WellTrim®iG (IGOB131®) African Mango Extract is a Comprehensive Weight Management Ingredient

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SUBSTANTIATED STRUCTURE/FUNCTION CLAIM AREAS:

- Weight Management
- Satiety
- Appetite Control
- Thermogenesis
- Metabolic Balance/Wellness
- Blood Sugar
- Cardiovascular
- Inflammation Response

The Centers for Disease Control has reported that a majority of Americans are overweight and more than 30 percent obese, and predicts that these numbers will rise over the coming decades. A multitude of factors contribute to weight gain including high caloric intake, lack of exercise, low metabolism, poor insulin function, increased fat production (lipogenesis), and decreased fat burning (lipolysis). Because excessive weight can have serious health consequences, often leading to metabolic syndrome and contributing to chronic diseases like diabetes and heart disease, the market for dietary supplements that promote healthy weight management continues to increase. A combination of a healthy diet, regular exercise, and supplementation with efficacious weight management nutraceuticals is often the best strategy for keeping pounds off.

Until now, there have been few nutraceutical ingredients that promote healthy weight management in a comprehensive manner by addressing the multiple factors affecting a person's weight while also contributing to healthy metabolic function. WellTrim® iG marketed by Icon Group represents a new approach to healthy weight management because it utilizes multiple mechanisms of action that promote not only weight loss, but also health and wellness throughout the body.* WellTrim® iG is IGOB131®, which is the scientific name for the authentic, patented, clinically-proven extract of African Mango (*Irvingia gabonensis*). WellTrim® iG (IGOB131®) is an all natural ingredient that has been proven to support healthy weight management as well as metabolic wellness in a randomized, double-blind, placebo-controlled clinical trial. This paper describes the story behind WellTrim® iG (IGOB131®) and why its superior properties make it a breakthrough, next-generation ingredient in the healthy weight management category.

WELLTRIM® IG (IGOB131®) IS CERTIFIED AUTHENTIC AFRICAN MANGO SEED EXTRACT

WellTrim® iG (IGOB131®) is the only certified, authentic, GRAS affirmed, standardized extract of African Mango (*Irvingia gabonensis*) seed. These seeds, called dika nut or ogbono in West Africa, have been used for centuries in African communities as a culinary staple as well as for medicinal purposes. Interest in the use of African Mango seed as a weight management ingredient increased after initial human clinical trials performed at the University of Yaounde (Yaounde, Cameroon) indicated that crude extracts of the seed help support healthy blood sugar levels, promote weight loss, and reduce percent body fat, waist size, and hip size. WellTrim® iG (IGOB131®) was created when scientists developed a more refined extraction process (U.S. Patent 7,537,790) that maximizes the ingredient's weight management and metabolic wellness health benefits. Because it is derived from a culinary source, WellTrim® iG (IGOB131®) possesses an excellent safety profile and lacks side effects.

WELLTRIM® IG (IGOB131®) IS A CLINICALLY PROVEN WEIGHT LOSS INGREDIENT

WellTrim® iG's (IGOB131®) weight management properties were investigated in a 10 week long, double-blind, placebo-controlled human clinical trial involving 102 healthy, overweight and obese volunteers (BMI 26 or higher). Subjects received either 150 mg of WellTrim® iG (IGOB131®) or placebo twice daily, 30 to 60 minutes before lunch and dinner. After 10 weeks, consumption of WellTrim® iG (IGOB131®) resulted in an average weight loss of 28 pounds and a reduction of 6.7" in their waist size ($p<0.01$ versus placebo) while fat content dropped 6.3% ($p<0.05$ versus placebo). The study was published in the peer reviewed journal, Lipids in Health and Disease.

WELLTRIM® IG (IGOB131®) TARGETS MULTIPLE METABOLIC PATHWAYS INVOLVED IN WEIGHT MANAGEMENT

Most weight management ingredients operate through a single mechanism of action, which limits their effectiveness. WellTrim® iG (IGOB131®) represents a dramatic breakthrough in the healthy weight management category because it is a highly effective ingredient that targets multiple metabolic pathways in the body associated with satiety and appetite control, metabolism, fat burning, fat production, and blood sugar balance.* WellTrim® iG (IGOB131®) positively influences the body's weight management command signal network by enhancing the function of two powerful hormones, leptin and adiponectin, and inhibiting the activity of glycerol-3-phosphate dehydrogenase, an enzyme that contributes to lipogenesis. When these important factors function optimally through daily supplementation with WellTrim® iG (IGOB131®), healthy weight management is more easily attainable. In addition, the aging process negatively impacts this command signal network, causing many individuals to gain weight as they grow older despite attempts at calorie restriction or increased activity. WellTrim® iG (IGOB131®)'s influence over the command signal network gives it important anti-aging properties.*

LEPTIN IS A KEY HORMONE AFFECTING WEIGHT

One of the principle hormones governing weight management in the body is leptin. Leptin is produced by fat cells and exerts its influence by crossing the blood-brain barrier and binding to receptors in the hypothalamus region of the brain. Research has shown that leptin has such a profound influence because it affects satiety and appetite control, thermogenesis and metabolism, as well as blood sugar levels. One of the major causes of weight gain is a phenomenon known as leptin resistance. Research has found that in overweight and obese people with increased levels of inflammation, leptin becomes bound by C-reactive protein and is prevented from crossing the blood-brain barrier so has limited function. With lower levels of leptin in the brain, overweight people with leptin resistance experience decreased satiety, greater appetite, reduced thermogenesis and metabolism, and higher fasting blood sugar levels.

