

JULY  
2008

# Smarter Bodies

Volume 8 Issue 7

Editor Jim Rabic

The Official Newsletter of Smart Bodies Personal Fitness Center

## Congratulations to all of this year's Smartest Losers!



**1st Place  
Male**



**Pernell Foster lost  
28 lbs and 12% bodyfat in 12 weeks!**



**1st Place  
Female**

**Kat Rivera lost  
16 lbs and 10% bodyfat in 12 weeks!**

**Kat Rivera was also the Grand Prize Winner of a trip to Almond Resorts St. Lucia  
courtesy of Travel Dreams [www.traveldreams.us](http://www.traveldreams.us)**

# **FREE FILE OF THE** **MONTH**

## **Fitness Meets Geek**

The concept is simple: call up a map of an area you run, walk or cycle and measure the distance. Save your route and blog about it.

- enter an address and load a map of your area
- click along your route to draw a path; distance is calculated for you
- see a graph showing the elevation change
- add a descriptive "point of interest" marker
- add a photo from your flicker account
- save your route, get a unique URL and blog it or email it to others
- search for routes

A web-based map application for people to create, store and share routes that they run, walk or cycle.

<http://www.runningmap.com>

## **Quote of the Month**

*“Live with intention. Walk to the edge. Listen hard. Practice wellness. Play with abandon. Laugh. Choose with no regret. Appreciate your friends. Continue to learn. Do what you love. Live as if this is all there is.”*

## **Tips for Fit Living**

It's always great to kick off a new month with a new start. We get 12 fresh starts a year, if you look at it that way and in my way of thinking - a fresh start is the best way to kick off the first day of a month. So with that in mind, let's look at some tips for living fitter, most of these are frugal in nature and don't require a lot of changes in your personal habits - just a relative awareness.

Sponsors (article continues below)

### **Fit Tips**

\* **Balance Your Diet** - Junk food schmunk food. Pay attention to what you eat. Incorporate vegetables into at least two of your meals a day (and no French Fries are not vegetables) as well as fiber, fruits and protein. Reducing carbs isn't a bad idea, especially with so many options to replace them

\* **Get Active** - You don't have time to go to the gym every day? No problem. Just get more active. Walk to pick the kids up from school, ride your bike or spend some time playing with them in the park. There's a lot we do every day that we can incorporate activity into whether it's power walking in the grocery store or walking around a shopping center while the kids are doing their extracurricular activities

\* **Regular physicals** - I've talked about this a lot, but getting a physical every year is really important. I've found problems that I've had through regular physicals including a mass on an ovary and my sleep apnea. Take care of your body so it can take care of you

\* **Stop Smoking** - This is high on my list of things that I need to do. Smoking is just bad for you. It's never too late to quit and the change in habit can be a fantastic thing for your body

\* **Be Safety Conscious** - Being aware of your safety is a vital part of your health, safe choices include wearing your seatbelt in the car, your bike helmet when you ride, running and jogging with a partner and seeing your doctor when you think something is wrong

\* **Maintain your Family and Friends** - Relationships are an important part of our personal health and wellness. Our connections with others ground us and provide support even during the toughest times. They are someone to turn to when things are bad and when things are good

## Drinking Coffee May Extend Life

*Study Suggests but Doesn't Prove Link Between Coffee and Longer Life*



Coffee drinkers, rejoice. While you might be using it for a "pick-me-up," coffee may also be extending your life.

Whether you are on a first-name basis with your barista or simply refueling from the office coffee pot during the day, new research suggests that drinking coffee, even in large amounts, might help you live longer.

Coffee drinkers in the study had slightly lower death rates than non-coffee drinkers over time, whether their drink of choice had caffeine or not.

The findings do not prove that coffee is protective, but they strongly suggest that drinking coffee in large amounts is not harmful if you are healthy, researcher Esther Lopez-Garcia, PhD, of the University of Madrid, tells WebMD.

Among women, drinking two to three cups of coffee a day was associated with an 18% reduction in death from all causes, while drinking four to five cups was associated with a 26% reduction in risk.

The risk reduction in men was smaller and could have been due to chance.

"We can't say from this one study that coffee extends your life, but it does appear that it doesn't increase the risk for death for people who are healthy," she says.

### Coffee, Caffeine, and Health

The evidence pointing to health benefits for coffee continue to grow, with studies linking regular consumption to a decreased risk for cardiovascular disease, diabetes, and even health conditions like Parkinson's disease and colon cancer.

But some studies also suggest that drinking caffeinated coffee is associated with an increased risk for heart attack and stroke in people who already have heart disease.

The American Heart Association concludes that the research linking caffeine to health risks is conflicting. The group concludes that moderate coffee consumption, defined as one or two cups a day, "doesn't seem to be harmful."

The few previous studies that have examined the impact of regular coffee drinking on mortality have also been conflicting, Lopez-Garcia says.

In an effort to clarify the issue, Lopez-Garcia and colleagues from the University of Madrid and Harvard University analyzed data from 84,214 women who participated in Harvard's Nurse's Health Study and 41,736 men who participated in the companion study involving male health professionals.

None of the participants had cancer or heart disease at enrollment, and all completed dietary and health questionnaires every two to four years that included questions about coffee consumption, other dietary habits, and smoking status.

