

# UNDERSTANDING METABOLISM

## What is Metabolism?

**Metabolism** is the rate at which your body uses energy, or, burns calories. Your resting metabolism measures the number of calories required to keep your body functioning.

**Energy metabolism** is the body's process of breaking down nutrients and converting them to energy.

While everyone's metabolism works the same way, the *rate* at which it metabolizes nutrients is unique to every individual.

## What is My Metabolic Rate?

Basal metabolic rate (BMR) is the rate at which your body burns calories while at rest.

To get a general idea of your BMR, multiply your weight by 10. For example, if you weigh 150 pounds, your BMR is 1,500. The actual formula looks like:

$$\text{BMR} = 150 \times 10 \text{ kcal/lb} = 1,500 \text{ kcals}$$

This formula allows 10 kcals (commonly referred to as calories) for every pound of body weight.

This means that your metabolism can "use up" around 1,500 calories a day. If you take in more than that, you will gain weight.

But remember, this is a rough estimate and doesn't take into account other contributing factors that may influence your metabolic rate like how much you exercise.

If you're interested in a truer estimate, a qualified trainer or a registered dietitian can actually take a measurement on a device similar to a calculator that will estimate the number of calories your body burns per minute.

## How Metabolism Affects Your Weight

Someone with a high metabolic rate is able to burn calories more efficiently than someone with a slower metabolic rate. Assuming these two people eat roughly the same amount of calories, the individual with a faster metabolic rate "burns up" more of the calories she eats; the person who has the slower metabolism doesn't burn all the calories taken in, so the extra calories are "saved" and then converted to fat.

Since many factors can affect your metabolism (e.g. age, your condition of health), it can actually slow down without you making any lifestyle changes. The good news is, aerobic exercise is an ideal way to increase your metabolism and combat resulting weight gain.

Aging in particular has a noticeable impact on your metabolism, due to changes in hormone balance. That doesn't mean aging makes weight gain inevitable. A 2001 study by the USDA Agricultural Research Service showed that older people can significantly improve their metabolism and fend off weight gain by participating in strength training (using weights or other resistance) exercise.

The reason both exercise and strength training can improve your metabolism? Muscle burns calories more efficiently than fat; the more muscle you have in relation to your body fat, the higher your metabolism will be.

Source: [www.weightloss.about.com/od/weightloss101/a/101lesson5.htm](http://www.weightloss.about.com/od/weightloss101/a/101lesson5.htm)

## HOW TO BOOST YOUR METABOLISM

Unless we perform regular strength exercises, we lose 5-7 pounds of muscle every decade after the age of 25. That corresponds with a reduction of up to 20% in metabolic rate each decade. The result: you get weaker and fatter.

Metabolism is the process by which your body makes and uses energy, or calories, for everything from the cellular absorption of nutrients to running a marathon.

Each of us has what is called a basal metabolic rate (BMR), or one's base metabolism. A good technical definition of BMR is "the energy expended when an individual is lying at complete rest, in the morning, after sleep, in the post digestive state."

For most men, BMR accounts for 60 to 70 percent of total calories expended each day, and that's a good thing, as you're about to see. Your BMR consumes all those calories through such functions as breathing, digestion, blood circulation, immune response and tissue repair. For comparison's sake, activity of any sort generally makes up just 15 to 30 percent of the average man's metabolism.

Muscle is the single most important predictor of how well you metabolize your food, and how well you burn calories and body fat. Regular exercise boosts your metabolic rate by producing larger mitochondria in each muscle cell, which results in more calories burned. Whereas fat is inactive and burns very few calories, skeletal muscle burns at least 10 times more calories than fat, even when we're at rest.

But unfortunately, unless we perform regular strength exercises, we lose more than a half a pound of muscle every year after the age of 25. Without an appropriate training stimulus, our muscles gradually atrophy, and decrease in size and strength. This loss of muscle results in a significant reduction in metabolic rate in every decade of adulthood — as much as two percent a year. And the corresponding decrease in metabolism generally results in an increased ratio of fat mass, which usually escalates as we get older.

The average male and female between the ages of 20 and 50 loses 5 to 7 pounds of muscle per decade and adds three times as much fat during that period. Since metabolism usually slows with age, your eating habits need to change accordingly or else fat can accumulate and your weight can increase.

