



# “THE MESSAGE”

## Health & Fitness Newsletter

OCTOBER 2003

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### WHAT'S NEW WITH FIT FOR YOU?

- **2 for 1** ... Do you have a friend that always says “I’ll do it if you do it” when it comes to doing different things? Well if you do, grab that friend and tell them about this special offer – Two people can enjoy the benefits of exercising conveniently at home, by sharing an in-home training session. **THE COST OF ONE SESSION PAYS FOR TWO!** For more details, you can reach Joe by phone or email him at: [fitforyou1@netzero.net](mailto:fitforyou1@netzero.net). If you’re sending an email be sure to include your full name, day and evening phone numbers and the best time to reach you.
- **Nutrition Goldmine!** ...The holidays are just around the corner and so to are all of the homemade treats and traditions that go along with it. Would you like to be able eat what you like for Thanksgiving without worrying about how fattening it is, how about for Christmas, some of those delicious homemade cookies? – Joe has put together an easy to read, easy to follow Special Report – that gives tips on eating and baking around the holiday season without giving up the foods you’d love to have. Read Joe’s Special Report “Eat Well & Be Merry” and learn some of the tips and strategies that you can use that make the holidays fun again. You can still go the Christmas parties and more and still look and feel great! Learn how by ordering your copy today while they last! Order one for yourself or buy one as a gift for a friend or family member!!
- **Fitness By Phone®** ... This program is working wonders for so many people, especially for those who are extremely busy. If you are interested in getting into great shape without committing to gym workouts that last an hour or more and but you want a program that fits you and your schedule then call for more details about Fitness By Phone® - Joe is a certified Master Fitness By Phone Coach and has seen this program work wonders for many of his clients. If you would like to have more information about the program simply send Joe an email and he will reply as quickly as possible. Joe is also available by phone or you may fax him at

For more information  
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(717) 545-2595. If faxing be sure to include your full name, return address with zip code and phone number along with your request for more information about Fitness By Phone®.



## **“WEIGHT BEARING NEWS”**

**By Joe Green**

It's long been understood that weight management is a delicate balance of the right amount of caloric intake balanced by the body's ability to metabolize food into energy. Research validates body mass index [BMI] as the important indicator of healthy weight. The number shown on the scale alone is far from the accurate truth that you need to be aware. BMI is based upon the percentage of fat, muscle, water and tissue your body has. Generally 24-27 percent body fat is considered healthy for women ages 35 to 45.

Additionally, scientists have been studying the effects of insulin in chronic obesity and now concur that insulin affects the body by sharply dropping in some people, resulting in carbohydrate and sugar cravings a few hours after eating. Evidence points to insulin crashes as the destroyer of most of our weight management efforts.

Scientists at the Center for Human Nutrition at UCLA School of Medicine discovered a natural supplement called Glucosol to promote healthy insulin levels and avoid crashing. Combined with a strength-training program that focuses on increasing muscle tone in conjunction with aerobic activities, and a healthy eating lifestyle consisting of 5-6 smaller meals throughout the day, most weight management efforts are thought to be successful. Glucosol, taken at each meal, helps the body maintain blood sugar levels within healthy ranges eliminating cravings and crashes. However before you run out to buy

Glucosol for those interested, you can pretty much stabilize your insulin levels by eating healthy and more importantly by eating balanced – in other words, a fibrous carb, starchy carb and a lean protein. Too often fragmented meals are at the source of the crime for spiking insulin levels causing cravings, short-term energy and more.

How sweet it is... or is it – It's sugar that in excess cuts our greatest efforts down. Refined, processed sugars often result in excess (more than we can handle), which sabotages the battle with body fat in several ways. First, it can reduce the ability to burn fat by inhibiting key enzymes needed for fat metabolism. Second, it can promote fat storage from all sources of food including fat, carbohydrates or protein.

Would I recommend purchasing Glucosol? Maybe as an option later down the road after one has truly adopted and implemented a healthy eating lifestyle. Do you have a healthy eating lifestyle? Leave that evaluation up to a professional for the most accurate evaluation. What I would recommend is eating as healthy as possible as often as possible long before turning to a supplement such as this.

As always, before starting on any exercise and weight management program remember to check with your doctor. Additionally, purchase the best multi-vitamin you can afford.

