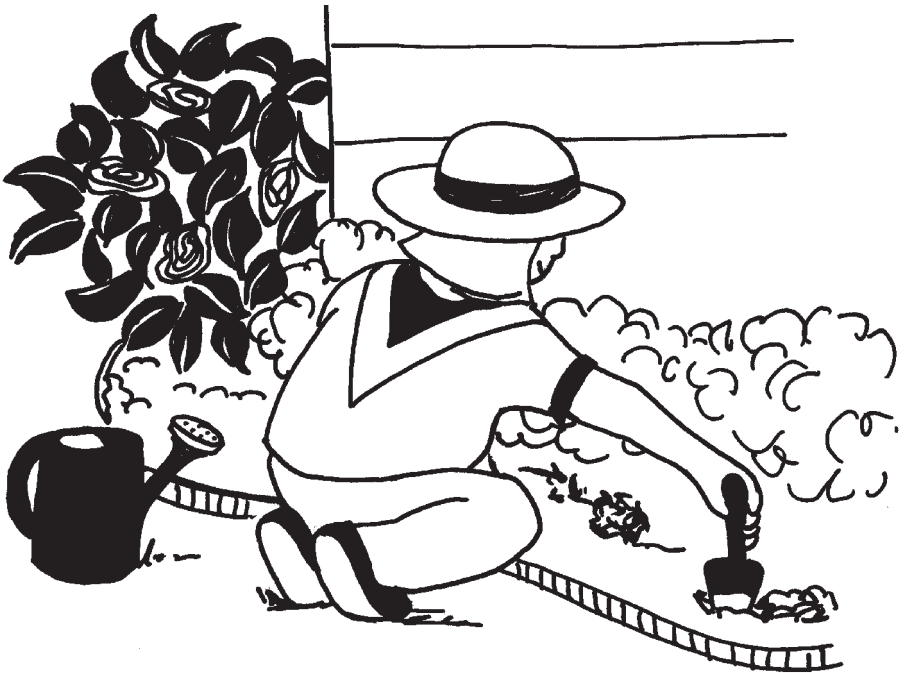


3

Physical Activity for Fun

*Exercise regularly at your own
level with an activity you enjoy.*



**Physical
Activity
for Fun**



*New from the exercise
industry.*

Buy now, lose later.

The entire principle of HUGS™ is focused on life-style change that you allow to happen naturally. In order to make your activity level a life-style change, it must be increased gradually. It's important to find an activity that you truly enjoy so you feel you are doing it for yourself, not because you have to do it. For this to happen, it is necessary to understand the principles of fitness in relation to HUGS™.

Part of the balance sought in life-style change is that daily physical activity is included. This refers to the normal day-to-day movement of a moderately active person going about the business of living. Called "active living," it involves such activities as getting up, getting dressed, working, lifting things, putting them down, walking around, doing housework, going out in the evening, etc. Active living burns 25 percent of your total calories if you are moderately active. However, most people are not moderately active and when they do not reach their calorie burning potential they retain the calories and accumulate fat.

In the past, exercise was viewed as a form of punishment rather than reward. Push-ups or running around the block were activities forced on you if you were bad. Aerobics was also hard work. Each evening you went to the fitness studio, and put up with the hour of pain. No gain without pain, you thought. You continued out of perseverance or after a few months gave it up, feeling that exercise was not for you.

My own experience attending regular aerobic classes was that I felt exhausted. I was often dizzy and in pain, but I thought this was a normal reaction and I wanted to be in shape. But when the soreness and stiffness persisted I decided to give up on aerobics.

A few years later, with new knowledge and a new attitude, I tackled other types of physical activity. It's now 3 years later and I enjoy exercising, mainly walking, cross-country skiing, and cycling. Now I teach HUGS™ aerobic classes at a lower intensity that emphasize fun.

YOU COUNT,
CALORIES
DON'T

Active living refers to enjoying physical activity and learning how to integrate it into your daily life.

The HUGS™ concept is back-to-basics active living which is a self-paced, integrated activity. It refers to working out in more natural surroundings, such as your garden, a playground, or skating rink. It involves natural movements used in everyday living. Sustained, strenuous exercise is now thought to be unnecessary according to Canadian fitness experts. *You need only take the equivalent of a few brisk walks weekly to increase your odds of living a long and healthy life.*

Living actively rewards you twice: immediately, in the pleasure of doing the activity, and over time, through improved health, well-being, and quality of life. Moving the way you like to move is good for you. It's the moving that counts.

Active living refers to enjoying physical activity and learning how to integrate it into your daily life. This refining process indicates that longevity is enhanced through any kind of activity and that people can be fit by doing ordinary, useful activities whether it is shingling your roof, cleaning your bathroom, or working in the yard.

You can pursue this active living at work as well. Take the stairs instead of the elevator; put a pair of walking shoes in your car and take a walk if you're early for an appointment; walk around the mall after lunch before returning to work; park your car a distance away from your workplace so that you can enjoy a short walk before the day's activities. All of these life-style moves do not even take extra time; rather they give you time. These changes get you moving and keep you moving. This leads to more energy and a healthier and longer lifespan.



Dependence on fitness classes or other structured group experiences for physical activity to get fit results in the activity of the participation decreasing or stopping once you move out of the activity structure. It's the same kind of dependence that people place on a diet. They follow the diet as long as they are involved in a group situation to reinforce and encourage. They go off the diet as soon as they stop attending classes. When the

Physical Activity for Fun

reason for doing exercise is weight loss and not fun, people find excuses not to go to classes. The focus of exercise should be to encourage the development of the individuals so that they find active living the answer to exercise needs.

Active living is an entirely different way to view activity. It promotes enjoyment of life and the awareness of what is going on around you. The main focus is to make choices for yourself, based on what you want and enjoy. Then you will find new excitement in activity and it will become a pleasurable part of your life.

If you listen to your body and tune into your body's needs you will know what intensity of activity you should follow.

MYTHS OF EXERCISING

Myth 1: No pain, no gain

Painful, intense exercising will not lead to life-style change. Continued discomfort will discourage you from continuing the exercise. In fact, painful exercise can damage your body.

New fitness information emphasizes *train but not strain*. The old pain-for-gain thinking destroys the sense of fun and enjoyment and does not fit into your new active life-style.