During 18 years of follow-up in the men and 24 years of follow-up in the women, roughly 4,500 deaths due to heart disease and 7,500 cancer deaths occurred. An additional 6,000 deaths were due to other causes.

After controlling for other risk factors such as weight, diet, smoking status, and disease status, the researchers concluded that people who drank coffee were less likely to die than those who didn't during the follow-up, and that the risk reduction was attributable to a lower risk for death from heart disease.

No association was seen between coffee drinking and cancer deaths.

The researchers conclude that the finding of a "modest" all-cause and heart disease death benefit for coffee consumption deserves further study.

### Coffee Benefits Explored

It has been suggested that coffee may protect against heart disease by reducing inflammation. Coffee has also been shown to lower blood sugar levels, which could have a beneficial effect on diabetes risk.

For many people, coffee is the main dietary source of beneficial plant compounds known as polyphenols, which are powerful antioxidants, says coffee researcher and chemistry professor Joe Vinson, PhD.

The antioxidant properties may or may not be the mechanism at work here. We can't really say.

Vinson says the newly reported study offers the best evidence yet linking coffee with a lower risk of death.

"This was a very rigorously designed study, and the findings are very intriguing," he says.



# SMART RUNNING

## Brisk Walking Lowers Blood Pressure, Increases Fitness In Obese

If walking seems too simple to be an effective fitness method, think again: taking a stroll is an easy way to lower pressure and for the obese to increase aerobic fitness, according to three researchers who presented findings at the 55th Annual Meeting of the American College of Sports Medicine.

A study of 14 morbidly obese patients was designed to determine if brisk walking alone was sufficient to serve as an aerobic training stimulus, increasing heart rate to at least 70 percent of maximum. Patients were asked to determine their own brisk walking pace, and walked for one mile. All 14 achieved at least 70 percent of maximum heart rate.

"Obese patients have more body mass to move, causing the heart and cardiovascular system to have to work harder than a normal-weight person's would," Thomas Spring, M.S., said.

"Walking is a great way for the overweight and obese to begin an exercise program, because it can be done with little instruction or equipment and is low in cost."

Benefits of brisk walking also extend to people at-risk for high blood pressure. A British study looked at borderline hypertensive middle-aged men after they walked at various intensities and durations, to determine which type of

walking reduced blood pressure the most.

Andrew Scott found that walking 30 minutes at 50 percent effort was most effective, reducing blood pressure for at least four hours.

"Our study found that walking for longer than 30 minutes or at a higher intensity had no additional effects on lowering blood pressure," Andrew Scott, M.S., said. "Those needing to lose weight may want to exercise for a longer period of time, but our findings show that ACSM's recommendations have significant health benefits."

ACSM recommends at least 30 minutes of moderate physical activity five days per week for healthy adults. The guidelines also state that physical activity can be broken up into 10-minute bouts and be as effective as one longer session, a recommendation confirmed by another study on the effects of brisk walking on hypertension.

The Korean study measured decreases in blood pressure in 23 hypertensive men following 40-minute brisk walking sessions and four, 10-minute brisk walking bouts. Blood pressure was lowered by similar amounts after each type of exercise session.

"Accumulating brisk, 10-minute walks appears to be very effective for lowering blood pressure," said Saejong Park, Ph.D., lead author. "Those with time crunches and busy schedules can fit bits of exercise in throughout the day to reap health benefits."

# The myth of muscle as calorie burner



Greg Ellis, whose new book, *Dr. Ellis's Ultimate Diet Secrets* (Targeted Body Systems Publishing, \$59.95), is to eating and exercising what Moby-Dick is to whaling.

One of Ellis' favorite sayings is "putting it to the numbers" - his phrase for testing conventional wisdom against scientific fact. By putting it to the numbers, Ellis, 55, who has a doctorate in exercise physiology, has discovered that many accepted truths are myths.

"People don't do their homework," he gripes. "That's how these myths get started and propagated."

A prime example: If you build more muscle, you'll burn lots of calories.

"This one really irks me," Ellis says. "It's the big one, the great myth."

The conventional wisdom: Muscle is metabolically active. It burns calories even when your body is at rest - 50 to 60 calories a day per pound of muscle. Ergo, if you add a pound of muscle, you can burn an additional 350 calories a week, 1,500 calories a month, 18,000 calories a year - the equivalent of 5 pounds of flesh.

In other words, if you gain a pound of muscle, everything else being equal, you can, in a year, shed 5 pounds of flab.

Trouble is, it ain't so.

"Putting it to the numbers" reveals that resting muscle burns a mere tenth of that - about 5 to 6 calories per pound per day, Ellis says. Since every pound of fat burns 2 calories a day, muscle hardly confers a hefty metabolic advantage - a mere 3 to 4 additional calories per pound.

How does this play out in the real world?

Suppose a woman who weighs 150 pounds begins working out, walking two miles a day, lifting weights three times a week. After six months, she manages to shed 18 pounds of flab and gain 6 pounds of muscle.

To feed that new muscle, her body needs 30 calories of food energy a day (6 pounds x 5 calories = 30). But because she has dropped 18 pounds of fat, her energy needs have also dropped - by 36 calories (18 pounds x 2 calories = 36). Result: Despite all that new muscle, she needs to eat 6 calories a day less to maintain her new weight.

