the uses/ methods/compositions of the invention. The term 'glycoside(s)' in the further specification hereinbelow, therefore, generally refers to said pregnane glycosides unless otherwise required by the context.

Caralluma plant matter also contains bitters which are also of significance medically and healthwise and some novel applications thereof are provided hereinbelow wherein said pregnane glycoside(s) includes some amounts of said saponin glycoside(s) and/or said bitters.

It would be possible to isolate any of the caralluma glycosides in pure form and then use them either singly or as mixtures in the said uses/methods/compositions of the invention. Alternatively, said glycosides could be obtained by synthesis methods. A still further alternative is to obtain a mixture of caratuberside and bouceroside by extraction of caralluma plant matter(or any other plant matter containing pregnane glycosides). References to glycosides also mean reference to their isomers. Two isomers of caratuberside and ten of bouceroside are known to be present in caralluma. Within the scope of the invention, said glycosides in the uses/methods/compositions of the invention may be in their unconverted forms or in the form of any of the pharmaceutically accepted salts thereof. Any of the pharmaceutically acceptable carriers may be used with the glycosides which may be in their converted or unconverted forms.

As mentioned, this invention preferably provides for the use of the caralluma extracts wherein by carefully conducting the extraction process substantially the entire caratuberside and bouceroside content in the plant material is extracted and the said CBR value in the plant material substantially preserved in the extract. The said earlier application for patent by these inventors provides both a liquid form extract of glycosides in aq. ethanol solution and solid form extract wherein the extracted glycosides are adsorbed on a suitable excipient. These extracts are easily convertible into any of the pharmaceutically acceptable forms for

administration to subjects, such as for example, tablets, capsules, suspensions and injections. Conversion of the glycosides in the extracts into the form of any of the pharmaceutically acceptable salts may also be easily carried out if required and said salts are within the scope of the invention. Said conversions may be carried out by any of the known processes.

Known pharmaceutical options for treatment of obesity, that is, for weight reduction are: thermogenesis, lipase inhibitors and compounds that suppress appetite and/or stimulate the central nervous system(CNS).

The thermogenesis method involves the raising of the body core temperature slightly. This increases the metabolism of deposited lipids in the body. Thermogenesis drugs act on the brain and the thyroid gland resulting in said increase of body core temperature.

Lipase inhibitors work by reducing absorption of fat in the intestine system. Thus, when a lipase inhibitor is administered to a subject, the fat portion of the food consumed by the subject passes through his intestinal system unabsorbed and is eliminated in the stools.

Appetite suppressants/CNS stimulators act by modifying the levels of neurotransmitters such as catecholamine and serotonin in the blood leading to decreased feeling of hunger.

All three abovementioned approaches to obesity treatment and management have been found to have strong to unacceptable side effects.

Thermogenesis, by its nature, carries risk of side effects such as overstimulation of vital functions such as cardiac rhythm, blood pressure, neurotransmitter levels and the endocrine system. Subjects experience nervousness, anxiety, hypersensitivity to stimulii, insomnia and irregular heartbeats.

The side effects associated with known lipase inhibitors are GI in nature. Patients report oily and fatty stools and increased bowel movement. They also complain of urgency of bowel movement and sometimes inability to control the same. Oily spotting may also occur between bowel movements. A yet another side effect is the loss of fat soluble vitamins present in the food. They are carried away by the unabsorbed fat into the stools. For these reasons, patient compliance is found to be a problem in lipase inhibitor treatments.

When appetite suppressants and CNS stimulators are used, side effects arise from the altered neurotransmitter function. These include increased heart rate, hypertension, anxiety, mood alterations, diaphoresis, dizziness, swelling of extremities, dryness of mouth, constipation and insomnia.

Said known obesity treatments are, furthermore, contraindicated in many clinical situations such as hypertensive obese patients or patients suffering from coronary artery disease, cardiomegaly and some chronic GI disorders such as Irritable Bowel Syndrome.

In contrast, as observed by these inventors, pregnane glycosides act without interfering with the digestion process or thermogenesis or neurotransmitter levels. A caralluma extract(containing the pregnane glycosides thereof) acts on the Kreb's cycle(citric acid cycle) at critical points thereof such as to inhibit fat synthesis in the liver and other cells of the subject and enhance fat burning(fat metabolism).

These inventors believe that pregnane glycosides also act on the hunger centres in the brain and reduce the feeling of appetite. Remarkably, this action occurs in the case of pregnane glycosides without any side effects arising, as was first observed by these inventors. Pregnane glycosides seem to suppress appetite without causing any significant disturbance in the neurotransmitter functioning unlike as in the case of the known appetite-suppressants. These inventors have further found that pregnane glycosides also apparently increase thermogenesis without manifestation of any side effects observed with the known thermogenesis enhancers.

Caralluma is indeed a food item that has been consumed in the past, and still consumed as a food by some population groups in India. Its non-toxicity, and that of the pregnane glycosides thereof, is therefore well established and further verified by clinical tests conducted by these inventors. This invention, therefore, provides for caralluma pregnane glycosides(and said extracts) not only as a medicinal product but also as a health-giving and health-ensuring food supplement. Thus, this invention offers caralluma pregnane glycosides and other caralluma constituents also as nutraceutical products for consumption either by themselves or in conjunction or mixture with a variety of other food supplements, energy enhancers and other health products.

Caralluma is a group of succulent species found wild in India, Afghanistan, Arabia, Southern Europe, Sri Lanka and others. Caralluma plants are small, erect and fleshy although some species have recumbent stems. The stems are 4-grooved and are from 10-40 mm thick(1/2" to 1-1/2"). The spines of the stems are actually the leaves of the plant. Caralluma plants bear star-shaped, fleshy flowers in a range of dark colours from purple and black to red and dark brown. Well over two hundred caralluma species are known. Some of the caralluma species investigated by these inventors are: C. indica, C. fimbriata, C. attenuata, C. tuberculata, C,. edulis, C. adscendens, C. stalagmifera, C. umbellata, C. lasiantha and C. penicillata. Although some limited and non-conclusive tests and animal trials appear to have been done in the past on some medicinal properties of caralluma, no tests, animal trials or human clinical trials appear to have been conducted on the appetite-suppression property or on weight reduction and other obesity

symptoms related properties of pregnane glycosides. This also applies to the properties of said glycosides related to the other disorders/symptoms mentioned hereinabove.

This invention therefore, is apparently first to establish the appetite-suppression, weight reduction and related properties of caralluma extracts relevant to treatment and management of obesity and obesity-related disorders/symptoms and other said disorders/symptoms and also the properties relevant to said alteration/regulation/improvement of said conditions/parameters/functions. The properties have been established by carefully designed and conducted animal trials and subsequently clinical trials on human subjects. This invention is also first in correlating said properties to the pregnane glycosides contained in the caralluma species of plants and to other members of the pregnane glycosides group.

Thus, this invention provides for novel uses of caralluma glycosides and/or said caralluma extracts in the treatment and management of obesity and obesity related disorders/symptoms and other disorders/symptoms wherein said glycosides and/or extracts are administered to achieve weight reduction, reduction of BMI, reduction of fat, reduction in waist, hip and arm circumferences, reduction of blood glucose, reduction of blood pressure, increase of lean body mass, increase of BMR, reduction in blood cholesterol, enhancement of the blood HDL/LDL ratio, appetite suppression, enhanced stamina, energy and endurance levels, improved hearing, improved capillary health, improved cognitive and memory function and/or for treatment and management of clinical depression, migraine, osteo-arthritis, aging syndrome, menopausal syndrome, mood elevation and joint inflammation and to improve/regulate these parameters/conditions/functions.

According to the invention, therefore, there is provided the use of pregnane glycoside(s)(PG) in the form of extracts of the caralluma species of plants or otherwise, either singly or as mixtures thereof, in the treatment and management of symptoms/disorders such as obesity, migraine, osteo-arthritis, overweight, clinical depression, hearing loss, sexual dysfunction, high BMI, low BMR, hyperglycaemia, hypertension, hypercholesterolemia, low stamina, endurance and energy levels, reduced cognitive and memory functions, capillary degeneration, joint inflammation/degeneration, menopausal syndrome, aging syndrome, circulation syndrome and others; in the alteration/improvement/regulation of parameters/conditions/ functions such as appetite levels, weight, BMI, BMR, waist, arm and hip circumferences, fat levels, lean body mass, blood sugar, blood pressure(bp), total blood cholesterol, blood HDL to LDL ratio, stamina, energy and endurance levels, cognitive and memory function, mood, circulation, capillary health, hearing, aging, joint mobility, sexual power, drive, stamina and libido; and in skin nourishment and as an anti-oxidant, anti-inflammation and anti-depressant agent, said treatment and management and alteration/ improvement/regulation comprising the administration of an effective daily treatment(main) dose(s) thereof to the subject over an adequate period of time followed optionally by a daily

maintenance dose(s) thereof to be taken optionally in a continuous or periodical(sequential) mode over an extended period of time or indefinitely, the said PG content of said main and maintenance doses being specified by the molecularly equivalent amount of caratuberside(CTB) therein, said pregnane glycoside(s) optionally including the saponin glycoside(s) and/or the bitters of said caralluma species and being optionally supplemented by one or more additional therapeutical, nutraceutical or nutritional components.

According to the invention, there is further provided methods for the treatment and management for said disorders/symptoms and for the alteration/improvement/regulation of said parameters/functions/conditions mentioned hereinabove.

Still further, according to the invention, there is provided pharmaceutical compositions containing pregnane glycoside(s) in the form of extracts of the caralluma species of plants or otherwise, for the treatment and management of said disorders/symptoms and for the alteration/improvement/regulation of said parameters/functions/conditions, comprising said pregnane glycoside(s) and optionally including therein the saponin glycoside(s) and/or the bitters of the caralluma species of plants and furthermore, optionally comprising one or more additional therapeutical, nutraceutical or nutritional components.

Still further, according to the invention, there is provided processes of admixture for making said pharmaceutical compositions.

This invention also provides for novel food supplement compositions containing said glycosides and/or said extracts for use in regulation of weight and other said obesity-related parameters and other parameters/functions/conditions. In addition to said glycosides and/or extracts, said supplements may comprise first, second and further additional components that enhance the performance of said glycosides and/or extracts, synergistically or otherwise, or that complement said extracts/glycosides in terms of the action thereof on one or more of said symptoms/disorders or parameters/functions/conditions or in providing additional nutrition. This invention provides for novel uses of said food supplement compositions and for methods of use thereof. Within the scope of the invention said supplements may contain one or more said additional components, that is, in addition to said pregnane glycoside(s).

The said uses and methods of this invention may be adopted for control/regulation of one or more said parameters/conditions/functions to particular, or desired values and also to correct those that have deviated and require to be brought in line with the said particular/desired values.

This invention has found that per day dosage of between 10 mg. to 1500 mg. of caratuberside or caratuberside-bouceroside mixtures do not exhibit any toxicity or side effects except for said transient effects experienced by some subjects. In the clinical trials that are described further hereinbelow the dosage followed was 300 mg. per day of said caratuberside-bouceroside mixture, the ratio of the two said components(CB Ratio) therein being from about 9:1 to about 19:1 by wt. Subsequently higher doses of

about 450 mg. per day per subject were adopted. Increased doses resulted correspondingly in increased change in the parameter(s), all other things being equal indicating that the two were generally proportional. These inventors observe that this proportionality of doses and effects extends upto at least 1500 mg. per day doses. Thus, this invention provides for designing the said doses to obtain desired speeds of transformation of said parameters/functions/conditions.

Said doses may contain said glycosides in the unconverted forms or otherwise. Said glycosides, converted or unconverted may be associated with any of the known pharmaceutically accepted carriers and excipients and furthermore be in the form of any of the pharmaceutically accepted salts. The compositions may include any pharmaceutically acceptable and/or edible colouring agents, flavouring agents and other additives.

The linkage between the pregnane glycosides and the effects thereof in said treatments and management and said alteration/improvement/regulation is established by the said animal tests and clinical trials conducted by these inventors first in India and then in the USA. These provide statistical evidence confirming said therapeutic and health effects thereof.

Said tests/trials were conducted at established and recognised medical institutions. In India, the trials were done at the St. John's Medical College & Hospital at Bangalore, India under the direction of Prof. Dr. Anura V. Kurpad, M.D., Ph.D., Dean, Institute of Population Health & Clinical Research, Bangalore, India. The US trials were under Dr. Ronald W. Lawrence and Dr. Suneeta Chaudhary of the Western Geriatric Research Institute, Los Angeles, California, USA. At the completion of the test at Bangalore, India the subjects expressed desire to continue with the caralluma extract doses. Said tests and the extended Bangalore tests and other tests have established the effectiveness of caralluma glycosides in reducing/eliminating arthritic pains/aches, reducing blood sugar, reducing BP and effecting changes in other parameters/functions/condition mentioned hereinabove. They have established the efficacy of pregnane glycosides in the treatment/management of said obesity-related symptoms/disorders and other said disorders/symptoms and in the said alteration/improvement/regulation of various parameters/ functions/ conditions.

A mutagenicity study(Reverse Mutation Test on Caralluma extract) by *Salmonella typhimurium* was conducted by M/s. Intox Private Ltd., of Dist. Pune, Maharashtra, India under Dr. P.Y.Naik, Director and Dr. N.S. Deshmukh, Study Director. The study was in accordance with the OECD Principles of Good Laboratory Practices(OECD, 1998) and OECD Guidelines for Testing of Chemicals, Section 4, No. 471 adopted 21 July 1997. The study concluded that Caralluma extract is Non-Mutagenic in *Salmonella typhimurium* strains TA 1535, TA 97A, TA 98, TA 100 and TA 102.

A report on the risks and efficacy of caralluma extracts based on the abovementioned animal and human studies and other evidence on caralluma was commissioned from Dr. Harry T. Preuss, M.D., M.A.C.N.,

C.N.S., Prof. Of Physiology, Medicine and Pathology, Georgetown University Medical Centre, Washington DC 20057, USA. Said report notes:

i. the absence of any adverse event reports on caralluma from the Indian subcontinental area where caralluma has been a part of the food chain for several population groups over hundreds of years, the average daily intake by said population groups ranging from about 100 gms. to about 400 gms. of caralluma plant matter,

ii. that apparently no alteration of the chemical nature of the caralluma principles occurs during the process of extraction of the plant matter by aq. ethanol,

iii. the heavy metal content of caralluma extracts was found to be quite low and well within limits based on several separate investigations,

iv. that various tests indicate extremely low amounts(well within safe limits) of hexane, methanol, 2-propanolol, chloroform, 1,4-dioxane, methylene chloride and trichloroethylene in caralluma extracts,

v. that the said 2 month long test programme at Bangalore, India referred to hereinabove is suggestive of weight loss although the differences were not significant in magnitude. However, that there was a significant drop in waist circumferences suggesting that a part of the fat loss must have been masked by muscle build-up,

vi. that tests on various categories of diabetic mice clearly show significant lowering of blood glucose levels through an 'insulin-like' action, that is, by increased release of insulin and/or sensitisation of the animal to lesser amounts of insulin,

vii. that caralluma extracts have anti-nociceptive and anti-inflammatory action in addition to anti-hyperglycaemic property.

The mechanism of action of caralluma glycosides in producing said effects is not at present fully understood and requires more work to ascertain and establish the same. However, the general outline of the mechanism are proposed herein by these inventors and in this context these inventors make the undermentioned observations. It may be noted that this is without commitment by this invention to any specific mechanism or mode of action. It may be relevant to mention again at this point that the link between said caralluma glycosides and said effects is conclusively established by the statistical evidence provided by said tests/trials.

The biochemical processes of carbohydrate, protein and fat metabolism and of the breakdown and biosynthesis of fats relevant to the subject of this invention are summarised below.

i. Carbohydrates, proteins and fats are broken down in cells to generate energy in the form of energy carrying molecules such as ATP(Adenosine triphosphate). Said breakdown also produces pyruvic acid

that diffuses into the mitochondria where a series of reactions produces, *inter alia*, acetyl coenzyme A and oxaloacetate. Compounds NAD and FAD are also produced. They carry activated hydrogen atoms that subsequently take part in fat synthesis reactions. A further reaction links acetyl coenzyme A and oxaloacetate to give a molecule that is capable of diffusion across the mitochondrial wall into the cell cytoplasm. The NAD and FAD also diffuse out into the cytoplasm where together with acetyl coenzyme A they undergo various reactions ending with synthesis of fat molecules.

ii. In the cytoplasm an enzyme called citrate lyase catalyses the breakdown of said combined molecule into its constituent parts, oxaloacetate and acetyl coenzyme A. The action of citrate lyase is critical in that blocking the action thereof would prevent formation of acetyl coenzyme A in the cytoplasm and thereby disrupt the fat synthesis process in the cells.

iii. The precursor(building block) of fat synthesis in the cells is malonyl coenzyme A which is produced from acetyl coenzyme A. Malonyl coenzyme A is the key to fat synthesis in cells and if the production thereof is either prevented or restricted, the fat synthesis is similarly affected.

iv. Both fat breakdown(fat metabolism) and fat synthesis occur simultaneously in cell cytoplasm particularly in liver cells. The fat breakdown is promoted(catalysed) by an enzyme called carnitine acyltransferase. Relative levels of carnitine acyltransferase and malonyl coenzyme A determine the balance between the twin reactions of fat synthesis and breakdown, more of one promoting one while more of the other promoting the other.

v. Acetyl coenzyme A is also consumed in the mitochondria to generate/release energy. Only when the energy requirements of a cell are met that excess acetyl coenzyme A gets formed that migrates to the cytoplasm where it partakes in fat synthesis as mentioned above.

vi. An important factor is the feeling of satiety/hunger that arises in the hypothalamus. The hypothalamus receives signals from the stomach conveying the position, that is, the fullness or otherwise of the stomach. This is translated into the appropriate feeling of hunger or satiety in the brain. Via another channel the brain also receives signals indicating the position about glucose and glycogen levels in the liver. If these levels are high, they generate a feeling of satiety in the brain and vice versa.