***PEP TALK***

***Nothing worth having comes easy!***

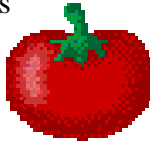
# “WEIGHT – NO LONGER”

## LEARN HOW TO CALCULATE YOUR WEIGHT!

By Joe Green

Energy is the capacity for doing work. Energy comes from chemical reactions that take place in the tissues of every human’s body. The calorie is used to measure the production of energy by the body and when added together, three primary elements compose a body’s energy expenditure: the effect of food on an individual, one’s basal metabolic rate, and the energy one expends during a physical activity.

A calorie is a unit used to measure how much energy is stored in food and how much energy a human requires throughout the course of a day. A scientific definition of a calorie is as follows: the amount of energy needed to raise the temperature of one kilogram of water one degree Celsius ("Figuring Your Energy Needs"). A kilocalorie is one thousand times as large as a calorie however, in most situations involving food, the word "Calorie" is substituted for "kilocalorie."



Calorie needs are estimated based on an individual’s metabolic rate, height, weight, age, gender, and activity level. Therefore, every person’s caloric intake and rate of expenditure will vary accordingly. However, the number of calories expended is roughly proportional to one’s body weight. An adult will require more calories than a child who completes the same activity.



# Who Needs What Calories?

Category	Age	Calories Per Day		
		Light Activity	Moderate Activity	Heavy Activity
Children	4-6	.	1,800	.
.	7-10	.	2,000	.
Males	11-14	.	2,500	.
.	15-18	.	3,000	.
.	19-24	2,700	3,000	3,600
.	25-50	3,000	3,200	4,000
.	51+	.	2,300 (2)	.
Females (1)	11-18	.	2,200	.
.	19-24	2,000	2,100	2,600
.	25-50	2,200	2,300	2,800
.	51+	.	1,900 (2)	.

Additional calories must also be provided for children and young adults who are growing.



Growth is not complete in men until they have reached an age of twenty-five years, and in women until they have reached twenty-two years of age. "To grow," means to build new active tissues, and this is accomplished by increasing one’s caloric intake.

If we burn less calories than we consume, the excess energy, calories, are stored as body fat. Conversely, when we burn more calories than we consume, we burn some of the energy stored as body fat. One’s body will store any caloric intake exceeding one’s daily requirements. A pound is equal to approximately 3,500 calories. Therefore, each additional 3,500 calories consumed by a person or not burned during exercise, will result in another pound of weight on his body. In general, fats yield nine calories per gram and carbohydrates yield four calories per gram. Foods with a high percentage of water are "less fattening" than foods with a high percentage of fat. Water is always advised. Water seems to "flush out your system." Furthermore, the quality of the food that is consumed is also critical. After eating 1,500 calories of either chocolate or spinach, the end

result in one's body weight may be the same, but his overall health and required vitamin and mineral intake will definitely be affected.

Approximately two out of every three people in the Western developed world are over weight to some extent. Obesity is generally defined as a state when a person exceeds over twenty percent of his desirable weight. Obesity increases one's risk of death from heart and kidney diseases, diabetes mellitus, pneumonia, influenza, digestive tract diseases, gout, gallbladder disease, and high blood pressure.

Age also affects body weight. The average American gains one pound of "weight" per year after the age of twenty-five, but he experiences a "fat" gain exceeding one pound throughout this same time period. By the age of forty-five, the average American has gained about twenty pounds, but has had a fat gain of thirty pounds. This means that each year the individual has lost about a half pound of lean weight, primarily muscle and bone. Furthermore, each individual burns approximately one hundred fewer calories per day with each passing decade subsequent to age thirty. To portray how age affects the number of calories a body burns, experiment with the following formula:



**Women age 18-30: Weight x 6.7 + 496 + # of calories burned during exercise**

**Women age 31-60: Weight x 4 + 829 + # of calories burned during exercise**

(Missett "Exercise: Metabolism")

Aside from food intake, metabolism also plays a significant role in an individual's energy level. Metabolism is defined as the sum total of every chemical reaction that occurs in one's body. Metabolism is divided into two basic categories: anabolic and catabolic. In the anabolic category, hormones and muscle tissue are manufactured. This process is occasionally referred to as the "building up" process. In the catabolic category, the breakdown of fats, carbohydrates, and proteins

allow humans to employ these elements as energy. Digestion occurs in this "breaking down" process.