Forget the old way, "I went for a walk to the donut shop where I can have one as my reward," or "I ate a piece of cake, so I'll have to go for a walk to wear it off." Activity is for pleasure which in itself is the reward. The old "calories taken in versus calories used up" attitude traps you in the diet mentality of counting calories.



Calories Taken In		Exercise needed to use up calories		
		WALKING	BICYCLING	RUNNING
Average cake donut	150 calories	29 min.	18 min.	8 min.
1 slice cheesecake	260 calories	50 min.	32 min.	13 min.
1/6 of 2-crust fruit pie	410 calories	79 min.	50 min.	21 min.

Finally, you ask yourself whether exercise is really worth the effort. You walk a half hour to the donut shop so that you have used up enough calories to reward yourself with a small cake donut. The sense of discouragement that develops further extracts your energy because of the poor attitude towards exercise that results.

Normal glycogen (carbohydrates) stores provide fuel for about 2 hours of moderate-intensity exercise.¹ Intense exercise, in which you work at over 75 percent of your maximum aerobic capacity, can deplete the working muscles' glycogen reserves in as little as an hour or two, depending on how fit you are and on your prior glycogen reserves.²

The body also burns fat for energy, but not as efficiently. As muscle glycogen is depleted, the liver contributes some of its reserves, but if you continue to exercise intensely, the liver may be unable to keep pace, and you may feel the effects of a sharp drop in blood sugar. If this happens, your muscles simply "give out" and you experience extreme exhaustion. At the same time the glucose deprivation in your brain and nervous system may make you confused or disoriented.³ The result of a high-intensity workout may leave you feeling exhausted and famished. It is common in such a situation to overeat to replenish glucose stores.

For example, if you put the resistance up on an exercise bicycle to get a better workout this can result in increased stress not only on the knee joints but also on the soles of the feet. Pedaling hard with few revolutions per minute can make it difficult for oxygen to reach the muscles, especially if you are not a conditioned cyclist. In addition, increased metabolic demands may promote a build-up of lactic acid, a factor in muscle pain and fatigue. Draining your energy will not help you establish a better life-style.

Activity could be part of your life-style change and not just the means to losing weight. Increasing the physical activity until you lose the weight is parallel to going on a diet until you lose the weight. If a life-style change isn't in place and the enjoyment isn't

there, you will stop exercising and go off the diet. The result is short-term success and a sense of failure when the weight returns.

Myth 2: Exercising only until you lose weight

“I’m going to the fitness class 6 times a week and I’m losing inches. I can’t wait till I reach my goal weight so that I can stop exercising.” Unfortunately this person found exercising stressful and didn’t know that there is evidence that if you start and stop exercise, you can increase body weight. In fact, animal studies have shown that cessation of exercise can lead to increased body fat later. So if you treat exercise only as a method to lose weight you are actually making your body fatter.



Studies have shown that making activity part of your life-style change is more effective for permanent weight loss in the long run. Gradual increase in activity that becomes ingrained as part of your routine is the way to go. Lower intensity, longer duration types of activity make the activities more likely to become part of your life-style. The activities will eventually become habit, but it will take time. *Enjoying the process eliminates the desire to stop.*

Incorporating activity into your life-style means adding it into your daily routine whenever possible. For example, if you have a half hour to spare between appointments why not go for a walk in the area? Be prepared for these opportunities by carrying some comfortable shoes in your car.

In order to allow yourself to “get hooked” on exercise, be aware of how you feel and how your body reacts before and after exercising. After exercising regularly (i.e. every second day) for a few weeks, try skipping a week and find out if you miss it. The feeling of energy, vitality, and exhilaration that you get from activity may make you want to continue. The endorphins, a chemical released while exercising, serve as a natural tranquilizer that soothes

both the body and mind. Once you experience the internal benefits of activity, it is difficult to do without it.

Myth 3: Exercising vigorously burns more fat

Higher intensity activity burns more carbohydrates rather than fat.⁴ In the first 12 to 30 minutes of activity, you use up mainly carbohydrates as your fuel source.^{5,6} This means that your body will be drawing from the carbohydrate stores in your liver (glycogen stores). Engaging in higher intensity activity such as jogging or running is hard on the knees and does not build up endurance if you continue the jogging for only a short period of time. With vigorous exercise you are not giving your body a chance to switch over to using more fat as the fuel source. This occurs only after about 30 minutes of activity.



As you become more fit, the training effect will allow you to increase the use of fat as a fuel source.⁷ Running may wear off the calories more quickly and for this reason burn more total fat. However, working at this higher intensity level may reduce the duration of the activity. In this way, the benefits of sustained activity are lost.⁸

People who do aerobics at a higher intensity level are often starved after a workout. They may have burned more total calories which used up some of their carbohydrate stores and caused some burning of fat

The lesson here is that you can

- work at a level that is comfortable for you where you can sustain the activity for a longer period of time rather than engage in short bursts of activity;
- increase your intensity gradually as you become more fit;
- use an activity that you enjoy that leaves you feeling energized not exhausted, and tune into how you feel before and after your activity with regard to energy level and appetite control; and
- work at a level that controls your appetite rather than leaves you feeling famished. (Even if you do eat a little more due to activity, there will still be a net loss of energy expended. Remember to replenish your fluids first to rehydrate any fluid lost. You may actually be thirsty and not hungry.)

as their fuel source. But because of their hunger and eating after the workout they replenished their glycogen stores and minimized the burning of fat. Karen, her mother, and her sister went for a walk.

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for Fun**

The mother walked with her arms flinging, racing to get to her destination. "It doesn't do any good unless you walk briskly," she said, as she huffed and puffed to keep her pace. "I want to lose 5 pounds by next week." At the end she was exhausted and had not enjoyed the walk or the scenery. Her focus was the destination, not the journey.



Karen walked at a rate comfortable to her, and was still able to talk to her sister. Her heart rate was going up, but not racing, so she felt both physically and psychologically refreshed at the end of the walk. In fact, she enjoyed it so much that she made this a habit. Each time she walked, it became easier to walk slightly more quickly and still feel comfortable. She was gradually becoming more fit and she reveled in the experience.

Like many people coming into the HUGS™ program, Janice was jogging regularly to lose weight. She felt tired because jogging was hard on her body. She was thrilled to hear that walking was more effective for weight loss due to its lower intensity and she enjoyed the activity much more. She noted the difference in the effectiveness of walking in helping her to

**Comparison of impact forces being generated
and delivered to the lower body**
WALKING – one times your body weight
RUNNING – 3 times your body weight
JUMPING – up to 10 times your body weight

stabilize her weight.