This invention observes that pregnane glycosides block the action of said enzyme citrate lyase and/or direct its action away from splitting the combined acetyl coenzyme A-oxaloacetate structure. The resultant drop of acetyl coenzyme A levels in the cytoplasm decreases fat synthesis. These inventors further believe that pregnane glycosides inhibit the action of malonyl coenzyme A in fat synthesis. Thus, caralluma

glycosides provide two-fold action in decreasing fat synthesis: one by decreasing the formation of malonyl coenzyme A and the other by inhibiting the action of malonyl coenzyme A generated.

Decrease of malonyl coenzyme A levels shifts the malonyl coenzyme A-carnitine acyltransferase balance in favour increased fat breakdown as opposed to fat synthesis. Thus, under the effect of pregnane glycosides a body not only decreases fat synthesis but speeds up fat breakdown(fat metabolism). The effect is greater release of energy, that is an enhancement of BMR. The latter effect is more significant because the scope for decrease in fat synthesis is quite small in view of the fact that the amounts of fat synthesised by a body in a day is, in any case, a small quantity. The increased fat metabolism and the increase of BMR makes a subject feel more energetic unlike as in the case of the known appetite suppressants and, as will be observed from the further description hereinbelow, these together with other properties of the pregnane glycosides has a cascade effect on so many other body functions/conditions/ parameters and processes causing improvements thereof. Pregnane glycosides are thus energy and stamina enhancers and provide increased endurance. This mechanism of action of pregnane glycosides has been first observed by these inventors.

These inventors also found that pregnane glycosides also act on the hypothalamus to generate a feeling of satiety and well-being and reduce the feeling of hunger. This occurs without any side effects such as those associated with known appetite-suppressants. Pregnane glycosides also act in the liver to direct the lipids towards glycogen production. Increased glycogen level also contributes towards the reduction in the feeling of hunger felt by a subject.

This mechanism of the action of pregnane glycosides in relation to obesity and obesity-related symptoms/disorders and parameters/conditions/functions has apparently not been known/presented before in the prior art. The description given hereinabove establishes the said effects of the pregnane glycosides in relation to the various symptoms/disorders/functions/parameters/conditions associated with obesity. The basis of said effects in relation to obesity and obesity-related symptoms/disorders is the appetite-reducing, the fat synthesis disruption, the fat metabolism increase and other properties of the pregnane glycosides. Specifically, the obesity and obesity related functions/parameters/conditions/disorders/ symptoms that are affected by pregnane glycosides are: weight, obesity, BMR, BMI, blood sugar, BP, blood lipids, appetite, lean body mass, waist, arm and hip circumferences, joints and others. Other properties of pregnane glycosides that come into action are: improving capillary health, anti-inflammatory, anti-oxidant and others.

The further description given hereinbelow establishes the said effects of the pregnane glycosides as regards several other non-obesity disorders/symptoms/functions/conditions/parameters. With regard to osteo-arthritis and joint degeneration/inflammation, these inventors observe that the action of pregnane

glycosides is very significant as it provides not only reduction/elimination of said inflammation but also improvement in the health of the joints by reducing/reversing the degeneration of the bone and synovial tissue. Pregnane glycosides have both anti-arthritic and anti-inflammation properties. Caralluma extracts, furthermore, cause increased secretion of the synovial fluid which increases joint efficiency and mobility. With pregnane glycosides, morning stiffness is either reduced or eliminated and the joints feel stronger and are able to take up greater loads.

With regard to clinical depression and mood elevation, these inventors observe that pregnane glycosides act through intervention in the neurotransmitter levels. This has not been observed/reported in prior art. The connection between pregnane glycosides and clinical depression and in mood elevation was first observed by these inventors during said clinical trials on the appetite-suppression and weight reducing properties of caralluma extracts. It was observed that subjects taking the extracts experienced an increased feeling of well-being, enhanced energy levels, mood elevation and increased tolerance to pain and stress. Clinical depression is characterised by pathological changes in neurotransmitter function, especially catecholamine levels. Significantly, low levels of serotonin(5 hydroxytryptamine, 5HT) have been demonstrated in neurochemical disorders like clinical depression, obsessive-compulsive disorders, social phobia and hypochondria. Serotonin is also apparently involved in the sensation of hunger. These inventors believe that through its effect on the neurotransmitter serotonin and others in the suppression of appetite, pregnane glycoside(s) is able to simultaneously provide mood elevation, increased ability to cope with stress and greater social interests. Unlike the known anti-depresssants of the SSRI class(Selective Serotonin Reuptake Inhibitors), pregnane glycosides do not have cardiovascular side effects or others such as dysrhythmia and hypertension. Adoption of SSRI's often results in serotonin intoxication unlike in the case of pregnane glycosides. Serotonin intoxication can cause aggressive/violent or erratic behaviour, insomnia and hyperactive state in subjects.

One of the most common form of sexual dysfunction is primary impotence, that is, erectile dysfunction(ED). ED is caused by various psycho-physiological factors including depression the effect of which is to restrict or decrease blood flow to the erectile tissue in the penis which is known as the corpus cavernosum. While nitric oxide in blood relaxes the muscles in the penis to let more blood flow in, a phosphodiesterase enzyme called PDE5 inhibits the action of the nitric oxide. Known treatments of ED are based on administering PDE5 inhibitors. However, the action of PDE5 inhibitors is quite slow and furthermore has adverse cardiological effects. It is contra-indicated in cardiovascular patients and for people suffering from low or high BP particularly those on nitrate-based vasodilators. PDE5 inhibitors are also known to induce depression, which itself is a known causal factor in ED. The tests conducted by these inventors have demonstrated that pregnane glycosides increase energy levels in subjects: cause mood elevation and a feeling of well-being. The anti-depressant properties of the pregnane glycosides are also relevant in this context. These inventors observe that while pregnane glycosides are not known to cause directly increased blood flow to the penile tissue, they may be causing the same to happen by virtue of the mood-elevation, energy-enhancing, capillary health restoring and anti-depressant properties thereof as the

said tests confirm improvement in sexual function in subjects suffering from ED. Increased fluid secretion in the male and female reproductive organs was also observed by the inventors.
In female subjects, particularly those suffering from age and/or menopausal syndrome, these inventors found that pregnane glycosides generated resurgence of sexual interest and increased libido.

Memory impairment and reduced retention are related to the neurotrasmitter levels in the brain, in particular serotonin levels. Pregnane glycosides, as observed by these inventors, cause enhancement of energy levels, libido and gastro-intestinal motility. They also cause mood elevation. The resultant increase in serotonin levels generates a feeling of well-being, increased perception of pain and stress, increased memory recall and retention, increased speed of retrieval and augmented cognitive function.

This invention has observed that pregnane glycosides cause a reduction of total cholesterol in subjects and also an increase in the HDL/LDL ratio. The mechanism for this action is not understood but the effect mentioned has been demonstrated by the clinical tests described hereinabove.
In the case of migraine attacks, these inventors have found that pregnane glycosides decrease inflammation and pain and increases tolerance to stress and pain. This invention has found that pregnane glycosides increase capillary elasticity and in general ensure capillary health. The anti-depressant and mood elevation property of pregnane glycosides gives a psychological boost to the subject and the higher serotonin levels generated by the glycosides increase the confidence level of the subject in facing upto the migraine attack.
These inventors report that pregnane glycosides enhance energy levels, endurance levels and increase stamina as outlined in the description hereinabove. This action of pregnane glycosides together with reduced fat synthesis and increased fat burning helps build up muscle tissue. Thus, this invention provides for administration of pregnane glycosides for building up the lean body mass. Pregnane glycosides and their formulations are therefore, good diet adjuncts/supplements in sports and athletics training schedules.
As regards diabetes, these inventors observe that pregnane glycosides exhibit dual action: reduction of weight and effect on the lipid metabolism and reducing/regulating blood sugar as established by the said tests/trials. The clinical trials have also established the anti-hypertensive and anti-cholesterolemic properties of caralluma extracts.
These inventors observe that in view of the energy, stamina and endurance enhancing properties of caralluma and its property of restoring elasticity to capillaries and its anti-oxidation action is relevant for its use in the treatment of the aging syndrome.
The role of pregnane glycosides in capillary regeneration and protection has been mentioned hereinabove. This forms the basis for the novel use thereof in treating capillary degeneration and maintaining capillary health as provided by this invention.

The role of pregnane glycosides in regenerating capillary walls is also the basis for the novel use of pregnane glycosides in treating loss of hearing as provided by this invention. Pregnane glycosides restores capillary health in the ear region which leads to improvement in the hearing function.

Said regeneration of capillary walls helps increase/restore blood flow to the various functional zones in the body. Thus, pregnane glycosides are effective in treatment of sexual dysfunction in men and women as they enhance blood flow to the various genital and reproductive organs. Pregnane glycosides also enhance the flow of lubricant and other fluids in the reproductive organs and prevents vaginal dryness. Hence, this invention provides for the novel use pregnane glycosides in treatment of sexual dysfunction, reproductive dysfunction, hearing loss, aging syndrome and others.

The connection between pregnane glycosides and capillary health is also the basis of the novel use thereof in skin nourishment as provided by this invention. Thus, pregnane glycosides can restore and maintain skin health such as of the face, arms and other parts of the body.

The intake of caralluma glycosides by population groups that consume caralluma as a food may be anywhere upto 1500 mg. per day. Further, an intensive LD 50 safety pharmacological study conducted at the St. John's Medical College and Hospital, Bangalore, India according to the OECD guidelines for testing of chemicals(Acute Oral Toxicity-Fixed Dose Method) showed no mortality in rats upon administration of a very high dose of 5 gms. per kg. body weight of caralluma fimbriata extract containing about 50% w/w of pregnane glycosides. No fatalities or adverse effects were noted. These data indicate that the toxicity limit if any of pregnane glycosides is quite high and may be well above 5000 mg. per day for humans. This also establishes that accidental overdoses of pregnane glycosides(or caralluma extracts) do not pose any risk.

The clinical trials programme done at the St. John's Medical College and Hospital, Bangalore, India was double-blind, controlled and randomised and followed the guidelines of the Indian Council of Medical Research, New Delhi, India with regard to methodology and ethical considerations and other factors.

Sixty-two obese subjects were selected at random for the test, fifty of who completed the test, the rest having dropped out during the test. Half of the subjects who completed were on active medicine and the rest were on placebo.

Each subject was examined at the commencement of the trials and then at the end of the first and second months. The examination included anthropometric parameters of body weight, waist circumference, MAC, hip circumference, Fat%, BIA Fat% and lean% and a series of biochemical measurements including blood sugar, lipid profile and others. The subjects were questioned about hunger level, urge to eat, fullness and thoughts on food and their responses recorded.

Both parametric(paired 't' test) and non-parametric tests such as Wilcoxon Signed Rank test(paired analysis) and Mann-Whitney test(for unpaired analysis) were used to look for significant changes between time points and between the groups. Both parametric and non-parametric tests gave similar results.

In groupwise analysis, the Wilcoxon-Signed Rank Test was used to check differences between time points separately in each group. The significant values were based on $p < 0.0016$. Paired 't' test analysis were used where differences were looked for in mean values between time points separately in each group. Significant differences were based on $p<0.016$(a value of 0.05 corrected with Bonferroni correction for three multiple comparisons for each analysis).

In the inter-group analysis, differences in change in each parameter were compared between the groups using Mann-Whitney test for independent comparisons. Significant differences were taken where $p<0.05$.

The overall conclusions from the trials are that statistically significant differences between time points were seen in the active group for the parameters of body weight, BMI, waist circumference, hip circumference, fat loss, blood pressure and hunger levels while blood sugar and lipid profile did not show any significant results.

The doses administered to the subjects consisted of an extract of caralluma fimbriata. The aerial parts of the plant were extracted with 30% v/v aq. ethanol. Resin removal was done with n-hexane solvent. This yielded the caralluma glycosides in aq. ethanol solution. This was concentrated and adsorbed on a suitable excipient. The material was then dried and filled in hard gelatine capsules. The dried, adsorbed material contained either about 25% or 50% w/w glycosides. Each capsule contained 500 mg. of the said excipient adsorbed extract containing either 25% or 50% w/w pregnane glycosides giving capsules of two strengths, single and double. The subjects took two capsules a day, one before each meal. The capsules given to the placebo group did not contain the extract. For some tests involving low value doses, capsules containing 250 mg. of said extract containing 25% and 50% w/w pregnane glycosides were used.

The adverse effects observed were GI(gastro-intestinal) in nature and were reported in both the groups, active and placebo. The effects were moderate acidity, mild constipation and mild to moderate flatulence and subsided within a week of commencement of trials. No adverse effects were noted in other systemic functions. No changes in ECG were observed. No sympathomimetic effects were found.

The American study by Dr. Ronald Lawrence and Dr. Suneeta Chaudhary at the Western Geriatric Research Institute, Los Angeles, California, USA was done on 26 randomly selected overweight patients of whom 19 were placed in the active group while 7 were on placebo. The trials were done over a 4-week period.

The subjects were taken from two active practices in the Los Angeles area and randomly assigned to the two groups. The age profile varied from 31 to 73. Two subjects dropped out during the trials leaving 24 to complete the test.

The following parameters were measured before and at the end of the tests: weight, height, hip and waist circumference and b.p. All the subjects were advised to pursue normal pattern of activity, exercise and food intake and not to alter their diets during the test.

The active group were given gelatine capsules containing an extract of Caralluma fimbriata. The capsules for the placebo did not contain the extract. The subjects were asked to take two capsules a day one prior to each meal. The active capsules contained 500 mg. of the extract each, said extract containing about 50% w/w of pregnane glycosides.

The extract incorporated in the capsules administered in the US study was prepared as follows. Aerial parts of Caralluma fimbriata were extracted with aq ethanol and then the extract was subjected to resin removal. The extract was then concentrated, adsorbed on a suitable excipient and the material dried and then incorporated in gelatine capsules.

The American study concludes that administration of Caralluma fimbriata extracts used in the weight reduction programme coupled with no change in daily activity pattern and diet of the subjects resulted in a statistically significant weight loss over a period of only four weeks. The study noted the lack of toxicity and the absence of any side effects. The study recommends further trials and states that there are few, if any over-the-counter natural substances which can produce such a weight reduction effect.

At the conclusion of the Indian study, the subjects expressed a voluntary desire to continue with the caralluma glycosides doses. The study was therefore extended and has already run over 12 months and is continuing. This has proved advantageous as the period of the earlier study was only two months. In the continuation study, the dosage has been increased to three capsules a day in a two-plus-one system. The increased dosage and the longer period have given some important insights that were not apparent earlier. Thus, while the earlier test did not show statistically significant effects as regards the blood sugar of the subjects, the link was clearly evident from the results of the extended study. The extended tests have established that administration of pregnane glycosides does lead to reduction of blood sugar levels, reduction of BP, reduction of serum cholesterol and reduction of LDL together with enhancement of HDL cholesterol in blood.

This invention has considered several said additional components that may be added to or taken in conjunction with the pregnane glycosides. These are described hereinbelow.

Garcinia(Garcinia cambogia) extract is a known weight reducing agent. It has been used as a food supplement in India and China over hundreds of years and its non-toxic nature is well established. The active principle of Garcinia cambogia is (-)-hydroxycitrate, or HCA.

HCA suppresses appetite and inhibits absorption and biosynthesis of fats, cholesterols and triglycerides. A dose of 3 mg. of HCA per kg. body weight is known to cause about 43% reduction in appetite at 6.5 hours and about 29% at 24 hours and is preferably taken 30 to 60 minutes before meals. The appetite reduction effect is dose dependent and no rebound eating is observed upon stopping of the dose.

The effect of HCA on the brain and the neurotransmitter system in reduction of appetite does not appear to have any side effects. HCA also acts in the upper digestive tract in reducing fat absorption and during the Kreb's cycle to reduce fat biosynthesis. HCA also acts in the liver and diverts carbohydrates from lipid biosynthesis to hepatic glycogen synthesis that also contributes to the feeling of reduced appetite.

It will be observed that there are considerable similarities in the action of the pregnane glycosides and HCA in appetite suppression and weight reduction. This invention therefore, provides for mixtures of pregnane glycosides(or caralluma extracts) and Garcinia extract(or HCA). Said mixtures have been observed by these inventors to exhibit synergy in the treatment and management of obesity and obesity related symptoms and disorders and in said alteration/improvement/regulation of the obesity related parameters/conditions/functions such as weight, BMI, BMR, waist, hip and arm circumferences, lean body mass, appetite suppression and others. Said mixtures increase lean body mass by stimulating thermogenesis without any side effects. Said mixtures also mildly reduce systolic and diastolic pressures and reduce cholesterol by inhibiting its production in the liver.

Glucosamine is known to be used for treatment and relief in arthritis. It gives strength to the cartilage and rigidity to the joints. These inventors found that mixtures of glucosamine with pregnane glycosides(or caralluma extracts) is synergistic in the treatment and maintenance of joint health. Said mixtures enhance the synthesis of new cartilage and inhibit the action of the cartilage destroying enzymes. The combination is far more effective in reducing joint pain and inflammation and in enhancing joint mobility than the sum of the actions obtainable individually by the two components. Glucosamine may be in the form of the sulphate or any of the other pharmaceutically accepted salts in the compositions disclosed herein.

Rutin is a bioflavonoid that has been used in the treatment of arthritic pain. Rutin is a capillary protectant in that it restores elasticity to capillary walls. Application of Rutin restores blood flow to joints and thereby enhances secretion of the synovial fluid. One of the other bioflavonoids may also be used: Hesperidin, Diosmin or others. This invention found synergy in mixtures of pregnane glycosides and Glucosamine and Rutin, mixtures of PG and glucosamine and in mixtures of pregnane glycoside and rutin

and provides such mixtures for the treatment and management of osteo-arthritis and in the reduction/elimination of joint inflammation and pains. Said mixtures may also include Chondroitin. Both Glucosamine sulphate and Chondroitin sulphate are acidic and therefore mixtures thereof with pregnane glycosides are problematic for subjects who suffer from gastric acidity. For such subjects, this invention provides for mixtures of pregnane glycosides and Rutin or one of the other bioflavonoids.