So, if you're in your 30s or 40s, have been eating exactly the same way for 20 years, and can't understand why you're gaining weight, it's because your energy demands have dropped.

The key to staving off the decline in your BMR is weight training. Strength training, at least twice a week, is essential to boosting your metabolism. The effects of a good, consistent strength training program allow you to continue burning calories 24 hours a day — long after you've left the gym.

Tissue repair and maintenance are critical to caloric expenditure since about three quarters of variability in BMR is predicted by lean body mass. Simply put, the more muscle mass you have the higher your BMR will be.

Untrained men and women can gain about 2 to 4 pounds of muscle and 40 to 60 percent more strength, after just two months of regular strength training exercise.

But what you eat can also have a dramatic affect on your body composition. Some of the calories you consume are less likely stored on your waistline. It's all about the choices you make.

Plenty of metabolic energy is required to convert the food we eat into usable forms of energy. The process of digesting, using, and storing food energy is inefficient, and by itself can consume from 10 to 15 percent of total daily metabolism. Animal proteins increase thermo genesis more than vegetable proteins, so the best calorie-burning foods are lean meats.

During the digestive process, foods are broken down into usable forms; complex carbohydrates are reduced to simple sugars, fats to fatty acids, and proteins to amino acids.

Eating protein with each meal is important. Protein contains nitrogen, which is broken down and eliminated as urea by the liver. As a result of this additional metabolic step, protein's thermic effect is roughly double that of fat and carbohydrates.

Assuming that you are exercising regularly, eating every 2 to 3 hours and including at least some protein with each of those meals can boost digestive metabolism all day long. And after you reach a healthy, stable weight you need to make sure you're eating as many calories as you're burning in order to maintain that weight.

If you have a job in which you sit all day, the following may be disheartening but also quite revealing; the difference in calorie burn between sitting and standing is nearly 1 calorie in added expenditure per minute. That may not seem like much, but it adds up quickly. At the end of an hour it amounts to 60 calories and at the end of an eight hour workday nearly 500. Burning 500 extra calories a day for a week would result in the loss of one pound. That's over fifty pounds in one year. You get the picture.

The idea is to get up and get active. Committing yourself to a regular strength training program at least 2 to 3 times per week will make a big difference, and not just to your metabolism. The positive effects are numerous, including: increased bone mass and strength, decreased blood pressure, injury prevention, improved appearance and body composition, improved mood, confidence and self-esteem, as well as reduced stress.

And if you're doing all that work to strengthen and improve your body and your psyche, make good food choices that will leave you guilt free. Include plenty of protein at each meal to allow your body to rebuild what's being broken down in the gym and remain more metabolically active all day long. Remember to include lots of fruits and veggies because they're full of water and nutrients, and are low in calories.

Take care of yourself. You only have one body, and replacement parts are hard to come by.

# STARTING YOUR OWN TOTAL WELLNESS AND VITALITY PROGRAM

Congratulations, you are now at the part of your training where you begin your own personal journey towards experiencing total wellness and vitality. Before you begin, it is important for you to understand some very simple truths regarding our bodies and the benefits of cellular nutrition.

Take time to understand the following concepts. The information below will serve you well as you choose your own total wellness and vitality program and will also provide you with the tools you will need to also share this gift with your future customers as well as with those you love.

Enjoy this moment! You are about to take your first steps towards a healthier you.

## ***How do our bodies work?***

The most important step to take when we begin our own personal journey towards experiencing true total wellness and vitality is to first understand how our bodies actually work.

In nature, the human body's number one goal is... survival. In fact, survival overrides all of our other basic needs as the single most important, driving force.

When we do not receive all of the nutrients we need on a regular basis, our body feels we may be at risk for survival and goes into survival mode.

In survival mode, our body lives in a constant state of fear and experiences increased stress on virtually all of our bodily systems. At this point, it is not sure if we are at risk or if we will get what we need to survive. It responds, as if in an emergency status, by conserving energy, slowing metabolism, retaining water, storing body fat and, out of necessity, holding on to whatever it needs to protect us just to survive. This process is called starvation response.

