REVIEW OF RESEARCH



ISSN: 2249-894X
IMPACT FACTOR: 5.2331(UIF)
VOLUME - 7 | ISSUE - 4 | JANUARY - 2018
UGC APPROVED JOURNAL NO. 48514



PRESCRIPTION OF EXERCISES FOR HEALTH & FITNESS FOR ADOLESCENT, MIDDLE AGE & OLD AGE

Sanjeev Yadav
Associate professor (L.N.I.P.E),GWALIOR.

INTRODUCTION—

Health is a state of complete physical, mental & social well being, and not merely absence of any disease, Keeping this view in mind the statement given by W.H.O. has helped the researchers to choose this topic entitle "Prescription of Exercises for Health & Fitness for Adolescent, Middle Age & Old Age" is in front of you. As the famous saying goes there, "A sound mind in a sound



body" and exercise is simple and best way to come closer to this saying. But the question arises that what should be the intensity, density, frequency and volume of particular exercise program. As the ability of each individual is different from other, so through the prescribed program for exercise of different age groups people are highlighted in this paper. As prescribed exercise program is for different age group,

it can be used by the masses is that group.

MEDICAL CHECK – UP

A medical check – up is essential & useful part of exercise prescription for many reasons

- 1. Some people either not exercising at all or considered at high risk they should exercise only under close medical supervision. A comprehensive medical check up will help in identifying these high risk individuals.
- 2. As per the information received by medical check-up an individual may be given exercise prescription accordingly.
- 3. The information regarding the blood pressure, body fat content, diabetes, and blood lipid levels, may help in motivating an individual to start continue the exercise program.
- 4. Adults & children should establish the habit of periodical medical evaluation because many illness and diseases, such as cancer, cardiovascular diseases, blood pressures can be identified in their earliest stages, when chances of successful treatment are much higher.

POINT TO KEEP IN MIND

Although a general medical check-up on a regular basis in important & desirable for every individual, otherwise it is not practical to require this for all individual desiring to start an exercise program.

PRESCRIPTION OF EXERCISES

The exercises suggested is as follows:

- 1. Type of Exercise.
- 2. Frequency of exercise / number of participants.
- 3. Duration of bout/ exercise.
- 4. Intensity of bout/ exercise.

TYPE OF EXERCISE

The suggested program should emphasize with one or more cardiovascular endurance activities traditionally. The activities prescribed most frequently are as follows.

- i) Walking
- ii) Jogging
- iii) Running
- iv) Hiking
- v) Cycling
- vi) Swimming

But these activities do not appeal to everyone alternative activities have to be identified that should develop similar cardiovascular endurance gains. Aerobic dance, step up (bench or Box) etc.

Sports & recreation activities are appropriate for maintaining desirable fitness level but they generally are not appropriate for developing fitness in unfit individuals. Use conditioning activities to reach the desired level of fitness, then switching over to sport & recreational activities and sport type activities involving competition is suggested preconditioning exercise such as jogging is advisable before taking part in any sports. It has been scientifically proved that precondition exercise reduces the chances of injuries of a person who is taking part in such activities and the major muscle gets toned to take part in such activities successfully.

While selecting activities individuals must be compared with activities that they enjoy and are willing to continue throughout their life. The exercise should be continued otherwise benefits are soon lost of participation stops, motivations is an important factor in a successful exercise program, selecting an activity that is fun, provides challenge and can produce needed benefit is one of the most crucial tasks in exercise prescription.

FREQUENCY OF EXERCISE

The frequency of participation, though certainly an important factor to consider, is probably less critically than either exercise duration or intensity. Research studies conducted on exercise frequency show that 3 to 5 days per week is an optimal frequency. It does not mean that 6 or 7 days per week won't give additional benefit, but simply for health related benefit, the optimal gain is achieved with a time investment of 3-5 days per week. Exercise should initially be limited to 3 – 5 days per week and frequency increased up to 5 or more days per week only if the activity in enjoyed and physically tolerated. All too often a person starts with great intensions is highly motivated and exercises every day for the first few weeks, only to stop from after fatigue or injury obliviously, additional days per week above the three to four days frequency are beneficial for weight loss, but this level should not be encouraged until the exercise habit is firmly established and the injury risk is reduced.

INTENSITY OF EXERCSE/BOUT

It is an important factor that how many time person should push himself to gain best benefit. Research show that a substantial training effect can be accomplished in some person by training at intensities of 45% or less of their aerobic capacities for most, however, the appropriate intensity appears to be a levels at least 60% of Vo_2 max.

IMPORTANT POINTS

- a) A minimum threshold for frequency, duration & intensity must be met to attain any activities benefits and this threshold is quits.
- b) The program should include one or more cardio-vascular endurance activities if the activity involves competition, preconditioning with a standard endurance activity recommended before sport participation begins to bring you up to an appropriate level of fitness.
- c) Activities must be matched with individuals need and likes so that motivation can be maintained.
- d) Optimal exercise frequency is 3 to 5 days of training per week. Although greater frequency might provide additional benefits. Exercise should begin with three to four session per week, then more if desired.
- e) Exercise duration of 20 to 30 min working at the appropriate intensity its optimal but the key is reaching the threshold for both duration & intensity.
- f) Exercise intensity appears to be most important of these factors for people, intensity should be at least 60% of Vo₂ max, and however health benefits occur at intensities lower than those needed for aerobic conditioning.

PROGRAM FOR EXERCISE

Once the exercise prescription has been determined it is integrated into a total exercise program, which is generally only part of an overall health improvement plan. Individual exercise capacity varies widely even between people of similar age and physical build for this reason, each program must be individualized bases on results of physiological and medical test and individual's need & interest.

The total exercise program consists of the following activities as per the sequence.

- a) Warm up and stretching activities
- b) Endurance Training
- c) Strength Training
- d) Flexibility Training
- e) Recreational activities
- f) Cool down & stretching activities

EXERCISE FOR ADOLESCENT

As for as exercise for adolescent is consent it is suggested that it should be started with warming up and various stretching exercise this will help in the toning up of all major muscles of the body.

Whereas for endurance, the basic endurance is to be developed as it will form the base for the development other specific type of exercise in later stage. At least twice a week continuous running for 20-35 minutes should be there in training program.

For flexibility training it has been proved scientifically that this is the best age for developing the maximum flexibility so to develop it. Exercise with external help will definitely increase the flexibility & range of movement around a joint.

For strength it is suggested that own body act should be used to develop it as at this stage of age bones & muscles are not so strong therefore the external resistance help may cause damage to the body for e.g. push up, pull up, situp hopping etc.

EXERCISE PROGRAM FOR MIDDLE AGE

Now the exercise program for middle age should consist of stretching & warming up tonicity & range of movement around the joints and also decrease the chance of injury at the time of performing various exercising movement. At this stage for the development at endurance one has to look at the duration of activity as well as which type of endurance is to be developed (General, Specific etc.) the emphasis should more on long term endurance as this will form the base for all types of endurance.

For developing strength we have to see the combination between duration & speed of movement this will decide the type of strength i.e. the maximum strength explosive strength & speed endurance the maximum

strength will form the base for all type of endurance, for the development of flexibility at middle age ballistic method is best also the external help will be taken to increase the range of movement.

EXERCISE FOR OLD AGE PEOPLE

The exercise program for the old age people should be prepared only after thorough medical check-up of the individual taking into consideration of high blood pressure & diabetes. Reprogram after the medical check-up, stretching should be maximum whereas the endurance & strength activities should be done as per the capacity of the body.