

PHYSICAL ACTIVITY FOR A HEALTHY LIFE



مستشفى حمد العام
Hamad General Hospital

عضو في مؤسسة حمد الطبية
A Member of Hamad Medical Corporation



Importance of physical activity

Physical activity is defined as any bodily movement produced by skeletal muscles that requires the expending of energy.

Sport is an effective way of maintaining lean body mass and improving heart and lung function.

Physical activity has positive effects on health both mentally and physically as it reduces depression and anxiety and helps people manage the stress of daily routine. As it can help extend a persons' life span while promoting physical wellbeing, it is important to select an activity that you enjoy.

Physical activity for different ages:

It is important to integrate physical activity into your daily routine throughout your life, starting from early childhood and extending into adulthood. This will help you to build a strong body with solid bones capable of resisting shock. As you mature, physical activity can also help your body grow and can help to prevent early aging. It can also help you to maintain a healthy weight and as you get older will help protect you from osteoporosis.




After the age of 30, we lose 8% of our weight mass per year, which means that we become weaker and our metabolic rate reduces. As this is the number of calories burned to perform our bodies' most basic functions (BMR) this can increase the danger of weight gain.

Continuous resistance exercises maintain and increase muscle mass, which leads to a stable and improved metabolism leading to a healthy weight.

Importance of physical activity on the body:




- Adjusts blood sugar, lipid profile and cholesterol
- Lowers blood pressure
- Increases muscle strength and maintains muscle mass during weight loss
- Helps build strong bones and prevents osteoporosis
- Improves brain function and memory
- Activates heart function, blood circulation and breathing
- Promotes better sleep
- Promotes self-esteem, self-confidence and reduces stress

Types of physical activity: 1-Sporting physical activity:

	Aerobic	Non aerobic	Stretching
Definition	Cardio exercise: Requires pump- ing of oxygenated blood by the heart to deliver oxygen to working muscles -it increases in a way that can be sustained for the exercise session	Resistance exercise: Consists of brief bursts of physical activity , where oxygen demand surpasses oxygen sup- ply , using body weight or extra weights	Providing flexibility and a range of motion for the joints and muscles, to promote body functioning in daily workouts
Benefits	Benefits fitness, improves circula- tion efficiency and facilitates the flow of air in and out of the lungs	Builds and maintains muscle mass and resists its decline with age	We should start with warming up for 5-10 min of stretching exercises or slow walking to prevent injuries and relieve muscle soreness after a workout
Examples	Walking is consid- ered as the easiest aerobic exercise. Only sports shoes are needed and it is free of charge. You can walk outside during good weather and move indoors to the gym or mall on hot or humid days 		

2-Non –exercise physical activity:

Non exercise activity thermogenesis (NEAT) is the energy expended for everything we do that is not sleeping, eating or sport-like exercise. Use (NEAT) in your daily routine for example by climbing the stairs instead of using lift, or not using your car to travel a short distance and walking instead. There are 3 types:

	Vigorous intensity	Moderate intensity	Low intensity
Definition	Requires a large amount of effort and causes rapid breathing and a substantial increase in heart rate	Requires a moderate amount of effort and noticeably accelerates the heart rate	Gets you to about 40 to 50% of your maximum heart rate. It requires a very limited amount of effort
Examples	-Drilling -Horticulture 	-Washing the car -Cleaning the floor 	Walking 

Health rate of doing exercise:

For weight loss	For weight maintenance
<150min /week : minimal weight loss	150 min of aerobics exercises split across the week
>150min /week : loss 2-3kg	75 min of high intensity exercise twice a week
225-420 min/week : 5-7.5kg	Moderate intensity physical activity broken up into mini sessions of 10min, throughout the day, of at least 45 min per day, five times per week

American College Sports Medicines (ACSM)

General advice:

- You need to find a balance between food intake and energy expenditure to maintain body fitness because healthy food is a source of energy
- Drink 8 cups of water per day to avoid dehydration and mineral deficiency

Advice before starting physical exercise:

- Choose a suitable form of exercise for your age and your health situation and refer to your doctor and/or physiotherapist for advice.
- Choose a friend to practice sports with to avoid getting bored. It will provide a healthy sense of competition and will help you to stick with it.
- Choose a good pair of walking shoes and wear light clothing for better heat exchange while exercising
- Warm up well before exercising
- Start slowly, gradually increasing your physical activity level. Changing your behavior gradually will help you to make these changes permanent.
- The program should contain different and diverse types of physical activities
- Cool down after exercising to relax your muscles

Modern technology and physical activities:

Modern technology has an important role in encouraging you to persevere with physical activities. Smart watches (FIT BIT) for example can calculate the number of calories you have burnt during exercise.



Pedometer : a tool to monitor your activity by calculating number of steps you have taken per day. You should aim to take 10,000 steps per day.



Exemples of food and minutes to exercise to burn

food	Calories	Walking	Swimming	bicycling
Ice cream (1cup)	277	52	24	33
Milk shake	400	81	38	51
Potato chips(10gm)	115	22	10	14
Cheeseburger (medium)	300	57	26	36
Shawarma Sandwich (134gm)	340	65	31	41