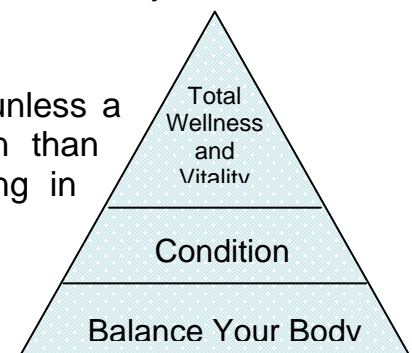
In years past, or in nature, survival mode would only typically be triggered due to the lack of available food or famine. In modern times, however, due to the existence of fast foods, over-processing, aggressive farming techniques and poor "food" choices, we now experience individuals that consume plenty of calories and still trigger the body's survival responses due to the lack of nutrients in the foods they consume.

## ***Efficiency vs. Survival***

Due to our changing times, it is pretty safe to say that unless a person follows a definite nutrition program, more often than not, their body is indeed, at least part of the time, living in survival mode.

## ***Stage One: Balance Your Body***

The first step for each of us when we start on our very



own total wellness and vitality program is to first balance the body. Like building a house, balancing the body is the first stage to building a solid foundation.

Balancing the body entails a program providing all of the nutritional "must haves" necessary for optimum health that everybody needs. It includes the vitamins, minerals, herbs, antioxidants, proteins, phytonutrients and digestive support needed to send that positive message of change to all our body systems.

### ***Stage Two: Condition Specific***

Even though we all share the common nutritional needs associated with any effective Balance Your Body Cellular Nutrition Program, we each experience specific conditions unique to us personally based on our history, genetics, habits, etc. Herbalife created our Targeted Nutrition product line to help each of us to address our specific needs. Whether it be men's issues, women's issues, digestive issues, high cholesterol, skin care, more aggressive weight loss goals or many other common conditions, Herbalife provides a wide array of targeted nutrition products for many of today's most common concerns. Be sure to watch the Personalize Your Program DVD and to review your product catalog to determine what targeted nutrition products might be the most helpful for you.

### ***Stage Three: Total Wellness and Vitality***

After balancing your body and addressing all of your unique imbalances or conditions, Total Wellness and Vitality describes a place of balance, a place of experiencing youthful energy, glowing skin and optimum health only possible by committing to and following a sound cellular nutrition program.

### ***Steps for Achieving Total Wellness and Vitality***

- Define your Wellness Goals
- Choose Your Balance Your Body program
- Watch the Personalize Your Program DVD
- Determine Targeted Nutrition needs
- Fill Out and Call in or Fax Advantage Order
- Schedule Follow-Up Appointments with Mentor
- Enjoy!

When you first start on any new journey, be patient. You will be learning new habits and creating a new lifestyle that will take some time.

Be sure to focus on the end results you desire and realize that making changes are a small price to pay to enjoy a life full of youthful energy and all of the other characteristics associated with true total wellness and lifelong vitality!

## FOOD IS YOUR FRIEND

Weight loss is really just eating fewer calories than what you burn. Food is not the enemy... it is your friend. Skipping meals is not the answer. Change your way of thinking because the truth is, you need to eat calories to burn calories! Huh? When you do not eat enough calories to sustain your body's daily functions, your body panics. It thinks there is no food available and slows down your metabolism. It absorbs more of the foods you eat instead of using that same food for energy. But when you eat regularly, your metabolism speeds up and use those calories instead of saving them for later. Knowing this, here are ways you can ensure your metabolism functions at the optimum:

- Eat Breakfast. You need to break the "fast" of not having eaten in a long time. Skipping this meal will slow down your metabolism. Eat within 45 minutes of waking up.
- Eat according to your activities. If you have a hectic and physical day, eat well at breakfast and lunch so you have sufficient energy. And in the evening when you are ready to relax, lighten up on dinner.
- Eat healthy and well. Have protein like egg whites, cheese, soy milk, lean meat, turkey, chicken, fish, pork, kidney beans, and peas. Eat foods with high nutritional values, at least 7-9 servings of fruits and veggies. Eat negative calorie foods like apples, asparagus, berries, broccoli, cabbage, celery, cauliflower, garlic, grapefruit, lemon, mango, onion, orange, papaya, pineapple, spinach, zucchini etc. Avoid sugar and alcohol!
- Snack frequently. Every 4-6 hours is good. Try snacking on fruits and veggies between meals so you don't get hungry. The hungrier you are, the less control you have over what and how much you eat.
- Aerobic exercise. Even if your mind resists, your body loves physical activity.
- Lift Weights. Muscle burns up to five times more calories than fat. Build muscle tone!
- Do Cardio. You can do 20-30 minutes of cardio activity like brisk walking or treadmill, swimming and biking. Cardio exercise speeds up your metabolism for several hours after your work out... so try doing it first thing in the morning and experience the benefit all day!
- Keep a food diary. This will help you stay keep track of what you eat. Be honest!
- Drink Water. Your metabolism needs it to function properly and being hydrated will keep you energized. Drink half your body weight in ounces of water.
- Drink Green Tea before meals. Drinking green tea before you eat helps to speed up your digestive metabolism.
- Have 8 hours of deep sleep nightly.
- And most of all, be realistic. Plan to lose no more than 1-2 pounds a week. A lifetime of inactivity, poor nutrition and bad habits can't be undone overnight.

There is no short cut to losing weight. It takes effort, discipline and patience. But it doesn't have to be a miserable experience. Eat smartly! Food is your friend!

## 7 REASONS TO DRINK GREEN TEA

The steady stream of good news about green tea is getting so hard to ignore, that even java junkies are beginning to sip mugs of the deceptively delicate brew. You'd think the daily dose of disease-fighting, inflammation-squelching antioxidants -- long linked with heart protection -- would be enough incentive. But wait . . . there's more. Lots more!

### ***Cut Your Cancer Risk***

Several polyphenols -- the potent antioxidants that green tea is famous for -- seem to help keep cancer cells from gaining a foothold in the body by discouraging growth and then suppressing the creation of new blood vessels that tumors need to thrive. Study after study has found that regularly drinking green tea reduces the risk of breast, stomach, esophagus, colon, and prostate cancer.

### ***Soothe Your Skin***

Got a cut, scrape, or bite, and a little leftover green tea? Soak a cotton ball in it. The tea is a natural antiseptic that relieves itching and swelling. Try it on inflamed blemishes, sunburns, or puffy eyelids. But that's not all. Green tea has been shown to help block sun-triggered skin cancer, whether you drink it or apply it directly to the skin -- which is why you're seeing green tea in more and more sunscreens and moisturizers.

### ***Steady Your Blood Pressure***

Having healthy blood pressure -- meaning below 120/80 -- is one thing. Keeping it that way is quite another. But people who sip just half a cup of green tea a day are almost 50% less likely to wind up with hypertension than nondrinkers. Credit goes to the polyphenols again (especially one known as ECGC); they help keep blood vessels from contracting and raising blood pressure.

### ***Protect Your – or Your Mom's – Memory***

Green tea may also keep the brain from turning fuzzy. Getting-up-there adults who drink at least two cups a day are half as likely to develop cognitive problems as those who drink less. Why? It appears that the tea's big dose of antioxidants fights the free-radical damage to brain nerves seen in Alzheimer's and Parkinson's.

### ***Stay Young***

The younger and healthier your arteries are, the younger and healthier you are. So fight plaque buildup in your blood vessels; the sticky stuff increases the risk of heart disease and stroke, adds years to your RealAge, and saps your energy. How much green tea does this vital job take? About 10 ounces a day, which also deters your body from absorbing artery-clogging fat and cholesterol.

### ***Lose Weight***

Oh yeah, one more thing. Turns out that green tea speeds up your body's calorie-burning process. In the every-little-bit-counts department, that's good news!

Source: [www.food.yahoo.com/blog/beauty eats/26529/7-reasons-to-drink-green-tea](http://www.food.yahoo.com/blog/beauty eats/26529/7-reasons-to-drink-green-tea)

# 20 EZ WAYS TO BURN 100 CALORIES

By: Raphael Calzadilla, eDiets.com Fitness Pro

Sometimes when we're working long hours or jammed with extra responsibilities, we tend to forgo our workouts until things calm down.

Instead of bailing on your exercise plan, I recommend you use some imagination.

I'm providing 20 easy and surefire ways to burn 100 calories\*. You might want to add one per day or a few per week.

Try not to look at it as, "This isn't enough." Instead, focus on the cumulative effect. Meaning, if you perform even just one of these activities per day, that's 700 calories burned in a week and 2,800 burned in a month. That will make a difference.

