



CellularGenesis HOODIA Private Reserve

A PROFESSIONAL DIETARY SUPPLEMENT FOR THE PROMOTION OF OPTIMAL WEIGHT MANAGEMENT*

Maintaining optimal body weight as well as sustaining proper health is often far more complex than simply eating less or exercising more. There are a variety of other factors involved that can make or break a weight-loss program. Decreasing food intake and a dedicated exercise plan can be difficult for many people for a number of reasons. Physiological effects resulting from fluctuating insulin and blood sugar levels such as cravings, irritability and low energy levels can impede even the most committed dieters. The fall of blood sugar levels is one of the main causes of sugar cravings. Once those cravings are satisfied, the blood sugar level increases and causes the body to secrete too much insulin in order to transport the glucose to the cells, causing blood sugar levels to drop again. Thus begins a cycle of low blood sugar and cravings and high blood sugar and insulin secretion. In addition, these effects can be further aggravated in people who are already overweight as they may already have some level of insulin resistance which causes your body stops responding to insulin and depositing every calorie it can as fat. Low blood sugar also causes low energy levels and moodiness which can disrupt exercise plans. Exercise is not only a means for burning excess calories, but it's also key to increasing muscle mass as muscle naturally boosts one's metabolism. Exercise is also important for improving mental state since the brain secretes endorphins during exercise which promote feelings of well being. Strategies which aid in both decreasing calories and increasing exercise could be beneficial to any weight loss program*

CellularGenesis HOODIA Private Reserve Naturally Supports a Weight Management Program*

A good weight management program focuses not only on immediate weight loss, but also on improving the body's natural mechanisms that aid in long term control of one's weight. The basic tenets of any weight management program are to balance caloric intake (food consumption) with caloric expenditure (exercise). HOODIA Private Reserve is formulated to complement these fundamental components by providing ingredients which aid in both the physiological and psychological requirements of maintaining optimal weight. HOODIA Private Reserve can help suppress appetite, control blood sugar and insulin levels, increase energy, build muscle mass and improve mental state, all of which are needed to be successful in long term weight control. *

**These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease.*

Research Supporting the Ingredients in CellularGenesis HOODIA Private Reserve

The information below highlights some of the scientific evidence supporting the use of ingredients found in CellularGenesis HOODIA Private Reserve for promotion of optimal weight management. The ingredients are combined to complement any weight loss program that includes reducing caloric intake and increasing physical activity. The following material is for educational purposes only and is not to be construed as making any claim for the product or for the amount of any ingredient used. We hope you enjoy the information presented, along with the cited studies, to increase your knowledge of these natural substances.

Arginine Alpha-Ketoglutarate Arginine (AKG) is a salt formed by combining two molecules of the amino acid arginine and one molecule of alpha-ketoglutarate. Because AKG seems to be involved in amino acid synthesis and protein availability, AKG may increase muscle mass and strength. Increased muscle mass boosts metabolism, therefore burning more calories even when at rest. In a recent study on exercise performance on adult men supplemented with A-AKG, a positive correlation was seen in strength training performance.¹



Banaba Leaf Extract (*Lagerstroemia speciosa*) has long been used in Philippine folk medicine for blood sugar control. Animal studies have shown that extracts of banaba leaf have anti-diabetic and antiobesity effects.^{2,3} The active compound in Banaba Leaf Extract is a triterpenoid called corosolic acid which appears to stimulate glucose transport into cells therefore regulating levels of blood sugar and insulin in

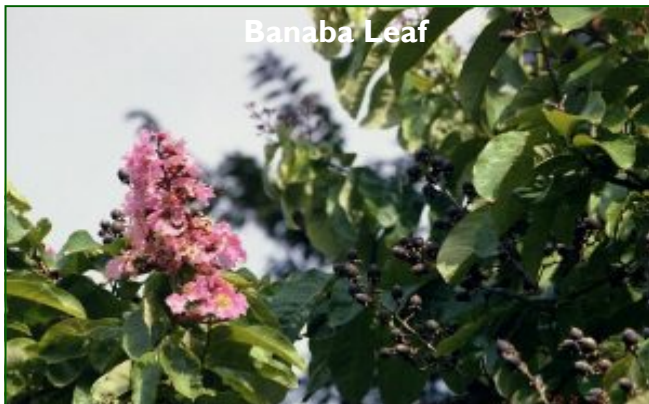
the blood. Recent human studies support the use of corosolic acid from Banaba Leaf Extract in lowering blood glucose levels.⁴ Controlling blood sugar and insulin levels is an important component of any weight loss program because hunger and cravings for carbohydrates are often a result of fluctuating blood sugar and insulin levels.

Chromium is an essential nutrient involved in regulation of carbohydrate and lipid metabolism. Chromium has also been shown to increase lean body mass and decrease body fat.⁵ Human clinicals have shown less weight gain in subjects supplemented with chromium.⁶ In addition, chromium bound with the B vitamin niacin (**Chromium nicotinate**) works synergistically to facilitate insulin binding, therefore decreasing fasting glucose levels in humans.⁷ Niacin-bound chromium supplementation was also shown to cause significant loss of fat in overweight women when combined with modest dieting and exercise compared to the control group.⁸

Citrus Aurantium Extract is also known its common name Bitter Orange Extract. Citrus aurantium is used in Traditional Chinese Medicine to reduce food accumulation and eliminate distention and fullness. In modern alternative medicine, Citrus aurantium is believed to be thermogenic. Thermogenesis is the process in which the body generates heat, or energy, by increasing the metabolic rate above normal. Such an increase in heat can burn off calories and aid in weight reduction. In human clinical studies, body weight losses were statistically greater in subjects supplemented with Citrus aurantium.⁹