Green Tea extract has been known for use as an anti-oxidant, anti-aging, anti-microbial, anti-viral, anti-fungal and an anti-cancer agent. It has been also used in plasma cholesterol control and for control of blood glucose and insulin levels. Green tea extract also inhibits the accumulation of fat in the body and the liver in particular. Its pre-eminent use is as an anti-aging agent. Pregnane glycosides are also anti-oxidation agents in their own right. Pregnane glycosides provide energy boost, prevent/minimise joint pains and ensure capillary health. Green tea contains polyphenols that are also referred to as catechins. The major catechins in green tea extracts are: Epicatechin, Epigallocatechin, Epigallocatechin gallate(EGCG) and Epicatechin gallate. EGCG is the strongest anti-oxidant of the four and is known to cure free radical damage, prevent bacterial infection and reduce cholesterol. These inventors have found that mixtures of pregnane glycosides together with the saponin glycosides found in caralluma and green tea extract are synergistic with regard to treating and fighting the aging syndrome, maintaining youthful elasticity in tissues, in slowing down or preventing cataract formation and for increase of stamina, energy and endurance and BMR. Said mixtures are excellent anti-oxidant and anti-aging agents.

Ashwagandha(Withania somnifera) is known as an aphrodisiac and sexual potency enhancer. These inventors observe that pregnane glycosides are steroidal in nature with close resemblance to sex hormones and believe that pregnane glycosides may be the precursor or a link in the synthesis of vital sex hormones in the body. This invention has discovered that combinations of pregnane glycosides and the withanolides of Ashwagandha are synergistic in respect of their application as aphrodisiacs and enhancers of sexual power and potency. Said application as aphrodisiacs and for increasing sexual potency and power relates to both sexes. This invention, therefore, provides for said combinations for enhancing sexual power and potency, as aphrodisiacs, for improvements in the functioning of reproductive organs in both sexes and for treatment of ED. These inventors observe that compositions of pregnane glycosides and Ashwagandha are anti-depressants and are provided by this invention for treatment and management of clinical depression.

Shilajith, also known as Asphaltum or Mineral pitch, is a strong aphrodisiac and sex drive enhancer. This invention reports that mixtures of Shilajith and pregnane glycosides also exhibit synergy. This is in respect of application of the combination as an aphrodisiac; for curing primary impotency and for increasing sex drive and libido. Mixtures of Shilajith and pregnane glycosides are provided by this invention for said application.

Fenugreek extract is known to be effective in reducing blood sugar and is used in anti-diabetic formulas. The component therein which is active in this respect is 4-hydroxy-iso-leucine. This invention explored mixtures of fenugreek extract and pregnane glycosides together with the bitters of caralluma for application in reducing blood sugar, in particular FBS(Fasting blood sugar) and found that such mixtures exhibit synergy and are highly effective in reducing and controlling blood sugar. Said mixtures are very relevant for Type 2 diabetic subjects and for those desiring reduction and/or regulation of blood sugar. Both the components are consumed as food products and are therefore, totally non-toxic and safe even at very high doses. These inventors have found that as the dosages are increased the FBS reaches a floor level of about 70-80 mg./dL and does not fall below the said level. A combination of about 250 mg. of caralluma extract containing about 125 mg. of PG together with 250 mg. of Fenugreek extract containing 40% 4-hydroxy-iso-leucine taken over a period of about 6 months brought the FBS down from about 160 mg./dL to about 80 mg./dL. This invention therefore, provides a mixture of pregnane glycosides, fenugreek extract containing 4-hydroxy-iso-leucine, Coccinia extract containing about 10% terpenes, Bitter gourd extract containing about 8% bitters and Cinnamon extract containing about 15% polyphenols for reduction of blood sugar.

Fenugreek also contains Protodioscin that is a precursor to many sex hormones including Androgen that stimulates sex urge in men. The role of pregnane glycosides in treating sexual dysfunction and for increasing sex drive, power and stamina and enhancement of libido has been discussed hereinabove. This invention finds that combinations of pregnane glycosides and protodioscin are synergistic in treating the aspects of sexual dysfunction mentioned hereinabove. Thus, this invention provides for mixtures of pregnane glycosides and fenugreek extract containing about 50% protodioscin for said treatment for sexual dysfunction symptoms and/or for enhancing sex drive, power, stamina and libido.

This invention provides for an anti-cancer composition that neutralises certain carcinogens and comprises pregnane glycosides with Zinc monomethionine, Citrus bioflavonoids with selenium as selenium chelate. Said mixture exhibits synergy.

Another novel composition comprising the same components, namely, pregnane glycosides together with Zinc monomethionine and Citrus bioflavonoids and Selenium as selenium chelate is provided by this invention for the treatment and management of the menopausal syndrome. Said composition, which is also synergistic, provides relief from hot flushes and menopausal distress.

A yet another novel composition comprising pregnane glycosides along with Zinc monomethionine, Citrus bioflavonoids and Selenium as selenium chelate is provided by this invention for skin nourishment. Said composition exhibits synergy and protects cell membranes and tissues and ensures capillary health. It is helpful in maintaining youthful elasticity in tissues by preventing the hardening thereof. It is an

excellent anti-aging and anti-oxidant composition. It also slows/prevents formation of cataract. The selenium in the abovementioned mixtures may also be as sodium selenate or selenomethionine.

A few other said additional components incorporated in compositions provided by this invention are: Coccinia extract containing about 10% terpenes, Bitter gourd extract containing about 8% bitters, Hibiscus Subdarifa extract containing about 25% polyphenols, Cinnamon extract containing about 25% polyphenols, and Commiphora Mukul extract containing about 3% gugulsterones.

A few plant extracts contain components that supplement or enhance estrogen levels in women and are therefore suitable for treatment of menopausal syndrome wherein women suffer hot flushes, depression, night sweat, irritability emotional changes and other symptoms. Combinations of these plant extracts and pregnane glycosides were found by the present inventors to offer synergy in treatment of menopausal problems and in lowering the risk of cardiovascular disease and osteoporosis in post-menopausal women. Said plant extracts are: Liquorice extract containing about 5% Triphytoestrogen, Red clover extract containing about 8% isoflavones, Hop's flower extract containing about 5% triphytoestrogen and Pomegranate extract containing about 10% Ellagic acid.

Bamboo silica is known to help in osteo-arthritis. This invention has also investigated mixtures of pregnane glycosides with Rutin and bamboo silica and finds them synergical and beneficial in the treatment and management of joint degeneration and inflammation. A mixture of said pregnane glycosides together with glucosamine and Rutin and furthermore containing bamboo silica is also provided by this invention for the treatment and management of joint problems and for maintaining joints health and flexibility.

With regard to the various treatments referred to herein, the following clarifications are made.

i. The pregnane glycosides content of the doses mentioned herein has been specified in terms of the weights of the molecularly equivalent amounts of the pregnane glycoside, caratuberside.

ii. The Glucosamine content of the various doses mentioned herein has been specified in terms of the weight of the sulphate salt thereof.

iii. All the compositions defined and claimed herein have been found by the inventors to exhibit synergy.

iv. Where plant extracts having a certain concentration of the active principles thereof have been specified as components of said doses, it may be noted that other said concentrations are within the scope of the invention as the same can be adapted for the dose by simple adjustment of the quantities going into the doses. For example, 70% bamboo silica has been specified. Any other concentration may be used and the amount of the component in the dose adjusted to take into account the concentration difference.

v. This also applies also to non-plant components, if any.

vi. Unless otherwise specified, the maintenance doses, where the dosage period is indefinite, may be taken daily on a continuing basis(continuous mode) or alternatively, on periodical(sequential)

mode wherein the doses are taken for a certain length of time and then stopped for a time. In such an on-off arrangement the said on-periods may be from about 2 to 7 months and the off-periods may also be of a similar extent.

vii. The term 'main dose' has been used herein at some places to refer to treatment doses as opposed to the maintenance doses. The terms 'main dose' and 'treatment dose' are, therefore, used interchangeably in this specification.

viii. The doses may be taken in the form of tablets, capsules, syrups, suspensions and other forms. The doses are also easily incorporated in beverages and foods.

ix. Some doses comprise the saponin glycosides of caralluma species of plants. Similarly, some doses include the bitters of caralluma. These components have been stated to be included in the pregnane glycosides. If the pregnane glycosides in the doses are derived from caralluma it is convenient to extract out said saponin glycosides and the bitters as well along with it. However, said saponin glycosides and bitters may be separate components within the scope of the invention and added to the pregnane glycosides to form the composition.

x. Where the component of a dose composition is a plant chemical, the component may be incorporated in said composition in the form of an extract of the plant or otherwise.

The said uses, methods and compositions and formulations provided by this invention are described hereinbelow.

1. Obesity:

1.1 For subjects of either gender suffering from clinical obesity with an BMI of about 25 to 30, Type 2 diabetes or normal, normotensive or mild to moderate hypertension with no systemic dysfunction, the subject being preferably on controlled diet and/or moderate physical activity, otherwise no restriction. Main Dose: From about 250 to 500 mg. of caratuberside(CTB) per day over a period of 3 to 4 months followed by an optional maintenance dose of from about 125 to 250 mg. CTB per day for about six to eight months. Said maintenance dose may be taken over an extended period or indefinitely without any adverse effects as caralluma pregnane glycosides are good anti-oxidants, non-toxic and well-tolerated nutritional supplements.

1.2 For subjects of either gender suffering from clinical obesity with an BMI of about 30 to 50, Type 2 diabetes or normal, normotensive or mild to moderate hypertension with no systemic dysfunction, the subject being preferably on controlled diet and/or moderate physical activity, otherwise no restriction, a treatment dose double that provided above for the lower BMI category of subjects and optional maintenance dosage the same as for the lower BMI category is provided, all other parameters including the period for the doses being the same as for the lower BMI category. .

1.3 An alternative schedule for the maintenance dose is to take the same for a period of about 4-5 months and then stop the same for a period of about 6 months. The maintenance dose may be again started at the end of the said 6 month period and continued for about three months. The maintenance

course may be continued under this sequence of six and three months for an indefinite period. The water intake should be double of the normal during the treatment. During the treatment one-half hour brisk walks in the morning and evening, and diet control, are advised.

By about the fifth week, subjects start feeling the lessening of appetite and of the thoughts of food and simultaneously feel more energetic. Appetite is experienced by the subjects at appropriate times but is satisfied with lesser amounts of food. From this point onwards, weight loss also begins to become quite apparent. By the ninth week, the effects will be clearly apparent in weight loss, appetite reduction, reduction of waist, hip and arm circumferences and other parameters. The waist circumference would be down by atleast about 50 mm(two inches) and the weight by at least 3-4 kgs.

1.4 An alternative treatment for obesity provided by this invention comprises a mixture of PG and HCA.

Main dose: From about 120 to 240 mg. of CTB with from about 150 to 300 mg. of HCA per day over a period of about six months. Optional Maintenance dose: same as the main dose. Period: extended period to indefinitely.

Garcinia extract may be used in place of HCA.

In the case of subjects where the gelatine of the capsules causes adverse GI reactions, the dose may be incorporated in a beverage and consumed in the liquid form. This applies to all of the treatments mentioned in this specification. This invention provides for a number of health-ensuring and nutraceutical compositions containing PG and other components, the compositions being provided in both solid and beverage forms.

2. BMR:

2.1 For subjects undergoing moderate physical activity and desiring increase in BMR and energy, endurance and stamina levels.

Main Dose: From about 250 to 500 mg. of CTB per day over a period of about 3 to 4 months.

Optional maintenance dose: From about 125 to 250 mg. CTB per day over an extended period or indefinitely.

2.2 For subjects undertaking heavy physical activity such as sportspersons and desiring increase in BMR, energy, endurance and stamina levels:

Main Dose: From about 500 to 1000 mg. CTB per day for a period of about 3 to 4 months.

Optional maintenance dose: From about 250 to 500 mg. CTB per day for an extended period or indefinitely.

2.3 An alternative treatment for subjects desiring moderate increased BMR, stamina, energy and endurance levels:

Main Dose: From about 90 to 150 mg. of CTB containing about 2 mg. to 15 mg. of saponin glycosides of caralluma together with from about 100 to 200 mg. of Green tea catechins per day.

Optional maintenance dose: Same as the main dose. Period: extended to indefinite.

2.4 A yet another course of treatment for subjects desiring increase in BMR, energy, endurance and stamina:

Main Dose: From about 100 to 200 mg. of CTB containing about 2 mg. to 15 mg. of saponin glycosides of caralluma together with from about 100 to 200 mg. of the catechins of green tea and from about 100 to 200 mg. of the withanolides of Ashwagandha per day.

Period: About 6-9 months.

Optional Maintenance dose: Same as the main dose Period : extended to indefinite.

At the end of week two, the feeling of fatigue during exercise and workouts comes down and the subject will feel more energetic and capable of more exercise. At week four, male subjects on exercise programmes such as weight training will notice an upward trend in bicep circumference, chest circumference and increase in muscle sizes. Female subjects on weight training will see clear signs of loss of fat surrounding muscle groups. The treatment is suitable for housewives whose energy levels tend to sag after the morning round of work.

3. Lean Body Mass:

3.1 For subjects undertaking moderate physical activity and desiring increase in lean body mass: Main Dose: From about 250 to 500 mg. CTB per day over a period of about 3 to 4 months followed by an optional maintenance dose of from about 125 to 250 mg. CTB per day over an extended period or indefinitely.

3.2 For subjects undertaking heavy physical activity and desiring increase in lean body mass the main dose provided by the invention is from about 500 to 1000 mg. of CTB per day over a period of 3 to 4 months followed by an optional maintenance dose of from about 250 to 500 mg. CTB per day over an extended period or indefinitely.

4. Osteo-arthritis:

4.1 For subjects having early to middle stage osteo-arthritis of weight-bearing joints with mild to moderate radiological symptomatology and desiring relief from joint pains and inflammation: Main Dose: From about 250 to 500 mg. CTB per day over a period of about 4 to 5 months followed by an optional maintenance dose of from about 125 to 250 mg. CTB per day over an extended period or indefinitely.

4.2 For subjects suffering from severe osteo-arthritis of weight-bearing joints with mild to moderate radiological symptomatology and desiring relief from joint pains and inflammation:

Main Dose: From about 500 to 1000 mg. CTB per day over a period of about 4 to 5 months followed by an optional maintenance dose of from about 250 to 500 mg. CTB per day over an extended period or indefinitely.

Six alternative courses of treatment for subjects suffering from osteo-arthritis and/or desiring rejuvenation of the weight bearing joints and/or relief from joint pains are provided hereinbelow.

4.3 . Main Dose: From about 120 to 300 mg. CTB together with from about 400 to 1000 mg. of Glucosamine sulphate per day for a period of about 6 to 8 months followed by an optional maintenance dose same as the main dose for a period of about 6 months or indefinitely.

4.4 Main Dose: From about 90 to 270 mg. of CTB together with from about 250 to 750 mg. of Glucosamine sulphate and from about 75 to 250 mg. of Rutin per day over a period of about 6 to 8 months followed by an optional maintenance dose same as the main dose for an extended period or indefinitely.

4.5 Main Dose: From about 120 to 300 mg. CTB together with from about 300 to 900 mg. Rutin per day over a period of about 6 to 8 months followed by an optional maintenance dose same as the main dose over an extended period or indefinitely. The maintenance dose may be adopted when the arthritic condition comes under control and the same may be taken in two parts, one morning and one evening.

4.6 Main Dose: From about 100 to 200 mg. CTB together with from about 600 to 750 mg. glucosamine sulphate per day to be taken in two parts. This dose is provided by the invention as a dietary supplement for subjects over forty years of age and desiring to prevent the onset of osteo-arthritis by the joints going into a degenerative process. This dose ensures adequate synovial fluid secretion and rejuvenates the ligaments. In the hereinmentioned doses the bioflavonoid Rutin may be substituted by one of the other bioflavonoids and the glucosamine sulphate may be either as the sodium or potassium salt or other. The doses that exclude glucosamine sulphate are advised for subjects that have gastric acidity problem as glucosamine sulphate has an acidic reaction in the stomach. Period: Over an extended period or indefinitely.

4.7 Main dose: From about 120 to 300 mg. of CTB together with from about 300 to 900 mg. Rutin and from about 50 to 100 mg. of bamboo silica(70%)(or equivalent amount of another concentration) per day over a period of about six to eight months followed by an optional maintenance dose same as the main dose to be taken over an extended period or indefinitely. The main dose may be stopped and the maintenance dose adopted as soon as the arthritic condition is under control.

4.8 Main dose: From about 90 to 270 mg. of CTB together with from about 250 to 750 mg. of Glucosamine sulphate, from about 75 to 250 mg. of Rutin and from about 50 to 100 mg. of Bamboo silica(70%)(or equivalent amount of another concentration) per day over a period of about six to eight months followed by an optional maintenance dose same as the main dose for a period of about six months or indefinitely.

The pregnane glycosides in the abovementioned doses for osteo-arthritis provide the anti-inflammatory action and regenerative action. This is important as both glucosamine sulphate and chondroitin do not possess anti-inflammation properties. The subjects may be on NSAID therapy and/or physiotherapy treatment. Caralluma extracts are well-tolerated and exhibit no side effects on prolonged consumption. Preferably the doses may be taken after the meals.

At week three, gradual alleviation of pain occurs together with an increase in joint mobility and increased tolerance to physical stress. At week five, the subjects experience near-normalcy in joint movements and cessation of pain, significant reduction in morning stiffness, increased tolerance to exercise and quicker recovery from exercise. At week 13, further bone degradation ceases almost totally as established by radiological investigations.

Where combination main doses have been provided, the same may be discontinued when the arthritic condition comes under control. From that point, a maintenance dose of from about 250 to 300 mg. of CTB per day may be adopted for a period of six to eight months. The said maintenance dose may be preferably taken in two stages after the two main meals of the day. For severe cases, the combination doses may preferably be continued indefinitely.