One's metabolic rate is a reflection of how quickly or slowly biochemical reactions occur in the body of each individual. Our metabolism can be considered our metabolic rate at rest. The metabolic rate portrays the amount of energy or calories a body burns to remain alive and perform the essential needs such as aiding the circulation of blood and the respiratory system. Our body burns more calories in a 24-hour period, simply to maintain itself, than it burns for other daily activities such as exercising.

A human's basal metabolic rate is the amount of calories that one's body needs simply to exist. A majority of the body's energy, sixty to seventy percent, is used to support the body's activities such as heartbeat, respiration, and maintaining the body's temperature. A few formulas can be employed for determining one's basal metabolic rate. A quick formula that is occasionally used is as follows:

**Adult Males: 10 X body weight + 2(body weight)**

**Adult Females: 10 X body weight + 1(body weight)**

For a more exacting basal metabolic rate:

**Adult Males: 66.47 + (6.22 x body weight in lbs) + (12.7 x height in inches) - (4.7 x age in years) = BMR**

**Adult Females: 655 + (4.36 x body weight in lbs) + (4.32x height in inches) - (4.7 x age in years) = BMR**

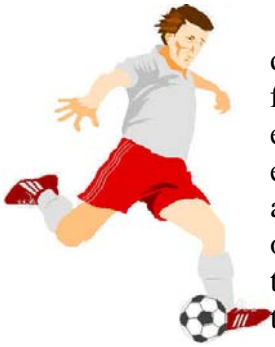
("Determining Your BMR")

When people try to lose weight, they first decrease the amount of calories they consume. This method will work if the amount of calories consumed is not reduced too drastically. Decreasing one's caloric intake too much can slow one's metabolism even more, consequently making it much more difficult to lose weight. "When your body thinks the food supply is dangerously low, it goes into starvation mode and slows the metabolism

to preserve calories." Habitual dieting and weight fluctuation may also result in a lower metabolic

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rate. For example, a case study of teenage wrestlers showed that among the athletes who had "cut weight" to enter a specific weight category, their energy expenditure rate was fourteen percent lower than the rate of those wrestlers who competed in categories closer to their normal weight.



The calories that one burns during a physical activity also factor into one's energy expenditure. One's energy expended during a physical activity depends on one's level of physical activity. Twenty to thirty percent of an individual's total energy output depends upon one's physical activity.

Although one burns many more calories throughout a day by simply experiencing life opposed to a half an hour bike ride, the muscle that it builds while exercising is essential.

It is very important for everyone to maintain muscle mass. Every pound of muscle burns about fifty calories per day, while every pound of fat burns approximately two calories per day. If more muscle is present, more calories will be burned, thus leading to a higher metabolic rate. An athlete's metabolic rate will be higher than a non-athlete's metabolic rate even when just lounging around.

Therefore, weight lifting is an activity that is essential for those wishing to lose or control their weight. Additionally, after one exercises, his metabolic rate will be elevated. A high intensity level exercise can produce an increased metabolic rate for twelve to twenty-four hours. However, the long, slow, steady activities performed by most exercisers interested in losing weight do not produce increase post-exercise metabolic rates for a long period of time.

Activity level is also an essential factor in determining one's caloric intake requirements. The

caloric requirements vary depending on a humans exercise patterns and simple activities completed in normal life. Each person must determine his activity level, and employ the formula to determine how many calories he must ingest.