Hoodia Gordonii is a cactus-like plant that grows in the African desert and has long been used in primitive African cultures as an appetite suppressant during long treks through the desert. A steroidal glyco-

The main thing in weight loss is calories in versus calories out. People go on fad diets and think 'This one will be different,' but it never is and their weight rebounds and they move on to the next fad diet —Judith Stern, Diet and Nutrition Expert and Founder of American Obesity Association



side, called P57, has been shown to have appetite suppressive action via the central nervous system by increasing ATP (the basic molecular form of energy in the body) levels in hypothalamic neurons which triggers the neural and endocrine systems to regulate appetite and produce a feeling of satiety.¹⁰

Magnesium is an essential mineral, although most Americans are lacking in optimal magnesium levels. Magnesium plays a central role in many bodily functions including the break down of carbohydrates and insulin control. Deficiencies in magnesium have been linked to many diseases such as insulin resistance and Type 2 Diabetes,¹¹ cardiovascular disease and hypertension. In addition, a calorie-restricted diet can further exacerbate a magnesium deficiency, making insulin resistance worse and making it more difficult to lose weight. Therefore, any weight management program should include magnesium supplementation.

Theobromine is a compound found in cocoa and chocolate. It is in methylxanthine family, which also includes caffeine. However, theobromine has very different effects on the human body from caffeine; it is a mild, lasting stimulant with a mood improving effect,¹² whereas caffeine has a strong, immediate effect and increases awareness. Theobromine is also believed to have appetite suppressant activity.

TMG (Trimethyl Glycine), also known as anhydrous betaine, is found in a variety of plant and animal sources. TMG is a key compound in the conversion of homocysteine to methionine. High blood levels homocysteine is considered to be a marker of potential cardiovascular disease. TMG supplementation has been shown to lower homocysteine levels.¹³ Homocysteine levels can become elevated by a high protein diet, or during and after weight loss. Supplementation for keeping homocysteine levels in check are recommended to those seeking sustained weight loss.¹⁴

References

1. Campbell, B. et al, Pharmacokinetics, safety and effects on exercise performance of l-arginine alpha-ketoglutarate in trained adult men. *Nutrition* 2006. Sep; 22(9):872-81 .
2. Suzuki Y, et al. Antiobesity activity of extracts from Lagerstroemia speciosa L. leaves on female KK-Ay mice. 1999. *J Nutr Sci Vitaminol (Tokyo)*. Dec;45(6):791-5.
3. Kakuda T, et al. Hypoglycemic effect of extracts from Lagerstroemia speciosa L. leaves in genetically diabetic KK-Ay mice. 1996. *Biosci Biotechnol Biochem*. Feb;60(2):204-8.
4. Fukushima M, et al. Effect of corosolic acid on postchallenge plasma glucose levels. 2006. *Diabetes Res Clin Pract*. Aug;73(2):174-7.
5. Anderson RA. Effects of chromium on body composition and weight loss. 1998. *Nutr Rev*. Sep;56(9):266-70.
6. Nachtigal MC, et al. Dietary supplements and weight control in middle-age population. 2005. *J Altern Complement Med*. Oct; 11(5):909-15.
7. Uberg, M. Evidence for synergism between chromium and nicotin acid in the control of glucose tolerance in elderly humans. 1987. *Metabolism*. Sep;36(9):896-9.
8. Crawford V., et al. Effects of niacin-bound chromium supplementation on body composition in overweight African-American women. 1999. *Diabetes Obes Metab*. Nov;1(6):331-7.
9. Preuss HG, et al. Citrus aurantium as a thermogenic, weight-reduction replacement for ephedra: an overview. 2002. *J. Med*. 33(1-4):247-64.
10. MacLean DB, et al. Increased ATP content/production in the hypothalamus may be a signal for energy-sensing of satiety: studies of the anorectic mechanism of a plant steroidal glycoside. 2004. *Brain Research*. Sep 10;1020(1-2):1-11.
11. Rosolova LM, et al. Insulin-mediated disposal is decreased in normal subjects with relatively low plasma magnesium concentrations. 2000. *Medabolism*. 49:418-420.
12. Psychopharmacology (Berl). 2004 Nov;176(3-4):412-9. Epub 2004 May 5. Methylxanthines are the psycho-pharmacologically active constituents of chocolate. Smit HJ
13. Olthof MR, et al. Low dose betaine supplementation leads to immediate and long term lowering of plasma homocysteine in healthy men and women. 2003. *J Nutr*. Dec;133(12):4135-8.
14. Dixon JB, et al. Sustained Weight Loss in Obese Subjects Has Benefits That Are Independent of Attained Weight. 2004. *Obesity Research*. 12(11):1895-1902.

Supplement Facts

Serving Size: Two capsules
Serving Size per Container: 60

Amount per Serving		% Daily Value†
Magnesium (as magnesium amino acid chelate)	20 mg	5%
Chromium (as chromium niacinate)	250 mcg	208%
Hoodia gordonii Extract	400 mg	*
Smooth Energy Formula	322 mg	*
Arginine Alpha-ketoglutarate, TMG (Trimethyl Glycine), Citrus aurantium extract, Banaba leaf Extract.		
Mental Control Formula	200 mg	*
Dwarf morning glory root extract, theobromine		

† Percent Daily Values are based on a 2,000 calorie diet.

* Percent Value not established

Other Ingredients: Gelatin (Capsule), Organic Brown Rice flour, Montomorillonite clay.

Directions: Take 2 capsules 15-30 minutes before breakfast and 2 more capsules 15-30 minutes before evening meal.



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