

# STAY FIT AT THE LATER AGES

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## Abstract:

It doesn't depend on of you are young or old, man or woman, you will get benefits of some regular exercises. By continueing to stay active at the later ages, you would be longer on ages and remain on well health. Regular exercise is the best available prevention medicine. Exercises help maintaining normal functions of the joints. Remember that it needs longer time for the muscles to recover from practices when you get older, also some injuries couldn't be healed soonly as before, so *that stretching is vital*.

As for the instances of the exercise programs for the later ages: (1) aerobic light training such as jogging, aerobic gym with light intensity-medium, swimming, bicycling, (2) weighting light exercise such as fitness practices: light-medium intensity, repeating 10-12 times, 3-4 times a week, weighting between 50%-65% of maximum weight, (3) exercises are practiced at least 30-60 minutes of each time, with the interval of 3-4 times a week at ideal.

Soon or later you will get old. That will be the period on which your strength and stamina will be decreasing. Unfortunately, many people who ignore this at all, supposing that being old is identically being weak, and so that you make that paradigm as the reason to be much lazy, starting to be lazy at the later age, all day long sitting on recliner, busy wasting time at home with the grand children, supposing that all of those are the gifts in the later ages. Since, balancing our later ages by keeping doing sports activities, because being healthy is one of some investments in the later ages.

Keywords: Fit, Later Ages

## INTRODUCTION

With the improvement of knowledge and technology and the success of the development especially on the education and health sector so that it causes the decreasing of mortality number, as we see that the hoping age of life increases. If this increase number of later ages didn't get some steps to keep physical fitness still hence it will be family's responsibility and will be a burden if physical fitness much more worsening.

This physical fitness has the law of reversibility, basically, men have a high adaptability, both on the practical and mental stress. The basic of the exercise which have to be considered is the reversible, it defines the human's organ functions which has natural characteristic, that will be improved if it gets practical stresses or contrary effected if it stops the exercise activities (*Mansur 1996:34*).

So that the function of body's organs keep on optimal condition, we need to maintain the body exercise regularly and measuredly on the limit of living men. Stopping practices in relatively long time period, the function of human organ gradually continueing decrease. this condition will cause troubles on the organs' functions and when the time has come it will influence the productivity and enlarge the health treatments' costs.

Along with the age added or the existence of aging process, hence the physical fitness will experience decrease, it is necessary to consider how to behave so that physical fitness still being kept on the later ages, therefore health and prosperity of aged people must be maintained. So that we have to know first what the definition of physical fitness is, the benefit of exercising, aging process and aged men and also kind of sports that suit for aged people.

It doesn't depend on of you are young or old, man or woman, you will get benefits of some regular exercises. By continueing to stay active at the later ages, you would be longer on ages and remain on well health. Regular exercise is the best available prevention medicine. Exercises help maintaining normal functions of the joints. Remember that it needs longer time for the muscles to recover from practices when you get older, also some injuries couldn't be healed soonly as before, *so that stretching is vital*.

## **LATER AGES**

Later age is a condition that must be experienced by all persons who are blessed long age, the process can not be avoided, but people can do some effort to slowing it. Being old is also cannot be prevented. Generally, all people want to have a long life.

That is one of the causes of the growing beauty saloons and fitness centers offer hopes against destiny. But, however, men may manipulate body's performs so that they're looked younger than their ages. Therefore, each person should prepare their selves to welcome the later ages that will come, tomorrow or the days after.

*Amrun Bustaman* (2003: 272) explains that a person can be called as an old man/woman if his/her age passed 60. Meanwhile later ages can be said as potential ones if they can do jobs and activities that produce stuffs or services.

The terms for person that his/her age has been old age are not classified yet. There some called is as *manusia usia lanjut* (Manula), *manusia lanjut usia* (Lansia), some called it *golongan lanjut umur* (Glamur), *usia lanjut* (Usila), even if in UK people use to call it with the term *senior* (*Infokes.com*, 2007: 1). This aging process will be different on each person. Usually a person is said old after the aging signs occur in the age of 30–35 years old. However there are people that looked so old on 40. Contrarily, there are some that still looked young and gallant and tough also on the age of 60-70 years old.

Actually, on what age a person can be said as an old person? The answer, there are no certain rules. Some experts differentiate it into 2 kinds of ages, they are, *chronologic* and *biologic* ages.

*Chronologic* age is the age achieved by someone who his/her life counted by almanac year or a calendar. In Indonesia the that limitation is not exist already, but with the retirement age of 55 year, it means the age after 55 might be included as old age group. However, there are others who mention 60 year and after or 65 year and after are included as old age group.