***Sedentary people: Weight x 14 = estimated calories/day***

***Moderately Active People: Weight x 17 = estimated calories/day***

***Active People: Weight x 20 = estimated calories/day***

For a more exacting calorie requirement formula, one should employ his basal metabolic rate found earlier, and multiply it accordingly:

**x 1.3 for lightly active people**

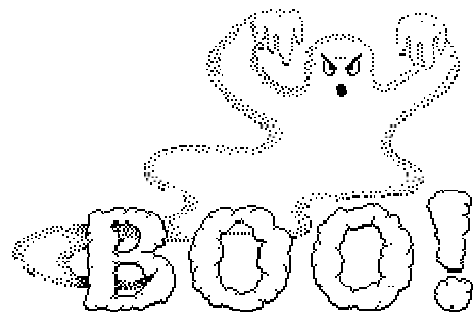
**x 1.4 for moderately active people**

**x 1.6 for very active people**

**x 1.8 for extremely active people**

In summary, energy expenditure is dependent upon the effect of food on an individual, his basal metabolic rate, and the energy exerted by an individual during exercise. By controlling these three variables, humans can learn to lead more healthy lives, improve their current body weight conditions, and regulate the elements needed to provide their bodies with more energy output.

I hope the research and explanations provided above shed some light on some of the most frequently asked questions that I hear.



# Happy Halloween!

## Chromium: Is it Ergogenic?

By Joe Cannon

This will be the first in a series of articles where I will address the theory and evidence for various nutritional supplements. The emphasis of these articles will be evidence and rational thought—not hype.

Chromium is a trace mineral in the body, which works as part of a molecule called glucose tolerance factor (GTF). Essentially what GTF does is *sandwich* itself between insulin and the insulin receptor. This seems to help insulin lower blood sugar more effectively. During the late 1980s' some research (which did not use hydrostatic weighing when determining body composition) indicated that chromium supplementation might enhance weight loss and promote muscle gain. This preliminary research resulted in a deluge of weight loss and athletic- performance dietary supplements, which still can be found on the shelves of nutrition stores to this day. But, does chromium really work? Sadly, the answer is no if you are a normal healthy individual eating a nutritionally sound diet. Literature searches of the National Library of Medicine, the most comprehensive medical database on Earth, shows that chromium has been extensively studied.

The vast majority of studies, which looked at individuals ranging from college football players and resistance trainers to overweight military personal, have found that chromium does not enhance fat loss or promote muscle gain. Why then does chromium continue to be incorporated into weight loss products to this very day? It can only be that chromium has a very good press agent. In other words, in spite of the evidence against its use, people continue to believe it works!

Chromium picolinate, the most popular form of chromium, is not without controversy either. During the early 1990's researchers at Dartmouth College noticed that high levels of chromium picolinate increased the rate of genetic damage in cell cultures. While these studies have been criticized by some in the dietary supplement industry, other more recent studies have also found

genetic abnormalities resulting from chromium picolinate use. One recent report in the April 2003 issue of the Proceedings of the National Academy of Sciences has found that chromium picolinate caused “sterility” and “lethal mutations” in fruit flies.

While I personally do not think chromium picolinate is the worst supplement in the world given that if it really was very toxic, people would be dropping like flies, I do however feel that the vast majority of people using chromium supplements can save their money. Chromium may help lower blood sugar levels in those who have hyperglycemia. Thus it may be of help to some diabetics. The optimal amount of chromium necessary to achieve a blood sugar lowering effect is not well known and research is ongoing. My advice is that if you have clients who are diabetic and who want to try chromium, direct them to their doctor. If they are thinking about trying chromium to lose weight or enhance muscle mass, the evidence seems clear – save your money.

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## QUICK MEAL TO GO...

### CREAMY STRAWBERRY SMOOTHIE

1 cup plain non-fat yogurt  
½ cup apple juice  
1 cup frozen strawberries  
½ frozen banana (store in freezer – peel before freezing)

*Blend this all together for 30 seconds*

## RESEARCH & REPORT CORNER

### New Study for Parkinson Disease

The Parkinson Disease Clinic of the University of Miami is evaluating a new and novel drug. Boehringer Ingelheim makes the drug a large European Company. Boehringer Ingelheim is the developer and co-marketer of Mirapex. Mirapex is a dopamine agonist; it aids one system in the brain, the system involving dopamine.

The new drug aides several systems in the brain including the dopamine and noradrenalin systems. It is hoped the new drug will benefit both the motor systems of PD (slowness of movement, rigidity, tremor) and the mental systems of PD (anxiety, depression, and thinking).

The University of Miami Parkinson Clinic is continuing their efforts in relationship to this study.