5. Blood Sugar:

5.1 The treatment provided by this invention for subjects having Type 2 diabetes and FBS(Fasting Blood Sugar) of about 120-150 mg./dL

Main Dose: From about 500 to 1000 mg. CTB per day Period : prolonged to indefinite

5.2 For subjects having Type 2 diabetes and FBS exceeding about 150 mg./dL

Main Dose: From about 1000 to1500 mg. CTB per day over a prolonged period or indefinitely.

The following two alternative courses of treatment are provided by the invention.

5.3 For subjects having Type 2 diabetes and/or desiring control/regulation of blood sugar:

Main Dose: From about 100 to 250 mg. CTB together with from about 100 to 200 mg. of 4-hydroxy-iso-leucine(or as Fenugreek extract) per day, the PG containing about 2-3% bitters of the caralluma species of plants. Period: 6 to 8 months.

Optional maintenance dose same as the main dose. Period: over an extended period or indefinitely.

5.4 For subjects having Type 2 diabetes.

Main Dose: From about 100 to 200 mg. of CTB together with from about 100 to 200 mg. of Coccinia extract containing about 10% terpenes, from about 100 to 200 mg. of Bitter gourd extract containing about 8% bitters, from about 100 to 200 mg. of Cinnamon extract containing about 15% polyphenols and from about 100 to 200 mg. Fenugreek extract containing about 40% 4-hydroxy-iso-leucine per day for a period of about 6-7 months followed by an optional maintenance dose, same as the main dose, preferably for an indefinite period.

Preferably the doses are taken 30 min. after meals. The dose may be taken in one stage or in two. At week two the subject would experience a reduction of about 10% in FBS and PPBS(Post-prandial blood sugar). At week four onwards, weight loss will be observed and also increased physical stamina. Blood sugar levels drop further. About 20% reduction in FBS and PPBS can be expected at this period. At week 16, reduction in glycosylated haemoglobin will be observed. Subjects may stop their main dose after the stipulated period for a period of about 6-8 months. They may then revive the main dose for about 2-3 months after a gap of about 2-3 months. This sequence may be continued indefinitely. For subjects over forty years of age, it is preferable that the said sequence is continued indefinitely. For subjects over fifty, prefcrably the main dose should be continued indefinitely. Regular exercise in the form of a brisk walk of 45 min. morning and evening is advised and it is suggested that subjects avoid refined carbohydrate foods.

6. Blood Pressure:

6.1 For subjects suffering from mild to moderate hypertension the main dose provided by the invention comprises from about 250 to 500 mg. of CTB per day to be taken over a period of about 3 to 4 months followed by an optional maintenance dose of from about 125 to 250 mg. of CTB per day for an extended period or indefinitely.

6.2 For subjects having severe hypertension the treatment provided by the invention comprises: Main Dose: From about 500 to 1000 mg. of CTB per day for a period of about 3 to 4 months followed by a maintenance dose of from about 250 to 500 mg. of CTB per day for an extended period or indefinitely.

6.3 An alternative course is provided by the invention for subjects having mild to moderate hypertension wherein the main dose is from about 125 to 250 mg. of CTB together with from about 125 to 250 mg. of HCA(Garcinia extract) per day to be taken over an indefinite period.

6.4 A still another alternative course of treatment and management for this condition provided by the invention comprises a main dose of from about 125 to 250 mg. of CTB together with from about 125 to 250 mg. of Commiphora Mukul extract containing about 3% gugulsterones per day to be taken over an indefinite period.

The tests have established that pregnane glycoside(s) reduce blood pressure, both systolic and diastolic. Another related effect is that of reducing serum LDL(Low density lipoprotein) and enhancing the HDL (High density lipoprotein). The dose may be taken in one stage or two and is preferably taken after meals. At week three, increased energy and exercise endurance were observed. This brings down the LDL levels. Physical training is advised during the treatment. At week five, increase in the HDL level and further increases in energy and endurance are observed.

7. Appetite Reduction:

7.1 For subjects desiring mild to moderate reduction in appetite, this invention provides: Main Dose: from about 250 to 500 mg. of CTB per day over a prolonged period or indefinitely.

7.2 For subjects desiring heavy reduction in appetite: Main Dose: From about 500 to 1000 mg. of CTB per day over a prolonged period or indefinitely.

7.3 This invention provides an alternative course comprising pregnane glycosides and HCA. Main dose: From about 120 to 240 mg. of CTB with from about 150 to 300 mg. of HCA per day over a period of about six months. Optional Maintenance dose: same as the main dose. Period: extended period to indefinitely.

Garcinia extract may be used in place of HCA.

8. Weight reduction:

8.1 For subjects desiring slow/gradual reduction in weight: Main Dose: From about 250 to 500 mg. of CTB per day over a period of about 3 to 4 months followed by an optional maintenance dose of from about 125 to 250 mg. CTB per day taken over an extended period or indefinitely.

8.2 For subjects desiring rapid reduction in weight: Main Dose: From about 500 to 1000 mg. CTB per day over a period of about 3 to 4 months followed by an optional maintenance dose of from about 250 to 500 mg. CTB per day over an extended period or indefinitely.

8.3 This invention provides an alternative course comprising pregnane glycosides and HCA. Main dose: From about 120 to 240 mg. of CTB with from about 150 to 300 mg. of HCA per day over a period of about six months. Optional Maintenance dose: same as the main dose. Period: extended period to indefinitely.

Garcinia extract may be used in place of HCA.

9. Waist, arm and hip circumference:

9.1 For subjects desiring reduction in waist, hip and arm circumferences: Main Dose: From about 250 to 500 mg. of CTB per day over a period of about 3 to 4 months followed by an optional maintenance dose of from about 125 to 250 mg. CTB per day over an extended period or indefinitely.

9.2 This invention provides an alternative course comprising pregnane glycosides and HCA. Main dose: From about 120 to 240 mg. of CTB with from about 150 to 300 mg. of HCA per day over a period of about six months. Optional Maintenance dose: same as the main dose. Period: extended period to indefinitely.

Garcinia extract may be used in place of HCA.

10. Migraine:

10.1 For a subject desiring relief from migraine: Main Dose: From about 500 to 1000 mg. of CTB per day over a period of about 3 to 4 months, said dose to be doubled during the periods of attack. The daily dose may be preferably taken in two parts one after each meal. At week five, the subject will notice decreased frequency of attacks. The pregnane glycosides exerts its anti-inflammatory properties and also restores elasticity to the capillaries. The anti-depressant property of pregnane glycosides gives a psychological boost to the subject. His confidence level increases due to increased secretion of serotonin. At week nine, the subject experiences significantly reduced frequency of attacks and increased tolerance to physical stress. At week thirteen, the frequency of attacks can be expected to be down to less than 10%. A maintenance dose of from about 125 to 250 mg. of CTB per day may preferably be continued indefinitely

11. Clinical depression:

11.1 For a subject suffering from mild clinical depression: Main Dose: From about 125 to 250 mg. of CTB per day to be taken till the ceasing of the symptoms.

11.2 For subjects suffering from severe clinical depression: Main Dose: From about 250 to 1000 mg. CTB per day to be taken till the ceasing of the symptoms.

11.3 An alternative course provided by the invention for a subject suffering from clinical depression or desiring mood elevation comprises a main dose of from about 250 to 500 mg. CTB per day together with from about 100 to 200 mg. of the withanolides of Ashwagandha over a period of about 12 to 18 months followed by an optional maintenance dose of from about 125 to 250 mg. of CTB per day together with from about 50 to 100 mg. of the withanolides of Ashwagandha over an extended period or indefinitely.

Depressions are associated with abnormal levels of serotonin reuptake. Pregnane glycosides cause increase in serotonin levels without the adverse effects such as serotonin intoxication of known anti-depressants such as the SSRI's. With pregnane glycosides, subjects experience increased feeling of well-being, increased energy levels, increase tolerance to stress and a general improvement in mood *inter alia* through its effect on serotonin levels. Adverse effects, if any, are of a milder form than with said SSRI's. The subjects begin to experience increased energy levels, reduced fatigue and tiredness and general well-being at week three. At week four, there is further all-round improvement in the abovementioned parameters and the subjects experience increased social interests.

12. Sexual dysfunction:

12.1 For a subject suffering from primary impotence and/or decreased libido and/or desiring increased libido and sexual drive, power and stamina: Main Dose: From about 500 to 1000 mg. of CTB per day over the period of existence of dysfunction and decreased libido or as desired by the subject.

12.2 An alternative course provided by the invention for a subject suffering from sexual dysfunction such as primary impotency and/or reduced libido or desiring increased sex drive, power and stamina: Main Dose: From about 250 to 500 mg. of CTB per day together with from about 100 to 200 mg. of the withanolides of Ashwagandha over a period of about 6 to 12 months followed by an optional maintenance dose of from about 125 to 250 mg. of CTB per day together with from about 50 to 100 mg. of the withanolides of Ashwagandha as long as necessary or as long as increase in sex power is desired.

12.3 A yet another alternative course provided by the invention for a subject suffering from sexual dysfunction such as primary impotence and/or loss of, or reduced libido and/or desiring increased sex power, stamina and drive comprises:

Main Dose: From about 250 to 500 mg. of CTB per day together with from about 100 to 200 mg. of Shilajith over a period of about 6 to 12 months followed by an optional maintenance dose of about 125-250 mg. CTB per day together with about 50-100 mg. of Shilajith for as long as necessary or as long as increased sex drive is desired.

12.4 A yet another course of treatment provided by the invention for a subject suffering from sexual dysfunction such as primary impotence and/or loss of, or reduced libido and/or desiring increased sex power/drive and stamina. Main dose: From about 250 to 500 mg. of CTB per day together with from about 250-500 mg. of Fenugreek extract containing about 50% Protodioscin to be taken over a period of about 3-4 months followed by an optional maintenance dose of from about 125 to 250 mg. of CTB together with from about 125 to 250 mg. of said fenugreek extract per day for as long as necessary or as long as increased sex drive is desired.

The effects of pregnane glycosides relevant to its application in treatment of sexual dysfunction are: increase in energy, endurance and stamina, beneficial effect on capillaries and through that on circulation, feeling of increased well-being, increased tolerance to stress, elevation of mood and others. Together these effects appear to produce increased blood flow in the region of the reproductive organs and cause resurgence of sexual interest and increase of libido which has been clearly established by the tests/trials.

Caralluma extracts also appear to be beneficial for women in the post-menopausal phase when they experience reduced sexual desire, painful intercourse, diminished sexual responsiveness, difficulty in achieving orgasm and decreased genital sensation. Pregnane glycosides do not have the cardio-vascular and other side effects exhibited by the known compounds for treatment of sexual dysfunction, such as, for example, the PDE5 inhibitors.

13. Cognitive and memory function:

13.1 For a subject suffering from diminished cognitive and memory function or desiring increase thereof: Main Dose: From about 250 to 500 mg. of CTB per day over a period of about 3 to 4 months.

Caralluma extracts have a beneficial effect on neurotransmitter levels and functioning and, in particular, on serotonin levels. It appears that the multiple effects of pregnane glycosides on a subject has a cascade type effect causing an all-round improvement in body functions including cognitive and memory function, memory recall and retention and speed of retrieval. This has been established by said tests/trials. The dose may be taken in a single stage or two and is preferably taken after meals.

14. Aging syndrome:

14.1 For subjects desiring treatment/management of the aging syndrome, this invention provides for a main dose of from about 250 to 500 mg. of CTB per day over a prolonged to indefinite period.

14.2 An alternative course provided by the invention comprises a dose of from about 100-200 mg. of CTB per day together with from about 100 to 200 mg. of the catechins of green tea and from about 100 to 200 mg. of the saponin glycosides of caralluma followed by an optional maintenance dose of from about 100 to 200 mg. of CTB per day together with from about 50 to 100 mg. of said catechins and from about 120 to 300 mg. of said saponin glycosides over an indefinite period.

14.3 This invention also provides a dietary supplement for fighting the aging syndrome comprising a dose of from about 100 to 200 mg. of CTB per day together with from about 250 to 350 mg. of Green Tea extract containing about 40% catechins to be taken indefinitely.

14.4 A yet another composition provided by this invention for a subject desiring reduction in the aging syndrome comprises a main dose of from about 50 to 100 mg. of CTB per day together with from about 100 to 150 mg. of Zinc monomethionine, from about 150 to 250 mg. of Citrus bioflavonoids and selenium chelate equivalent to from about 2 to 8mg. of selenium to be taken over an indefinite period.

The properties of pregnane glycosides relevant to its application as an anti-oxidant and in combating aging are: i. Reduction of fat ii. Increase of energy levels and stamina levels iii. Increased physical activity iv. lowered stress and mood elevation v. increased joint mobility vi. increasing capillary elasticity and others. These benefits are obtained with substantially nil side effects.

15. Loss of Hearing:

15.1 For a subject suffering from hearing loss: Main Dose: From about 250 to 500 mg. of CTB per day over a period of about 3 to 4 months followed by an optional maintenance dose of from about 125 to 250 mg. of CTB per day taken over an extended period or indefinitely.

16. Circulation disorder:

16.1 For a subject suffering from a circulation disorder: Main Dose: From about 500 to 1000 mg. of CTB per day over a period of about 3 to 4 months followed by an optional maintenance dose of from about 250 to 500 mg. per day of CTB over an indefinite period. The invention provides for the maintenance dose to be taken indefinitely in case of severe circulation disorder and where the disorder is mild and the maintenance dose is not adopted then the main dose should be commenced upon re-occurrence of the disorder/symptom. The main dose must be revived if the circulation problem re-occurs and in cases of severe circulation problems the main dose should preferably be continued indefinitely.

17. Capillary Degeneration:

17.1For a subject desiring restoration or maintenance of capillary elasticity: Main Dose: From about 500 to 1000 mg. of CTB per day for a period of about 3 to 4 months followed by a maintenance dose of from about 250 to 500 mg of CTB per day to be taken over an indefinite period.

It has been observed that caralluma extracts enhance/restore capillary elasticity. Together with the other effects of pregnane glycosides, the subject experiences an all-round improvement of body functions including hearing, sexual function, skin health, mental functions, circulation and others. The dosage may be taken in one stage or two and is preferably taken in two stages after the two main meals of the day.

18. Skin Nourishment:

18.1 For a subject desiring skin nourishment and skin elasticity and health : Main Dose: From about 50 to 100 mg. of CTB per day together with from about 100 to 150 mg. of Zinc monomethionine, from about 150 to 250 mg. of Citrus bioflavonoids and from about 2 to 8 mg. of selenium as selenium chelate or other compound, to be taken over an extended period or indefinitely.

19. Menopausal syndrome:

19.1 For a subject suffering from the menopausal syndrome and desiring alleviation from hot flushes and menopausal distress: Main Dose: From about 50 to 100 mg. of CTB per day together with from about 100 to 150 mg. of Zinc monomethionine, from about 150 to 200 mg. of Citrus bioflavonoids and from about 6 to10 mg. of selenium as selenium chelate or other compound to be taken as long as necessary.

Four further courses of treatment and management for a subject suffering from menopausal syndrome are indicated hereinbelow.

19.2 Main dose: From about 50 to 100 mg. of CTB together with from about 100-200 mg. Liquorice extract containing about 5% Triphytoestrogens per day to be taken as long as necessary and as long as symptoms last.

19.3 Main dose: From about 50 to 100 mg. of CTB together with from about 100 to 200 mg. of Red clover extract containing about 8% isoflavones per day to be taken for as long as necessary and as long as symptoms last.

19.4 Main Dose: From about 50 to 100 mg. of CTB together with from about 100 to 200 mg. of Hops flower extract containing about 5% triphytoestrogens per day to be taken for as long as necessary and as long as symptoms last.

19.5 Main dose: From about 50 to 100 mg. of CTB together with from about 100 to 200 mg. of Pomegranate extract containing about 10% Ellagic acid per day. Period: As long as the symptoms and as long as necessary.

20. Cancer prevention/protection:

20.1 For a subject desiring the neutralisation of carcinogens and protection against cancer: Main Dose: From about 50 to 100 mg. of CTB per day together with from about 100 to 150 mg. of Zinc monomethionine, from about 150 to 200 mg. of Citrus bioflavonoids and from about 2 to 8 mg. of selenium as selenium chelate or other compound to be taken indefinitely.

21. Cholesterol:

21.1 For a subject desiring reduction of total blood cholesterol: Main Dose: From about 125 to 500 mg. of CTB per day together with from about 150 to 250 mg. of Hibiscus Subdarifa extract containing about 25% polyphenols and from about 100 to 200 mg. of Commiphora Mukul extract containing about 3% gugulsterones to be taken for an indefinite period.

21.2 An alternative composition provided by the invention for a subject desiring reduction in blood cholesterol: Main Dose: From about 120 to 240 mg. of CTB per day together with from about 150 to 300 mg. of HCA over a period of about six months followed by an optional maintenance dose same as the main dose over an extended period or indefinitely preferably over an indefinite period.

21.3 A yet another alternative composition provided by the invention for a subject desiring reduction in blood cholesterol: Main Dose: From about 90 to 150 mg. of CTB containing about 2-10% saponin glycosides, together with from about 100 to 200 mg. of the catechins of green tea per day over an extended period or indefinitely.

22. BMI:

For a subject desirous of reducing BMI, the invention provides for the following courses of treatment and management.

22.1 For subjects of either gender having a BMI of about 25 to 30, Type 2 diabetes or normal, normotensive or mild to moderate hypertension with no systemic dysfunction, the subject being preferably on controlled diet and/or moderate physical activity, otherwise no restriction.

Main Dose: From about 250 to 500 mg. of caratuberside(CTB) per day over a period of 3 to 4 months followed by an optional maintenance dose of from about 125 to 250 mg. CTB per day for about six to eight months. Said maintenance dose may be taken over an extended period or indefinitely without any adverse effects as caralluma pregnane glycosides are good anti-oxidants, non-toxic and well-tolerated nutritional supplements.

22.2 For subjects of either gender having a BMI of about 30 to 50, Type 2 diabetes or normal, normotensive or mild to moderate hypertension with no systemic dysfunction, the subject being preferably

on controlled diet and/or moderate physical activity, otherwise no restriction, a treatment dose double that provided above for the lower BMI category of subjects and optional maintenance dosage the same as for the lower BMI category is provided, all other parameters including the period for the doses being the same as for the lower BMI category. . .