Moreover, adding 6 pounds of muscle is no easy feat. When Ellis was working on his doctorate, doing body-composition studies in the lab, he found that the muscle mass of female bodybuilders, compared with that of untrained women, was greater by only 6 pounds.

"Steroid girls had only 8 to 10 pounds more lean body mass," Ellis says. "I'm talking about hard-core bodybuilding chicks - not someone lifting 5-pound dumbbells, but a gal benching 150, and going at it hard."

Ditto for guys. After several years of training hard, a man may be able to gain 10 pounds of muscle, max. Even with steroids and other anabolic aids, the most a competitive bodybuilder can add is 30 to 40 pounds of muscle, Ellis says. At 5 calories per pound of muscle, all that extravagant anabolic gingerbread revs the metabolism by a mere 150 calories - an amount that could be wiped out by a Reese's Peanut Butter Cup.

"So when Diane Sawyer works out with rubber bands and 5-pound dumbbells and manages to add a quarter-pound of muscle, she may be burning more calories through the exercise itself," Ellis says, "but she's doing zip to increase her resting metabolism."

Can Ellis be believed? For proof, he has citations and tables from his trusty texts, including a real page-turner titled *Energy Metabolism: Tissue Determinants and Cellular Corollaries*. But more persuasive than academic data was this argument: "If new muscle burns 50 calories a pound, why doesn't already existing muscle burn 50 calories a pound?" Ellis asks. "How does the body determine that new muscle burns 50 calories, while old muscle burns only 5?"

Answer: It doesn't, because all muscle burns only 5 calories. Putting it to the numbers: If every pound of muscle burned 50 calories, a typical 200-pound man would have a resting metabolic rate (RMR) from muscle alone of 4,000 calories (80 pounds of muscle x 50 = 4,000). Since muscle accounts for about 40 percent of the RMR (organs such as the liver, kidneys, brain and heart account for about 60 percent), the RMR of our hypothetical musclehead would be 10,000 calories - an impossibility. Even Ellis, a mesomorphic pillar of vintage beefcake, has an RMR of only 1,900 calories. So if muscle isn't a calorie-gobbler, why bother to lift weights?

Because, besides making you stronger, fortifying your bones and joints, improving your balance, reducing the risk of heart disease, and giving you a sense of power, control, accomplishment and well-being, pumping iron will make you look better.

"If you add 5 pounds of muscle and lose 5 pounds of fat, the impact on your shape and appearance will be dramatic," Ellis says. "If you add 5 pounds of muscle and lose 10 to 20 pounds of fat, you're definitely going to be eye candy."

# Exercise May Cut Risk of Dementia

*Study Shows Physical Activity in Middle Age Has Brain Benefits Years in the Future*



Exercising in middle age may help ward off dementia and Alzheimer's disease decades later.

In a study of more than 1,400 adults, those who were physically active in their free time during middle age were 52% less likely to develop dementia 21 years later than their sedentary counterparts. Their chance of developing Alzheimer's disease was slashed even more, by 62%.

These patterns were even stronger in people with the ApoE e4 gene, which is associated with higher risk of developing Alzheimer's disease.

"By being physically active in midlife, people who carry the ApoE e4 gene can lower their risk of Alzheimer's to the same level as someone not carrying the gene," says researcher Suvi Rovio, MSc, of the Karolinska Institute in Stockholm, Sweden.

But she's not talking about taking a leisurely stroll around the block now and then. Rovio tells WebMD that the study participants who gained benefit worked out for 20 to 30 minutes, two or three times a week, "fairly vigorously -- enough to make them sweat and feel out of breath."

But Maria Carrillo, PhD, director of medical scientific relations at the Alzheimer's Association, says there's growing evidence that physical exercise "does not have to be

strenuous or even require a major time commitment. It is most effective when done regularly, and in combination with a brain-healthy diet, mental activity, and social interaction.

"Physical activities that also involve mental activity -- plotting your route, observing traffic signals, making choices -- provide additional value for brain health. And doing these activities with a companion offers the added benefit of social interaction," Carrillo tells WebMD.

## Work-Related vs. Leisure-Time Exercise

The new analysis comes from the Cardiovascular Risk Factors, Aging, and Incidence of Dementia (CAIDE) project, which involved 1,449 men and women in Finland. When they joined the study in middle age, participants filled out questionnaires that asked about their diet and work-related and leisure-time physical activity. Work-related physical activity, such as heavy lifting, didn't have the same protective effect as leisure-time exercise. "There was some reduced risk of dementia associated with occupational activities," but the findings could have been due to chance, Rovio says.

The findings were presented at the annual meeting of the American College of Sports Medicine.

Carrillo says exercise provides a host of brain benefits. "We know that physical exercise is essential for maintaining good blood flow to the brain as well as to encourage the development of new brain cells," she says. "It also can significantly reduce the risk of heart attack, stroke, and diabetes, and thereby protect against those risk factors for Alzheimer's and other dementias."

