

SCIENCE OF FAT BURNING

Most of the energy needed by the human body is provided by the breakdown (oxidation) of carbohydrates and fats (lipids). Carbohydrates are easily digested and become a readily available source of energy, whereas lipids function primarily as an energy reserve. When you consume more calories than your body needs for immediate energy or for glycogen stores, it converts and stores the excess calories into lipids (aka body fat) for later use via a process called Lipogenesis. Fat yields more energy than carbohydrates (one gram of carbohydrates contains 4 calories of energy per gram, while one gram of fat contains 9 calories per gram) which explains why body fat is harder to burn.

Burning off stored body fat happens via a process called Lipolysis (the breakdown of lipids stored in "fat cells" or adipose tissue). During lipolysis, free fatty acids are released into the bloodstream and circulated throughout the body. The most effective and proven method of burning up these fats is exercise (specifically cardiovascular or "cardio" training), which increases energy expenditure. The key is to increase the amount of fats being shuttled to the cells to be burned and to convert them to energy. The result of this fat burning process depends on two variables. (1) How much fat gets into the mitochondria (if the body's natural "fat metabolizers", such as L-carnitine are not present to transport the fat, then they can't get into the mitochondria to be burned. With this deficiency, the released fat may continue circulating and potentially become stored as body fat again). (2) The fat burning efficiency of the mitochondria. Unhealthy or aging mitochondria burn fuel less efficiently and may be destroyed by the immune system in an effort to protect against cancer.

To avoid this problem and increase fat burning (lipid metabolism), supplementing with MytoCharge may help to utilize and burn a greater amount of fat for energy as well as protect and renew the mitochondria. This means fat loss is accelerated and endurance may be improved.

MytoCharge helps enhance exercise performance, sustain energy, reduce muscular soreness and spare glycogen.



MytoCharge
Fat Metabolizer (stimulant-free)

Supplement Facts

Serving Size: 4 capsules
Servings per container: 20

	Amount / Serving	%DV
Vitamin B-6	7.5 mg	375%
Chromium Picolinate	120 mcg	100%
Niacin	6 mg	30%
Mitochondrial CPT Boosters		
CarniSal™	2000 mg	†
L-carnitine magnesium salicylate		
MytoBoost™	854 mg	†
Calcium Pyruvate, N-Acetyl Cysteine, Inosine		
MytoRenew™	25 mg	†
Rhodiola Rosea (3% rosavins, 1% salidroside), R-Lipoic Acid, Superoxide Dismutase		
Fat Metabolizers		
	657mg	†
Yohimbe extract 100:1 (8% yohimbine), Inositol, dl-Methionine, Choline bitartrate, Green tea (30% catechins, decaf), L-Lysine, Fucoxanthin, Evodia (10% Evodiamine), Betaine Hcl, Lipase		
Appetite Control		
	365 mg	†
Hoodia Gordonii, Cayenne Pepper 5:1 extract, Ginger root		

* Daily Value Not Established

Other Ingredients: Gelatin, Titanium Dioxide (color). Contains No milk, egg, peanut, tree nuts, fish, soy, wheat, yeast, glutens, starch or preservatives.

Suggested Use: Take 4 capsules 30 minutes before exercising with 8 oz. of water or as directed by a health care professional.

Stacking Option: To accelerate fat loss stack with **Burn Extreme**. To boost endurance use with **SHOT**.



CarniSal™ is a registered trademark of Metaugus, Inc.

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

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myto CHARGE™

Fat Metabolizer

- Promotes Fat Burning
- Suppress Appetite
- Suppress Appetite





by **John Scott, CISSN, CNS, SPN**
Developer of John Scott's Nitro

"I understand what an athlete needs because I am one."

MytoCharge™ is an unparalleled mitochondrial supercharger, scientifically formulated to accelerate fat burning and enhance athletic performance. Instead of cranking the central nervous system into a jittery overdrive, MytoCharge works by boosting the efficiency of the cellular powerhouses, the mitochondria. MytoCharge contains a potent blend of Fat Metabolizers and Mitochondrial CPT Boosters that increase the transport of body fat and oxygen into the "furnaces" of the cells. This unified formula also contains an Appetite Control blend that helps suppress cravings.

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WHY DOES MYTOCHARGE WORK DIFFERENTLY FROM TYPICAL FAT BURNERS?

Most fat burners contain stimulants which may indirectly increase fat burning by jacking up the central nervous system. MytoCharge directly influences fat burning (without stimulants) by helping to increase the amount of fat being burned by the cells to create energy and also by making the mitochondria (cellular furnaces) burn more efficiently.

To maximize fat burning, supplementing with a precise blend of targeted fat metabolizers helps a person to utilize a greater amount of lipids (fats) for energy.

WHAT ARE MITOCHONDRIA?

The Mitochondria are the ONLY place inside your body that can "burn" fat. The more living tissue you have (specifically muscle) the more energy you will 'burn'. That is because muscle tissue is filled with mitochondria, which is one of the reasons athletes and active individuals stay lean. The more mitochondria you have, the more efficient your energy producing and 'fat burning' process. Without these "powerhouses" of the cells, as they are called, your body would not be able to fully burn the energy stored as fat. Nor would you be able to burn carbohydrates and sugars, or metabolize proteins.

HOW DOES ONE USE MYTOCHARGE?

