

Isagenix Clinical Research Summary

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UIC study finds subjects on Isagenix products lost more body fat, lost more visceral fat, showed greater adherence, and showed greater improvement across several cardiovascular biomarkers in comparison to a leading ‘heart-healthy’ diet*

Leading Research

Providing independent clinical validation of the Isagenix product portfolio is of high importance to the many health professionals and Independent Associates that both use and refer Isagenix solutions. During 2012, Isagenix elected to fund an independent clinical evaluation of its core weight-loss program. After an extensive assessment, because of its specialised capabilities and accomplished faculty, the company selected University of Illinois at Chicago (UIC) to conduct this clinical evaluation.

UIC is generally regarded as a leading research institution in the fields of health sciences, health promotion, and disease prevention. UIC’s close relationship with Rush University Medical Center affords the university a cross-disciplinary and collaborative environment with access to a large community of researchers and scholars. The university is a contributor and authority in public health and wellness. The faculty is comprised of some of the most highly regarded researchers in their respective fields, actively shaping areas of research in ageing, exercise physiology, and health information sciences.

Advanced facilities and excellent research programs make the university uniquely qualified to examine a variety of health

parameters ‘inside and out’ regarding overweight and obesity-related conditions. Obesity is a complex, multifactorial condition requiring a cross-disciplinary approach to its study (1-2). For example, growing evidence suggests that more attention should be placed on visceral obesity because of its unique implications on health (3-5). Visceral obesity is associated with chronic disease due to its active production and release of pro-inflammatory mediators and its effect on insulin resistance (3-4). UIC has the capacity to examine body weight, body composition, as well as markers of inflammation, oxidative stress, and cardiovascular health.

Scientific Credibility

Krista Varady, Ph.D. an assistant professor at the UIC College of Applied Health Sciences, was selected to lead this clinical evaluation. Dr. Varady is a prolific researcher with more than 30 peer-reviewed publications. She also has a Ph.D. in nutrition from McGill University,



Krista Varady, Ph.D.
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one of the top universities in Canada. Dr. Varady has devoted much of her research to investigating novel strategies to facilitate weight-management and decreasing cardiovascular disease risk in obese subjects (5-14). She is also one of the pioneers in researching alternate-day and intermittent fasting.

Previously, Dr. Varady had investigated several regimens that have comprised either alternate-day or intermittent fasting (5-8). Several of her findings have been extremely positive in showing intermittent fasting to be an effective means for encouraging weight loss and improving vascular health. The findings include changes in adipose tissue physiology during weight loss that may mediate improvements in cardiovascular health.

Because of her previous research, the Isagenix products really inspired Dr. Varady to perform research. Other regimens rarely have incorporated intermittent fasting as part of their programs.

“Subjects also found the Isagenix program simple because of the easy-to-use guidance in their materials.” Dr. Varady said.

Study Design

The study compared a dietary plan using certain components of an Isagenix weight-loss system to a ‘heart-healthy’ dietary plan based on nationally recognised guidelines (15-20). This dietary plan was modified to include intermittent fasting along with supplementation of a flavored drink as a placebo.

The 10-week study evaluated the effects of both dietary plans in combination with intermittent fasting, or “Cleanse Days,” on

body weight, body composition, cardiovascular risk factors, oxidative stress markers and inflammation in 54 obese women with a body mass index above 35.

Subjects on the Isagenix program had the Isagenix products for breakfast and lunch, and were counseled to eat a 400- to 600-calorie meal for dinner. Both groups performed a “Cleanse Day,” or fast, one day per week. The ‘heart-healthy’ subjects received instruction from a registered dietitian on how to follow ‘heart-healthy’ guidelines, which included limiting calories by 20 to 25 percent daily, limiting total fat to 35 percent, limiting cholesterol intake, and increasing intake of fibre-rich foods such as whole grains, fruits and vegetables. Both groups’ prescribed caloric intakes were similar. The trial had two phases: a two-week weight maintenance period and an eight-week weight-loss period.

Results

The study found that the subjects in the Isagenix group had superior results across several clinical parameters in comparison to the ‘heart healthy’ group, with respect to adherence, including body composition, body weight, body fat, cardiovascular risk factors, and oxidative stress markers. One of the most impressive results was that of up to double the visceral fat lost along with improved cardiovascular risk markers in the Isagenix group in comparison to the ‘heart healthy’ group.