# Recipe of the Month

## Beef and Vegetable Stir-fried with Shirataki Noodles

### Ingredients

- \* 2 packs 198g Shirataki Noodles
- \* 100g zucchini, cut in thin shreds
- \* 85g lean beef, thinly sliced
- \* 30g Enoki mushroom (or any other kind you like or you can find)
- \* 1-2 tsp minced garlic
- \* 1 tbsp reduced sodium Soya sauce
- \* 1 stalk scallion (optional), chopped
- \* 1 tsp roasted sesame seeds (optional)
- \* Cooking Spray
- \* Pinch of Salt



### Preparation:

1. Rinse the Shirataki noodles under the water. Rinse thoroughly and drain well. Set aside.
2. Marinate the Canada beef in your choice of sauces. I like using a bit of garlic powder, onion powder and soy sauce.
3. Clean the mushrooms and dry them well. In a medium saucepan over medium heat, coat the pan with cooking spray. Sauté the mushroom for about 2 minutes or until tender and there is no more water in the pan. Add the beef and fry for another 3 minutes, or until the beef is cooked to your liking. Set the Canada beef and mushroom aside on a dish.
4. In the same saucepan, coat the surface with cooking spray. Add 1 tsp of minced garlic to the saucepan (if you prefer stronger taste, add 2 tsp). Drain the noodles and add the noodles to the saucepan. Keep stirring and watch for the noodles shrink in size, about 5 minutes.
5. Add the Soya sauce and, Canada beef and mushroom to the pan and cook for another minute. If you prefer, you can season with salt to taste. Remove from heat and serve the noodles on a plate.
6. You can optionally garnish the noodle dish with chopped scallion and sesame seed on the top.

### Makes 2 servings

### Each Serving:

Total Carbohydrates: 7g, Fiber 5.5g (Net Carb 1.5g), Fat 3g, Protein 15g

# Infant Weight Gain May Predict Obesity

*Studies Show Links Between Early Weight Gain and Risk of Adult Obesity*



There is growing evidence that babies who gain weight rapidly during the first few months or years of life may be at increased risk for obesity as they get older.

Three new studies, published in the June issue of the American Journal of Clinical Nutrition, support the hypothesis that early growth is predictive of weight during adolescence or adulthood.

In one of the studies, researchers from the health research organization Institut National de la Sante et de la Recherche Medicale in France followed children from birth to age 5, identifying two critical periods in which early-life weight gain appeared to influence later obesity risk.

The first critical period occurred in the first few months of life and the second occurred after age 2.

Between these periods, growth seemed to be preferentially directed towards height and not weight.

## Early Weight Gain and Obesity Risk

In a separate study from Finland, researchers found little evidence of an obesity link associated with rapid weight gain before the age of 2. But rapid weight gain after the second birthday was found to be a risk factor for obesity later in life.

The study included 885 Finnish men and 1,032 women between the ages of 56 and 70, whose childhood weights and heights were known from

medical records.

Rapid weight gain before age 2 was associated with increases in lean mass while rapid gains later in childhood predicted higher body fat in adulthood.

In the third study, rapid weight gain during the first six months of life was found to increase obesity risk later in childhood.

Researchers from London's Institute of Child Health investigated the associations between weight gain during different periods in infancy and later body composition in 105 boys and 129 girls living in the U.K.

The three studies are not the first to link early growth to later obesity.

An analysis of 24 such studies, published in 2005, suggested a link between rapid weight gain before age 2 and obesity later in life. 'How Big Should My Baby Be?'

Obesity prevention researcher Matthew W. Gillman, MD, of Harvard Medical School tells WebMD that rapid weight gain after age 2 or 3 is now generally recognized as a risk factor for later obesity.

He adds that there is "mounting evidence" that the same is true for rapid weight gain in the first few months or even weeks of life, but the link has not been proven.

In an editorial published with the studies, Gillman called for studies to directly address the question.

"All parents want to know, 'How big should my baby be?'" he writes. "Researchers, clinicians and the public health community need to be able to respond not only to that question, but also to the follow-up challenge of what we can do to ensure that babies are the right size."

# Walking Helps Lower Blood Pressure

## *Studies Show a Brisk Walk Can Help Improve Heart Health*



If you have high blood pressure or are extremely overweight, walking may hold the key to improved heart health.

That's the message from researchers who spoke here this week at the annual meeting of the American College of Sports Medicine (ACSM).

A Korean study shows that walking just 40 minutes a day lowered blood pressure in people with hypertension. A U.S. study suggested that taking a stroll offers cardiovascular benefits for people who are morbidly obese.

The Korean researchers studied 23 men with prehypertension or hypertension. "Normal" blood pressure is a measurement of less than 120/80. Hypertension is defined as a reading of 140 over 90 or greater. Those with blood pressure readings between normal blood pressure and high blood pressure are considered to have prehypertension.

The researchers measured the men's blood pressure following a 40-minute brisk walking session and four, 10-minute brisk walking bouts. What's brisk? About 3 to 4 miles per hour, says Saejong Park, PhD, of the Korea Institute of Sport Science in Seoul.

Blood pressure dropped by similar amounts after each type of exercise session. The top number in the blood pressure reading dropped about 5 points after the 40-minute walk and 3 points after the four 10-minute walks. The bottom number of the blood pressure reading dropped about 2 points for both walking sessions.

While longer studies are needed, "we think the

benefits will be sustained over time if the men keep exercising," Park says.

The bottom line is that you have a choice when it comes to exercise. "Some people like to work out all at once, but others say they can't comply with an exercise program because they have no time. These findings suggest people with time crunches and busy schedules can fit bits of exercise in throughout the day and reap the same health benefits."