Here are my top 20 in no particular order – have fun!

1. Vacuuming: 25 minutes of vacuuming around your home will burn just about 100 calories.
2. Gardening: Like to garden? It's the digging and raking that will reap the most fitness benefits. These are the bigger calorie burners when it comes to gardening. In fact, you can burn up to 100 calories in just 15 minutes with these movements.
3. Walking: The easiest and one of the most natural movements known to human beings. 15 minutes of brisk walking will burn approximately 100 calories. A brisk daily walk at lunch time or after work will make a difference.
4. Jogging in place: Need a quick pick-me-up before work? Jog in place for 12 minutes and burn a little more than 100 calories.
5. Dancing: Twenty minutes of dancing at a moderate pace will burn 100 calories. C'mon, you know you love to do it, so have some fun with it.
6. Ironing Clothes: If you have to do it for the whole family, you might as well know the calories you're burning. Just a bit over 100 calories in 25 minutes.
7. Badminton: A casual, non-competitive, 20-minute game of badminton will get you to the mark, and it's a lot of fun.
8. Housework: Vigorous housework for 20 minutes will burn a little more than 100 calories. You have to do it, so why not make it count?
9. Volleyball: 12 minutes of volleyball is all it takes to reach our magic number. Not a bad way to burn some calories while on the beach.
10. Biking: How about a light bike ride in the summer? A light intensity of approximately 10 mph will burn a little over 100 calories.
11. Golfing: Just 20 minutes of golf will burn 100 calories.
12. Swimming: I'm not referring to swimming laps or training for the Olympics. Just a 15-minute, leisurely swim will get us to our goal.



13. High-Impact Aerobics: You might wonder why I would include this. It's not like you're going to aerobics class for 10 minutes. However, if you're pressed for time or working long hours, invest in a fun aerobic video tape and use it for 10 minutes (after a warm-up) each day. That's close to 120 calories in just 10 minutes.
14. Car Waxing: Forget the car wash – do it yourself on a hot summer day. Just 20 minutes of waxing your car will burn a little more than 100 calories.
15. Frisbee: A fun, 30-minute Frisbee toss with your kids or a friend will burn up calories, and it's a bit more pleasurable than a boring jaunt on the treadmill.
16. Take the Stairs: If you work in an office building, take the stairs instead of the elevator. Approximately 20 minutes will burn just more than 100 calories. You don't have to do it all at one time. Just make sure to spread it out during the day.
17. Pushing Baby Stroller: Pushing a stroller burns approximately 60 calories in 20 minutes. No problem -- two nice and easy 20-minute strolls per day will get the job done without even breaking a sweat.
18. Mowing the Lawn (self-propelled mower): 25 minutes and you've burned about 100 calories. Just like cleaning, it needs to be done, so put a little oomph into it.
19. Painting: Need to paint a room in your home or apartment? You can burn approximately 100 calories with 20 minutes of painting. Plus, you get a better-looking room at the same time.
20. Weight Training: 15 minutes of vigorous weight training will burn approximately 100 calories. You don't have to work out forever, Just three 15-20 minute sessions per week will keep your bones strong and muscles tight, and you'll keep burning calories after your workout.

\*All counts are based on a 150-pound individual.

*LIFE IS AN ATTITUDE. HAVE A GOOD ONE!*

Source: [www.featherish.com/showthread.php?t=1310](http://www.featherish.com/showthread.php?t=1310)

## WHAT IT TAKES TO BURN 100 CALORIES

Find out how many calories you burn when doing your favorite sports and activities. By just burning an additional 100 calories a day for a year, you could lose up to 10 pounds a year!