*Biologic* age is the real age. The networks maturation is usually being the index. This can explain, why people who at the same *chronologic* ages have different physically and mental appearance. For younger look, this *biologic* process can be prevented.

## **BODY ORGANS' FUNCTIONAL DECREASEMENT**

If the aging process starts to run, inside the body it happens structural changes that are a degenerative process. As the instance cells are minimizing or the composition of cells of new fasten networks forming vanished by the effects of the appearance of body organs' functional decreasement. Some body organs' functional decreasements as mentioned by *Kartari in Infokes.com* (2007: 1-2), as well as followed:

**Skin:** Skin changes more flimsy, dry, collapsible, and inelastic. Thereby, skin function as the environmental temperature insulator and the shield of germs' entrance is disturbed.

**Hair:** Hair, its color is whitening, dry, and not gleams. This is related to skin degenerative changes.

**Muscles:** The number of muscular cells is decreasing, atrophy size, while the numbers of fastening networks are increasing, overall muscular volume is minimizing, its function is decreasing and its strength is reduced.

**Heart and venous:** In aged human the power of heart's pumping machine reduces. Various specific important venous in heart and brain experience inertia. Intimate coat is being rough because of smoking, hypertension, diabetic mellitus, high cholesterol rate, and etc facilitating the appearance of blood and thrombosis coating.

**Bones:** In aging process the calcify (calcium) rate in bones decreases, the effect is bones becomes weak (osteoporosis) and breakable.

**Sex:** sex hormone production on male and female decreases by the age adding.

## **PHYSICAL FITNESS**

When doing their daily activities men need good stamina, in this occasion it can be said as good physical fitness. The time men do their activities are; (1) Morning, Preparing to go to work, (2) Noon, active shift, (3) afternoon, extra activities, such as doing fitness, aerobic gym, sport practice, and etc, (4) Evening, Resting hours. Based on the daily activities schedule generally in the society in which to be able doing routine

schedule of each day we need a good fitness so that all of our activities agenda can be well done without exhausted complaining.

Along with the suggestion of writers above, *Howard, Perry* (1987 : 77) revealed that in the largest words' definition, the physical fitness is determined by your own ability to face stresses from the neighborhoods toward yourself as well as physical and mental. Based on the same consideration the term "fit and well" indirectly contents of unattacked by diseases.

The physiologically definition of physical fitness is one's ability to do daily works efficiently without being over exhausted so that he/she still can enjoy his/her rest times. Of next definition by *Fox* (1987: 6) where physical fitness is viewed from the physiological aspect is the functional capacity to make life's quality better. This is included in the context of total and physical fitness itself which is one of the total fitness' parts. Same sound expressed by *Mangi* (1987 : 11) in which physiologically physical fitness one's capacity to do works with minimum efforts means the capacity to adapt towards exhausting training and soon recovering of that exhaustion.

*Sadoso Sumosardjuno* (1992: 19) suggested that physical fitness is one's ability to finish their daily activities easily without feeling over tired, and still has his/her resting time and for the sudden needs. Same suggestion confirmed by *Giam and The* (1993 : 8), fitness is the ability to do works energicy and full of alertness without being unnecessarily exhausted and and the energy is available enough, so that he/she still can enjoy his/her rest times and overcoming sudden unexpected conditions.

*Djoko Pekik I* (2000: 2) suggested that generally physical fitness is the fitness of the physic, that is; one's ability to do daily works efficiently without being over exhausted so that he/she still can enjoy his/her rest times. By that definition fitness is divided into 3 groups:

- 1) Static fitness is one's condition freely of diseases and immobility or as called healthy.
- 2) Dynamic fitness is one's ability to do daily works efficiently which don't need special skills, such as walking, running, jumping, and lifting.

- 3) Motoric fitness is one's ability to do daily works efficiently claiming some special skills.

In physical fitness there are components divided into 2 groups:

1. Physical fitness related to health

Physical fitness related to health involves five basic components related each other;

- a) Cardiovascular endurance

This components draw ability and willingness to do works on aerobic condition, it means the ability and willingness of breathing blood circulation system, take and circulate needed oxygen supply. In the later ages this component is very important to be considered remembering there are a lot of degenerative diseases attacks on the system to old people.

- b) Muscular strength

Muscular strength often used in the daily life, especially on the joints detaining the weight of the body. When one is getting older, the muscular strength is lessening.

- c) Muscular endurance

Muscular endurance is the ability and willingness to do repeated works without feeling exhausted.