The findings are in line with ACSM recommendations, which call for healthy adults to engage in at least 30 minutes of moderate physical activity five days a week. The guidelines state that three 10-minute sessions are as effective as one longer session.

Jeffrey A. Ross, DPM, a clinical professor of medicine at Baylor College of Medicine in Houston, recommends alternating walking with other activities.

"Instead of walking seven days a week, take a day off and go swimming or biking. That way you'll work out different muscles and reduce your chance of overuse injuries," Ross says. **Walking Helps Morbidly Obese**

The U.S. study involved 14 morbidly obese patients who were scheduled to undergo weight loss surgery. Their average body mass index (BMI) was 46; a person with a BMI of 40 or over is considered to be morbidly obese.

Patients were asked to walk 1 mile at as brisk a pace as possible. They were able to stop and take breaks, but most walked the mile in under 30 minutes, says Thomas Spring, MS, a senior exercise physiologist at William Beaumont Hospital in Royal Oak, Mich.

Results showed that all 14 got their heart rate up to an adequate level to have benefits in term of cardiovascular health. Walking is a great way for the overweight and obese to begin an exercise program, but always check with your doctor before starting any exercise program.

# Excess Estrogen & Weight Gain (belly fat) - The Problem and Solution



Certain estrogen inhibiting compounds in food help destroy stubborn fat and also defend against cancer. How to defend yourself against estrogen and its related chemicals.

**Problem: Estrogen chemicals in food and water cause fat gain and disease.** We live in an "over estrogenic world".

Never before has the human body been exposed to such an overwhelming amount of estrogen chemicals in the environment, meat, dairy, produce and water supply. Most people are prone to suffer from excess estrogen sooner or later in life. Excess estrogen, also known as estrogen dominance, occurs when estrogen levels are relatively too high, compared to other sex hormones (i.e. progesterone or testosterone). Excess estrogen is associated with increased estrogen activity in the body. Estrogen chemicals are not the only reason why we suffer from excess estrogen.

Aging (both genders) is also associated with increased estrogenic activity (increased conversion of testosterone to estrogen via the aromatase enzyme). The use of drugs is another contributor to estrogen dominance. Athletes may suffer from over estrogenic activity due to steroidal drugs or "estrogen kickbacks" when on and off the drugs. Women on hormonal replacement therapy may suffer from increased levels of harmful estrogen metabolites and a related increased risk for cancer.

Consequently, there is an ever-growing rate of people who fall victim to estrogen's devastating effects, some of which include weight gain (for men, typically in the belly or chest; for women typically in the hips, lower butt, upper thighs), feminization and sterility in men and estrogen disorders, including PMS and endometriosis for women as well as estrogen related cancers for both genders, including breast, ovarian and prostate.

## Estrogen related weight gain (stubborn fat)

Studies demonstrated that estrogen acts in a vicious cycle-like manner, i.e. estrogen increases the size of fat tissues and the enlarged fat tissue increases estrogen production and so on and so forth. Note that excessive fat gain can lead into over estrogenic activity (due to increased conversion of testosterone to estrogen via the aromatase enzyme in fat cells). Over estrogenic activity increases the number of estrogen receptors in fat cells thus forming a highly estrogenic fat tissue known as "stubborn fat" due to its high resistance to fat burning.

## Bad and good estrogen

When over expressed, estrogen may convert to extremely toxic compounds - 16 hydroxy estrones. Known as "bad estrogens", 16 hydroxy estrones have been regarded as the culprit for some of the deadliest cancers including breast, ovarian and prostate.

Note that estrogen is not a "bad hormone". Under healthy conditions, it supports the neural, skeletal and reproductive systems. Ideally, estrogen converts to highly beneficial derivatives - the 2 hydroxy estrones, which play critical roles as antioxidants and anti-cancerous compounds. Called "good estrogens", the 2 hydroxy estrones may induce cancer cell's apoptosis (cell's suicide).

However, when the body's nutritional defenses are low and estrogen is over-expressed, it unfortunately converts instead into the toxic compounds 16 hydroxyestrones, associated with adverse effects, including stubborn fat gain and formation of cancer cells.

## Nutritional defense against estrogen

Researchers found that the human body has been primarily programmed to be nourished and protected from over-estrogenic activity by certain flavones or indoles in plants and bee products that inhibit estrogen and block its conversion to the highly carcinogenic derivative 16 hydroxy estrone. Instead, estrogen converts to antioxidant, anti-cancerous compounds. Overall, estrogen inhibitors can help increase the ratios of 2 hydroxy/16 hydroxy estrone (verifiable by urinalysis), which also marks improved defense against cancer and an overall reduction in estrogenic activity.