<b>In and Around the House</b>	<b>Minutes Needed to</b>	<b>Team Sports</b>	<b>Minutes Needed to</b>
<b>Activity</b>	<b>Burn 100 Calories*</b>	<b>Activity</b>	<b>Burn 100 Calories*</b>
Washing dishes	28	Volleyball	25
Washing windows	20	Tennis - Doubles	20
Gardening	20	Softball	17
Lay or Remove Carpet/Tile	20	Baseball	17
Mowing Lawn (push/power)	20	Soccer	11
Raking Lawn	20	Beach Volleyball	10
Refinishing Furniture	20	Basketball	10
Operating Snow Blower	20	Flag Football	10
Light House Cleaning	18	Hockey: Field or Ice	10
Paint House: Outside	17	Football	9
Weeding	17	La Crosse	9
Chopping and Splitting Wood	14	Water Polo	8
Mowing Lawn (push/hand)	14		
Shovelling Snow by Hand	14		
Moving Household Furniture	14		
Heavy House Cleaning	14		
<b>With the Family</b>	<b>Minutes Needed to</b>	<b>Individual Activities</b>	<b>Minutes Needed to</b>
<b>Activity</b>	<b>Burn 100 Calories*</b>	<b>Activity</b>	<b>Burn 100 Calories*</b>
Flying a Kite	30	Stretching	25
Playing Catch	30	Weight Lifting	25
Exploring the Zoo	30	Bowling	25
Tossing a Frisbee	25	Golfing: With Cart	25
Dancing: Slow	25	Water Aerobics	20
Walking to a friend's house (3 mph)	25	Badminton	20
Paddleboat	25	Tai Chi	20
Playing Tag (with your kids)	22	Calisthenics	20
Coaching Sports	20	Walking: 3.5 mph	20
Roller Skating	20	Walking: 4.0 mph	19
Kicking a Soccer Ball	20	Walking: 4.5 mph	17
Washing the Family Car	20	Golfing: Walking	14
Running Through the Sprinkler	20	Hiking	14
Shooting Hoops	20	Wrestling	14
Walk Family Dog (3.5 mph)	20	Swimming	14
Pushing a Stroller (3.5 mph)	20	Boxing	14
Hop-Scotch	17	Aerobics: Low Impact	14
Skateboarding	17	Stair Step Machine	14
Ice Skating	15	Tennis: Singles	13
Dancing: Fast	14	Aerobics: High Impact	13
Family Bike Ride	13	Step Aerobics: Low Impact	13
Rollerblading	13	Bicycling: Moderate	13
Backpacking	13	Rowing: Moderate	13
Jumping Rope	8	Running: 5 mph	10
<b>Try Something New?</b>	<b>Minutes Needed to</b>	Bicycling: 12-14 mph	10
<b>Activity</b>	<b>Burn 100 Calories*</b>	Swimming: Backstroke	10
Horseback Riding	20	Circuit Training	10
Hatha Yoga	20	Elliptical Trainer	9
Kayaking	17	Ski Machine	9
Whitewater Rafting	17	Running: 6 mph	8
Water Skiing	14	Swimming: Butterfly	8
Fencing	14	Bicycling: 14-16 mph	8
Snow Shoeing	10	Step Aerobics: High Impact	8
Snow Boarding	10	Handball	7
Judo	8	Bicycling: 16-19 mph	7
Karate	8	Running: 7 mph	6
Rock Climbing: Ascending	8	Bicycling: >20 mph	5

# BREAKFAST: WHY IS IT SO IMPORTANT?

## Q. Why is breakfast the most important meal of the day?

**A.** A healthy breakfast refuels your body and replenishes your blood sugar (glucose), giving you the energy necessary to start a new day. In addition, a growing body of evidence indicates that breakfast is good for both your physical and mental health. Studies show that people who eat breakfast — especially a healthy breakfast — are more likely to:

- **Consume more vitamins and minerals and less fat and cholesterol during the day.** While the reason is unclear, one study claims that increasing daily eating frequency is associated with consuming more favorable nutrients and fewer less favorable nutrients, such as dietary cholesterol.
- **Have better concentration and be more productive throughout the morning.** Researchers believe this is due to replenishing glucose, the brain's main energy source.
- **Control their weight.** There are several theories behind the association between eating breakfast and controlling weight. Researchers speculate that eating breakfast may reduce hunger later in the day, or that it may cause eaters to choose less-dense foods at later meals. Eating breakfast regularly may simply be an indicator of someone who adopts a low-calorie, low-fat diet.
- **Have more strength and endurance.** People who eat breakfast — and thus have higher energy levels — may engage in more physical activity than may people who don't eat breakfast.
- **Have lower cholesterol, which reduces the risk of heart disease.** Research has shown that people who eat breakfast consume less dietary cholesterol than do people who don't eat breakfast.

