WALK AWAY AND FEEL BETTER.

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Man is made to walk and not to sit and talk! Like any other aerobic exercise viz: swimming, cycling, and dancing walking gives the body an opportunity to get more oxygen, in addition to many other benefits. The skin and the muscles get relatively more oxygen, making them healthier. Enhanced energy out put of the body along with increased physical endurance are the added benefits of regular walking. Most useful, but the least appreciated, is the good effect of walking on the mental wellbeing which is being felt more and more with new knowledge coming up in this field. It is probable that many degenerative diseases like heart diseases and cancer could also be slowed if not totally prevented by this simple, yet effective daily routine.

Walking is the safest mode of exercise for any body at any age even those with some advanced diseases. One could walk at one's own pace and enjoy the bounties of Nature, in addition. Other than spending more calories, speed walking or power walking are no better than simple walking. Walking could be done in any weather at any place without the help of other aids. Most people could use it for happiness and health most of the time. By stimulating the lungs and in turn the heart; walking keeps one feeling a lot better. This sense of wellbeing is the most important dividend that one gets from walking and the palpable one at that.

Years ago, when I was a registrar at the Middlesex Hospital in London we used to do a study, under the able guidance of Dr. Walter Somerville, on the possibility of regular walking opening up clogged coronary arteries in the heart, in patients with established coronary heart disease. This is now confirmed by other studies as well. One other great advantage is for smokers. Smoking and coronary disease are a deadly combination. In this dangerous group of men regular walking helps reduce the effect of carbon monoxide on the body by increasing the oxygen uptake in the lungs. Another great advantage of walking is that the rigid blood vessels might soften a bit to prevent their rupture causing strokes in some patients.

Patients with any one of the above diseases could help their drugs or surgical operations by added walking regularly. Blood pressures come down gradually in those who regularly walk and I think that borderline and mild hypertensives should first try a regular walking regime before embarking on life long drug therapy; the latter is not free from side effects which, at times, could be worse than the disease.

Weight reduction is good for all those who are overweight. In fact, walking regularly reduces one's appetite, contrary to the popular belief, by stimulating the brain centre that controls appetite! To reduce weight one must have a two pronged attack. Walking must be coupled with reduced total food intake. One should also take food more frequently but small in quantity. There are a few obese people who can not reduce their weight. Even those unfortunate people get benefit by regular walking as recent studies have revealed that it is not the body weight that eventually determines one's long term health prospect but the level of physical activity. Active obese people have better health expectancy compared to the thin people who are inactive.

To lose one pound of weight one has to lose about 3500 calories. Walking at one's own pace spends about 250-300 calories per hour. About ten hours walk would make you lose one pound. It is a very good idea if you could lose a pound in ten days. One has to be consistent though. After attaining normal body weight one could eat a bit more so that one does not become underweight. Many a time walking makes one reshape oneself even if the weight does not significantly change. Body fat gets redistributed to give you a better shape although to get those muscles of body builders one has to go for special body shaping exercises!

One's genes would determine one's longevity. Regular exercise would add life to one's years although it may not add years to one's life. Every decade after the age of 30 years, the heart's capacity to work goes down by 5-8% and the blood pressure goes up by 5-6%. Body also loses muscle mass at the rate of 3-5%. Blood vessels lose their elasticity and the lungs their maximum breathing capacity. The joints lose their normal agility. Lack of regular exercise would enhance these processes and make them a bit faster. When one does not use either his body or his brain they deteriorate very fast. "Use it or lose it" is a good adage here. While mental exercise is very necessary for keeping the brain active to postpone senility, physical activity helps to keep senility at bay in addition.

Doctor Sherwin Nuland, Professor of Clinical Surgery at the Yale University, started losing his muscle mass after he quit active operating. Regular exercise got him his muscle mass back again. He talks about all these in his beautiful new book *Wisdom of the Body*. Irrespective of one's age taking to regular walking would make that significant difference in how one feels and also in postponing senility and physical debility.

If one has never walked or exercised at all it is better to gradually start walking and attain the maximum level after a couple of weeks of gradually increasing walking levels. Although daily walking is good, alternate days are not a bad idea if one can not do it daily. Minimum of fifteen minutes walk at a time is necessary to get any benefit. One could walk for an hour a day, but if pressed for time half an hour twice daily is as good or thrice a day is also good enough. When you walk slowly you cover two miles in an hour, medium pace three miles an hour and fast walking four miles an hour. What is important is the time one spends walking rather than the speed. Enjoy the bounties of Nature while walking.

Such regular walks are very good for mental health. Depression, a common modern disease, is relatively very rare in those who regularly exercise. I find good company for walking helps in addition. Walking alone may be, at times, quite boring unless one is an introvert.

One should remember not to walk after a meal and in very cold weather against cold wind. Even hot sun is a taboo. Never push yourself too much while walking. The key word is enjoy what you do.

What about jogging? Jogging is not such a good exercise, but could even be dangerous. In a very good editorial in the *American Heart Journal* years ago, the then editor and a famous American cardiologist, George Burch, cautioned people about that "*run to death."* However, the multi-billion jogging shoe and outfit industry advertises jogging so much that common man falls a prey to it. It is a pity that the truth does not percolate to that level. Many studies have now shown the futility of jogging. The same good effects could be obtained by walking without the side effects of jogging.

What is this fitness fad all about? Lawrence Moorehouse, the then chief of exercise physiology at the NASA, in his book *Total Fitness* has a chapter captioned "Fit for What?" wherein he explains clearly that fitness and heath are not synonymous. If one runs

everyday he is fit to run. If one plays tennis he is fit to play tennis. Physical fitness is a different thing altogether. Physical fitness of the highest order could be maintained by simple daily walking.

The dangers of jogging are that if one were motivated to jog a particular distance or time, one would do it even if the body can not afford it. Consequently the heart muscle cells get fatigued. When they are further goaded to work with lot of cyclic AMP inside them they, at times, die and are replaced by only fibrous tissue. Unlike in any other organ of the body there is no regular apoptosis (natural cell death) occurring in the heart muscles to be replaced by new cells. As such each cardiac cell that dies is replaced only by fibrous tissue. Habitual joggers have more fibrous tissue compared to people who did not jog.

Sudden death is another danger of jogging, although rare. The motivation to jog is such in some fanatics that they finish their job irrespective of any body signal coming from the inability of the body to cope up with that amount of running. The two messages that come are breathlessness and, at times, pain in the chest, mild though. When the motivation stimulates the brain so much that all other impulses coming in are suppressed by substrate competition there. Eventually the compensatory phase of heart's performance may be outdone and the heart might stop. One of the causes of death during the Bhopal gas tragedy was discovered to be this kind of running away from the gas in fear and ignoring the distress signals from the heart of breathlessness.

The moral of the story is that one should not push any physical activity to the brink. Stop short of extreme effort. If one does not feel fine five minutes after stopping the exercise, it suggests that one has done too much or one is not fit to do what he has done.

The bottom line is that one should exercise regularly but never overdo it. The benefit of exercise on the human system does not follow the linear relationship, as in any other field of human physiology. No dynamic system in the Universe follows the linear mathematical rules. More the merrier does not hold good there.

Walk daily at your own pace for an hour; but do not panic if you can not do for a day or two due to some other pressing problem. Worry is bad for the human system. Enjoy walking and enjoy good health as long as possible.