Estrogen inhibitors stack for total body defense

It was also found that estrogen inhibitors' nutrients work better when combined together in synergy to provide a total body (systemic) defense against over-estrogenic activity in three ways:

1. Reducing estrogen receptors' activity
2. Inhibiting the cytochrome p450 aromatase activity (the enzyme that converts testosterone to estrogen)
3. Inhibiting the conversion of estrogen to 16 hydroxy estrone and instead increasing its conversion to 2 hydroxy estrone

## Estrogen inhibitors - flavones and indoles

Numerous studies investigated the role of flavones in regulating estrogen. It is now known that certain nutrients help inhibit estrogen, whereas others promote it. For instance, most potent estrogen inhibitors (good guys) were found to be the antiaromatase flavones 5,7 dihydroxyflavone (derived from tobacco or passiflora), apigenine (ingredient in passiflora and chamomile) and galangin (ingredient in bee propolies). Other natural estrogen inhibitors are omega 3 oils (found in flaxseed, hempseeds or nuts). Potent estrogen regulating nutrients are also found in cruciferous vegetables. Previous studies provided substantial evidence to the highly beneficial properties of Diindolyl methane (DIM) - an active indole derived from broccoli, cauliflower or cabbage, which helps block the conversion of estrogen to its adverse derivative 16 hydroxy estrone, and thus helps protect against cancer. The researchers noted that certain flavones, in particular isoflavones such as those found in soy, actually increase aromatase and estrogenic activity, as does an excess intake of omega 6 oils (found in most vegetable oils including corn, canola, safflower and soy).

What to do

Follow The Anti-Estrogenic Diet. Until then, increase intake of cruciferous vegetables (broccoli, cauliflower, brussel sprouts or cabbage). Eat them cooked or steamed. Cooking softens the fiber, and therefore helps release the active estrogen-inhibiting ingredients. Broccoli sprouts are rich in active indoles and should be consumed raw.

\* Increase the intake of omega 3 oils derived from flaxseeds, hempseeds, or fatty fish (wild catch) such as salmon, halibut, mackerel, or black cod.

\* Decrease the intake of omega 6 oils derived from soy, canola, or safflower. For that matter, stay away from margarine products, even if they claim to be cholesterol-free.

\* Note that all monounsaturated oils-(omega 9) such as olive oil or nuts are neutral to estrogen activity, and therefore quite safe.

\* Eat organic food. Minimize the consumption of meat or dairy, unless they are hormone and chemical free. Fruits with a peel (banana, orange or kiwi) are generally safer than fruits without a peel (berries, cherries and grapes) due to lower exposure to pesticides after peeling.

\* Minimize alcohol intake. Alcohol increases estrogenic activity and its conversion to toxic derivatives.

\* Supplement with estrogen inhibitors (aromatase inhibitors flavones and estrogen modulating indoles). Unfortunately, most estrogen inhibitors are derived from herbs or bee products, which are not part of our typical diet and are not always accessible in their most potent form.



# Smart Cycling

## Fit & Comfort Short "Shorts" That Are Long On Comfort

An important comfort point, that's often missed, is that cycling shorts are worn without underwear. This sounds weird until you realize that the whole point of special biking shorts with padding inside is to provide a seam-free riding garment.

### Eighty-Six The BVDs

When you put bike shorts on over underwear, you end up sitting on the seams in the undies, which compromise the short's ability to prevent pain. Seams affect circulation and form bumps that can chafe and hurt. So, leave the BVDs at home and you'll get all the benefits cycling shorts offer. Still Sore? Try Lube

Simply wearing cycling shorts usually eases saddle sores. But some cyclists like to also use lubricants on the pad inside the shorts (called a chamois; say "shammy"); to reduce friction and enhance comfort. This is something to experiment with if you're uncomfortable. Long-distance riders find it particularly helpful.

### Double Your Shorts To Double Your Comfort

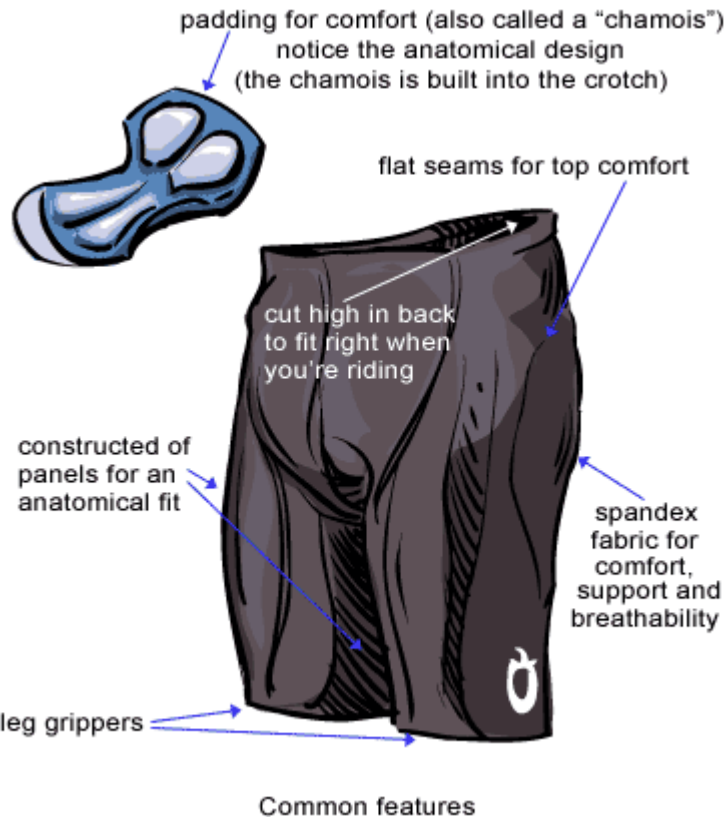
One great trick for preventing and dealing with saddle soreness is wearing two pairs of cycling shorts (don't laugh; even professional bikers use this trick at times). Not only does adding a second pair of shorts double your padding, it also reduces the friction on the chamois (pad) as well. How? The outside pair of shorts moves with the saddle while the inner pair moves with you.