For increased fat loss, take one serving of MytoCharge (4 capsules) prior to exercise and another serving (4 capsules) mid-day. Unless fat makes it into the mitochondria, it cannot be oxidized, no matter how much you exercise or diet. MytoCharge helps shuttle a greater amount of fat into the mitochondria. Burn Extreme can be stacked with MytoCharge for accelerated fat "burning".

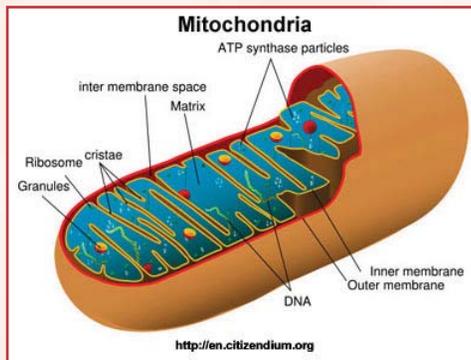
For greater endurance, take one serving (4 capsules) prior to training. It can be stacked with SHOT for greater energy. The Mitochondrial CPT Boosters and Fat Metabolizers in MytoCharge help deliver more stored body fat into the mitochondria for longer lasting energy.

HOW CAN ENDURANCE ATHLETES BENEFIT FROM MYTOCHARGE?

During exercise, your metabolism sky rockets and you burn energy at a fast pace. Within the cells of the body, energy units are known as a "mol" or "mole". Basically a mole is one unit. In terms of cellular energy, 1 mole of glucose yields 2 moles of ATP. However, with the increase of oxygen through the oxidative pathway, 1 mole of glucose will yield between 36 -38 moles of ATP or 1600% more energy! The MytoBoost and MytoRenew help deliver more oxygen to the mitochondria for greater energy production.

WILL ATHLETES OVER THE AGE OF 40 BENEFIT FROM MYTOCHARGE?

Athletes age 40 (and beyond) may notice the most dramatic effects from MytoCharge. The Mitochondrial CPT Boosters in MytoCharge may improve the activities of mitochondrial enzymes, improving the electron flow and increasing energy. The MytoRenew contains superoxide dismutase (SOD) an enzyme which helps with the uptake of oxygen in the mitochondria and destroys "free radicals" a dangerous type of molecule that can cause cellular aging and tissue damage. Using MytoCharge may help prevent mitochondrial aging, a leading cause of heart disease, diabetes and neurodegenerative diseases.



FORMULA

Vitamin B6 helps convert carbs to usable energy (glucose). Chromium helps stabilize blood glucose and may help minimize fat storage. Niacin helps improve circulation by dilating blood vessels.

Mitochondrial CPT Boosters

Carnisa™: is a special form of L-carnitine bound to Magnesium Salicylate that is superior for fat burning and athletic performance.

Magnesium has been shown to improve cellular metabolism in athletes and help prevent muscle cramps. Salicylate is a natural pain reliever/anti-inflammatory similar in structure to aspirin and found in the bark of willow trees that may increase thermodynamic energy expenditure and fat metabolism.

MytoBoost™: Calcium Pyruvate may increase fat burning, improve exercise performance and reduce fatigue. It works by increasing the amount of ATP available to the mitochondria, inhibits new fat creation and buffers lactic acid build up. In addition, Calcium may help to decrease body fat by increasing fat excreted and increasing calorie burning. N-Acetyl Cysteine is rapidly metabolized to intracellular glutathione, a powerful antioxidant which neutralizes free radicals that can cause damage to muscle, organs and DNA. Inosine helps blood cells release oxygen to the tissues easier, boosting energy, improving lactic acid removal and exercise performance.

MytoRenew™: Rhodiola Rosea helps enhance ATP (energy) production in the mitochondria as well as activate fat breakdown. R-Lipoic Acid is a powerful antioxidant that helps protect against mitochondrial oxidative damage. Superoxide Dismutase is an enzyme that decreases with age. Supplementing with SOD protects DNA, reduces oxidative damage and may neutralize free radicals that can lead to wrinkles and precancerous cell changes.

Fat Metabolizers

Yohimbine Hcl may increase the release of stored fat (especially in women's hips), promote fat oxidation and decrease new fat synthesis. Inositol helps facilitate the transport and metabolism of fats in the body, lower circulating fatty acids in the blood and reduce bad cholesterol. Methionine assists in breaking down lipids. Choline is essential for the breakdown of cholesterol and lipids (fats). Green tea extract is rich in a type of polyphenols called catechins, which are believed to increase fat loss. L-Lysine aids in the production of L-carnitine, muscle growth, and improves recovery. Fucoxanthin an active ingredient in brown seaweed was shown in animal studies to stimulate fat oxidation via a special protein found in white adipose tissue, particularly in the abdominal area. Evodiamine can significantly elevate resting core temperature which may lead to an increase in the calories and fat that are burned for energy. Betaine Hcl is a vitamin derived from choline that has been shown to increase fat loss by promoting the oxidization of lipids. Lipase is an enzyme that breaks down or dissolves fat in the body and aids in burning fat for energy.

Appetite Control

Hoodia Gordonii is a South African herb that is used to help suppress appetite. It is believed Hoodia sends signals to the brain (hypothalamus) that make the brain believe that the body is full, even when it is not. Cayenne Pepper also known as Capsicum, contains capsaicin, the compound that creates the "hot" in hot peppers. Cayenne is known to increase the body's heat production (thermogenesis), boost the breakdown of fats and suppress appetite. Ginger has been shown in studies to stimulate fat burning by helping rev up metabolism and raising body temperature. It can also aid performance by causing muscle cells to utilize more oxygen.

References are available on www.jsnitro.com