Another client commented, "I tried to fit jogging in. What a relief to find I can enjoy walking at lunch with a friend and it's okay!"

Walking at a comfortable speed may increase the heart rate 40 to 50 percent above the normal heart rate. This is more than enough to stimulate the lungs and heart and increase oxygen uptake and delivery to all body tissues. According to experts in the field of exercise physiology, 2-1/2 miles (4 km) of walking will produce the same aerobic benefits as 5 miles (8

km) of bicycling, 1/4 mile (.4 km) of swimming, or 1 mile (1.6 km) of running.

It is interesting to note that it is often Type A personalities—the hard-working, aggressive, competitive individuals—who choose jogging or competitive sports because they think that aggressive activities will lessen their chance of heart disease. However, instead of running off their aggression and tension, they actually run into it and increase their chances of developing heart disease above the 25 percent chance they already have due to their personality type.

Myth 4: Activity burns only calories

Regular activity provides more benefits to your health than simply burning calories. It revs up your system from 4 to 6 hours after the completion of the activity.⁹ It gives you the energy to meet everyday and emergency requirements, and to effectively use and enjoy leisure time. It is not how many calories you use up during the activity but how much you increase your metabolic rate and keep it going at a faster rate even when the activity is completed. This is why regular activity as part of your life-style is important.

If you think it is difficult to take time for an activity in terms of a half hour off from your daily routine, keep in mind that you will get back that time and more in terms of your increased efficiency and energy level which will allow you to accomplish more in less time.

For example, if you exercise from 8:00 to 8:30 in the morning, your body will continue to burn calories at a faster rate than if you had not participated in the exercise program. The increase in metabolic rate is caused by the demand for energy for muscle building and repair resulting from exercise, providing that the exercise is of an appropriate intensity and duration. If you work at the level that is comfortable for you it will allow activity to control rather than increase your appetite.

Regular activity gives you sustained energy

Gradually increase your activity so that you can participate in the activity at least every second day in order to derive the benefit of the training effect. Start more slowly if you wish. As the activity becomes a life-style change, you will eventually choose to do it more frequently. *Let it happen naturally.*

THE PERKS OF PHYSICAL ACTIVITY

Exercise and obesity

According to experts, exercise may carry important benefits for the large person even in the absence of weight loss. In sufficient amounts, physical activity can improve nearly every ill consequence of obesity.^{10,11}

Improved self-concept

Being fat in a weight-conscious society can undermine self-esteem. Yet some studies have shown that large men and women in physical training programs exhibit marked improvement in self-satisfaction, self-acceptance, and a sense of personal worth. A Harris poll in 1979 found that physically active people reported more self-confidence, a better self-image, and greater psychological well-being than inactive people.

Control over one's life—the ability to make choices—is vital for a positive self-image and a feeling of personal power. A renewed sense of control is expressed after a period of regular activity, which facilitates the ability to resolve problems of personal dissatisfaction and poor body image.

Tune into how you feel before and after physical activity.



The body adapts to the demands of physical exertion by increasing muscular strength and endurance, whereas long periods of food restriction produce diminishing returns, and increase both physical and psychological stress. During periods of increased stress, feelings of lethargy often result with the release of adrenalin and cortisol, both stress-related hormones. These hormones are metabolized by exercise, which decreases their undesired effect. As well long-term activities result in the secretion of endorphins by the brain. These small, morphine-like substances can produce a feeling of exhilaration, which reduces stress and, through a complex process, may even reduce fat storage.

The improved self-concept and sense of accomplishment resulting from exercise may be instrumental in the development of long-term life-style changes that lead to permanent weight control and a healthier life. For health, walk tall with shoulders back, pelvis forward and bum tucked in. *For health, walk like a*



“New attitude” in fitness — focus on the process of enjoyment, not the end result.

tiger with confidence.

Depresses mood swings

During physical activity, the release of endorphins acts as a pain killer and tranquilizer making you feel more relaxed. Eating and laughter can also release this chemical. Changing your attitude and your lifestyle by adopting a more light-hearted approach can make you happier and healthier. The same temporary “high” that you get from eating can be transferred to a more sustained “high” from activity.

Make that special time for yourself

Physical activity can serve as a release valve for stress and give you the time to think things through.

Improve body image and self-esteem

Roz went tobogganing with her sister, niece, and nephew. She had to run after the toboggan. While she was running her niece and nephew called out, “Come on Auntie, you can do it, you’re a HUGS™ lady.” She found that she was able to run after the toboggan without being “pooped” or totally out of breath. What an accomplishment! With HUGS™ life-style change you will notice health benefits within a few months and feel a sense of accomplishment. The outward energy through activity can help you to channel that energy inward to deal with the inner problems.

Physical activity regulates appetite

Sedentary people who do little activity may overeat because their appetite control mechanism is not functioning properly. The stomach is not sending the signal to the brain that they are full when they are full. Exercise at a proper intensity puts this back in balance.

Deanna was tuned into her body with regard to food and ate till she was satisfied; she felt that she was not overeating. If her eyes were bigger than her stomach and she overloaded her plate, she would eat till full, and then leave the rest on her plate. This was quite an accomplishment for her. She had lost weight and it had stabilized. But even though she was following her internal hunger signals, she seemed

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to be gaining back some weight.

In this case, she was no longer active and tended to be in a constant “rush” with her new job. Some of this rushed feeling transferred to her eating and she was able to eat more before her stomach signaled her brain that she was full. Without activity, her appetite control mechanism was not working properly and so she may have been taking in more quantities of food before she was signaled to be satisfied. Keep in mind that activity, done at an intensity appropriate for you, can regulate your appetite.

Physical activity keeps you fit

Activity improves joint problems and decreases muscle cramps. Drinking sufficient water also helps to lessen muscle cramps.

Physical activity lowers blood pressure

Blood pressure is the force of blood pushing against the walls of the arteries as it flows through them. Physical activity lowers blood pressure in 3 ways. First, it aids in the loss of body fat. For every extra pound of body fat you need an extra mile of blood vessels to nourish it. Second, it tones the blood vessels to make them more elastic. Third, exercise reduces the deposition of fat on the artery walls, preventing the opening from becoming smaller. A larger opening requires less pressure against the artery walls.

The bonus is that as you become more fit, your heart becomes stronger. With each contraction, it pushes more blood to the rest of the body.