WELLTRIM® IG (IGOB131®) ENHANCES LEPTIN FUNCTION

WellTrim® iG (IGOB131®) improves leptin function through a reduction in the level of C-reactive protein which results in lower serum leptin levels. In the same clinical trial described previously, consumption of 150 mg of WellTrim® iG (IGOB131®) twice daily resulted in a 51.7% reduction in C-reactive protein coupled with a 48.6% drop in serum leptin levels after 10 weeks ($p<0.01$ versus placebo). Lower C-reactive protein and serum leptin lead to enhanced satiety and appetite control, increased metabolism and thermogenesis for greater fat burning, and healthier blood sugar levels. In fact, by the end of the trial, fasting blood sugar had fallen 22.5% in subjects taking WellTrim® iG (IGOB131®) ($p<0.05$ versus placebo).

WELLTRIM® IG (IGOB131®) ENHANCES ADIPONECTIN LEVELS

Another weight management mechanism of WellTrim® iG (IGOB131®) is its effect on adiponectin levels. Adiponectin, like leptin, is a hormone secreted by fat cells. Adiponectin carries out its many functions both in the brain and in other regions of the body. Lower levels of adiponectin are associated with higher body weight and greater fat content while higher adiponectin levels occur with reduced body fat content. Adiponectin acts synergistically with leptin to potentiate leptin function. Adiponectin also acts independently to modulate insulin sensitivity and blood sugar levels. Overweight and obese people have increased insulin resistance and elevated blood sugar due to reduced adiponectin levels. Conversely, blood sugar levels normally improve as adiponectin levels rise. This was illustrated in the previously described clinical trial. By the end of the trial, along with the reduction in fasting blood sugar levels, adiponectin levels were 159% higher than baseline in subjects taking WellTrim® iG (IGOB131®) ($p<0.05$ versus placebo).

WELLTRIM® IG (IGOB131®) INHIBITS GLYCEROL-3-PHOSPHATE DEHYDROGENASE ACTIVITY

One of the ways that WellTrim® iG (IGOB131®) reduces body fat content is its ability to inhibit the enzyme, glycerol-3-phosphate dehydrogenase (G3PDH). G3PDH is a major enzyme involved in the conversion of blood sugar into stored fat. This enzyme converts blood sugar into glycerol-3-phosphate which is then used to form triacylglycerols, the main fat molecules stored in fat cells. WellTrim® iG's (IGOB131®) influence over G3PDH activity was investigated using a well studied *ex vivo* model. Researchers discovered that WellTrim® iG (IGOB131®) inhibited G3PDH activity by 71.6% compared to a control. At the same time, fat production was reduced 80.9%. These results, together with the ability to enhance the function of both leptin and adiponectin, illustrate how WellTrim® iG (IGOB131®) utilizes multiple mechanisms of action to promote healthy weight management for improved health and well-being.

WELLTRIM® IG (IGOB131®) HELPS SUPPORT METABOLIC WELLNESS AND CARDIOVASCULAR HEALTH

Metabolic wellness and cardiovascular health can decline due to a number of factors including obesity, systemic inflammation, unhealthy blood lipid levels, and more. By helping to reduce weight and body fat content, WellTrim® iG (IGOB131®) improves overall health,* but its ability to promote metabolic wellness does not stop there. C-reactive protein is an indicator of systemic inflammation in the body. Adiponectin has important anti-inflammatory properties as well. WellTrim® iG's (IGOB131®) ability to reduce C-reactive protein and raise adiponectin levels helps contribute to less inflammation in the body for improved cardiovascular health. Subjects taking WellTrim® iG (IGOB131®) in the previously described clinical trial also had significant reductions in total cholesterol (26.2%; $p<0.05$) and LDL cholesterol (27.2%; $p<0.01$) compared to placebo. LDL cholesterol, known as "bad" cholesterol, is a biomarker of cardiovascular health, with greater risk occurring when levels are elevated in the blood. Health professionals recommend that individuals try to reduce their LDL cholesterol in order to promote heart health.

WELLTRIM® IG (IGOB131®) – A NEW APPROACH TO HEALTHY WEIGHT MANAGEMENT AND METABOLIC WELLNESS

WellTrim® iG (IGOB131®) is a clinically proven, breakthrough ingredient that provides comprehensive, multifunctional support for enhanced healthy weight management and improved metabolic wellness.* Its ability to enhance leptin and adiponectin function while inhibiting fat production helps people lose weight and reduce fat efficiently and effectively. WellTrim® iG (IGOB131®) helps promote satiety and appetite control, thermogenesis, and blood sugar balance while supporting cardiovascular health.* WellTrim® iG (IGOB131®) also has important anti-inflammatory properties.* GRAS affirmed WellTrim® iG (IGOB131®) clearly sets a new standard in the weight management category. Call us today to learn more about WellTrim® iG (IGOB131®) and how it can add substantial value to your product line.

REFERENCES ARE AVAILABLE UPON REQUEST

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* 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.