### Speed Washing

Another handy shorts trick used by traveling cyclists, racers and handy for anyone who doesn't have an unlimited supply of cycling shorts, is speed washing and drying. Ideally, you'll always ride in clean gear because when your riding shorts are dirty, it increases the chances of developing saddle sores.

Unless there's a laundry mat nearby, though, it can be difficult to wash your pedaling pants when you're traveling. If you're lucky, it might be a hot day and scrubbing them in the motel sink and hanging them to dry might work fine. But, let's say, it's not warm. Or, that maybe you forget to wash them until the next morning. How do you manage to get them ready in a hurry?

It's easy: Wash them thoroughly in the sink. Then roll them up in a towel and wring (get a friend to hang on to the other end of the towel) to quickly dry the shorts. If you do this several times using different towels, you'll be able to almost completely dry the shorts in minutes and they'll be clean and ready for more miles.





## SMART GOLF TIPS AND TRICKS

### Sticky Rough

#### Problem

The ball is sitting in the rye rough, still a good distance away from the green. You are worried about the grass catching and turning the clubhead.

#### Cure

Although you still have a ways to the hole, try making a steep swing for a high fade to help get it back, safe on the fairway.

#### Therapy

Place the ball back, to the middle of your stance and stand closer to the ball to encourage a steep swinging plane. Use a firmer grip to hold the loft throughout the shot to help prevent the club from turning in the grass. Although you might lose a little distance from it, hit a little more up and down more than usual to reduce the chances that the club will get caught in the rye

### Aim Test

#### Problem

You consistently hit straight to the right or left.

#### Cure

Test your line to make sure that you are truly aiming where you think you are. Right handed players tend to aim more right than they think they are just as left handed players tend to aim more left than they think they are.

#### Therapy

Test your aim by setting up to the ball as usual. Place a ball one foot in front of the ball you intend to play and another one foot behind it. All three balls should be directly on your target line. Make sure your feet are still in the same place you set up at as you complete align the balls. Now step six feet behind your ball and see if the balls are truly pointing towards the target or does it point a little left or right of it? Correct the position of the extra balls and then set up your alignment using the correct line you just formed.

### Hand Off Drill

#### Problem

You need to improve your bunker shots.

#### Cure

The best way to work on your sand shots is to practice in a sandpit. You might find it helpful to play a round of golf aiming for the sand bunkers so you can improve these shots while you are not being rushed or having to worry about the score.

#### Therapy

Tee the ball in the sand and practice your swing technique by taking your trailing hand off of the club just after impact so your lead hand can continue to move the club more through the shot. If you normally have difficulty with your sand shots, try moving your body weight through the shot by placing more weight on your forward foot and lift your back foot up on the toes as you approach impact.



## Too Little Sleep, Too Much Snacking

*Study Shows Lack of Sleep Can Lead to More Munching on Snacks*



Can't figure out why you can't keep your hand out of the cookie jar? It could be those long hours you've been keeping, a small study suggests.

Researchers have found that people who don't get enough sleep often indulge in excessive snacking.

The study is important because it attempts to tease out the reasons why sleep deprivation can lead to obesity, says Sanjeev Kothare, MD, a spokesman for the American Academy of Sleep Medicine (AASM). Kothare, a sleep specialist at Harvard Medical School, was not involved with the work.

"It suggests that high calorie intake from snacks plays a role," he tells WebMD.

The study involved 11 healthy men and women who agreed to enter the sleep lab for two 14-day periods. During one visit, they were allowed to sleep for only five-and-a-half hours each night. During the other, they slept for eight-and-a-half hours a night. During both visits, they could eat as much as they wanted, whenever they wanted.

Plamen Penev, MD, PhD, of the University of Chicago, headed the study. He presented the findings here at SLEEP 2008, the 22nd

Annual Meeting of the Associated Professional Sleep Societies.

Results showed that when bedtimes were restricted to five-and-a-half hours, participants consumed an average of 1,087 calories a day from snacks alone. In contrast, they consumed 866 in calories from snacking when given eight-and-a-half hours to sleep.

The total number of calories consumed each day and the total weight gain was similar during both visits. But Kothare notes that participants were only studied for a few weeks. It's possible other changes would have been seen if they were followed longer, he says.

The AASM recommends that adults get between seven and eight hours of sleep nightly.





## Older Men With Low Testosterone Benefit From Testosterone Replacement

In older men with low testosterone levels, testosterone replacement therapy improves their risk factors for cardiovascular disease and diabetes, according to two new studies. The results were presented at The Endocrine Society's 90th Annual Meeting in San Francisco.

Testosterone deficiency becomes more common with age, occurring in 18 percent of 70-year-olds, said a coauthor of both studies, Farid Saad, PhD, of Berlin-headquartered Bayer Schering Pharma. Low testosterone levels are linked to the metabolic syndrome - a cluster of metabolic risk factors that increase the chances of developing heart disease, stroke, and type 2 diabetes - and other health problems, including loss of bone and muscle mass, depression, and decreased libido.