- d) Flexibilities

Flexibilities is the maximum mobile ability of a joint. On old people there are many claiming of stiff joint, this can be solved by callisthenic training.

- e) Body composition

Body composition related to the distribution of muscles and fats to whole parts of the body and this body composition measurement has an important role, for both body's health and to exercise. The body fat excess

may cause obesity and increase the risk to suffer some several illnesses. In the sports world this fat excess can worsen the performs and doesn't contribute energy supply produced by muscular contraction, it even gives extra burdens because it needs more energy just to move the body.

## 2. Physical fitness related to skills

Beside the physical fitness related to health it needs also skills. They are:

### a) Balance

Balance is related to the attitude to detain the balance condition (equilibrium) while immobile or not move.

### b) Burst energy (power)

Burst energy is related to the move when one's doing activity or burst energy is the product of  $x$  velocity.

### c) Velocity

Velocity is related to the ability to do moves in a short time.

### d) Mobility

Mobility is related to the ability in the way changing body's position to high velocity and accuracy.

### e) Coordination

Coordination is related to the ability of using the five senses such as the vision and the hearing together with certain parts of the body in the time of doing motoric activities harmonically and on a high velocity.

### f) Reaction velocity

Reaction velocity is related to time speed used between the existence of simulation and the beginning of reaction.

For old people not all of those components are conducted, the suggestion is only a, c, and e components. The balance is suggested to old people because there is relation to the attitude to detain the balance when is immobile or not moving.

## **SPORTS TO KEEP FITNESS IN LATER AGES**

The age is adding, the rate of physical fitness is getting down. This degradation of abilities will more visible after the age of 40, so that when on the later ages the ability will degrade between 30%-50%. (*Kusmana in Infokes.com*, 2007: 2). Therefore, if the old people want to do sport they have to choose the suitable sports to their age classification, and the possibility of disease existence. Old age sports need to have some directions; they are light and medium weight, relative long time, aerobically and or callisthenic, not competitive/fighting.

Some of the example sports are walking, with all of games forms available which have walking element, such as, golf, crosscountry, hiking, low level difficulties gymnastic, and some sports that recreatively characteristic are suggested. By muscle training old people can pursuing the degenerative changes speed.

Why do we need to exercise? Moves is the life's characteristic, there is no life without moving and it's no use if we don't move. Keep moving is surviving, while improving the skills of moving is improving the quality of life. By loving to exercise can prevent diseases, and have healthy life. Sports give us own protections that is increasing the antioxidant elements which can attack free radicals, and reducing the factor obesity risk, hypertension (high blood pressure), and diabetes which worsening cells' damages caused by free radicals.

The study reports show exercises can protect the heart and bones; fix feelings, resting and memories, reduces the risk of breast cancer and large intestine, minimizing the risk of premature death, and really very longing our lives.

These today's various researches have shown that people keeping their physical fitness which is suitable and also use some various exercises wisely and weight managing may have extra benefit, which is live longer. Especially between the age of 50 and 70 year, the research have shown that deaths decreased double to people do fitness then they who didn't do physical activities supporting fitness.

These are two reasons by *tcindo.com* (2008: 1-2) which most proving the



physical fitness and weight managing are so reducing cardiovascular illness (heart disparity). This is the cause of blood pressure arrangement and the reduction of blood cholesterols and low density lipoprotein. These changes work all together to reduce the number of heart attacks and stroke.

And maybe it is as the same important, that athletically healthy people have more physical fitness reserve when they are sick. As the instance, an 80 year old man who do not do fitness is possibly to have the breathing system that limiting the oxygen usage not more than 1 liter/minute; this means his breathing reserve is not more than three or four times.

At the contrary, an old age man athletically fitness may have the double reserve. This condition is specially important in surviving if that old man suffers disease such as pneumonia (acute infection happens inside lungs) which spending fast all of the breathing reserve available. Beside that, the ability to improve heart's bulk in a time needed ("heart reserve") is often more than 50% in old people doing the fitness then they who don't.

Now the positive effects list of exercises will be longer more by the existence of new evidence by *Daniel M. Landers in tcindo.com* (2008: 2), a professor of health education and sports of Arizona University. Based on Landers there are five benefits of sports which can make the mental healthy. Let see one by one.