- 56% greater reduction in average weight loss
- 47% greater reduction in average body fat loss
- Twice as much visceral fat loss
- 35% greater reduction of oxidative stress



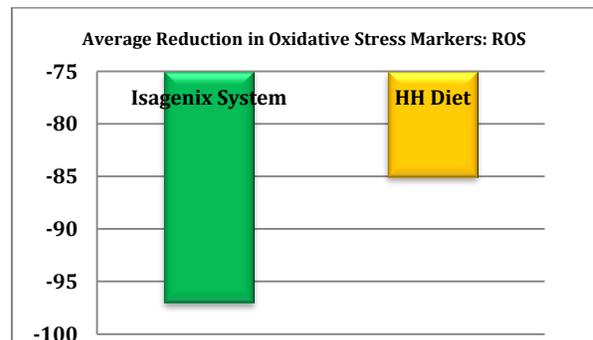
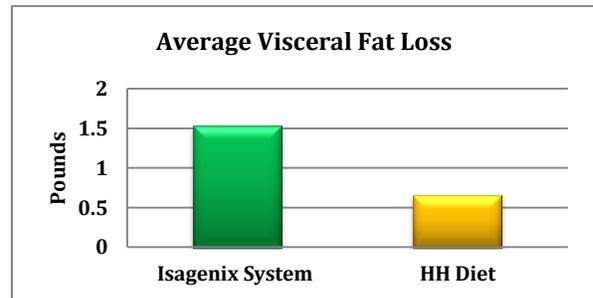
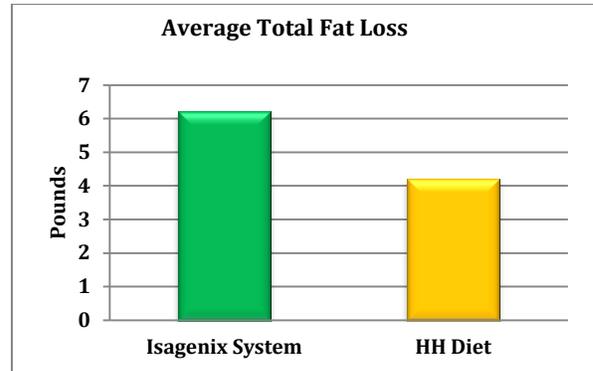
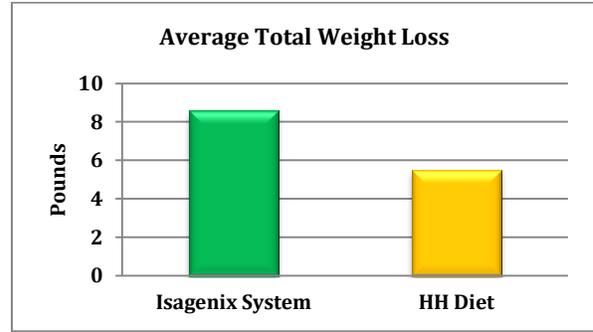
- Greater adherence in subjects
- Easier and more convenient

“When you see successful weight and visceral fat loss, the scientific literature suggests you should see a reduction in cardiovascular risk factors. This well-designed clinical trial further supports the impact someone can have on his or her life by controlling calorie intake,” said Chief Science Officer Suk Cho, Ph.D. “We are pleased to be able to play such an important role in the health of our product users. We are looking forward to the publication of this clinical trial and are also excited to collaborate with Dr. Varady in the future.”



Suk Cho, Ph.D.
Chief Science Officer

Dr. Varady had high praise for the Isagenix products, saying, “Most intriguing was the adherence in the Isagenix group because of the program’s ease of use. The subjects showed better adherence, better weight loss, and better visceral fat loss. As expected, the greater weight and visceral fat loss equated to a greater decrease in certain cardiovascular risk factors, specifically cholesterol levels, inflammatory markers, and oxidative stress.”



Publication

The results were unique and novel; therefore, the study's findings have been submitted to two reputable peer-review journals. Their publication is expected sometime in the near future. Although the university received funding by Isagenix to perform the clinical research, the company had no editorial power over the statistical methods or publication of the results.

**This document is intended to provide a technical summary of the actual results of the 10-week clinical study. Be responsible when sharing this information with others interested in Isagenix nutritional systems and products. Do not (i) stray or make claims that are not supported within this document, (ii) make any direct links to improved cholesterol or inflammatory markers except as a result of the greater weight loss and greater visceral fat loss achieved by the Isagenix program, or (iii) disclose the specific name of the diet against which the Isagenix program was compared. This document may not be altered or amended in any way for individual purposes and should only be reproduced in its entirety.*

References

1. Centers for Disease Control and Prevention. National Center for Health Statistics. Prevalence of Obesity in the United States, 2009-2010. NCHS Data Brief (No. 82). January 2012.
2. National Institutes of Health. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults—The evidence report. *Obes Res* 6(Suppl 2): 51S–209S. 1998.