Physical activity lowers blood sugar level

With exercise the immediate rise in blood sugar after a meal is less pronounced, and sugar is released in smaller doses. This is accomplished by increased sensitivity to the receptors of the cells permitting the insulin to allow blood sugar to enter cells more readily. The curve is flatter (not as steep) and therefore the blood sugar is released into the bloodstream at a slower, more gradual rate, providing a more steady supply of energy.

Eating properly as HUGS™ defines it, coupled with activity, allows you to feel more energetic. This is partly due to blood sugar control. Even if you do not have diabetes, poor eating habits may lead to erratic blood sugar control. For example, 24-year-old Brenda was not overweight but had poor, erratic eating habits. She was always tired and lived on cake and little food. Blood tests indicated that Brenda had hypoglycemia (low blood sugar level).

When Brenda established a regular eating pattern balancing both carbohydrate and protein sources, she had the energy to become more active, which in turn, gave her more energy. She became more efficient and productive. It's a matter of balance!

Physical activity improves circulation

Physical activity adds to an increased energy level as oxygen and nutrients are carried throughout the body more efficiently.

Physical activity improves digestion

You will find that constipation decreases as the natural movement of the intestine is improved.

Myth 5: The same exercise every day is necessary

Some people think that doing the same type of exercise activity every day is necessary. Rather, cross-training for a more balanced body is preferable. Alternating the type of activities done on a daily basis gives specific muscles a chance to relax. For example, walking on one day and rowing another day uses different muscles. However, activities such as cross-country skiing use the entire body. Cross-training allows you to exercise more muscle groups than a single activity would do. For instance, cycling builds your lower body, and rowing works your upper body, so alternating them can help give you the benefits of both while you build aerobic endurance. It also minimizes the stress felt from always using the same muscles and joints.

Allowing your muscles to rest and using other muscles reduces the risk of injury. Better muscle balance is also achieved. For example, walking or running strengthens the hamstring muscles (located

Physical



at the rear of the thigh) more than it does the quadriceps at the front of the thigh. This muscle imbalance may lead to injury. By adding cycling on alternate days (which strengthens the quadriceps) you can work complementary muscle groups in your legs and thus achieve better muscle balance.¹²

Vary the types of exercise you do. People in long-term aerobic programs strengthen their hearts, and typically build up their leg muscles, but may lose muscle mass in their upper body. To balance your exercise program, use your own body weight as resistance in push-ups, sit-ups, and pull-ups. There's no set amount of weight you should lift and no standard against which you should measure yourself: *the goal is to work out according to your capabilities.*¹³

Myth 6: Eat little, exercise a lot for weight loss

The type of the activity rather than the amount of activity is what counts. Restrictive eating (dieting) combined with frequent physical activity will cause you to drain your protein or muscle tissue if insufficient carbohydrates are consumed.

If your calorie consumption is too low to supply your energy needs, your body then breaks down valuable protein tissue to use for energy. With the breakdown of protein, your metabolic rate is further decreased.

Many diets are low in carbohydrates and if you remember that regardless of the intensity of the activity, in the first 30 minutes, carbohydrates are the main fuel source, you will need them for fuel. Carbohydrates break down into glucose, which is your energy source for the first half hour of activity. If insufficient breads, cereals, potatoes, rice, and pasta are consumed muscle protein will be broken down into glucose.¹⁴ *Exercise preserves lean muscle tissue only if sufficient calories are consumed, including carbohydrates.*¹⁵

Between the ages of 30 and 70 the average person

Exercise for
energy, not
exhaustion.



loses 30 to 40 percent of the body's muscle mass. Exercise can retard these changes by as long as 20 years.¹⁶

Myth 7: Exercise increases appetite

Exercising at a higher intensity depletes your glycogen stores faster, leaving you with a lower blood sugar level. The result is that instead of activity controlling your appetite, it may actually increase it. Lower intensity activity will draw less from your glycogen stores and allow you to sustain the activity for a longer period of time. *Tune into your body and decide on the level that is right for you.* You should increase your heart rate and still be able to carry on a conversation with a friend. Putting an extra strain on your body with stressful activity gives no added benefit. You can feel energized, not exhausted after exercise, and not feel famished.

Myth 8: Exercise is boring

Taking on an exercise program and giving it up just as quickly produces the same short-term gain as a quick weight loss diet. The extra physical strain that comes from exercising above your capacity or eating below your basic needs leaves you in a weakened condition.

Having fun with activity will ensure that you are doing what your body can endure. Choose something you enjoy and learn to work at your own level. If you do not like aerobics, find a program or activity that interests you. Don't participate only because your best friend is doing it.

Exercise is a skill. Once developed it is difficult to do without it. It becomes part of you and when it's fun it's something that you look forward to. As June stated, "I discovered swimming and it's great. I feel so invigorated."

A positive attitude is also necessary. Once out for a Sunday cross-country ski trip, I had to go down a small hill. I froze. I couldn't face this challenge. In my mind, I felt that I could not do it, and so the self-fulfilling prophecy came true as I went down the hill on my bum. I didn't even give myself a chance to fall

down or fail. I got it over with, not allowing myself to experience the exhilaration of trying.

Contemplating this and becoming more comfortable with skiing, I tried to implant a positive “I-can-do-it” attitude. I did it gradually, stopping partway to decrease my fear of speed. I fell from time to time but I also made more hills with my skis in place. Best of all I allowed myself to enjoy the whole experience.

Focusing on the fun and the improvement of self rather than on the competition can keep you going. So many of us fail because we feel we aren’t good enough to compete, so we don’t exercise at all. If you have a positive attitude and find an activity that you enjoy, you will keep coming back.

Kevin was anxious every time he had to play baseball. His father always concentrated on winning. Eventually Kevin found excuses to stop playing and began watching more television. At least this was non-threatening. On the other hand, Tim’s father’s attitude towards fitness emphasized fun. He practised with his son so that he would feel more confident with the ball. The sport became an enjoyable event that kept him active, and Tim continued to include activity as part of his everyday activity as he got older.

Remember, it is not the quantity but the types of foods consumed that contribute to weight gain.

