

EXERCISING WISDOM

by Cindy Ng, principal physiotherapist, Singapore General Hospital

Exercise is for everyone. In fact, exercise is a poor man's plastic surgery for his health. It is a known fact that regular exercise helps to improve one's quality of life. The benefits of exercise for the elderly are plenty:

- Strengthens the heart
- Improves the circulation
- Reduces the blood pressure
- Increases good cholesterol levels
- Reduces bad cholesterol levels
- Increases energy
- Reduces stress
- Improves sleep
- Strengthens bone
- Strengthens the muscles and joints
- Reduces body fat
- Improves quality of life & functional capacity

As one ages, the muscles undergo structural and functional changes. These muscle changes start in the fourth decade of one's life and may cause frailty and disability in later years. It is also a known fact that our body composition changes as we age. The percentage of fat free mass or muscle mass tends to decrease with age and this may indirectly cause metabolic diseases such as diabetes, hypertension and hyperlipidaemia (increased bad

cholesterol or triglycerides and low density lipoproteins). As such, exercises like aerobic or resistance training can help to build muscle proteins and thus retard the degeneration of muscles. With stronger muscles, joints are also protected from injuries. Balance training can also help prevent falls in the elderly.

Brisk walking, cycling, low impact aerobics, swimming and line dancing are just some of the aerobic exercises that the elderly can participate to build up their fitness level.

For beginners, start by doing some brisk walking continuously daily at your own pace for at least 15 minutes, increasing by five minutes every two weeks until you are able to walk briskly non-stop for 30 minutes covering a distance of 2.4km. In fact, the American College of Sport Medicine recommends at least 150 minutes of walking per week.

For those exercising regularly, you can add variation to your routine by having strength training once to twice a week as well as some balancing exercises. However, should you be taking any heart medications or had any symptoms of chest pains or have past medical history of heart condition, you should consult a cardiologist and an exercise specialist to

tailor a suitable exercise program in the gym.

Strengthening exercises can be easily done at home using elastic bands or free weights. It is important to train both the leg and shoulder muscles. An example will be lying on the bed and lifting the leg up about 10 to 15cm high and holding it there for a minimum of five seconds.

An example of dynamic balance training is *taiqi*. A home exercise can be as simple as doing a one leg stand which can be progressed to doing it with the eyes closed. Balance training has been shown to reduce falls in the elderly by improving proprioception, which trains the elderly to cope with different terrains.

Stretches are equally important to ensure we remain flexible even in our golden years. Stretches should be done before and after exercises, preferably once or twice and holding the stretch between 10 and 15 seconds.

In short, exercise has many benefits for the elderly and can be done easily without much cost, even at home. In fact, some physical activity is better than none and there is no age limit!

Illustrations by Tilen Ti



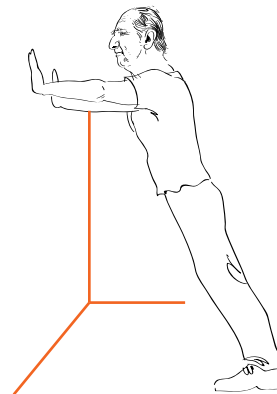
Stand on one leg. Hold on to a support such as a chair when doing the exercise, if one tends to fall.



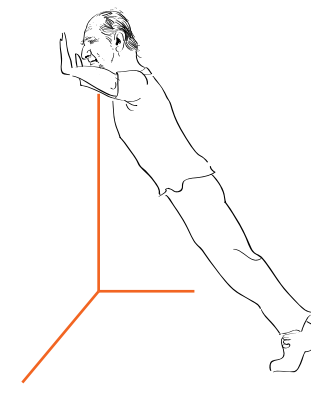
Hip abduction in standing: Attach a 1kg weight at the ankle. You may need to support yourself by holding to the wall or onto a chair. Lift one leg sideways (abduction) keeping the knee straight and body upright. Do 1 to 3 sets of 8 to 15 repetitions.



Hip extension in standing: Attach a 1kg weight at the ankle. You may need to support yourself by holding onto the wall or a chair. Extend one leg backwards while keeping your body upright. Do 1 to 3 sets of 8 to 15 repetitions.



Wall push up: Place both hands on the wall about shoulder width apart, standing about one arm length away from the wall. Lean forward without moving the feet, bending the elbows. Do 1 to 3 sets of 8 to 15 repetitions.



Leg raises: Lie flat on the bed. Attach a 1kg weight at the ankle. Keep knees straight and lift up the leg 10 to 15 cm high or at a 45 degree angle. Hold for 5 to 10 seconds. Do 1 to 3 sets of 8 to 15 repetitions.

Quadriceps, Hamstrings and Calf Stretches:

Do them before and after exercises, preferably once or twice and holding the stretch between 10 and 15 seconds.

