ManiActive

Hidden Sugar in the Diet: A Product to Solve This Health Risk

Although most people understand the importance of good nutrition, they may not realize how difficult it is to maintain healthy blood sugar levels in today's hectic world. It isn't just sweets or starchy snacks that send these levels sky-high. Many packaged foods contain hidden sugars that can raise otherwise healthy blood sugar. But there is an alternative to measuring sugar intake. A clinically researched plant extract called *Salacia* addresses both hidden and added sources of sugar in the diet by promoting healthy carbohydrate metabolism and glycemic response. MetaVive[™] helps consumers lead a healthy lifestyle without worrying about how much hidden sugar is in their diet.

Why Controlling Sugar in the Diet is Important

Excessive amounts of sugar pose a health risk, and sweet foods like candy, cookies and soda are packed with sugar. However, when it comes to sugar in the diet, sweets aren't the only culprits. Any food source with carbohydrates contains sugar, including bread, pasta, grains and even vegetables. In addition, packaged foods can contain hidden sugar which increases one's blood sugar. In diet foods and health foods, you don't expect to find sugar, but it may be hiding behind another name, such as sucrose, brown rice syrup, high-fructose corn syrup, barley malt, dextrose or evaporated cane juice.

Given today's busy lifestyles, even the savviest consumers will find themselves gravitating toward the convenience of pre-packaged foods, not always taking the time to read labels. The result is that the average daily consumption of sugar is more than 70 grams. This is almost twice the recommended level or 24 to 40 grams.¹ Therefore, even blood sugar in diet-conscious individuals may be higher than one would expect.



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Public awareness of healthy dietary practices is growing, but the standard American diet still consists of large amounts of red meats, fried food, pre-packaged food, eggs, high-fat dairy products, potatoes, corn, refined grains and high-sugar beverages. In this type of diet, people unknowingly consume high levels of sugar, whether it's added sugars or sugar from hidden sources. Just a simple breakfast of 6 ounces of low-fat yogurt, a medium bagel with 1 teaspoon of cream cheese and 8 ounces of fresh orange juice delivers 46 grams of sugar!



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Excessive sugar and carbohydrates wreak havoc on blood sugar metabolism. It leads to a vicious cycle of sugar cravings that ratchet up one's sugar intake and causes increasingly higher blood sugar levels.^{2 3}

About Blood Sugar Metabolism

Broadly speaking, people eat two forms of carbohydrates — complex carbs (grains, bread, pasta, vegetables, etc.; also known as starches) and simple carbs (table sugar, fruits and fruit juice; also known as simple sugars). The chemical structure of complex carbs consists of a long chain of glucose molecules. Glucose is the primary sugar that the body uses for energy and stores for later usage. Simple carbs consist of two smaller units bound together, such as glucose and another sugar like fructose. For blood sugar metabolism of both types, digestion breaks down the carbs into glucose, fructose or another simpler sugar so the body can absorb them.

The digestion process is as follows:

- 1. In the mouth, the amylase enzyme begins to break down polysaccharides into disaccharides.
- 2. In the stomach, with the help of stomach amylase, polysaccharides are broken down completely into disaccharides.
- 3. In the intestines, the alpha-glucosidase enzyme completes the breakdown of disaccharides to monosaccharides, single sugar molecules, which are absorbed through the intestine wall and into the blood stream.
- 4. Blood sugar increases (causing a sugar spike), which triggers high levels of insulin to be released, so the glucose in the blood stream can move into the cells and be used for energy.
- 5. The release of insulin causes a dip in blood sugar, which can result in a desire to consume more carbohydrates. Thus, the cycle begins again.

The overconsumption of sugar and carbohydrates perpetuates this vicious cycle, disrupting healthy blood sugar levels. Heightened cravings for sugary and savory foods lead to unhealthy snacking, increased sugar intake and higher blood sugar levels. Careful maintenance of blood sugar, in diet conscious diabetics as well as non-diabetics, is extremely important.



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Consumer Trends

A study examining the metabolic health of American adults found that less than 12% of U.S. citizens are metabolically healthy.⁴ The public understands how important it is to control their sugar and carbohydrate intake — 83% of consumers believe that managing blood sugar (in diet and in random snacking) is important — but find it difficult to keep track of every food item and count how many grams of sugar they consume each day. Research shows that 25% of consumers would take a blood sugar supplement to help support healthy metabolism.⁵ ⁶

The Solution

What if it were possible to reduce the glycemic impact of carbs and sugars, thereby halting the cycle of sugar addiction? MetaVive, a natural root extract from the plant species *Salacia chinensis*, helps consumers to take control of their health by supporting healthy glucose and insulin levels after a meal. It naturally inhibits the alpha-glucosidase action, the final step in carb metabolism, thereby reducing the impact of sugar in the blood. In this way, consumers can practice healthy blood sugar management without having to obsessively watch their diet.