3. Shields M et al. Measures of abdominal obesity within body mass index categories, 1981 and 2007-2009. *Health Reports* 2012; 23:2.
4. Hairston KG, Vitolins MZ, Norris JM, et al. Lifestyle Factors and 5-Year Abdominal Fat Accumulation in a Minority Cohort: The IRAS Family Study. *Obesity* 2011 Jun 16.
5. Varady KA. Intermittent versus daily calorie restriction: which diet regimen is more effective for weight loss? *Obes Rev* 2011 Jul;12(7):e593-601.
6. Varady KA, Bhutani S, Church EC, Klempel MC. Short-term modified alternate day fasting: A novel dietary strategy for weight loss and cardio-protection in obese adults. *Am J Clin Nutr* 2009; 90: 1138-43.
7. Varady KA, Roohk DJ, Loe YC, et al. Effect of modified alternate-day fasting regimens on adipocyte size, triglyceride metabolism, and adipokine levels in mice. *J Lipid Res* 2007; 48: 2212-9.
8. Varady KA, Hellerstein MK. Alternate-day fasting for chronic disease prevention: A review of human and animal trials. *Am J Clin Nutr* 2007; 86: 7-13.
9. Varady KA, Bhutani S, Church EC, Phillips SA. Adipokine responses to acute resistance exercise in trained and untrained men. *Medicine and Science in Sports and Exercise*. 2009.
10. Varady KA and Bhutani S. Nibbling versus feasting: Which meal pattern is better for heart disease prevention? *Nutrition Reviews*. 2009; 67: 591-8.
11. Varady KA, Tussing L, Bhutani S, Braunschweig CL. Degree of weight

- loss required to improve adipokine concentrations and decrease fat cell size in severely obese women. *Metabolism*. 2009; 58: 1096-11.
12. Jaworski K, Ahmadian M, Duncan RE, et al. AdPLA ablation increases lipolysis and prevents obesity induced by high-fat feeding or leptin deficiency. *Nature Medicine*. 2009; 15: 159-68.
 13. Ahmadian M, Duncan RE, Varady KA, Frasson D, Hellerstein MK, Birkenfeld AL, Samuel VT, Shulman G, Wang Y, Kang C, Sul HS. Adipose overexpression of desnutrin promotes fatty acid utilization and promotes diet-induced obesity. *Diabetes*. 2009; 58: 855-66.
 14. Varady KA, Roohk DJ, McEvoy-Hein BK, Gaylinn BD, Thorner MO, Hellerstein MK. Modified alternate-day fasting regimens reduce cell proliferation rates to a similar extent as daily calorie restriction in mice. *FASEB J* 2008; 22: 2090-6.
 15. Grundy S. M., Cleeman J. I., Merz C. N., et al. 2004. Implications of recent clinical trials for the National Cholesterol Education Program Adult Treatment Panel III guidelines. *Circulation* 110: 227–239.
 16. Obarzanek E., Sacks F. M., Vollmer W. M., et al. 2001. Effects on blood lipids of a blood pressure-lowering diet: the Dietary Approaches to Stop Hypertension (DASH) Trial. *Am J Clin Nutr* 74: 80–89
 17. Adult Treatment Panel III. 2001. Executive Summary of the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. *J Am Med Assoc* 285: 2486–2497.
 18. Krauss R. M., Eckel R. H., Howard B., et al. 2000. AHA Dietary Guidelines: revision 2000: A statement for healthcare professionals from the Nutrition Committee of the American Heart Association. *Circulation* 102: 2284–2299.
 19. Berglund L., Lefevre M., Ginsberg H. N., et al. 2007. Comparison of monounsaturated fat with carbohydrates as a replacement for saturated fat in subjects with a high metabolic risk profile: studies in the fasting and postprandial states. *Am J Clin Nutr* 86: 1611–1620.
 20. Vincent-Baudry S., Defoort C., Gerber M., et al. 2005. The Medi-RIVAGE study: reduction of cardiovascular disease risk factors after a 3-mo intervention with a Mediterranean-type diet or a low-fat diet. *Am J Clin Nutr* 82: 964–971.