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Human Performance Laboratory Center for Lifestyle Enhancement

Volume II, Number 2

Spring, 1982

Newsletter

Listening to your body signals...

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Listening!

You might think it peculiar to be writing about listening in a fitness newsletter, but listening to our body's signals is an important component of a healthy lifestyle. Our bodies provide a constant flow of information to our brain and nervous system about its health and function. Thank heavens much of this information never reaches our cerebral cortex (the thinking part of our brain) or we would be paralyzed by the millions of impulses received each minute and by the decisions we would be required to make. For example, we are relieved of making decisions about when and how deeply to breathe and how fast to make our heart beat or when to contract our stomach to assist in digestion. Our nervous system is arranged in such a way that only the messages requiring rather sophisticated thought processes reach the cortex or our consciousness. These are the signals that are important to "hear."

The brain, being the miraculous organ that it is, has the ability to receive and react to these messages. At the same time, it also has the capacity to override or ignore these messages. This is often where an active individual finds trouble. For example, he/she may notice a twinge of pain in their knee and tell themselves that it is of no significance, put it out of their mind and resume training with no further consideration. A few days later another reminder is received telling them that the knee discomfort is more pronounced. Again it is disregarded and the training goes on until a severe injury is sustained which may require a long rehabilitation period.

This is but one example of why it is important to carefully evaluate bodily signals and to react appropriately as early as possible. Had the individual, in our example, taken a day's rest or shifted to another activity, such as swimming for a few days, the problem most likely would have taken care of itself. The body has the remarkable ability to heal itself if given the opportunity. It is only when we treat it unreasonably; by failing to give it the time it needs for repairs, that it fails us.

Another example of failing to listen to the body's signals is when we try to hurry our training program along faster than we should. It is important for us to understand the basic physiological principle often referred to as the "overload principle." It states that in order to become fitter, we must work harder than we previously have.

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(Listening continued)
 The principle also states that between exercise sessions the body must have an opportunity for recovery (rest). It's this second part that too many of us forget to include in our training programs. It makes good sense for each of us to train ourselves with alternative periods of work and recovery. Many athletes have been able to do this by training hard on one day and then coming back the next day with an easier workout. This hard-easy routine provides the stimulus needed for improved levels of fitness as well as the recovery period the body needs to regain its strength. Many of you are doing this by incorporating an every other day training routine.

In conclusion, learn to respect your own judgment about your body's well being. When it comes to listening to our bodies, we are the experts. No one can do it quite as well. So, it is important for each of us to gain confidence in our ability to listen, consider and react to our body's messages.

NOTICE

THE LAST DAY FOR TESTING IS MAY 21, 1982.
 THE LAB WILL BE CLOSED FOR THE SUMMER. TESTING WILL BEGIN IN THE FALL.
 BUT DON'T STOP EXERCISING!!

\$\$ FUND RAISING \$\$

We have been greatly encouraged with your response to our fund raising efforts. While we haven't broken any records yet, we have the ball rolling. Our campaign has currently raised \$1,340.00. We are hopeful that many of you will be able to participate in the campaign later in the year. Please remember that these gifts are tax deductible and any gift to the University Foundation can be designated for the Adult Fitness Program.

In one case, we found that a person made a gift to the Foundation in our name, but for some reason it was not channeled to our program. So, in making your contributions, please clearly specify that the gift is intended to be used in the adult fitness program.

We wish to thank Bob Jennings for his generous contributions and involvement as our fund-raising chairperson.

FAMILY INVOLVEMENT

We are always gratified to have one of our members inform us of how they have been able to use information from our program in helping other family members become better informed about health. This is not always easy to do because of the fine line that exists, between helping and nagging. Many who have been successful in bringing a greater awareness of health and fitness into their families have done so through patience (waiting for the appropriate time), love and understanding. While this may seem to be a slow and complicated process, we believe it is the only way to achieve positive results. Those who take a more aggressive approach often cause greater family frustration and discontent than it is worth. The secret, of course, is to make the individual(s) want to participate rather than coaxing them into something they perceive to be distasteful. All of our efforts must be positive and pleasant with no energies wasted on negative or degrading approaches. The attitude that every positive change is important, no matter how small or insignificant it may be, is essential for successful results. For example, simply getting a family member to walk or work in the garden with you on a Sunday afternoon, rather than spending it in front of the television set is a positive step. These times together also provide greater opportunities for more wholesome relationships. One last ingredient; enrich your family activities by making them joyful and pleasant.



Noon fitness

by sue strand

Our main purpose for offering the noon exercise program was to allow more people (parents, early workers, and "late" sleepers) the opportunity to join us at a more convenient time.

Interest in the noon program has been excellent with approximately 55 members registering for aerobic dance, jogging and walking, aerobic water exercise, lap swimming and stationary bicycling. Daily attendance for these activities has been very good with many "regulars" providing tremendous group spirit and support. Throughout the past weeks, many people have developed a greater confidence in themselves and have formed new friendships because of the positive group interaction and support they have received. It is very rewarding to witness so many people striving in an enjoyable way toward very positive, individual goals.

Many members, such as John Herold & Jean Aichele are spending their lunch hour with us. They are proof that if a person has a real desire to do something (exercise) they can and will "find" the time for it. Besides participating in some good exercise and socializing with other group members, the noon program has provided a great energy boost, making the

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IS
PHYSICAL
FITNESS
GOOD
BUSINESS?

Quiz Time!! OK, name at least three benefits you would experience from a program of regular exercise. Time's up! Does your list include the following?