While eating breakfast is important for all ages, breakfast is especially important for children and adolescents. According to the American Dietetic Association, children who eat breakfast are more likely to have better concentration, problem-solving skills and eye-hand coordination. They may also be more alert and creative, and less likely to miss days of school.

A healthy breakfast should consist of a variety of foods. To make a healthy breakfast each day, choose one item from at least three of the following four food groups:

- **Fruits and vegetables.** Consider fresh, whole fruits and vegetables, fruit or vegetable smoothies, or 100 percent juice without added sugar.
- **Grains.** Choose whole-grain rolls, bagels, hot or cold whole-grain cereals, or low-fat bran muffins.
- **Dairy.** Consider skim milk, low-fat yogurt cups or low-fat cheeses, such as cottage and natural cheeses.
- **Protein.** Choose hard-boiled eggs, peanut butter, lean slices of meat and poultry, or fish, such as water-packed tuna or slices of salmon.

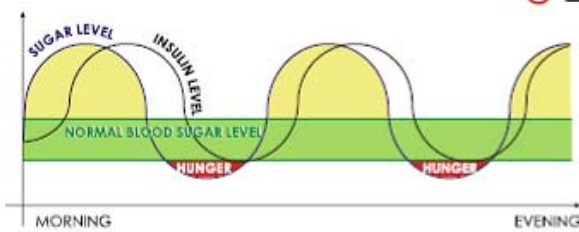
## Q: How important is breakfast for weight control?

**A:** It might seem logical that skipping breakfast would mean fewer calories and easier weight control, but it doesn't seem to be true most of the time. Studies show that frequently skipping breakfast is linked with higher body mass index (BMI), a measure of overweight. Of course, it's possible that skipping breakfast doesn't cause overweight; perhaps this is how people who are already overweight try to lose weight. Research suggests that people who eat breakfast are less likely to snack impulsively later on, and tend to do less overeating

throughout the rest of the day. Some of the studies show that high-fat, high-calorie, meat-centered breakfasts are also linked with greater overweight. But a good breakfast will energize you, satisfy hunger through the morning, and provide antioxidant vitamins and phytochemicals that add up to help protect you against cancer and heart disease. Start the day with whole-grain bread or cereal, some fruit or vegetable, and a modest amount of protein. You can get protein from peanut butter on whole-grain toast, nuts added to cereal, low-fat cheese melted on an English muffin, yogurt, or milk, to name just a few options.

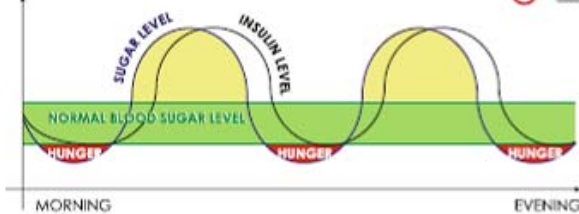
## HEALTHY BREAKFAST: FEEL GOOD AND CONTROL YOUR WEIGHT

### ⊗ Carbs-based breakfast



In the morning simple carbohydrates (*sugary refined cereals, white breads, toasts, etc*) cause an immediate surge of blood sugar level which results in a substantial emission of insulin. The insulin removes sugar from blood turning its excess into fat. The result is a decreased level of blood sugar, and thirst for more carbs. This cycle repeats itself 2-3 more times during the day. This vicious circle constitutes one of the major reasons for diabetes, high blood pressure and extra weight.

### ⊗ Skipping breakfast



When you skip breakfast, blood sugar drops below the normal level, you experience cravings and a drop of energy. You again revert to simple carbohydrates to achieve a quick surge of blood sugar and to overcome hunger and a drop of energy. Simple carbohydrates will cause an immediate surge of blood sugar level and a substantial insulin emission. The insulin removes sugar from blood turning its excess into fat. Then this cycle repeats itself 2-3 more times during the day. This vicious circle constitutes one of the major reasons for diabetes, high blood pressure and extra weight.

### ☑ Balanced protein-based breakfast



Such a breakfast supplies our body with all vital nutrients and energy without increasing blood sugar and insulin levels. It helps to avoid dependence on carbs during the day. In this way, appetite stays under control, cravings for carbs (*snacks, chocolate, pastry, junk, soft drinks, etc*) diminish and the body uses its own stored fats to get more energy.