Yet the risks and benefits of hormone replacement therapy are unclear in older men, he said.

Saad's research showed that restoring testosterone to normal levels in hypogonadal, or testosterone-deficient, men led to major and progressive improvements in features of the metabolic syndrome. Furthermore, men older than 63 benefited as much as younger men, they found. Treatment lasted a year and used a slow-

release, injectable form of the hormone (testosterone undecanoate) that is not yet available in the United States.

All 95 men in the studies (ages 34 to 69 years) had the metabolic syndrome. To receive this diagnosis, patients must have three of the following five risk factors: increased waist circumference (abdominal fat), low HDL ("good") cholesterol, high triglycerides (fats in the blood), high blood pressure, and high blood sugar.

The first study showed that testosterone treatment significantly reduced waist circumference, total cholesterol, LDL ("bad") cholesterol, triglycerides, and body mass index (a measure of body fat). Treatment also increased "good" cholesterol. Improvements were progressive over 12 months, indicating that benefits may continue past a year, Saad said.

In the second study, the researchers divided the patient population into three groups by age: less than 57 years, 57 to 63 years, and more than 63 years. They found that the oldest men had similar improvements in metabolic risk factors to the youngest men.

Additionally, the investigators looked at the degree of testosterone deficiency before treatment. This beginning level of testosterone deficiency did not predict the beneficial outcome, they found. Men whose subnormal testosterone levels were not as low as the others had similar improvements in metabolic risk factors to men with the lowest levels, according to Saad.

"We conclude that if elderly men have a deficiency of testosterone, it is worthwhile to treat them with testosterone," he said.

# Women: Eat Well, Live Longer?

## *Diet of Whole Foods Associated With Lower Risk of Death in Women*



Eating well is good for us. But can eating a certain way also help you live longer and cut your chances of developing heart disease, cancer, diabetes and stroke?

A new study suggests a link between what women eat and whether they die from certain diseases.

Researchers led by Christin Heidemann from Harvard's School of Public Health and the German Institute of Human Nutrition tracked more than 72,000 women, 30 to 55 years old, who had no history of health problems at the beginning of the study. The study spanned 18 years, from 1984 to 2002; every two to four years, the women answered questionnaires about what they ate.

Two distinct dietary patterns emerged. Researchers called one pattern the "high prudent" diet. This included lots of vegetables, fruit, legumes, and whole grains, as well as lean protein sources such as fish and poultry. The other dietary pattern, dubbed "Western," included more red and processed meat, refined grains, french fries, sugary foods, and desserts.

### **It Pays to Be 'Prudent'**

During 18 years of tracking, 6,011 of the participants died.

Women with the most "prudent diet" had a 28% lower risk of dying from heart disease. They also had a 17% lower risk of death

from all the diseases studied, including cancer, diabetes, and stroke.

Women who followed a diet highest in meats, processed and refined foods, and sweets had a 22% higher risk of dying from heart disease. They also had a 21% increased risk of dying from all causes combined.

"These results highlight the importance of intensifying public health efforts to promote the adoption of a healthy overall diet including high intakes of vegetables, fruit, legumes, whole grains, fish and poultry and low intakes of red and processed meat, refined grains, French fries and sweets," says Heidemann in a prepared statement.

"Traditionally, there has been a focus on single nutrients or foods, but in terms of longevity a greater focus on dietary patterns can take into account the complexity of the overall diet," Heidemann says.

### **Healthy Diet, Lifestyle Tips**

Here are some lifestyle and diet guidelines from the American Heart Association, which are in line with following a "prudent" diet:

- Limit saturated fat, trans fat, cholesterol, and sodium.
- Minimize sugary foods and beverages.
- Eat lots of vegetables, fruits, and whole-grain and high-fiber foods.
- Eat fat-free and low-fat dairy products.
- Eat fish at least twice a week.
- Be physically active and keep weight at healthy levels.
- Avoid using or breathing tobacco smoke.
- Achieve and maintain healthy cholesterol, blood pressure, and blood glucose levels.

# Girlie Wisdom



- Women over 50 don't have babies because they would put them down and forget where they left them.
- A friend of mine confused her Valium with her birth control pills... she has 14 kids but doesn't really care.
- One of life's mysteries is how a 2-pound box of chocolates can make a woman gain 5 lbs.
- My mind not only wanders, it sometimes leaves completely.
- The best way to forget your troubles is to wear tight shoes.
- The nice part about living in a small town is that when you don't know what you are doing, someone else does.
- The older you get, the tougher it is to lose weight because by then, your body and your fat are really good friends.
- Just when I was getting used to yesterday, along came today.
- Sometimes I think I understand everything, and then I regain consciousness.
- I gave up jogging for my health when my thighs kept rubbing together and setting fire to my pants.
- Amazing! You hang something in your closet for a while and it shrinks 2 sizes!
- Skinny people irritate me! Especially when they say things like... 'You know sometimes I forget to eat!' .....Now I've forgotten my address, my mother's maiden name and my keys, but I have never forgotten to eat. You have to be a special kind of stupid to forget to eat!
- The trouble with some women is that they get all excited about nothing and then they marry him.
- I read this article that said the typical symptoms of stress are eating too much, impulse buying, and driving too fast. Are they kidding?

That's my idea of a perfect day!