- increased cardiovascular fitness
- improved body composition (lower body fat percentage, weight control)
- overall feeling of health and well-being

Question 2. (Relax, there are only two questions!) How are these personal benefits exemplified "on the job?"

- a. decrease in absenteeism
- b. decrease in industrial accidents
- c. increase in work productivity
- d. reduced employee turnover rate
- e. all of the above

You guessed it! The correct-answer is "e." A study by the Prudential Life Insurance Company found that for their employees who participated in a regular exercise program a minimum of 20 minutes, 3 times per week, the number of disability days averaged 3.5 days, while non-exercising staff averaged 8.6 disability days. Interestingly, those employees classified in a high fitness category had no disability days. Quite a difference! Corporations are thus beginning to recognize the economic advantages of physically fit employees. The dollars that can be saved through reduced absenteeism and turnover rates, and increased worker productivity are obvious. In addition, the physically fit employee enjoys a much more positive attitude toward work. Thus, both employer and employee stand to gain from regular exercise. Yes, physical fitness is good business!

By Bev Oehrlein (Graduate Student)

(Noon Fitness continued)

remainder of their work day a little easier and more productive.

Many people have seen improvements in their weight, body toning, body coordination, endurance, and the ability to "listen" to their body. For many, their original goal was to lose a lot of weight, but the end results have proved to be much greater. For example, members had to monitor their heart rate to know how hard they were working, but now after weeks of exercise, most people know at what level they are working and when to increase or decrease their efforts. They have learned to "listen" to every part of their body through various signals, i.e. pain, fatigue, which may indicate a little "T.L.C." is necessary.

Exercise sessions have been made less "painful" by a very understanding staff. We have been fortunate to have the services of some very talented and experienced individuals who have lead our exercise groups for the past ten weeks. In the "land lubber" classes, Mary Kimble has kept everybody high stepping in aerobic dance with the assistance of Nancy Henderson. Also Tina Thorson has given many of you joggers and walkers good company down the "home stretch." Our new aquatics program (aerobic water exercising and lap swimming) has been coordinated by Juli Peterson with the assistance of Julie Andreotti, Kathy Kimble and Michele Reberg

who are all certified water safety instructors.

I would like to thank all of you who participated in and supported the noon program. It has been a great learning opportunity for me as well as a chance to meet many wonderful people in the community.

If there is enough interest, the noon program may be offered again next fall.

aerobics · aquatics · aerobic

DEPRESSION



Depression is something each of us must deal with from time to time in our lives. There is some evidence that physical activity reduces its effects and makes us less likely to have these unpleasant experiences. We've asked Dr. Tony Tabor to write a few paragraphs on this topic...

DEPRESSION: CHALLENGE/OPPORTUNITY?

Depression - undoubtedly one of the more common symptoms of stress whether an "off day", "baby blues", a morning after hangover or an uneasy foreboding of something disastrous about to happen - all have the unsettling feeling of helplessness and even sense of doom.

Depression is much more than simply feeling bad - or feeling sad. It's losing sleep, developing a poor appetite, a general loss of interests, etc. The causes and varieties vary from simple, situational crises to more complex self-directed hostility (guilt feeling) and sense of ennui and loss of direction and purpose. It may be acute or chronic situational or seemingly unrelated to the ebb and flow of life's everyday problems.

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(Depression continued)

Whatever its source, depression can provide the impetus for change and new opportunity, perhaps a time out for re-evaluation of all areas of well-being.

As much as mental health proponents may know about depression's response to treatment, there is much that remains unknown. For example, we know physical exercise such as jogging has been found to have had significant effects in providing relief from depression. There are pros and cons to whether mood elevating chemicals called endomorphins are released in the brain when we exercise vigorously and whether it is these chemicals, similar to morphine, that produce the "runner's high". What is never challenged is that we do feel better when we exercise regularly and perhaps that is "the bottom line", however it may be produced!



Keep Your FIRE going

In a sense the body is a type of furnace. Fuel is added to feed the internal fire creating life-sustaining energy. The "fuel" is protein, carbohydrates and fats. The "fire" is metabolism--an integrated network of chemical reactions by which cells produce energy for work as well as synthesize the body's building blocks.

Each of us has a minimum level of energy needed for our bodily functions to continue at rest. Termed the basal metabolic rate (BMR), it can be determined in the laboratory by measuring oxygen consumption. For adults, the BMR ranges from 50-80 calories per hour or approximately 1200-2000 calories per day.

Several factors are known to affect BMR. Body size, lean body mass, age, sex, food intake/digestion, temperature and thyroid hormone are examples. Interestingly, calorie restriction reduces BMR 15-30%. During semi-starvation, the body slows down and becomes more efficient at extracting energy from ingested or stored sources of fuel. Because of this, individuals who attempt to lose weight by dieting alone often get discouraged when they hit a "plateau" and can't seem to shed additional pounds. Don't lose heart--there is a happier side! As you know, exercise expends calories while the activity is being performed. However, it is also theorized that physical activity increases BMR, depending on the type, duration and intensity of the exercise. If weight loss is your goal, a combined program of diet-modification and exercise is best. Not only will you expend calories while you exercise, but as a bonus, you may continue to burn extra calories even after you have stopped. So... it is to your benefit to keep your "fire" going!

By Deb Krippner
Graduate Student

Thought for the Day

Did you know that for a 150-pound person it takes 5 minutes of running, 19 minutes of walking or 78 minutes of reclining to burn the number of calories (101) in one large apple? For a piece of apple pie having 377 calories, the numbers of minutes are 19, 73, and 290!