22.3 An alternative schedule for the maintenance dose is to take the same for a period of about 4-5 months and then stop the same for a period of about 6 months. The maintenance dose may be again started at the end of the said 6 month period and continued for about three months. The maintenance course may be continued under this sequence of six and three months for an indefinite period. The water intake should be double of the normal during the treatment. During the treatment one-half hour brisk walks morning and evening and diet control are advised.

By about the fifth week, subjects start feeling the lessening of appetite and of the thoughts of food and simultaneously feel more energetic. Appetite is experienced by the subjects at appropriate times but is satisfied with lesser amounts of food. From this point onwards, lowering of the BMI(weight loss) also begins to become quite apparent.

22.4 An alternative composition of this invention for increase of BMI comprises: Main dose: From about 120 to 240 mg. of CTB with from 150 to 300 mg. of HCA per day over a period of about six months. Optional Maintenance dose: same as the main dose. Period: extended period to indefinitely.

Garcinia extract may be used in place of HCA.

23. Anti-oxidation:

23.1 This invention provides for an anti-oxidation course for subjects desiring treatment/ management of the aging syndrome and/or for general fitness and health, comprising a main dose of from from about 250 to 500 mg. of CTB per day over a prolonged to indefinite period.

23.2 An alternative anti-oxidation course provided by the invention comprises a dose of from about 100 to 200 mg. of CTB per day together with from about 100 to 200 mg. of the catechins of green tea and from about 100 to 200 mg. of the saponin glycosides of caralluma followed by an optional maintenance dose of from about 100 to 200 mg. of CTB per day together with from about 50 to 100 mg. of said catechins and from about 120 to 300 mg. of said saponin glycosides over an indefinite period.

23.3 This invention also provides an anti-oxidant dietary supplement for fighting the aging syndrome and/or provide general health and fitness comprising a dose of from about 100 to 200 mg. of CTB per day together with from about 250 to 350 mg. of Green Tea extract containing about 40% catechins to be taken indefinitely.

23.4 A yet another composition course provided by this invention for a subject desiring reduction in the aging syndrome and/or ensuring general health and fitness comprises a main dose of from about 50 to 100 mg. of CTB per day together with from about 100 to 150 mg. of Zinc monomethionine, from about 150 to 250 mg. of Citrus bioflavonoids and selenium chelate equivalent to from about 2 to 8 mg. of selenium to be taken over an indefinite period.

The properties of pregnane glycosides relevant to its application as an anti-oxidant and in combating aging are: i. Reduction of fat ii. Increase of energy levels and stamina levels iii. Increased physical activity iv. lowered stress and mood elevation and v. increased joint mobility vi. improved circulation and others. These benefits are obtained with substantially nil side effects.

In all the treatments described hereinabove, the dosages may be taken before, during or after meals. However, where the objective is to provide relief from one or more of the obesity-related symptoms the dosages may be preferably taken one-half to one hour before meals. A daily dose may be taken at one time or in two stages. If taken at one time, it may be preferably taken before, during or after the main meal of the day.

The term 'indefinitely' used in relation to said treatment and maintenance doses is intended to mean that the doses are to be taken substantially lifelong in a continuous mode wherein the doses are taken daily without a break. The scope of the said term 'indefinitely' is intended to include the option of taking the maintenance doses in a periodical(sequential) arrangement(mode) comprising taking the doses periodically over periods of about two to seven months with the gaps also extending to about two to seven months. In the applications related to obesity-related symptoms, the sequential formula for maintenance doses described hereinabove is recommended.

Various embodiments and variations other than described hereinabove that are within the art are within the scope of the invention.

We claim:

1. The use of pregnane glycoside(s)(PG) in the form of extracts of the caralluma species of plants or otherwise, either singly or as mixtures thereof, in the treatment and management of symptoms/disorders such as obesity, migraine, osteo-arthritis, overweight, clinical depression, hearing loss, sexual dysfunction, high BMI, low BMR, hyperglycaemia, hypertension, hypercholesterolemia, low stamina, endurance and energy levels, reduced cognitive and memory functions, capillary degeneration, joint inflammation/degeneration, menopausal syndrome, aging syndrome, circulation syndrome and others; in the alteration/improvement/regulation of parameters/conditions/ functions such as appetite levels, weight, BMI, BMR, waist, arm and hip circumferences, fat levels, lean body mass, blood sugar, blood pressure(bp), total blood cholesterol, blood HDL to LDL ratio, stamina, energy and endurance levels, cognitive and memory function, mood, circulation, capillary health, hearing, aging, joint mobility, sexual power, drive, stamina and libido; and in skin nourishment and as an anti-oxidant, anti-inflammation and anti-depressant agent. said treatment and management and alteration/improvement/regulation comprising the administration of an effective daily treatment(main) dose(s) thereof to the subject over an adequate period of time followed optionally by a daily maintenance dose(s) thereof to be taken optionally in a continuous or periodical(sequential) mode over an extended period of time or indefinitely, the said PG content of said main and maintenance doses being specified by the molecularly equivalent amount of caratuberside(CTB) therein, said pregnane glycoside(s) optionally including the saponin glycoside(s) and/or the bitters of said caralluma species and being optionally supplemented by one or more additional therapeutical, nutraceutical or nutritional components.

2. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from obesity and having a BMI from about 25 to 30, with or without Type 2 diabetes and/or mild to moderate hypertension, with no systemic dysfunction is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken for about six to eight months or indefinitely.

3. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from obesity and having a BMI of about 30 to 50, with or without Type 2 diabetes and/or mild to moderate hypertension, with no systemic dysfunction is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken for about six to eight months or indefinitely.

4. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from obesity comprises a combination of about 120mg to 240 mg. of CTB and about 150 mg. to 300 mg. of (-)-hydroxycitrate(HCA)(as Garcinia cambogia extract or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as the said treatment dose to be taken over an extended period or indefinitely.

5. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking moderate physical activity and desiring increase in BMR and/or said increase in stamina, energy and endurance levels is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period or indefinitely.

6. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking heavy physical activity such as sports and desiring increase in BMR and/or said increase in stamina, energy and endurance levels is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period or indefinitely.

7. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring a moderate increase in BMR and/or in stamina, endurance and energy levels comprises a combination of about 90 mg. to 150 mg. of CTB containing from about 2 mg. to 15 mg. of the said saponin glycosides, and from about 100 mg. to 200 mg. of Green Tea catechins per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as the treatment dose, to be taken over an extended period or indefinitely.

8. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring an increase in BMR and/or in stamina, endurance and energy levels comprises a combination of about 100 mg. to 200 mg. of CTB containing from about 2 mg. to 20 mg. of the said saponin glycosides, with from about 100 mg. to 200 mg. of Green Tea catechins and about 100 mg. to 200 mg. of the withanolides of Ashwagandha per day, said treatment period is from about six to nine months and said optional maintenance dose is the same as the treatment dose, to be taken over an extended period or indefinitely.

9. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking moderate physical activity and desiring increase of lean body mass(muscle mass) is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said

optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period to indefinitely.

10. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking heavy physical activity and desiring increase of lean body mass(muscle mass) is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period to indefinitely.

11. The use as claimed in the preceding claim 1, wherein said treatment does for a subject suffering from early to middle stage osteo-arthritis of weight-bearing joints with mild to moderate radiological symptomalogy and/or desiring relief from joint pains and inflammation is from about 250mg. to 500 mg. of CTB per day, said treatment period is from four to five months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period to indefinitely.

12. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from severe osteo-arthritis of weight-bearing joints with mild to moderate radiological symptomalogy and/or desiring relief from joint pains and inflammation is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about four to five months and said optional maintenance does is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period to indefinitely.

13. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 120 mg. to 300 mg. of CTB with about 500 mg. to 1000 mg. of Glucosamine (as sulphate or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or alternatively comprises about 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely, said glucosamine amount specified herein being as the sulphate salt thereof.

14. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 90 mg. to 270 mg. of CTB with about 250 mg. to 750 mg. of Glucosamine(as sulphate or otherwise) and about 75 mg. to 250 mg. of Rutin(or other bioflavonoid) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or alternatively comprises 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely, said glucosamine amount specified herein being as the

sulphate salt thereof.

15. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 120mg. to 300 mg. of CTB with about 300 mg. to 900 mg. of Rutin(or other bioflavonoid), per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or comprises about 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely.

16. The use as claimed in the preceding claim 1, wherein said treatment dose constitutes a dietary supplement for subjects(particularly over forty years of age), suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation and the rejuvenation of the joints is a combination of from about 100mg. to 200 mg. of CTB with about 600 mg. to 750 mg. of Glucosamine(as sulphate or otherwise) per day, and said treatment period is from prolonged to indefinitely, said glucosamine amount specified herein being as the sulphate salt thereof.

17. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 120mg. to 300 mg. of CTB with about 300 mg. to 900 mg. of Rutin(or other bioflavonoid) and from about 50 mg. to 100 mg. of Bamboo silica(70% concentration or other) per day, said treatment period is from about six to eight months or till the arthritic condition is brought under control whichever is earlier and said optional maintenance dose is the same as said treatment dose, or comprises about 250-300 mg. of CTB, to be taken over an extended period or indefinitely.

18. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight bearing joints and desiring relief from joint pains and inflammation is a combination of from about 90 mg. to 270 mg. of CTB with about 250 mg. to 750 mg. of Glucosamine(as sulphate or otherwise), from about 75 mg. to 250 mg. of Rutin(or other bioflavonoid) and from about 50 mg. to 100 mg. of Bamboo silica(70% concn. or other) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or comprises about 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely, said glucosamine amount specified herein being as the sulphate salt thereof.

19. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from Type 2 diabetes and having a fasting blood sugar(FBS) level of from about 120-150 mg./dL and/or desiring control/regulation of blood sugar is from about 500 mg. to 1000 mg. of CTB per day, to be taken over a prolonged period or indefinitely.

20. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from Type 2 diabetes and having a fasting blood sugar(FBS) level exceeding about 150 mg./dL and/or desiring control/regulation of blood sugar is from about 1000 mg. to 1500 mg. of CTB per day, to be taken over a prolonged period or indefinitely.

21. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from elevated blood sugar levels or Type 2 diabetes and/or desiring control/regulation of blood sugar is a combination of from about 100 mg. to 250 mg. of CTB containing about 2mg. to 8 mg. of the bitters of the caralluma species of plants with from about 100 mg. to 200 mg. of 4-hydroxy-isoleucine(as Fenugreek extract or otherwise), said treatment period is from about six to eight months and the said optional maintenance dose is the same as the said treatment dose, to be taken for an extended period or indefinitely.

22. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from Type 2 diabetes and/or desiring control/regulation of blood sugar is a combination of from about 100 mg. to 250 mg. of CTB with from about 100 mg. to 200 mg. of Coccinia extract containing about 10% terpenes, from about 100 mg. to 200 mg. of Bitter gourd extract containing about 8% bitters thereof, from about 100 mg. to 200 mg. of Cinnamon extract containing about 15% polyphenols thereof and from about 100 mg. to 200 mg. of Fenugreek extract containing about 40% 4-hydroxy-isoleucine per day, said treatment period is from about six to seven months and the said optional maintenance dose is the same as the said treatment dose, to be taken for an extended period or preferably indefinitely.

23. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject having mild to moderate hypertension is from about 250mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period or indefinitely.

24. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject having severe hypertension is from about 500 mg. to 1000 mg. of CTB per day , said treatment period is from about three months to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period or indefinitely.

25. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject having mild to moderate hypertension is a combination of from about 125 mg. to 250 mg. of CTB with from about 125 mg. to 250 mg. of HCA(in the form of Garcinia extract or otherwise) per day, to be taken over an extended period or indefinitely.

26. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject having mild to moderate hypertension is a combination of from about 125 mg. to 250 mg. of CTB with from about 125 mg. to 250 mg. of Commiphora Mukul extract containing about 3% gugulsterones per day to be taken over an extended period or indefinitely.

27. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring mild to moderate reduction in appetite is from about 250 mg. to 500 mg. of CTB per day, to be taken over an extended period or indefinitely.

28. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring heavy reduction in appetite is from about 500 mg. to 1000 mg. of CTB per day, to be taken over an extended period or indefinitely.

29. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in appetite is a combination of from about 120 mg. to 240 mg. of CTB with from about 150 mg. to 300 mg. of HCA(as Garcinia extract or otherwise) per day, said treatment period is about six to eight months and said optional maintenance dose is same as the said treatment dose, to be taken over a prolonged period or indefinitely.

30. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring slow/gradual reduction in weight is from about 250mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB to be taken over an extended period or indefinitely.

31. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring rapid reduction in weight is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB to be taken over an extended period or indefinitely.

32. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in weight is a combination of from about 120mg. to 240 mg. of CTB with from about 150 mg. to 300 mg. of HCA(as Garcinia extract or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, to be taken for an extended period or indefinitely.

33. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in waist, hip and arm circumferences is from about 250 mg. to 500 mg. of CTB per day, said treatment period is about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB to be taken over an extended period or indefinitely.

34. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in waist, hip and arm circumferences is a combination of from about 120 mg. to 240 mg. of CTB with from about 150 mg. to 300 mg. of HCA(as Garcinia extract or otherwise) per day, said treatment period is about six to eight months and said optional maintenance dose is the same as said treatment dose, to be taken over an extended period or indefinitely.

35. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from migraine is from about 500 mg. to 1000 mg. of CTB per day and said treatment period is about three to four months and said treatment dose is to be doubled during the period(s) the migraine attack(s) last.

36. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from mild clinical depression is from about 125 mg. to 250 mg. of CTB per day, said treatment period extending upto the ceasing of the symptoms thereof.

37. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from severe clinical depression is from about 250 mg. to 1000 mg. of CTB per day, said treatment period extending upto the ceasing of the symptoms thereof.

38. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from clinical depression or desiring mood elevation is a combination of from about 250 mg. to 500 mg. of CTB with from about 100 mg. to 200 mg. of the withanolides of Ashwagandha, said treatment period is from about twelve months to eighteen months and said optional maintenance dose is a combination of from about 125 mg. to 250 mg. of CTB with from about 50 mg. to 100 mg. of the said withanolides, to be taken over an extended period or indefinitely.

39. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is from about 500 mg. to 1000 mg. of CTB per day, said treatment period extending over the period of existence of said dysfunction and of decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject.

40. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is a combination of from about 250 mg. to 500 mg. of CTB with from about 100 mg. to 200 mg. of the withanolides of Ashwagandha per day, said treatment period extending over a period of about six to twelve months and said optional maintenance dose is a combination of from about 125 mg. 250 mg. of CTB with from about 50 mg. to 100 mg. of said withanolides to be taken over the period of existence of said dysfunction or decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject.

41. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is a combination of from about 250 mg. to 500 mg. of CTB with from about 100 mg. to 200 mg. of Shilajith per day, said treatment period extending from about six to twelve months and said optional maintenance dose is a combination of from about 125 mg. to 250 mg. of CTB with from about 50 mg, to 100 mg. of Shilajith to be taken over the period of existence of said dysfunction and decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject.

42. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is a combination of from about 250 mg. to 500 mg. of CTB with from about 250 mg. to 500 mg. of Fenugreek extract containing about 50% Protodioscin per day, said treatment period extending over a period of about three to four months and said optional maintenance dose is a combination of from about 125 mg. to 250 mg. of CTB with from about 125 mg. to 250 mg. of said fenugreek extract to be taken over the period of existence of said dysfunction and of decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject.

43. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from decreased cognitive and memory function and/or desiring increased cognitive and memory function is from about 250 mg. to 500 mg. of CTB per day and said treatment period is from about three to four months.

44. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is from about 250 mg. to 500 mg. of CTB per day said treatment period being from prolonged to indefinite.

45. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is a combination of from about 100 mg. to 200 mg. of CTB with from about 100 mg. to 200 mg. of the catechins of green tea and from about 100 mg. to 200 mg. of the saponin glycosides of caralluma per day, and said optional maintenance dose is a combination of from about 100 mg. to 200 mg. of CTB with from about 50 mg. to 100 mg. of said catechins and from about 120 mg. to 300 mg. of said saponin glycosides to be taken over an extended period or indefinitely.

46. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is a combination of from about 100 mg. to 200 mg. of CTB with from about 250 mg. to 350 mg. of Green tea extract containing about 40% catechins, said treatment period being from prolonged to indefinite, said combination being also an anti-oxidant dietary supplement for fighting the aging syndrome.

47. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 250 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg. of selenium(as chelate or otherwise) to be taken over a prolonged to indefinite period.

48. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from loss of hearing is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period or indefinitely.

49. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from a circulation disorder is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period or indefinitely.

50. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from capillary degeneration such as loss of capillary elasticity, and/or desiring restoration or maintenance of capillary elasticity is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period to indefinitely.

51. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring skin nourishment, elasticity and health is a combination of from about 50 mg. to 100 mg. of CTB with from

about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg of selenium(as chelate or otherwise), said treatment period being from prolonged to indefinite.

52. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 6 mg. to 10 mg. of selenium(as chelate or otherwise) per day, said treatment period being as long as symptoms last or as necessary.

53. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Liquorice extract containing about 5% Triphytoestrogens per day, said treatment period being as long as the symptoms last or as long as desired.

54. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Red clover extract containing about 8% isoflavones per day, said treatment period being as long as symptoms last or as long as desired.

55. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Hops flower extract containing about 5% triphytoestrogens per day, said treatment period being as long as symptoms last or as long as desired.

56. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Pomegranate extract containing about 10% Ellagic acid per day, said treatment period being as long as symptoms last or as long as desired.

57. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring cancer prevention/protection is a combination of from about 50 mg. to 100 mg. of CTB with from about 100

mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg. of selenium(as chelate or otherwise) per day, said treatment period being of indefinite duration.

58. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of blood cholesterol is a combination of from about 125 mg. to 500 mg. of CTB with from about 150 mg. to 250 mg. of Hibiscus Subdarifa extract containing about 25% polyphenols and from about 100 mg. to 200 mg. of Commiphora Mukul extract containing about 3% gugulsterones and said treatment period is a prolonged one to indefinitely.

59. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of blood cholesterol is a combination of from about 120 mg. to 240 mg. of CTB with from about 150 mg. to 300 mg. of HCA(as Garcinia extract or otherwise) per day, said treatment period is from about six months to eight months and said optional maintenance dose is the same as the said treatment dose to be taken over an extended period preferably indefinitely.

60. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of blood cholesterol is a combination of from about 90 mg. to 150 mg. of CTB containing about 2 mg. to 15 mg. of the saponin glycosides of caralluma with from about 100 mg. to 200 mg. of the catechins of Green tea per day and said treatment is over an extended period to indefinitely.

61. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject having a BMI from about 25 to 30, diabetic or normal, normotensive or having mild to moderate hypertension with no systemic dysfunction, preferably on a controlled diet and/or moderate physical activity and desiring a reduction in BMI is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken for about six to eight months, preferably for an indefinite period.

62. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject having a BMI of about 30-50 diabetic or normal, normotensive or having mild to moderate hypertension with no systemic dysfunction, preferably on a controlled diet and/or moderate physical activity and desiring reduction in BMI is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB to be taken for about six to eight months, preferably for an indefinite period.

63. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of BMI comprises a combination of about 120mg to 240 mg. of CTB with about 150 mg. to

300 mg. of (-)-hydroxycitrate(HCA)(as Garcinia extract or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as the said treatment dose and is to be taken over an extended period or indefinitely.

64. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness comprises from about 250 mg. to 500 mg. of CTB per day and said treatment period is a prolonged to an indefinite one.

65. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness comprises a combination of from about 100 mg. to 200 mg. of CTB per day with from about 100 mg. to 200 mg. of the catechins of Green tea(as Green tea extract or otherwise) and about 100 mg. to 200 mg. of the saponin glycosides of caralluma and said treatment period is a prolonged one to indefinite.

66. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness comprises a combination from about 100 mg. to 200 mg. of CTB with from about 250 mg. to 350 mg. of Green tea extract containing about 40% catechins per day and said treatment period is a prolonged one to indefinite, said treatment dose being also an anti-oxidant dietary supplement to fight the aging syndrome.

67. The use as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness comprises a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg. of selenium(as chelate or otherwise) per day, said treatment period being of indefinite duration.

68. The use as claimed in the preceding claim 1 for the treatment of a subject suffering from Type 2 diabetes wherein said treatment dose is a combination of from about 100 mg. to 250 mg. of CTB, from about 100 mg. to 200 mg. of said 4-hydroxy-leucine and the bitters of caralluma to the extent of from about 2 mg. to about 8 mg, said period is from about six to eight months, said optional maintenance dose being the same as the said treatment dose, to be taken over an extended period or indefinitely.

69. The use as claimed in any of the preceding claims 1 to 68 wherein said combination is administered in the form of a mixture or the components thereof or sequentially.

70. The use as claimed in any of the preceding claims 1 to 69, wherein said treatment dose is divided into parts, each to be administered separately preferably at mealtimes.

71. The use as claimed in any of the preceding claims 1 to 70, wherein said pregnane glycoside(s) comprise principally caratuberside and bouceroside including the isomers thereof.

72. The use as claimed in the preceding claim 71, wherein said caratubersides and boucerosides comprise 99% or more by weight of said glycosides.

73. The use as claimed in the preceding claim 72, wherein the ratio of said caratubersides to boucerosides is from about 9:1 to 19:1 by weight.

74. The use as claimed in any of the preceding claims 1 to 73, wherein said pregnane glycoside(s) are of plant origin and comprise the extract(s) of one or more of the caralluma species of plants.

75. The use as claimed in the preceding claims 74, wherein said pregnane glycoside(s) comprise the extract of the species caralluma fimbriata.

76. The use as claimed in any of the preceding claims 1 to 75, wherein said pregnane glycoside(s) are in the unconverted form.

77. The use as claimed in any of the preceding claims 1 to 76, wherein said pregnane glycoside(s) are in the form of an aqueous ethanolic extract the said pregnane glycoside(s) content therein being preferably either from about 5% to 15% w/w or exceeding about 15% w/w.

78. The use as claimed in any of the preceding claims 1 to 76, wherein said glycoside(s) are in the adsorbed form over a suitable excipient, said glycoside(s) content therein being preferably either from about 25% to 30% w/w or exceeding about 30% w/w, preferably either about 25% w/w or 50% w/w.

79. The use as claimed in the preceding claim 78, wherein said excipient is either Malto Dextrin or Magnesium Carbonate.

80. The use as claimed in any of the preceding claims 1 to 75, wherein said pregnane glycoside(s) are in the form of any of the pharmaceutically accepted salts and/or on any of the pharmaceutically accepted carriers.

81. The use as claimed in any of the preceding claims 1 to 80, wherein said treatment and maintenance doses are in any of the pharmaceutically accepted forms such as capsules, tablets, syrups, sprays and others.

82. The use as claimed the preceding claim 81, wherein said treatment and maintenance doses are in the form of soft or hard gelatine capsules wherein the said pregnane glycoside(s) content thereof is preferably either about 25% by wt. or 50% by wt.

83. A method of treatment/management for a subject suffering from disorders/symptoms such as obesity, migraine, osteo-arthritis, overweight, clinical depression, hearing loss, sexual dysfunction, high BMI, low BMR, hyperglycaemia, hypertension, hypercholesterolemia, low stamina, endurance and energy levels, reduced cognitive and memory functions, capillary degeneration, joint inflammation/ degeneration, menopausal syndrome, aging syndrome, circulation syndrome or others; or desiring alteration/improvement/regulation of parameters/conditions/ functions such as appetite levels, weight, BMI, BMR, waist, arm and hip circumferences, fat levels, lean body mass, blood sugar, blood pressure(bp), total blood cholesterol, blood HDL to LDL ratio, stamina, energy and endurance levels, cognitive and memory function, mood, circulation, capillary health, skin health, hearing, aging, joint mobility or sexual stamina, power, drive and libido, comprising the administration to the subject of an effective daily treatment(main) dose(s) of pregnane glycoside(s)(PG) in the form of extracts of the caralluma species of plants or otherwise, either singly or as mixtures thereof, over an adequate period of time followed optionally by a daily maintenance dose(s) thereof to be taken optionally in a continuous mode or a periodical(sequential) mode over an extended period of time or indefinitely, the said PG content of said main and maintenance doses being specified by the molecularly equivalent amount of caratuberside(CTB) therein, and said pregnane glycoside(s) optionally including the saponin glycoside(s) and/or the bitters of said caralluma species and being optionally supplemented by one or more additional therapeutical, nutraceutical or nutritional components.

84. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from obesity and having a BMI from about 25 to 30, with or without Type 2 diabetes and/or mild to moderate hypertension, with no systemic dysfunction is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken for about six to eight months or indefinitely or periodically with about six to seven months off and about four to five months on said maintenance dose, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

85. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from obesity and having a BMI of about 30 to 50, with or without Type 2 diabetes and/or mild to moderate hypertension, with no systemic dysfunction is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is

from about 125 mg. to 250 mg. of CTB per day to be taken for about six to eight months or indefinitely or periodically with about six to seven months off and about four to five months on said maintenance dose, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

86. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from obesity comprises a combination of about 120mg to 240 mg. of CTB and about 150 mg. to 300 mg. of (-)-hydroxycitrate(HCA)(as Garcinia extract or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as the said treatment dose to be taken over an extended period or indefinitely or periodically with about six to seven months off and about four to five months on said maintenance dose, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

87. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking moderate physical activity and desiring increase in BMR and/or said increase in stamina, energy and endurance levels is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

88. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking heavy physical activity such as sports and desiring increase in BMR and/or said increase in stamina, energy and endurance levels is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period or indefinitely said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

89. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring a moderate increase in BMR and/or in stamina, endurance and energy levels comprises a combination of about 90 mg. to 150 mg. of CTB containing from about 2 mg. to 15 mg. of the said saponin glycosides and from about 100 mg. to 200 mg. of Green Tea catechins per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as the treatment dose, to be taken over an extended period or indefinitely said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

90. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring an increase in BMR and/or in stamina, endurance and energy levels comprises a combination of about 100

mg. to 200 mg. of CTB containing from about 2 mg. to 20 mg. of the said saponin glycosides with from about 100 mg. to 200 mg. of Green Tea catechins and about 100 mg. to 200 mg. of the withanolides of Ashwagandha per day, said treatment period is from about six to nine months and said optional maintenance dose is the same as the treatment dose, to be taken over an extended period or indefinitely said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

91. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking moderate physical activity and desiring increase of lean body mass(muscle mass) is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period to indefinitely said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

92. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject undertaking heavy physical activity and desiring increase of lean body mass(muscle mass) is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period to indefinitely said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

93. The method as claimed in the preceding claim 1, wherein said treatment does for a subject suffering from early to middle stage osteo-arthritis of weight-bearing joints with mild to moderate radiological symptomalogy and/or desiring relief from joint pains and inflammation is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from four to five months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period to indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

94. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from severe osteo-arthritis of weight-bearing joints with mild to moderate radiological symptomalogy and/or desiring relief from joint pains and inflammation is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about four to five months and said optional maintenance does is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period to indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

95. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 120 mg. to 300 mg. of CTB with about 400 mg. to 1000 mg. of Glucosamine(as sulphate or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or alternatively comprises about 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day, and said glucosamine amount specified herein being as the sulphate salt thereof.

96. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 90 mg. to 270 mg. of CTB with about 250 mg. to 750 mg. of Glucosamine(as sulphate or otherwise) and about 75 mg. to 250 mg. of Rutin(or other bioflavonoid) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or alternatively comprises 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day and said glucosamine amount specified herein being as the sulphate salt thereof.

97. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 120mg. to 300 mg. of CTB with about 300 mg. to 900 mg. of Rutin(or other bioflavonoid), per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or comprises about 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

98. The method as claimed in the preceding claim 1, wherein said treatment dose constitutes a dietary supplement for subjects(particularly over forty years of age), suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation and the rejuvenation of the joints is a combination of from about 100mg. to 200 mg. of CTB with about 600 mg. to 750 mg. of Glucosamine(as sulphate or otherwise) per day, and said treatment period is from prolonged to indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day and said glucosamine amount specified herein being as the sulphate salt thereof.

99. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering

from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 120mg. to 300 mg. of CTB with about 300 mg. to 900 mg. of Rutin(or other bioflavonoid) and from about 50 mg. to 100 mg. of Bamboo silica(70%) per day, said treatment period is from about six to eight months or till the arthritic condition is brought under control whichever is earlier and said optional maintenance dose is the same as said treatment dose, or comprises about 250-300 mg. of CTB, to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day.

100. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from osteo-arthritis of weight-bearing joints and desiring relief from joint pains and inflammation is a combination of from about 90 mg. to 270 mg. of CTB with about 250 mg. to 750 mg. of Glucosamine(as sulphate or otherwise), from about 75 mg. to 250 mg. of Rutin(or other bioflavonoid) and from about 50 mg. to 100 mg. of Bamboo silica(70%) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, or comprises about 250-300 mg. of CTB, to be taken over a period of about six months to indefinitely, said doses to be preferably taken in two stages within about one hour after the two main meals of the day and said glucosamine amount specified herein being as the sulphate salt thereof.

101. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from Type 2 diabetes and having a fasting blood sugar(FBS) level of from about 120-150 mg./dL and/or desiring control/regulation of blood sugar is from about 500 mg. to 1000 mg. of CTB per day, to be taken over a prolonged period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

102. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from Type 2 diabetes and having a fasting blood sugar(FBS) level exceeding about 150 mg./dL and/or desiring control/regulation of blood sugar is from about 1000 mg. to 1500 mg. of CTB per day, to be taken over a prolonged period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

103. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from elevated blood sugar levels or Type 2 diabetes and/or desiring control/regulation of blood sugar is a combination of from about 100 mg. to 250 mg. of CTB containing about 2mg. to 8 mg. of the bitters of the caralluma species of plants with from about 100 mg. to 200 mg. of 4-hydroxy-isoleucine(as Fenugreek extract or otherwise), said treatment period is from about six to eight months and the said optional maintenance dose is the same as the said treatment dose, to be taken for an extended period or

indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

104. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from Type 2 diabetes and/or desiring control/regulation of blood sugar is a combination of from about 100 mg. to 250 mg. of CTB with from about 100 mg. to 200 mg. of Coccinia extract containing about 10% terpenes, from about 100 mg. to 200 mg. of Bitter gourd extract containing about 8% bitters thereof, from about 100 mg. to 200 mg. of Cinnamon extract containing about 15% polyphenols thereof and from about 100 mg. to 200 mg. of Fenugreek extract containing about 40% 4-hydroxy-isoleucine per day, said treatment period is from about six to seven months and the said optional maintenance dose is the same as the said treatment dose, to be taken for an extended period or preferably indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

105. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject having mild to moderate hypertension is from about 250mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

106. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject having severe hypertension is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three months to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

107. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject having mild to moderate hypertension is a combination of from about 125 mg. to 250 mg. of CTB with from about 125 mg. to 250 mg. of HCA(in the form of Garcinia extract or otherwise) per day, to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

108. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject having mild to moderate hypertension is a combination of from about 125 mg. to 250 mg. of CTB with from about 125 mg. to 250 mg. of Commiphora Mukul extract containing about 3% gugulsterones per day to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

109. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring mild to moderate reduction in appetite is from about 250 mg. to 500 mg. of CTB per day, to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

110. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring heavy reduction in appetite is from about 500 mg. to 1000 mg. of CTB per day, to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

111. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in appetite is a combination of from about 120 mg. to 240 mg. of CTB with from about 150 mg. to 300 mg. of HCA(as Garcinia extract or otherwise) per day, said treatment period is about six to eight months and said optional maintenance dose is same as the said treatment dose, to be taken over a prolonged period or indefinitely, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

112. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring slow/gradual reduction in weight is from about 250mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within one to two hours before the two main meals of the day.

113. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring rapid reduction in weight is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

114. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in weight is a combination of from about 120mg. to 240 mg. of CTB with from about 150 mg. to 300 mg. of HCA(as Garcinia extract or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as said treatment dose, to be taken for an extended period or indefinitely, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

115. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in waist, hip and arm circumferences is from about 250 mg. to 500 mg. of CTB per day, said treatment period is about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

116. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction in waist, hip and arm circumferences is a combination of from about 120 mg. to 240 mg. of CTB with from about 150 mg. to 300 mg. of HCA(as Carcinia extract or otherwise) per day, said treatment period is about six to eight months and said optional maintenance dose is the same as said treatment dose, to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

117. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from migraine is from about 500 mg. to 1000 mg. of CTB per day and said treatment period is about three to four months and said treatment dose is to be doubled during the period(s) the migraine attack(s) last, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

118. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from mild clinical depression is from about 125 mg. to 250 mg. of CTB per day, said treatment period extending upto the ceasing of the symptoms thereof, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

119. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from severe clinical depression is from about 250 mg. to 1000 mg. of CTB per day, said treatment period extending upto the ceasing of the symptoms thereof, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

120. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from clinical depression or desiring mood elevation is a combination of from about 250 mg. to 500 mg. of CTB with from about 100 mg. to 200 mg. of the withanolides of Ashwagandha, said treatment period is from about twelve months to eighteen months and said optional maintenance dose is a combination of from about 125 mg. to 250 mg. of CTB with from about 50 mg. to 100 mg. of the said withanolides, to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

121. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is from about 500 mg. to 1000 mg. of CTB per day, said treatment period extending over the period of existence of said dysfunction and of decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

122. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is a combination of from about 250 mg. to 500 mg. of CTB with from about 100 mg. to 200 mg. of the withanolides of Ashwagandha per day, said treatment period extending over a period of about six to twelve months and said optional maintenance dose is a combination of from about 125 mg. 250 mg. of CTB with from about 50 mg. to 100 mg. of said withanolides to be taken over the period of existence of said dysfunction or decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

123. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is a combination of from 250 mg. to 500 mg. of CTB with from about 100 mg. to 200 mg. of Shilajith per day, said treatment period extending from about six to twelve months and said optional maintenance dose is a combination of from about 125 mg. to 250 mg. of CTB with from about 50 mg. to 100 mg. of Shilajith to be taken over the period of existence of said dysfunction and decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

124. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power, drive and stamina is a combination of from about 250 mg. to 500 mg. of CTB with from about 250 mg. to 500 mg. of Fenugreek extract containing about 50% Protodioscin per day, said treatment period extending over a period of about three to four months and said optional maintenance dose is a combination of from about 125 mg. to 250 mg. of CTB with from about 125 mg. to 250 mg. of said fenugreek extract to be taken over the period of existence of said dysfunction and of decreased libido or as long as enhanced sexual drive, power and stamina is desired by the subject, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

125. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from decreased cognitive and memory function and/or desiring increased cognitive and memory function is from about 250 mg. to 500 mg. of CTB per day and said treatment period is from about three to four months, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

126. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is from about 250 mg. to 500 mg. of CTB per day said treatment period being from prolonged to indefinite, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

127. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is a combination of from about 100 mg. to 200 mg. of CTB with from about 100 mg. to 200 mg. of the catechins of green tea and from about 100 mg. to 200 mg. of the saponin glycosides of caralluma per day, and said optional maintenance dose is a combination of from about 100 mg. to 200 mg. of CTB with from about 50 mg. to 100 mg. of said catechins and from about 120 mg. to 300 mg. of said saponin glycosides to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

128. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is a combination of from about 100 mg. to 200 mg. of CTB with from about 250 mg. to 350 mg. of Green tea extract containing about 40% catechins, said treatment period being from prolonged to indefinite, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

129. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring treatment of the aging syndrome is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 250 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg. of selenium(as chelate or otherwise) to be taken over a prolonged to indefinite period, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

130. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from loss of hearing is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of

CTB per day to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

131. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from a circulation disorder is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period or indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

132. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from capillary degeneration such as loss of capillary elasticity, and/or desiring restoration or maintenance of capillary elasticity is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said maintenance dose is from about 250 mg. to 500 mg. of CTB per day to be taken over an extended period to indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

133. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring skin nourishment, elasticity and health is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg of selenium(as chelate or otherwise), said treatment period being from prolonged to indefinite, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

134. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 6 mg. to 10 mg. of selenium(as chelate or otherwise) per day, said treatment period being as long as necessary, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

135. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Liquorice extract containing about 5% Triphytoestrogens per day, said treatment period being as long as the symptoms last or as long as desired, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

136. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Red clover extract containing about 8% isoflavones per day, said treatment period being as long as symptoms last or as long as desired, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

137. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Hops flower extract containing about 5% triphytoestrogens per day, said treatment period being as long as symptoms last or as long as desired, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

138. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 200 mg. of Pomegranate extract containing about 10% Ellagic acid per day, said treatment period being as long as symptoms last or as long as desired, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

139. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring cancer prevention/protection is a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg. of selenium(as chelate or otherwise) per day, said treatment period being of indefinite duration, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

140. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of blood cholesterol is a combination of from about 125 mg. to 500 mg. of CTB with from about 150 mg. to 250 mg. of Hibiscus Subdarifa extract containing about 25% polyphenols and from about 100 mg. to 200 mg. of Commiphora Mukul extract containing about 3% gugulsterones and said treatment period is a prolonged one to indefinitely.

141. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of blood cholesterol is a combination of from about 120 mg. to 240 mg. of CTB with from

about 150 mg. to 300 mg. of HCA(as Garcinia extract or otherwise) per day, said treatment period is from about six months to eight months and said optional maintenance dose is the same as the said treatment dose to be taken over an extended period preferably indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

142. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of blood cholesterol is a combination of from about 90 mg. to 150 mg. of CTB containing about 2 mg. to 15 mg. of the saponin glycosides of caralluma with from about 100 mg. to 200 mg. of the catechins of Green tea per day and said treatment is over an extended period to indefinitely, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

143. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject having a BMI from about 25 to 30, diabetic or normal, normotensive or having mild to moderate hypertension with no systemic dysfunction, preferably on a controlled diet and/or moderate physical activity and desiring a reduction in BMI is from about 250 mg. to 500 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB per day to be taken for about six to eight months, preferably for an indefinite period, or periodically with about six to seven months off and about four to five months on said maintenance dose, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

144. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject having a BMI of about 30-50 diabetic or normal, normotensive or having mild to moderate hypertension with no systemic dysfunction, preferably on a controlled diet and/or moderate physical activity and desiring reduction in BMI is from about 500 mg. to 1000 mg. of CTB per day, said treatment period is from about three to four months and said optional maintenance dose is from about 125 mg. to 250 mg. of CTB to be taken for about six to eight months, preferably for an indefinite period, or periodically with about six to seven months off and about four to five months on said maintenance dose, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

145. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring reduction of BMI comprises a combination of about 120mg to 240 mg. of CTB with about 150 mg. to 300 mg. of (-)-hydroxycitrate(HCA)(as Garcinia extract or otherwise) per day, said treatment period is from about six to eight months and said optional maintenance dose is the same as the said treatment dose and is to be taken over an extended period or indefinitely, or periodically with about six to seven

months off and about four to five months on said maintenance dose, said doses to be preferably taken in two stages within about one to two hours before the two main meals of the day.

146. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness comprises from about 250 mg. to 500 mg. of CTB per day and said treatment period is a prolonged to an indefinite one, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

147. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidation treatment and/or ensuring general health and fitness comprises a combination of from about 100 mg. to 200 mg. of CTB per day with from about 100 mg. to 200 mg. of the catechins of Green tea(as Green tea extract or otherwise) and about 100 mg. to 200 mg. of the saponin glycosides of caralluma, said treatment period is a prolonged one to indefinite, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

148. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidation treatment and/or ensuring general health and fitness comprises a combination from about 100 mg. to 200 mg. of CTB with from about 250 mg. to 350 mg. of Green tea extract containing about 40% catechins per day and said treatment period is a prolonged one to indefinite, said treatment dose being a dietary supplement to fight the aging syndrome, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

149. The method as claimed in the preceding claim 1, wherein said treatment dose for a subject desiring anti-oxidation treatment and/or ensuring general health and fitness comprises a combination of from about 50 mg. to 100 mg. of CTB with from about 100 mg. to 150 mg. of Zinc monomethionine, from about 150 mg. to 200 mg. of Citrus bioflavonoids and from about 2 mg. to 8 mg. of selenium(as chelate or otherwise) per day, said treatment period being of indefinite duration, said doses to be preferably taken in two stages within about one-half to one hour after the two main meals of the day.

150. The method as claimed in the preceding claim 1 for the treatment of a subject suffering from Type 2 diabetes wherein said treatment dose is a combination of from about 100 mg. to 250 mg. of CTB, from about 100 mg. to 200 mg. of said 4-hydroxy-leucine and the bitters of caralluma to the extent of from about 2 mg. to about 8 mg, said period is from about six to eight months, said optional maintenance dose being the same as the said treatment dose, to be taken over an extended period or indefinitely.

151. The method as claimed in any of the preceding claims 83 to 150 wherein said combination is administered in the form of a mixture of the components thereof or sequentially.

152. The method as claimed in any of the preceding claims 83 to 151, wherein said treatment dose is divided into parts, each to be administered separately preferably at mealtimes.

153. The method as claimed in any of the preceding claims 83 to 152, wherein said pregnane glycoside(s) comprise principally caratuberside and boucerοside including the isomers thereof.

154. The method as claimed in the preceding claim 153, wherein said caratubersides and boucerosides comprise 99% or more by weight of said glycosides.

155. The method as claimed in the preceding claim 154, wherein the ratio of said caratubersides to boucerosides is from about 9:1to 19:1 by weight.

156. The method as claimed in any of the preceding claims 83 to 155, wherein said pregnane glycoside(s) are of plant origin and comprise the extract(s) of one or more of the caralluma species of plants.

157. The method as claimed in the preceding claims 156, wherein said pregnane glycoside(s) comprise the extract of the species caralluma fimbriata.

158. The method as claimed in any of the preceding claims 83 to 157, wherein said pregnane glycoside(s) are in the unconverted form.

159. The method as claimed in any of the preceding claims 83 to 158, wherein said pregnane glycoside(s) are in the form of an aqueous ethanolic extract the said pregnane glycoside(s) content therein being preferably either from about 5% to 15% w/w or exceeding about 15% w/w.

160. The method as claimed in any of the preceding claims 83 to 158, wherein said glycoside(s) are in the adsorbed form over a suitable excipient, said glycoside(s) content therein being preferably either from about 25% to 30% w/w or exceeding about 30% w/w, preferably either about 25% w/w or 50% w/w.

161. The method as claimed in the preceding claim 160, wherein said excipient is either Malto Dextrin or Magnesium Carbonate.

162. The method as claimed in any of the preceding claims 83 to 157, wherein said pregnane glycoside(s) are in the form of any of the pharmaceutically accepted salts and/or on any of the pharmaceutically accepted carriers.

163. The method as claimed in any of the preceding claims 83 to 162, wherein said treatment and maintenance doses are in any of the pharmaceutically accepted forms such as capsules, tablets, syrups, sprays and others.

164. The method as claimed the preceding claim 163, wherein said treatment and maintenance doses are in the form of soft or hard gelatine capsules wherein the said pregnane glycoside(s) content thereof is preferably either about 25% by wt. or 50% by wt.

165. A pharmaceutical composition, for use as a treatment dose and/or a maintenance dose in:

i. treatment/management of obesity;
ii. reducing appetite levels;
iii. reducing waist, arm and hip circumferences;
iv. weight-reduction;
v. reduction of blood cholesterol; and
vi. reduction of BMI,

of a subject, comprising first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof, and the said second comprising (-)-hydroxycitrate(HCA)(in the form of Garcinia cambogia extract or otherwise), the amount of said first being to the extent of from about four to eight parts by weight while that of said second being to the extent of from about five to ten parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

166. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in:

i. treatment/management of the aging syndrome;
ii. skin nourishment and maintaining skin elasticity and health;
iii. protection from and prevention of cancer; and
iv. anti-oxidant action and ensuring general health and fitness,

of a subject, comprising first, second, third and fourth components; said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Zinc monomethionine, said third comprising Citrus bioflavonoids and said fourth comprising selenium(as chelate or in another form), the amount of said first being to the extent of from about 25 to 50 parts by weight, of said second from about 50 to 75 parts by wt., of said third from about 75 to 125 parts by wt. and of said fourth from about one to four parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

167. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from the menopausal syndrome and/or desiring alleviation from hot flushes and menopausal distress, comprising first, second, third and fourth components, said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Zinc monomethionine, said third comprising Citrus bioflavonoids and said fourth comprising selenium(as chelate or in another form), the amount of said first being to the extent of from about 25 to 50 parts by weight, of said second from about 50 to 75 parts by wt., of said third from about 75 to 100 parts by wt. and of said fourth from about three to five parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

168. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject desiring a moderate increase in BMR and/or in stamina, endurance and energy levels, comprising first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, and the said second comprising the catechins of Green tea(as Green tea extract or otherwise), the amount of said first being to the extent of from about 45 to 75 parts by wt., that of said second being to the extent of from about fifty to one hundred parts by wt. and of said saponin glycosides being to the extent from about one to seven and half parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

169. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject desiring an increase in BMR and/or in stamina, endurance and energy levels, comprising first, second and third components, said first comprising any of the pregnane glycosides, or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, said second comprising the catechins of Green tea(as Green tea extract or otherwise) and said third comprising withanolides of Ashwagandha(in the form of Withania somnifera extract or otherwise). the amount of said first, second and third each being to the extent of from about 50 to 100 parts by wt., and of said saponin glycosides being to the extent from about one to ten parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

170. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation comprises first, second and third components, said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Glucosamine(as sulphate or otherwise), and said third comprising Rutin(or other bioflavonoid), the amount of said first being to the extent of from about 45 to 135 parts by wt., of said second being to the extent of from about 125 to 375

parts by wt. and of said third being to the extent of from about 35 to 125 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside and the said glucosamine amount specified herein being as the sulphate salt thereof.

171. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation comprises first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof and said second comprising Rutin(or other bioflavonoid), the amount of said first being to the extent of from about 4 to 10 parts by wt. and of said second being to the extent of from about 10 to 30 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

172. A pharmaceutical composition, and dietary supplement, for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation and the rejuvenation of the joints comprises first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Glucosamine(as sulphate or otherwise), the amount of said first being to the extent of from about one to two parts by wt. and of said second being to the extent of from about 6 to 7.5 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside and the said glucosamine amount specified herein being as the sulphate salt thereof.

173. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation comprises first, second and third components, said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Rutin(or other bioflavonoid) and said third comprising Bamboo Silica(of 70% concentration or other), the amount of said first being to the extent of from about 12 to 30 parts by wt., of said second being to the extent of from about 30 to 90 parts by wt. and of said third being to the extent of from about 5 to 10 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

174. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation comprises first, second third and fourth components, said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Glucosamine(as sulphate or

otherwise), said third comprising Rutin(or other bioflavonoid) and said fourth comprising Bamboo Silica(of 70% concentration or other), the amount of said first being to the extent of from about 9 to 27 parts by wt., of said second being to the extent of from about 25 to 75 parts by wt., of said third being to the extent of from about 7.5 to 25 parts by wt., and of said fourth being to the extent of from about 5 to 10 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside and the said glucosamine amount specified herein being as the sulphate salt thereof.

175. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from elevated blood sugar levels or Type 2 diabetes and/or desiring control/regulation of blood sugar comprises first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof and including therein the bitters of the caralluma species of plants, and said second comprising 4-hydroxy-iso-leucine(as Fenugreek extract or otherwise), the amount of said first being to the extent of from about 100 to 250 parts by wt. and of said second being to the extent of from about 100 to 200 parts by wt., the amounts of said bitters being to the extent of from about 2 to 8 parts by wt. and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

176. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from elevated blood sugar levels or Type 2 diabetes and/or desiring control/regulation of blood sugar comprises first, second, third, fourth and fifth components, said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Coccinia extract containing aboout 10% terpenes, said third comprising Bitter gourd extract containing about 8% bitters thereof, said fourth comprising Cinnamon extract containing about 15% polyphenols thereof and said fifth comprising Fenugreek extract containing about 40% 4-hydroxy-iso-leucine, the amount of said first being to the extent of from about 100 to 250 parts by wt. and of said second, third, fourth and fifth each being to the extent of from about 100 to 200 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

177. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject having mild to moderate hypertension, comprising first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof and the said second comprising Commiphora mukul extract containing about 3% gugulsterones, the amount of both said first and second components each being to the extent of from about 125 to 250 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside. caratuberside.

178. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from clinical depression or desiring mood elevation, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), the amount of said first being to the extent of from about 10 to 25 parts by wt. and that of said second being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

179. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), the amount of said first being to the extent of from about 10 to 20 parts by wt. and that of said second being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

180. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual power, drive and stamina, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Shilajith, the amount of said first being to the extent of from about 10 to 20 parts by wt. and that of said second being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

181. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Fenugreek extract containing about 50% Protodioscin, the amount of said first being to the extent of from about 10 to 20 parts by wt. and that of said second being to the extent of from about 10 to 20 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

182. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring treatment of the aging syndrome, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and including therein the saponin glycosides of the caralluma species of plants, and the said second comprising the catechins of Green tea, the amount of said first and the said second components and of said saponin glycosides each being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

183. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring treatment of the aging syndrome, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Green tea extract containing about 40% catechins, the amount of said first being to the extent of from about 4 to 8 parts by wt. and of the said second being to the extent of from about 10 to 14 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

184. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Red clover extract containing about 8% isoflavones, the amount of said first being to the extent of from about 2 to 4 parts by wt. and of the said second being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

185. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Hops flower extract containing about 5% triphytoestrogens, the amount of said first being to the extent of from about 2 to 4 parts by wt. and of the said second being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

186. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal

distress, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Pomegranate extract containing about 10% Ellagic acid, the amount of said first being to the extent of from about 2 to 4 parts by wt. and of the said second being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

187. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Liquorice extract containing about 5% Triphytoestrogens, the amount of said first being to the extent of from about 2 to 4 parts by wt. and of the said second being to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

188. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from hypercholesterolemia and /or desiring reduction of blood cholesterol, comprising first, second and third components, said first comprising any of the pregnane glycosides or mixtures thereof, the said second comprising Hibiscus subdarifa extract containing about 25% polyphenols and the said third comprising Commiphora mukul extract containing about 3% gugulsterones, the amount of said first being to the extent of from about 5 to 20 parts by wt. and of the said second being to the extent of from about 6 to 10 parts by wt. and the amount of said third being to the extent of from about 4 to 8 parts by wt., amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

189. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from hypercholesterolemia and /or desiring reduction of blood cholesterol, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and including therein the saponin glycosides of the caralluma species of plants and the said second comprising the catechins of Green tea, the amount of said first being to the extent of from about 90 to 150 parts by wt., that of the said second being to the extent of from about 100 to 200 parts by wt. and the amount of said saponin glycosides being to the extent of from about 2 to 15 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

190. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness, comprising first and second

components, said first comprising any of the pregnane glycosides or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, and the said second comprising the catechins of Green tea(as Green tea extract or otherwise), the amount of said first and second components and said saponin glycosides being each to the extent of from about 4 to 8 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

191. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Green tea extract containing about 40% catechins, the amount of said first component being to the extent of from about 4 to 8 parts by wt. and the amount of said second being to the extent of from about 10 to 14 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

192. A pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering from clinical depression or desiring mood elevation, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), the amount of said first being to the extent of from about 5 to 10 parts by wt. and that of said second being to the extent of from about 2 to 4 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

193. A pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), the amount of said first being to the extent of from about 5 to 20 parts by wt. and that of said second being to the extent of from about 2 to 4 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

194. A pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual power, drive and stamina, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Shilajith, the amount of said first being to the extent of from about 5 to 10 parts by wt. and that of said second being

to the extent of from about 2 to 4 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

195. A pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof, and the said second comprising Fenugreek extract containing about 50% Protodioscin, the amount of said first being to the extent of from about 5 to 10 parts by wt. and that of said second being also to the extent of from about 5 to 10 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

196. A pharmaceutical composition for use as a maintenance dose for a subject desiring treatment/ management of the aging syndrome and/or ensuring general health and fitness, comprising first and second components, said first comprising any of the pregnane glycosides or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, and the said second comprising the catechins of Green tea(as Green tea extract or otherwise), the amount of said first component being to the extent of from about 10 to 20 parts by wt. and of said second being to the extent of from about 5 to 10 parts by wt. and of said saponin glycosides from about 12 to 30 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

197. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pain and inflammation and the rejuvenation of the joints comprises first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof, said second comprising Glucosamine(as sulphate or otherwise), the amount of said first being to the extent of from about twelve to thirty parts by wt. and of said second being to the extent of from about 40 to 100 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside and the said glucosamine amount specified herein being as the sulphate salt thereof.

198. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from Type 2 diabetes and/or desiring control/regulation of blood sugar comprises first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof and including therein the bitters of the caralluma species of plants, and said second comprising 4-hydroxy-iso-leucine(as Fenugreek extract or otherwise), the amount of said first being to the extent of

from about 100 to 250 parts by wt. and of said second being to the extent of from about 100 to 200 parts by wt., the amounts of said bitters being to the extent of from about 2 to 8 parts by wt. and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

199. A pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from mild to moderate hypertension, comprising first and second components, said first comprising any of the pregnane glycosides, or mixtures thereof and the said second comprising (-)-hydroxycitrate(HCA)(in the form of Garcinia Cambogia extract or otherwise) the amount of both said first and second components each being to the extent of from about 125 to 250 parts by wt., the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

200. The pharmaceutical composition as claimed in any of the preceding claims 165 to 199, wherein said pregnane glycoside(s) comprise principally caratuberside and bouceroside including the isomers thereof.