Myth 9: Exercise plus dieting increases metabolic rate

Physical activity increases the metabolic rate about 10 percent which may offset some of the 15 to 30 percent decrease in metabolic rate when dieting. However, the net decrease in metabolic rate is still 5 to 20 percent.^{17,18} The answer of course is to stop dieting. Rather, focus on “eating healthier” by gradually changing the type of foods you are consuming. There may not be a great difference in the total number of calories eaten but the type of calories will change, and this is important. By avoiding a marked drop in caloric intake your body will have a chance to adjust to the gradual change. Gradual is the key. Then the body won’t be fooled into dropping the metabolic rate to protect you from starvation since you are not drastically cutting calories but maintaining them at

YOU COUNT,
CALORIES
DON'T



"I can't go out for a walk today because I didn't bring my walking shoes and I only have 20 minutes to walk instead of the usual 45 minutes. Can't get my heart rate up, so it's not worth it."

It is not what you weigh that counts, but how much of the weight is fat.

close to the original level.

Initially when teaching the HUGS™ program, I noticed that clients dropped the fat content of their meals quickly when they realized that it was these calories that contributed to weight gain (more about this in Chapters 4 and 5). Many lost weight more quickly but did not give their systems a chance to adjust either physically (with regard to metabolic rate) or psychologically (change in taste) to the sudden change. If you do this the result is quicker weight loss which inevitably results in quicker weight gain.

Escape from the all-or-nothing mentality.

Myth 10: Exercise causes you to lose weight on the scale

Without activity, only 50 percent of weight lost is fat. Muscle cannot be stored in a dry form; it is stored with water. This makes muscle weigh more than fat.

Therefore, an increase in muscle mass may mean inches lost, but not necessarily weight lost. This is another indication of why the scales do not count.

An increase in muscle mass results in an increase in metabolic rate. Muscle tissue burns more calories at rest than fat does. Men, whose body composition consists of more muscle mass, burn more calories at rest. Frequent dieting can result in weight loss, including muscle mass. Unfortunately, once the weight is regained, it is mostly fat. Exercise provides an opportunity to rebuild muscle tissue that is vital to your health and well-being.

Myth 11: Sit-ups get rid of fat in the stomach area

Spot reducing tones, but it does not get rid of fat in the area you are working on. Results from new products that claim to do this are only temporary. The gut buster, toning clinics, and new gadgets to rid you of that paunch are not the answer.

These fads in the exercise field are comparable to fad diets. They work temporarily, and some may shed inches, but often at the expense of health. Poor techniques may result in back problems. Fat loss does

When doing sit-ups or any other type of mat exercise, breathe out as you are doing the work. With sit-ups, that means breathing out as you are coming up.



“IT'S BEAUTIFUL!
I DIDN'T NEED
RUNNERS AFTER ALL!”

not occur. These methods merely tone by making muscles more taut and helping with body alignment. They certainly do not improve your health or make you fitter.

Body builders work out with weights. They want to display muscle tone but since abdominal muscles, for example, are beneath fat they must get rid of the fat. The body builder or weight trainer may look fit but his endurance may be poor. In order for the weight trainer to lift weights, he needs the stamina that comes from improving heart-lung functions of the cardiovascular system. The weight lifter may be strong, but does he exude inner health?

Doing sit-ups helps with alignment and toning only by making muscles tighter. While strong abdominal muscles provide better support for the back, in order to get rid of the fat, some form of aerobic activity is necessary. Lifting weights can help to increase muscle mass which indirectly will increase metabolic rate due to the change in body composition. However, for sustained energy and fat loss to occur, aerobic activity is the answer. Aim for the balance in different types of activity to achieve the right combination for you!

Myth 12: Exercise takes time

If you make physical activity important enough in your life to give it priority, the regular activity will give you the added benefit of increased energy level and improved efficiency. By accomplishing tasks in less time, exercise actually gives you time back, rather than taking time away from your daily routine.

HOW TO MAKE AN EXERCISE PROGRAM WORK FOR YOU

If you exercise consistently and regularly at a lower intensity level you will develop a training effect. The result is an increased capacity to work with less effort due to the glycogen sparing effect of using more fat as the fuel source. If you do this you will not get tired as quickly because you preserve carbohydrate stores that supply you with continued energy.

However, it is important to keep up the exercise. *This adaptation or training effect will be lost within 3 or more days of inactivity.*¹⁹

Exercising at too high a level for your body to feel comfortable can result in heavier breathing or feeling

Exercise for energy, not exhaustion.
If you are tired after exercising and sore, you are exercising at too high a level.

Pay attention to your body. Do you feel your heart rate increasing, yet you can still carry on a conversation? This is the level that is right for you.



out of breath. This indicates that you are no longer using oxygen, and are switching over to anaerobic activity. This leads to a build-up of lactic acid causing muscle fatigue. There is absolutely no advantage to pushing yourself to work at this high level. Work on

changing those past negative experiences that you may have had with exercising into positive activities that are enjoyable, interesting, safe, and meaningful to you. To keep the activity you choose safe, it is important to work in a warm-up, aerobic, and cool-down routine, even for walking.

Purpose

- to stretch, loosen up, and relax muscles
- to prevent injury
- to stimulate circulation
- to prepare you physically and psychologically for the workout

Duration
5 - 10 min.

Component

WARM-UP

Warming up your body can be compared to warming up the engine of your car. If you turn on the ignition and don't take time to warm it up on a cold day, you may do some harm to the engine. Usually the car tells you to take a little longer to warm it up by stalling as you start to drive. If you do not take the time to warm up your body, you may harm it as well. Walking slowly, doing some stretches to prepare our muscles, or partaking in the activity of your choice at a slower pace warms up our body.

Aerobic Exercises

Warm-up

Cool-Down

Keep intensity up for 20 minutes of activity!

Gradually speed-up activity

Gradually slow down activity

Before Each Activity:

1. Walk, cycle, or march on a spot at a pace comfortable to you for about 5-10 minutes.
2. To prepare yourself and help protect yourself from injury, do the

After Each Activity:

1. To prevent the possibility of sore muscles later on, repeat the warm-up activity and exercises and add the
- COOL-OFF STRETCHES.

EASY WARM-UP EXERCISES.

• Hold each exercise / stretch for 15-20 seconds.

• Do each exercise / stretch 2 times for warm-up & 2 times for cool-off.

• Keep stretching movements slow and even, do not bounce

• To keep strain off back muscles, press hips forward in all exercises.

• The greatest gains in flexibility are possible during cool-down.

WARM - UP



• **Hip Flex**
tilt pelvis/hips forward, slightly drop by bending knee of back leg.