The science behind the ingredient supports claims consumers are looking for:



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Products marketed as "starch blockers" can only act on the amylase enzyme, which is only effective for complex carbohydrates. This plant-derived extract is unique in its ability to reduce the glycemic impact of all kinds of carbohydrates found in high carb foods, both complex and simple.



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The Health Benefits of Salacia

MetaVive is derived from a woody climbing plant called Salacia, which is indigenous to India and Sri Lanka. Salacia has been widely used in Ayurveda for thousands of years and is highly valued for its beneficial effect on blood sugar metabolism, in addition to other health benefits. This preparation is produced through a patented, clean extraction process, and has been researched through multiple preclinical trials and two human clinical trials to establish efficacy at a low dose of just 300 mg.^{7 8}

This scientifically proven natural ingredient is loaded with metabolic health benefits. It acts as a metabolic synergizer to address various targets. The key drivers of optimal metabolic health include healthy body composition, glucose management and healthy lipid profiles (total cholesterol, HDL cholesterol, triglycerides and LDL cholesterol). These are dependent on various systems in the body working together.

MetaVive supports these systems so that they work synergistically at their highest levels for:

- Healthy body composition
- Blood glucose management
- Cardiovascular health
- Lipid management
- Satiety



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At OmniActive Health Technologies, our products go through two phases of rigorous testing. The first is to verify the level of active ingredients, and the second is to verify the level of desired activity against a benchmark to ensure that each batch delivers consistent results every time. This proprietary process results in a unique set of fingerprinted bioactives and bioactivity. In addition to guaranteeing consistently reliable performance, it allows for a lower dosage to be used to support metabolic health (300 to 500 mg per day), compared to as much as 2,000 mg found in scientific studies.



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MetaVive Advantages as a Natural Dietary Supplement Ingredient:

- Versatile extract with little to no taste can be effectively added to a supplement or wellness formula
- Free-flowing powder that's suitable for tablets, capsules and powders
- Verification process ensures authenticity and consistent performance
- **Source traceability** by proprietary markers that ensure the correct parts of the plant (roots and stems) are used



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Who is OmniActive Health Technologies?

Since 2004, OmniActive Health Technologies has had a singular vision — to improve lives by enhancing nutrition and wellness through science and innovation. Through expertise in R&D, manufacturing, extraction technologies, product development and marketing — and working with visionary partners in the dietary supplement marketplace — the company addresses consumer demand for solutions that support a healthy, active lifestyle at all ages.

OmniActive's key offerings and strengths include breakthrough extracts and scientifically validated bioactives, innovative delivery systems that ensure product stability and usability, and sustainable manufacturing processes. With a dedicated team of professionals in clinical research, product development, product management, marketing and sales, OmniActive is perfectly poised to help

companies bring innovative ideas in the health and wellness realm to market, from farm to consumer product. Their global approach and worldwide presence give them the ability to effectively sell and distribute in markets from North and South America to Europe, Asia and Oceania.

OmniActive is unmatched in their commitment to responsible environmental practices and community enrichment. They focus on sustainable agriculture, education and support of farmers and their families, community and social stewardship, transparency and traceability, while at the same time staying cost competitive. This corporate responsibility includes using state-of-the-art technology to reduce their environmental footprint in agricultural and manufacturing processes, as well as investments and initiatives that support the communities with which they work, for a better and healthier world.

References

- (2016 March). 2015-2020 Dietary Guidelines for Americans Cut Down on Added Sugars. Retrieved from <u>https://health.gov/dietaryguidelines/2015/resources/DGA_Cut-Down-On-Added-Sugars.pdf</u>
- 2. Avena, N., Rada, P., & Hoebel, B. (2008). Neuroscience Behavior Review, 52(1), 20-39. Retrieved from <u>http://www.ncbi.nlm.nih.gov/pubmed/17617461</u>
- Shapiro, A., Mu, W., Roncal, C., Cheng, K.-Y., Johnson, R.J., & Scarpace, P.J. (2008). American Journal of Physiology. Regulatory, Integrative and Comparative Physiology, 295(5), R1370–1375. doi:10.1152/ajpregu.00195.2008
- 4. Joana Araújo, Jianwen Cai, June Stevens. Prevalence of Optimal Metabolic Health in American Adults: National Health and Nutrition Examination Survey 2009–2016. Metabolic Syndrome and Related Disorders. 2018.
- 5. OmniActive Consumer Insights Program, November 2017; n=499
- 6. OmniActive Consumer Insights Program 2016, n=500
- 7. Jeykodi S, et al. Salacia Extract Improves Postprandial Glucose and Insulin Response: A Randomized Double-Blind, Placebo Controlled, Crossover Study in Healthy Volunteers. J Diabetes Res. 2016.
- Hao L, et al. Appetite and Gut Hormones Response to a Putative α-Glucosidase Inhibitor, Salacia Chinensis, in Overweight/Obese Adults: A Double Blind Randomized Controlled Trial. Nutrients. 2017.