### Now Available, New Stalevo Addresses Top Parkinson's Disease Concern

East Hanover, NJ - September 16, 2003 - Novartis Pharmaceuticals Corporation today announced that a new treatment for Parkinson's disease, Stalevo™ (carbidopa, levodopa and entacapone) tablets, is now available in U.S. pharmacies. Indicated for patients with signs and symptoms of end-of-dose "wearing off," this enhanced levodopa therapy significantly improves Parkinson's disease patients' ability to control body movements and the ability to perform basic functions such as walking and dressing versus previously available forms of levodopa. Stalevo is the first new treatment for Parkinson's disease in three years, and the first new form of levodopa in more than a decade.

"Levodopa is the most effective drug for treating the symptoms of Parkinson's disease," said C. Warren Olanow, MD, chairman and professor of

Neurology at the Mount Sinai School of Medicine in New York. "With Stalevo, we can enhance the effects of levodopa and more effectively treat problems such as end-of-dose 'wearing off' that complicate the long-term use of regular levodopa and limit its utility. Stalevo thus represents an important advance in our ability to treat Parkinson's disease patients."

A recent Harris Interactive survey found that 55 percent of Parkinson's disease patients on an older form of levodopa cited "wearing off" of their medication as the biggest treatment challenge they face (n=300). In addition, 92 percent of physicians surveyed said that the re-emergence of Parkinson's disease symptoms due to "wearing off" was a significant concern about levodopa, with nearly half citing "wearing off" as the one biggest challenge (n=456). The survey was conducted in partnership with the National Parkinson Foundation (NPF).

"This survey reinforces our belief that end-of-dose 'wearing off' is a major concern for both Parkinson's patients and healthcare providers. Within only one to two years, nearly half of people receiving levodopa experience this phenomenon, so many will potentially be aided by the benefits of Stalevo," noted Abraham Lieberman, MD, medical director of the NPF.

### **About Stalevo**

Stalevo is a new form of levodopa therapy that targets end-of-dose "wearing off" by combining levodopa, the most widely used agent for treating Parkinson's disease, with carbidopa and entacapone. While carbidopa reduces the side effects of levodopa, entacapone extends its benefits, permitting Parkinson's disease patients to have an improved ability to perform everyday tasks, as well as a reduction in symptoms associated with the disease. Stalevo simplifies treatment for many patients by providing three medications in one tablet, which reduces the number of tablets that patients need to take daily.

The effectiveness of levodopa administered with carbidopa and entacapone in the treatment of Parkinson's disease was established in three 24-week multicenter, randomized, double blind

placebo-controlled trials in patients with Parkinson's disease experiencing "wearing off." In these trials, this combination increased "on" time (the period where patients experience no symptoms), reduced "off" time (the period where the patients' symptoms return) and improved motor function and daily activities such as patients' ability to walk and dress. In addition, in a separate study, most patients regarded Stalevo as easier to dose, use, handle and swallow.

The most common side effects of Stalevo therapy are dopaminergic in nature (e.g. dyskinesia, nausea). These side effects may be manageable with alteration in the drug-dosing schedule. Other common side effects include diarrhea, hyperkinesias, urine discoloration, hypokinesia, abdominal pain, dizziness, constipation, fatigue, pain and hallucinations. For full prescribing information, visit [www.stalevo.com](http://www.stalevo.com) or call 1-866-STALEVO (866-782-5386).

Stalevo was approved by the U.S. Food and Drug Administration (FDA) in June 2003 and is marketed by Novartis Pharmaceuticals Corporation and manufactured by Orion Pharma.

### **About Parkinson's Disease**

Parkinson's disease, a chronic and progressive neurological condition, affects approximately 1.5 million Americans. While its cause is unknown, the symptoms of Parkinson's disease are primarily the result of degeneration of dopaminergic cells, or neurons, in the substantia nigra, a part of the brain that controls and modulates movement. Symptoms include limbs that tremble; slowness of movement; stiffness and rigidity of limbs and gait or balance problems. As the disease progresses, these symptoms usually increase and impact a person's ability to work and function.

This release contains certain forward-looking statements relating to Novartis Pharmaceuticals Corporation's business, which can be identified by the use of forward-looking terminology, such as "new", "can" and "will" or similar expressions, or by discussions of strategy, plans or intentions. Such forward looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results to be materially different from any future results, performance, or

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