• **Reach Up**
knees slightly bent, reach up and slightly over.



• **Lunge**
lean hands on knee, leg bent 90 degrees, toes, heel, and knee of bent leg lined up.



• **Calf Stretch**
lean against wall or steady object: back leg extended, in line with body.



• **Achilles Stretch**
same as Calf Stretch except back leg slightly bent.



• **Hamstrings**
toes up, hands and weight on bent knee, lean forward slightly,



OR place leg on steady support with knee slightly bent, lean forward and reach from hips.



• **Thigh/Quads**
hold onto steady object, hold ankle of opposite leg back and up, slightly bend other leg.



OR sit on edge of chair, lower knee towards floor, and press it back.



• **BREATHE DEEP AND FEEL GOOD**

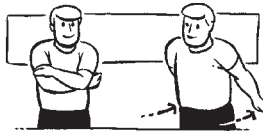
COOL-OFF



• **Reverse Hurdle**
rest sole of foot on thigh, other leg straight, bend from hips and reach forward.



• **Reach Down**
reach down back, gently press elbow down with other hand.



• **Hug**
hug yourself and swing arms comfortably back.



• **Relax**
gently pull knee towards chest.

I like the game of tennis. I used to go on the court and start to play vigorously almost right away, not having the patience to take the time to warm up. I ended up running for the ball a lot and was not systematic in my approach. These days, I warm up my muscles first by doing a few shoulder rolls, stretching out my calves, bouncing the ball against my racket, then rallying slowly at first. I am taking it slowly, gradually, and building up to a level that is comfortable for me.

My tennis game has improved because my body is more focused on what I am doing. Instead of rushing to get the ball and stopping cold, and in many cases missing it, I pace

myself better and have more rhythm to my steps. I also focus on the ball and what I am doing which helps improve my game. I

can now take this more methodical approach because I have the energy to think clearly. I am no longer trying to wear myself out in the first few minutes. Best of all, I enjoy tennis more as well as the process of gradually improving.

Purpose

- **improve heart-lung function (cardiovascular benefits)**

*Duration
maintain
intensity for
20 min.
of activity*

Component

AEROBIC PORTION

An aerobic activity is any exercise that increases the body's intake and use of oxygen. The exercise does this by increasing the heartbeat, within prudent limits, and improving the heart-lung action. The adequacy of your oxygen supply depends on how much you take in by breathing, and how efficiently the blood distributes it throughout the body. To be aerobic, exercise must be active and sustained, enough to cause you to breathe more deeply and more often. This will increase your heart rate, causing more efficient blood circulation.

In the target heart rate zone this is presented as the 65 to 70 percent range where maximum heart rate is calculated by using the following formula:

If you aim, with your aerobic exercise program, to be slightly to moderately out of breath, the benefits are that you will burn more fat as a fuel source, you will have the ability to carry on the activity for a longer period of time, and your cardiovascular system will work better to make you more fit as well.

Physical Activity for Fun

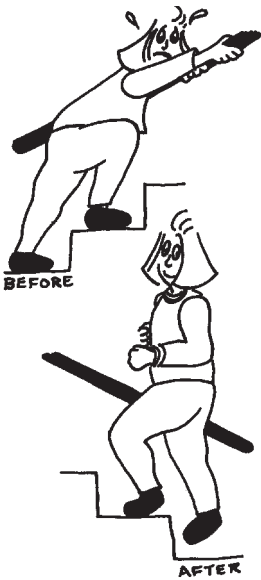
220 minus person's age.

For example, for a 45-year-old woman, the maximum heart rate is equal to $220 - 45 = 175$. 65% of $175 = 114$ beats/min. ($.65 \times 175$) = 19 beats/10 sec.

This gives the range of 65 percent of maximum heart rate at which this woman needs to be working when in the aerobic zone. This range will allow enjoyment of the activity while participating in it, and will allow the activity to be sustained in order to derive the benefits from it.

AGE	Target Heart Rate Zone
20	22 - 23 beats/10 sec.
30	20 - 22 beats/10 sec.
40	19 - 21 beats/10 sec.
50	18 - 20 beats/10 sec.
60	17 - 19 beats/10 sec.
70	16 - 18 beats/10 sec.

Your heart is a muscle. When you work it you strengthen it. With a strengthened heart, each contraction pumps more blood throughout the body thus making it more efficient. With efficiency, your heart does not have to work as hard to achieve the same effect. Compare the effort it takes to walk up 2 or 3 flights before and after 3 months of training. As you become more fit, your heart rate at rest in the morning will be lower because your heart will not have to work as hard to achieve the same effect.



The purpose of including target heart rate zones here is merely to familiarize you with them. You will see them in fitness clubs; however, *the HUGS™ program is related to fitness and life-style rather than to a number on the chart.* Learn to tune into working at the level where you feel your heart rate coming up, but are still able to carry on a conversation. This is the intensity for you. Aim for feeling energized rather than exhausted at the end of your fitness break. Including warm-ups and cool-downs, listening to your body, and participating in an activity that you enjoy will help you to achieve this goal.

Purpose

- to allow heart rate to gradually return to normal
- to stretch and relax all body muscles
- to reduce the chance of pain or injury to muscles
- to prevent the possibility of sore muscles later on

Duration
5 -10 min.

Component COOL-DOWN

Once again compare your body to a car. When you are driving quick-ly at 60 miles (100 km) per hour and you are coming to a traffic light, you slow down gradually rather than slam on the brake. The same applies to your body. You don't want to get going at full speed and then come to an abrupt stop.

The result will be fatigue and sore muscles the next day. After exercise your muscles are warm. It's a perfect time to stretch them out and increase your flexibility. Cooling down may involve working the same large muscle groups as you did for the warm-up, walking slowly, or partaking in the activity slowly. Going full speed to come home and flop in the chair is not enforcing a life-style change. If you make it fun and enjoyable, you will derive more energy from the activity. *Listen to your body!*



Any of these different activities will help you make fitness into a life-style change that you can enjoy for a lifetime.

CYCLING Work up a faster cycling rate and heart rate without the tension on the bike. Using the tension will work your leg muscles but you won't derive the aerobic benefit. Increasing the tension on the bicycle will also tire your legs more quickly so that you may not be able to sustain the activity over the required period of time.