201. The pharmaceutical composition as claimed in the preceding claim 200, wherein said caratubersides and boucerosides comprise 99% or more by weight of said glycosides.

202. The pharmaceutical composition as claimed in the preceding claim 201, wherein the ratio of said caratubersides to boucerosides is from about 9:1 to 19:1 by weight.

203. The pharmaceutical composition as claimed in any of the preceding claims 165 to 202, wherein said pregnane glycoside(s) are of plant origin and comprise the extract(s) of one or more of the caralluma species of plants.

204. The pharmaceutical composition as claimed in the preceding claim 203, wherein said pregnane glycoside(s) comprise the extract of the species caralluma fimbriata.

205. The pharmaceutical composition as claimed in any of the preceding claims 165 to 204, wherein said pregnane glycoside(s) are in the unconverted form.

206. The pharmaceutical composition as claimed in any of the preceding claims 165 to 205, wherein said pregnane glycoside(s) are in the form of an aqueous ethanolic extract the said pregnane glycoside(s) content therein being preferably either from about 5% to 15% w/w or exceeding about 15% w/w.

207. The pharmaceutical composition as claimed in any of the preceding claims 165 to 205, wherein said glycoside(s) are in the adsorbed form over a suitable excipient,

208. The pharmaceutical composition as claimed in the preceding claim 207, wherein said excipient is either Malto Dextrin or Magnesium Carbonate.

209. The pharmaceutical composition as claimed in any of the preceding claims 165 to 208, wherein said pregnane glycoside(s) and the other components and constituents thereof are in the unconverted form or in the form of any of the pharmaceutically accepted salts and/or on any of the pharmaceutically accepted carriers and comprise any of the pharmaceutically accepted flavours and/or colours.

210. The pharmaceutical composition as claimed in any of the preceding claims 165 to 209, wherein said treatment and maintenance doses are in any of the pharmaceutically accepted forms such as capsules, tablets, syrups, sprays and others.

211. A process of admixture for making a pharmaceutical composition for use as a treatment and/or a maintenance dose in:

i. treatment/management of obesity;
ii. reducing appetite levels;
iii. reducing waist, arm and hip circumferences;
iv. weight-reduction;
v. reduction of blood cholesterol; and
vi. reduction of BMI,

of a subject, wherein said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof, and the said second being (-)-hydroxycitrate(HCA)(in the form of Garcinia cambogia extract or otherwise), and wherein from about four to eight parts by wt. of said first are admixed with from about five to ten parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

212. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in:

i. treatment/management of the aging syndrome:
ii. skin nourishment and maintaining skin elasticity and health;
iii. protection from and prevention of cancer; and
iv. anti-oxidant action and ensuring general health and fitness,

of a subject, wherein said composition comprises first, second, third and fourth components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Zinc monomethionine, said third being Citrus bioflavonoids and said fourth being selenium(as chelate or in another form), and wherein the undermentioned are admixed together:

i. from about 25 to 50 parts by weight of said first component.
ii. from about 50 to 75 parts by wt.,of said second component.
iii. from about 75 to 125 parts by wt. of said third component. and
iv. from about one to four parts by wt. of said fourth component,

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

213. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from the menopausal syndrome and/or desiring alleviation from hot flushes and menopausal distress, wherein said composition comprises first, second, third and fourth components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Zinc monomethionine, said third being Citrus bioflavonoids and said fourth being selenium(as chelate or in another form), and wherein the belowmentioned are admixed together:

i. from about 25 to 50 parts by weight. Of said first component.
ii. from about 50 to 75 parts by wt. of said second component.
iii. from about 75 to 100 parts by wt. of said third component, and
iv. from about three to five parts by wt. of said fourth component,

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

214. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject desiring a moderate increase in BMR and/or in stamina, endurance and energy levels, wherein said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, and the said second being the catechins of Green tea(as Green tea extract or otherwise), and wherein the following are admixed:

i. from about 45 to 75 parts by wt., of said first component,
ii. from about fifty to one hundred parts by wt. of said second component,

the amount of said saponin glycosides being from about one to seven and a half parts by wt., and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

215. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject desiring an increase in BMR and/or in stamina, endurance and energy levels, wherein said composition comprises first, second and third components, said first being any of the pregnane glycosides, or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, said second being the catechins of Green tea(as Green tea extract or otherwise) and said third being the withanolides of Ashwagandha(in the form of Withania somnifera extract or otherwise) and wherein from about 50 to 100 parts by wt., of each of said first, second components are admixed together, the amount of said saponin glycosides being to the extent from about one to ten parts by wt., and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

216. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation, wherein said composition comprises first, second and third components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Glucosamine(as sulphate or otherwise) and said third being Rutin(or other bioflavonoid), and wherein the following are admixed together:

i. from about 45 to 135 parts by wt., of said first component,
ii. from about 125 to 375 parts by wt. of said second component, and
iii. from about 35 to 125 parts by wt., of said third component,

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside and the said glucosamine amount specified herein being that of the sulphate salt thereof.

217. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation, wherein said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof and said second being Rutin(or other bioflavonoid), and wherein the following are admixed:

i. from about 4 to 10 parts by wt. said first component, and
ii. from about 10 to 30 parts by wt., of said second component,

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

218. A process of admixture for making a pharmaceutical composition, and dietary supplement, for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation and the rejuvenation of

the joints, wherein said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Glucosamine(as sulphate or otherwise), and wherein the following are admixed:

i. from about one to two parts by wt. of said first component, and

ii. from about 6 to 7.5 parts by wt., of said second.

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside and the said glucosamine amount specified herein being that of the sulphate salt thereof.

219. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation, wherein said composition comprises first, second and third components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Rutin(or other bioflavonoid) and said third being Bamboo Silica(of 70% concentration or other), and wherein the following are admixed together:

i. from about 12 to 30 parts by wt., of said first component,

ii. from about 30 to 90 parts by wt. of said second component, and

iii. from about 5 to 10 parts by wt., of said third component,

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

220. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation, wherein said composition comprises first, second third and fourth components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Glucosamine(as sulphate or otherwise), said third being Rutin(or other bioflavonoid) and said fourth being Bamboo Silica(of 70% concentration or other), and wherein the following are admixed together:

i. from about 9 to 27 parts by wt., of said first component,

ii. from about 25 to 75 parts by wt., of said second component,

iii. from about 7.5 to 25 parts by wt., of said third component, and

iv. from about 5 to 10 parts by wt., of said fourth component,

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

221. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from elevated blood sugar levels or Type 2

diabetes and/or desiring control/regulation of blood sugar, wherein said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof and including therein the bitters of the caralluma species of plants, and said second being 4-hydroxy-iso-leucine(as Fenugreek extract or otherwise), and wherein the following are admixed:

i. from about 100 to 250 parts by wt. of said first component, and

ii. from about 100 to 200 parts by wt., of said second component, the amounts of said bitters being to the extent of from about 2 to 8 parts by wt. and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

222. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from elevated blood sugar levels or Type 2 diabetes and/or desiring control/regulation of blood sugar, wherein said composition comprises first, second, third, fourth and fifth components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Coccinia extract containing about 10% terpenes, said third being Bitter gourd extract containing about 8% bitters thereof, said fourth being Cinnamon extract containing about 15% polyphenols thereof and said fifth being Fenugreek extract containing about 40% 4-hydroxy-iso-leucine, and wherein from about 100 to 250 parts by wt. of said first component and from about 100 to 200 parts by wt. of each of said third, fourth and fifth components are admixed together, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

223. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject having mild to moderate hypertension, wherein said composition comprising first and second components, said first being any of the pregnane glycosides, or mixtures thereof and the said second being Commiphora mukul extract containing about 3% gugulsterones, and wherein from about 125 to 250 parts by wt. of each of said first and second components are admixed together, the amount of said first component being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

224. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from clinical depression or desiring mood elevation, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), and wherein from about 10 to 20 parts by wt. of said first component are admixed with from about 4 to 8 parts by wt of said second the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

225. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), and wherein from about 10 to 20 parts by wt. of said first component are admixed with from about 4 to 8 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

226. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual power, drive and stamina, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Shilajith, and wherein from about 10 to 20 parts by wt. of said first are admixed with from about 4 to 8 parts by wt. of said second component, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

227. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Fenugreek extract containing about 50% Protodioscin, and wherein from about 10 to 20 parts by wt. of said first component are admixed with from about 10 to 20 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

228. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring treatment of the aging syndrome, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and including therein the saponin glycosides of the caralluma species of plants, and the said second being the catechins of Green tea, and wherein from about 4 to 8 parts by wt. of each of said first and second components are admixed together, the amount of said saponin glycosides also being from about 4 to 8 parts by wt. and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

229. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring treatment of the aging syndrome, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Green tea extract containing about 40% catechins, and wherein from about 4 to 8 parts by wt. of said first component is admixed with from about 10 to 14 parts by wt. of the said second component, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

230. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Red clover extract containing about 8% isoflavones, and wherein from about 2 to 4 parts by wt. of said first component is admixed with from about 4 to 8 parts by wt of the said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

231. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Hops flower extract containing about 5% triphytoestrogens, and wherein from about 2 to 4 parts by wt. of said first component are admixed with from about 4 to 8 parts by wt. of the said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

232. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Pomegranate extract containing about 10% Ellagic acid, and wherein from about 2 to 4 parts by wt of said first component are admixed with from about 4 to 8 parts by wt. of the said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

233. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject suffering from the menopausal syndrome or desiring alleviation from hot flushes and menopausal distress, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Liquorice extract containing about 5% Triphytoestrogens, and wherein from about 2 to 4 parts by wt. of said first component are admixed with from about 4 to 8 parts by wt. of the said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

234. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from hypercholesterolemia and /or desiring reduction of blood cholesterol, wherein said composition comprises first, second and third components, said first being any of the pregnane glycosides or mixtures thereof, the said second being Hibiscus subdarifa extract containing about 25% polyphenols and the said third being Commiphora mukul extract containing about 3% gugulsterones, and wherein the following are admixed together:

i. from about 5 to 20 parts by wt. of said first component,

ii. from about 6 to 10 parts by wt. of the said second component, and

iii. from about 4 to 8 parts by wt., of said third component,

the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

235. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from hypercholesterolemia and /or desiring reduction of blood cholesterol, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and including therein the saponin glycosides of the caralluma species of plants and the said second being the catechins of Green tea, and wherein from about 90 to 150 parts by wt.of said first is admixed with from about 100 to 200 parts by wt. of the said second component, the amount of said saponin glycosides being to the extent of from about 2 to 15 parts by wt., and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

236. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, and the said second being the catechins of Green tea(as Green tea extract or otherwise), and wherein from about 4 to 8 parts by wt. of each of said first and second components are admixed with

each other, the amount of said saponin glycosides being also to the extent of from about 4 to 8 parts by wt. and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

237. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose for a subject desiring anti-oxidant action and/or ensuring general health and fitness, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Green tea extract containing about 40% catechins, and wherein from about 4 to 8 parts by wt. of said first component are admixed with from about 10 to 14 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

238. A process of admixture for making a pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering from clinical depression or desiring mood elevation, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), and wherein from about 5 to 10 parts by wt. of said first component are admixed with from about 2 to 4 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

239. A process of admixture for making a pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being the withanolides of Ashwagandha(as the extract of Withania somnifera or otherwise), and wherein from about 5 to 20 parts by wt. of said first component are admixed with from about 2 to 4 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

240. A process of admixture for making a pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering from sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual power, drive and stamina, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Shilajith, and wherein from about 5 to 10 parts by wt. of said first component are admixed with from about 2 to 4 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

241. A process of admixture for making a pharmaceutical composition for use as a maintenance dose in the treatment of a subject suffering sexual dysfunction such as primary impotence and/or decreased libido and/or desiring increased libido and sexual, power drive and stamina, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof, and the said second being Fenugreek extract containing about 50% Protodioscin, and wherein from about 5 to 10 parts by wt. of said first component are admixed with from about 5 to 10 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

242. A process of admixture for making a pharmaceutical composition for use as a maintenance dose for a subject desiring treatment/ management of the aging syndrome and/or ensuring general health and fitness, wherein said composition comprises first and second components, said first being any of the pregnane glycosides or mixtures thereof and including therein the saponin glycosides of the caralluma species of plants, and the said second being the catechins of Green tea(as Green tea extract or otherwise), and wherein from about 10 to 20 parts by wt. of said first component are admixed with from about 5 to 10 parts by wt. of said second, said saponin glycosides being from about 12 to 30 parts by wt. and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

243. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from osteo-arthritis of weight-bearing joints and/or desiring relief from joint pains and inflammation and the rejuvenation of the joints, wherein said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof, said second being Glucosamine(as sulphate or otherwise), and wherein from about twelve to thirty parts by wt. of said first component are admixed with from about 40 to 100 parts by wt. of said second, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside and the said glucosamine amount specified herein being that of the sulphate salt thereof.

244. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from Type 2 diabetes and/or desiring control/regulation of blood sugar, wherein said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof and including therein the bitters of the caralluma species of plants, and said second being 4-hydroxy-iso-leucine(as Fenugreek extract or otherwise), and wherein from about 100 to 250 parts by wt. said first component are admixed with from about 100 to 200 parts by wt. of said second, the amount of said bitters being to the extent of

from about 2 to 8 parts by wt. and the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

245. A process of admixture for making a pharmaceutical composition for use as a treatment dose and/or a maintenance dose in the treatment of a subject suffering from mild to moderate hypertension, said composition comprises first and second components, said first being any of the pregnane glycosides, or mixtures thereof and the said second being (-)-hydroxycitrate(HCA)(in the form of Garcinia Cambogia extract or otherwise), and wherein from about 125 to 250 parts by wt. of each of said first and second components are admixed with each other, the amount of said first being specified herein in terms of the molecularly equivalent amount of the pregnane glycoside, caratuberside.

246. The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 211 to 245 wherein the components and constituents of said composition comprise other matter such as plant matter that is substantially non-therapeutic.

247. The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 214, 215, 228, 235, 236 and 242 wherein said saponin glycosides are not part of said first component but an additional component that is admixed into the composition.

248. The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 221 and 244 wherein said bitters of caralluma are not part of said first component but an additional component that is admixed into the composition.

249. The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 211 to 248, wherein said pregnane glycoside(s) comprise principally caratuberside and bouceroside including the isomers thereof.

250. The process of admixture for making a pharmaceutical composition as claimed in the preceding claim 249, wherein said caratubersides and boucerosides comprise 99% or more by weight of said glycosides.

251. The process of admixture for making a pharmaceutical composition as claimed in the preceding claim 250, wherein the ratio of said caratubersides to boucerosides is from about 9:1 to 19:1 by weight.

252. The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 211 to 251, wherein said pregnane glycoside(s) are of plant origin and comprise the extract(s) of one or more of the caralluma species of plants.

253.The process of admixture for making a pharmaceutical composition as claimed in the preceding claim 252, wherein said pregnane glycoside(s) comprise the extract of the species caralluma fimbriata.

254.The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 211 to 253, wherein said pregnane glycoside(s) are in the unconverted form.

255. The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 211 to 254, wherein said pregnane glycoside(s) are in the form of an aqueous ethanolic extract the said pregnane glycoside(s) content therein being preferably either from about 5% to 15% w/w or exceeding about 15% w/w.

256.The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 211 to 254, wherein said glycoside(s) are in the adsorbed form over a suitable excipient,

257.The process of admixture for making pharmaceutical composition as claimed in the preceding claim 256, wherein said excipient is either Malto Dextrin or Magnesium Carbonate.

258.The process of admixture for making a pharmaceutical composition as claimed in any of the preceding claims 211 to 253, wherein said pregnane glycoside(s) and the other components and constituents thereof are in the form of any of the pharmaceutically accepted salts and/or on any of the pharmaceutically accepted carriers and comprise any of the pharmaceutically accepted flavours and/or colours.

259. The uses of the pregnane glycoside(s)(PG) in the form of extracts of the caralluma species of plants or otherwise, either singly or as mixtures thereof, in the treatment and management of various symptoms/disorders in subjects and in the alteration/improvement/regulation of physiological and other parameters/conditions/functions of subjects, said pregnane glycoside(s) optionally including the saponin glycoside(s) and/or the bitters of said caralluma species and being optionally supplemented by one or more additional therapeutical, nutraceutical or nutritional components, substantially as hereindescribed.

260. The methods of treatment/management of various symptoms/disorders in subjects and in the alteration/improvement/regulation of physiological and other parameters/conditions/functions of subjects using the pregnane glycoside(s)(PG) in the form of extracts of the caralluma species of plants or otherwise, either singly or as mixtures thereof, said pregnane glycoside(s) optionally including the saponin glycoside(s) and/or the bitters of said caralluma species and being optionally supplemented

by one or more additional therapeutical, nutraceutical or nutritional components, substantially as hereindescribed.

261. The pharmaceutical compositions comprising the pregnane glycoside(s)(PG) in the form of extracts of the caralluma species of plants or otherwise, either singly or as mixtures thereof, for use in the treatment/management of various symptoms/disorders in subjects and in the alteration/improvement/ regulation of physiological and other parameters/conditions/functions of subjects, and in the methods of said treatment/management or of said alteration/improvement/regulation, substantially as hereindescribed, said pregnane glycoside(s) optionally including the saponin glycoside(s) and/or the bitters of said caralluma species and being optionally supplemented by one or more additional therapeutical, nutraceutical or nutritional components.

262. The processes of admixture for making the pharmaceutical compositions comprising the pregnane glycoside(s)(PG) in the form of extracts of the caralluma species of plants or otherwise, either singly or as mixtures thereof, for use in the treatment/management of various symptoms/disorders in subjects and in the alteration/improvement/regulation of physiological and other parameters/conditions/ functions of subjects, and in the methods of said treatment/management or of said alteration/ improvement/regulation, substantially as hereindescribed, said pregnane glycoside(s) optionally including the saponin glycoside(s) and/or the bitters of said caralluma species and being optionally supplemented by one or more additional therapeutical, nutraceutical or nutritional components.