1. Sports can maintain the brain power. Routine physical activities can improve the reaction ability, concentration, creativity, and mental health. This is because of body pumps more blood so that the oxygen supply in blood increases also which its point is fastening the blood entrance into brain. If the brain gets the blood supply so that physical and mental reaction of someone will increase. Based on the research on USA that recently published, regular sports can reduce the dementia (forgetting is its one of manifests) up into 40%.
2. Sports are against aging. Being old is a thing that can's be avoided. However, being old is not always identical to weaker body. Routine exercise can help facing the old days well, in the meaning of keeping doing activities. Many people tend only to consider foods supplies which are nutritious and

vitaminous but forgot to exercise regularly. Though sport is an excellent medicine to slow down the aging process. These recent researches proved that by just doing light exercise such as this walking can help the body to prevent the degradation of brain's working ability for old women. Longer in time and often this walking activity conducted hence the sharpness of thoughts will be better. Routine exercises can also improving cardiovascular endurance (heart), so that we can act not too overly in behaving on a problem.

3. Sports can maintain happy feelings. Many people experience depression and use tranquilizer as the way out. Though sports has proved as an excellent treatment in increasing the happy feelings growing hormones in brain, such as adrenaline, serotonin, dopamine, and endorphin which are the number one upsets killer.
4. Sports can maintain confidences. Nowadays confidences can be achieved not only relying on physical beauty anymore. A case study in USA proved if the sports active teenagers have confidences rate as strong as their friends who have beautiful physics and performs.

Some of influences if we do exercises based on *pojokpenjas.blogspot.com* (2008: 2):

1. Sports influences will improve the lungs' works efficiency; someone trained can process the air more by less energy.

During doing an exhausting work, someone trained can process the air almost double per minute than they who are not trained. Hence a man trained will be able to supply oxygen much more for his/her body for the energy formation.

2. Sports influences will improve the heart' works efficiency in many aspects. Heart will be stronger and able to pump blood much more on each contraction; hence the contraction number will be reduced. A man trained is able to reduce the contraction frequency to 20 times per minute of the untrained man's contraction.

3. Sports influences will improve the number and the size of the venous flow to whole body networks, so that it can fulfill full oxygen to whole body networks into the energy formations.
4. Sports influences will improve the blood volume. This will more improve the oxygen distribution medium to whole body network.
5. Sports can improve the muscular and venous stresses, so that it can change the fat network and soft network to be strong and tough. On this process it can degrade high blood pressure.
6. Sports will improve the oxygen consumption to maximum, in this improving process it improves as lungs, heart, venous and whole body networks. So that it is formed a strong defending toward disease.

### **KINDS OF SPORTS SUITABLE TO LATER AGES**

All kind of sports basically can be conducted by the later ages, as long as that kind of sports has been done regularly since young. However, for the safety, sports suggested by the experts are sports of aerobically and dynamically characterized such as walking, gymnastic, and swimming. People who are into the later ages if they conduct sports activities cannot experience over exhausted, if the intensity is too over it can produce out of breath, bone chest pain, or headache. If you get some kind of these occasions then stop as soon as possible. Suggested intensity for aged people is individually characterized and depends on age, sex, and the period of that sport activity, the regularity and physical condition of the body's organs.

There's a general formula can be used to acknowledge to what limitation we may conduct the sports activity. The formula is  $220 - \text{age}$ . The safe limit is if the sport activity only achieved (sub maximum pulse 70% - 85% of the maximum pulse which is called as target zone. Example, there's a man of age 70 year, so the formula is;  $(220 - 70) \times 70\%$  to  $85\% = 105 - 127$  pulses per minute.

## CONCLUSION

Soon or later you will get old. That will be the period on which your strength and stamina will be decreasing. Unfortunately, many people who ignore this at all, supposing that being old is identically being weak, and so that you make that paradigm as the reason to be much lazy, starting to be lazy at the later age, all day long sitting on recliner, busy wasting time at home with the grand children, supposing that all of those are the gifts in the later ages. Since, balancing our later ages by keeping doing sports activities, because being healthy is one of some investments in the later ages.

The fitness condition on the later ages should be necessarily cared so that health, daily activities stability, and all other things still can be enjoyed in the old ages even while. Generally the fitness components can be seen into 2 components, they are; (1) physical fitness related to health consisting; cardiovascular endurance, muscular strength, flexibility, and body composition, (2) physical fitness related to skills, they are; balance, burst reaction, velocity, mobility, coordination and reaction velocity.

As for the various kinds of sports can be conducted by them of later ages are kinds of sports aerobically characterized such as walking, swimming, and gymnastic. But it has to be conducted with sub maximum intensity between 70%-85% with the directive formula of pulse on training is  $(220 - \text{age}) \times \text{percentage}$ .

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