GOLF Walking around the course rather than using the motorized cart is beneficial. Formerly, it was thought that this type of activity was "stop and go" and would not allow your heart rate to stay in the target heart rate zone for the required period of time to derive the cardiovascular benefit. But the aim of a more active life-style is achieved with this activity. It also creates a good balance in life-style.

ROWING This activity uses the arm muscles and is a good complement to walking. Be gradual and consistent rather than racing and then doing nothing. Pace yourself.

TENNIS The aerobic benefit can be derived from this activity if you pace yourself rather than undergoing the more fanatic “stop and go” method of playing tennis.

AEROBICS For maximum benefit find a fitness routine that incorporates life-style moves and fun. Be sure to include warm-up, aerobic, and cool-down in the routine. Many routines also include a mat portion that helps you with strength and flexibility. Ensure that the atmosphere allows you to work at the level at which you feel comfortable and that you do not come away feeling sore or stiff.

Safe techniques are crucial so that you do not injure your body. HUGS™ has a fitness video specifically geared to persons who are not used to regular activity and aimed at fun. These life-style moves can help you with your everyday life. The safe techniques are designed to reduce the chance of injury. For more help in this area, see the order form at the end of this book.

CROSS-COUNTRY SKIING This is an all-round activity. Warm up by doing a few stretches. Start slowly, then gradually work up to a faster pace that you can continue for a period of time. Gradually slow down during the last 5 to 10 minutes of skiing.

WALKING The best and safest exercise for people of any age is walking. It is

- safe and efficient,
- can be followed throughout life,
- strengthens bones and organs including the heart,
- improves many body functions especially blood circulation, digestion, and elimination (stimulates contractions of the intestine, helping to push food through),
- lubricates the joints, reducing the pain of arthritis,
- lowers high blood pressure and reduces risk of heart attack and stroke by improving cardiovascular function,
- helps to relieve pain from varicose veins,
- is the least likely activity to cause any muscle, joint, or bone injury, and
- has these other benefits of regular activity (sleep better, reduces tension and related headaches,

YOU COUNT,
CALORIES
DON'T

relieves depression, improves emotional health,

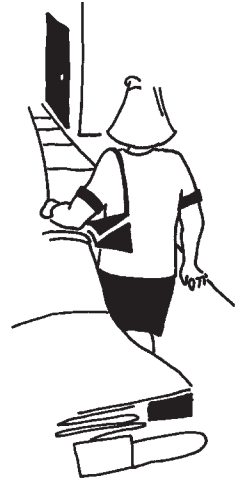


Use the stairs instead of an elevator or escalator where appropriate. At airports, hotels, shopping centers use the stairs or walk up or down the escalator. An interesting study found that merely climbing 5 flights of stairs or walking more than 5 city blocks daily reduced the incidence of heart attack by 25 percent.²⁰

sharpens the senses, increases mental alertness, helps maintain a youthful outlook).



As a life-style change, walking does not mean just going out for a walk every day or second day. It could also include taking every opportunity to walk during the day as well.



HELPFUL HINTS

Plan vacations to include your new life-style of increased activity. A more active life-style becomes a way of life; it is not simply something that you turn on and off. It may take some time to internalize it and make it part of your inner being, but eventually it will be as routine as brushing your teeth. You won't feel right if you don't get a walk in during the day.



Walking a mile burns 10 to 20 percent fewer calories than jogging a mile, though obviously it takes longer. If you walk briskly, you can obtain nearly the same aerobic benefits provided by running.

Park your car a little farther and walk the rest of the way. This will also save you from the congestion in the parking lot at quitting time.

**Physical
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for Fun**

When friends come over try going for a walk instead of engaging in conversation while sitting and eating. There is nothing like scenery to stimulate exciting conversation.

Physical activity allows you to think more clearly, be more efficient, have a happier disposition, and renew energy to allow you to accomplish more in less time. The result is that you have more free time to do the things you really want to do.

Remember to replace fluids lost through exercise. Physical exercise without fluid replacement enhances crystallization of both calcium oxalate and uric acid, largely as a result of reduced urine output and acid in the urine. If you do not drink enough fluids, your body protects you from becoming dehydrated by reducing the amount of fluid you excrete in the form of urine. The more concentrated urine, noticeable by its darker color, increases the chance of formation of kidney stones. Increase fluid intake during physical activity to compensate for sweat loss.²¹

If you lose a few pounds of weight after exercising, this is water loss in the form of sweat. Replenish your fluid intake to bring you back to your original weight prior to exercise. Another indication of rehydration is the lighter color of your urine. Keep in mind that taking vitamin pills may color your urine darker so that you may mistake it for a state of dehydration.

GETTING HOOKED ON ACTIVITY

Computers and modern technology make your life easier and you are less likely to have an active lifestyle. Children are growing up using less and less of their muscle capacity. Playing ball or running around are being replaced by sitting comfortably on a tire and being pulled by a speedboat, playing computer games, or working radio-controlled machines or airplanes.

If you continue to do this you will lose your energy

and vitality. How can you break this cycle and increase your leisure time physical activity? You could plan more active holidays and get involved in more sports.

Many of us live a fast-paced life-style. We work out because it's good for us, not because we enjoy it. Since we work intensely we tend to work out intensely. It's difficult to enjoy physical activity with this approach. On the other hand, many people become addicted to exercise and suffer from withdrawal pains when they are deprived. They exhibit the same dependence on exercise as dieters are dependent on diets. These individuals exercise as an end unto itself rather than a means to physical fitness. Some of them cannot stop exercising, even when their muscles and joints have become seriously injured. The symptoms of exercise addicts are as follows:

- needing to run or exercise daily to maintain a basic level of functioning,
- expressing minor withdrawal symptoms, such as irritability, guilt, or anxiety, when unable to exercise for a day or two; experiencing major withdrawal symptoms, such as depression, loss of self-esteem, or lack of interest in other activities when unable to exercise for longer periods of time,
- exercising even against medical advice,
- risking physical injury,
- organizing life around exercise,
- putting exercise above everything else, including job or relationships, and
- striving for greater achievement.

Intense commitment to exercise as a means in itself cannot have long-term benefit. You cannot hurry to be fit or stop when you reach your goal. Exercising for the wrong reason won't help you to adopt exercise permanently into your life-style.

The good news is that recent studies show that even mild physical activity is helpful in counteracting the effects of an unhealthy way of eating or in lowering cholesterol and high blood pressure. So if you have

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been laughing at your neighbors as they garden or rake leaves (life-style moves) while you are riding your stationary bike that goes nowhere, take a second look at who is getting hooked on an active life-style. Observe the enjoyment they get from living a more active life-style.

