

Dr. T's Appetite Crusher



Clinical Applications

- Affects Adipogenesis and the Genetic Expression of Adipogenic Marker Genes in Multipotent Cells*
- Affects Synovial Fluid and Serum Leptin Levels*
- Supports Weight Loss*

*Dr. T's Appetite Crusher represents an advanced, science-based strategy for positively affecting leptin levels. Leptin is a fat-cell derived hormone that is elevated in some individuals. Healthy leptin activity helps balance energy intake and expenditure by influencing appetite, food cravings, and metabolism.**

All O Health by D. T Formulas Meet or Exceed cGMP Quality Standards

Discussion

Leptin is an adipose-derived hormone that facilitates communication between peripheral adipose tissue and the central nervous system for the control of appetite and the balance of energy. Leptin is secreted by adipocytes in proportion to their size and number. It is known to indicate satiety, to control appetite, and to participate in multiple regulatory mechanisms. These mechanisms include energy expenditure/metabolism and cell proliferation/differentiation; they also include signal interactions among other hormonal regulators of energy and metabolism, such as insulin.^[1,2]

Leptin resistance can occur when the body is overexposed to leptin (through adipose accumulation) and when pathways affecting leptin transport and signaling become disrupted, such as by a high-sugar diet or a high-fat (e.g., saturated triglyceride) diet.^[3-6] A body with leptin resistance becomes unresponsive to leptin's hormonal messages, such as satiety and reduced appetite. When leptin resistance is coupled with excess body weight, resistance to weight loss is common; furthermore, cytokine and metabolic alterations ensue,^[7] which can affect many facets of health, including joint and cardiovascular health.

Dr. T's Appetite Crusher is a dietary supplement that provides ORALVISC®—a proprietary blend of hyaluronic acid and other glycosaminoglycans. In vitro, animal, and human studies suggest that this formula has an impact on leptin, adipogenesis, and body weight.*

Human Clinical

A double-blind, randomized, controlled study tested the effects of ORALVISC on synovial fluid and serum leptin levels in overweight adults with joint discomfort. Forty patients completed the study; of these, 21 were given 80 mg of ORALVISC daily and 19 were given placebos. After 12 weeks, there was a significant ($P < 0.05$) decrease between initial and final—and between supplement and placebo—synovial and serum leptin levels, as measured by immunoassay. This result was accompanied by a significant ($P < 0.05$) reduction in synovial and serum cytokines and chemokines, including IL-1alpha, IL-1beta, and TNF-alpha.^[10,11] Significant improvements were recorded in joint comfort and function as assessed by VAS (visual analog scale) and WOMAC (Western Ontario and McMaster Universities osteoarthritis index) scores. Although participants were not told to change any lifestyle habits and their activities were monitored during the study, the supplemented group lost an average of 0.55 kilograms compared to a 0.75 kilogram weight gain in the placebo group over the 12-week period.^[10] Furthermore, as shown by post-hoc analysis, participants experienced a significant shift toward healthier blood lipid profiles; in contrast, no significant lipid-profile differences were detected in subjects treated with placebo.*

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



Manufactured from: O Health by D. T.
600 N. Hiatus Road, S-201
Pembroke Pines, FL 33026
954-526-6378

Dr. T's Appetite Crusher



Supplement Facts

Serving Size: 1 Capsule
Servings Per Container: 30

	Amount Per Serving	%Daily Value
Vitamin C (ascorbic acid)	15 mg	25%
ORALVISC® (proprietary, naturally occurring source of glycosaminoglycans (GAGs))	80 mg	**

** Daily Value not established.

Other Ingredients: Microcrystalline cellulose, capsule (gelatin, carmine, and titanium dioxide), vegetable stearic acid, vegetable magnesium stearate, and silica.

ORALVISC® is a registered trademark licensed by Bioiberica, S.A.

Directions

Take one capsule in the morning, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

References

1. Jéquier E. Leptin signaling, adiposity, and energy balance. *Ann N Y Acad Sci.* 2002 Jun;967:379-88. [PMID: 12079865]
2. Fukuda M, Williams KW, Gautron L, et al. Induction of leptin resistance by activation of cAMP-Epac signaling. *Cell Metab.* 2011 Mar 2;13(3):331-39. [PMID: 21356522]
3. Lin L, Martin R, Schaffhauser AO, et al. Acute changes in the response to peripheral leptin with alteration in the diet composition. *Am J Physiol Regul Integr Comp Physiol.* 2001 Feb;280(2):R504-09. [PMID: 11208581]
4. Wang J, Obici S, Morgan K, et al. Overfeeding rapidly induces leptin and insulin resistance. *Diabetes.* 2001 Dec;50(12):2786-91. [PMID: 11723062]
5. Shapiro A, Mu W, Roncal C, et al. Fructose-induced leptin resistance exacerbates weight gain in response to subsequent high-fat feeding. *Am J Physiol Regul Integr Comp Physiol.* 2008 Nov;295(5):R1370-75. [PMID: 18703413]
6. Vasselli JR, Scarpace PJ, Harris RB, et al. Dietary components in the development of leptin resistance. *Adv Nutr.* 2013 Mar 1;4(2):164-75. [PMID: 23493533]
7. Leon-Cabrera S, Solís-Lozano L, Suárez-Álvarez K, et al. Hyperleptinemia is associated with parameters of low-grade systemic inflammation and metabolic dysfunction in obese human beings. *Front Integr Neurosci.* 2013 Aug 23;7:62. [PMID: 23986664]
8. Cross-talk between the adipogenic and the chondrogenic programs elicited by a glycosaminoglycan mixture. Barcelona, Spain: Bioiberica S.A.; 2013. [on file]
9. A glycosaminoglycan-rich commercial preparation used in osteoarthritis management favors fat loss in diet-induced obese mice. Barcelona, Spain: Bioiberica S.A.; 2013. [on file]
10. Wu W, Zvirbulis R, Zonca B, et al. An oral preparation containing hyaluronic acid (Oralvisc®) can significantly decrease the production of leptin levels in the serum and synovial fluid of osteoarthritic knee patients. Poster presented at: Orthopaedic Research Society (ORS) Annual Meeting. San Antonio, TX. January 26-29, 2013. [on file]
11. Wu W, Pasierb M, Zonca B et al. An oral preparation containing hyaluronic acid (Oralvisc®) can act systemically to decrease serum and synovial fluid levels of inflammatory cytokines and chemokines in osteoarthritic knee patients. Oral communication at: Orthopaedic Research Society (ORS) Annual Meeting. San Antonio, TX January 26-29, 2013. [on file]

Does Not Contain

Wheat, gluten, yeast, soy, dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

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