In the past 20 years the fitness movement has been focusing too much on performance that stresses the importance of doing more. When you change your focus to overall fitness and well-being and redefine success, you will realize that you can improve your health by doing those simple chores around the house or even taking a leisurely stroll.

Regular physical activity protects you against heart disease. Even if you are not working out to a point that brings your heart rate up to the target heart rate, you will still benefit.

Ellen's speed-walking leaves her husband Ron tired when he tries to keep up, causing him to lose interest in exercising. At the next outing, Ron, who weighs 330 pounds, was determined to work at his own level. Now he feels good after walking instead of ending up "pooped" and with sore legs. "This is for life," he says to Ellen, "and it will take time for me to comfortably work up to your level, so go on ahead of me."

Remember that exercising above your comfort level in an effort to get fit too quickly will make you feel exhausted and will make it difficult for you to transfer from an inactive to active state. Develop a positive rather than a negative association with activity and the rest will follow.

**Find an activity that you enjoy.
Work at your own level. Increase the amount of activity time gradually.
Stick with it.**

Regularity is the key for exercise and if you don't enjoy the type or intensity level of the activity then the activity may be short-lived. Your memory of the activity could be one of enjoyment.

When you stop exercising, you lose the beneficial effects of exercise. This process is known as detraining. How quickly this occurs depends on how fit you are and how long you have been exercising or how long you have been sedentary.

**YOU COUNT,
CALORIES
DON'T**

In a study done at Washington University School of Medicine in St. Louis, runners, cyclists, and swimmers who had worked out regularly and vigorously for years abstained from exercise. After 12 weeks they lost more than half their gains in aerobic conditioning compared to a sedentary control group who hadn't exercised regularly for at least 8 years.

In another study, sedentary people undertook an 8-week cycling regimen and then stopped for 8 weeks. The result was that all their aerobic gains were lost. They returned to their pretraining fitness levels. Cutting back on exercise is less devastating than stopping exercise. Studies show that these people are often able to avoid or postpone the effects of detraining.²²

Life-style activities (walking or climbing stairs) that are done regularly can help you become fit while enjoying it.

A recent report in the *Journal of the American Medical Association* studied more than 13,000 people for an average of 8 years to analyze the effects of fitness on longevity. Five groups of people were divided according to fitness levels. The least-fit group who were also the most sedentary had the highest mor-

So why not take opportunities to use the stairs or go for a walk? Build up the strength of your heart and enhance your level of active living.

As you gradually make modest improvements in aerobic fitness, the energy expended will increase the high density lipoprotein (HDL) that will protect you against heart disease. Here is an example of daily leisure time activities that can provide you with the satisfaction of getting your work done, add enjoyment to your life, and keep you energized and in good health.

MONDAY	Walk	40 minutes
	Stairs at work	10 minutes
TUESDAY	Stairs at work	10 minutes
WEDNESDAY	Walk	30 minutes
	Rake lawn	40 minutes
	Stairs at work	5 minutes
THURSDAY	Stairs at work	10 minutes
FRIDAY	Walk	60 minutes
	Stairs at work	10 minutes
SATURDAY	Mow yard	60 minutes
	Dancing	60 minutes
SUNDAY	Walk with family	60 minutes

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tality rates by far. The big surprise was that the death rate dropped most sharply in the second least-fit group, by 60 percent for men and 48 percent for women.²³

Researchers estimated that a person need only walk briskly for 30 to 60 minutes everyday to be in this group. The 3 most fit groups including people who jogged up to 40 miles a week, derived relatively small additional benefits from their exercise. Why kill yourself to maintain a grueling schedule when in fact you don't have to be a marathoner to greatly reduce your risks of heart or other disease. Modest increases in lower intensity activities such as brisk walking will probably add years to your life.

The good news is that all that is needed to significantly prolong life is a moderate level of activity. This fact applies regardless of the presence of other risk factors such as cholesterol levels, blood pressure, body composition, cigarette smoking, or family medical history. According to Dr. Steven Blair, one of the physicians conducting the study, the men were better off to have high cholesterol and be fit, than to have low cholesterol and be in a low fitness category.

Another study of 17,000 Harvard alumni found that exercise levels to use 2000 calories a week through day-to-day activities such as walking, stair climbing, and light sports such as golf, afforded significant protection from heart disease.²⁴ This maximum protective effect of a 64 percent reduction in risk of heart disease was reached by including leisure time physical activities as seen in the table (p94). It is interesting to note that if you exceed 2000 calories per week in leisure time physical activities you gain little further benefit; in fact, you increase the risk of orthopedic injury.

Boredom can make you feel lazy and tricks you into thinking you're physically tired. It catches all of us if we don't watch out, so fight back by finding an activity you really enjoy and stick with it.

If you ever tried an activity and you didn't care for it,

try it again with your new attitude towards activity. When I was first introduced to golf, I went to the driving range, took a few lessons, and tried my hand at the golf course. But I just couldn't get interested in trying to shoot this small ball into the hole. So I gave up and never considered trying again.

One day, a friend took me for lunch overlooking a beautiful golf course. It was lovely, but I never considered trying golf again until she presented me with a new perspective. "Golf is an excuse to walk in a really nice park," she said. "We don't even keep score, Linda."

We often feel that we have to be good at an activity in order to enjoy it. Yet the very act of participating in an invigorating, natural, and stimulating environment can be enjoyable in itself.

One weekend my husband, Mitchell and I packed up the canoe to go on a spontaneous adventure to a lake. We arrived, went canoeing for a couple of hours, and then Mitchell decided to move on. "Why don't we stay here?" I asked. "After all, isn't one lake similar to the next?"

"Linda," he said, "we are not in a cowboy movie where the same scenes are repeated over and over again. Look around you and observe." So I did, and he was right.

We went canoeing to 3 different lakes that weekend and had 3 totally different experiences. We felt revitalized when we returned home. What a process of self-discovery!

So you see, you may regress from time to time in order to grow. Tune into your surroundings and allow yourself to relax. Observe those around you who are tuned into nature and its wonders and who enjoy the internal benefits of active living.

The next time you go to a social event where there is dancing, try staying on the dance floor at least 20 minutes and just keep dancing. Feel the music and enjoy yourself!