

**Rizvi College of Arts, Science & Commerce,
Bandra (W), Mumbai**

Stress Management-II
FYBCOM, OE-2

**Module 1: Exercise and Strategies for
Decreasing Stressful Behaviors and
Occupational Stress**

Dr. Shaikh Ansarpasha
Assistant Professor

Exercise and stress: Get moving to manage stress

Exercise in almost any form can act as a stress reliever. Being active can boost your feel-good endorphins and distract you from daily worries.

You know that exercise does your body good, but you're too busy and stressed to fit it into your routine. Hold on a second — there's good news when it comes to exercise and stress.

Virtually any form of exercise, from aerobics to yoga, can act as a stress reliever. If you're not an athlete or even if you're out of shape, you can still make a little exercise go a long way toward stress management. Discover the connection between exercise and stress relief — and why exercise should be part of your stress management plan.

Makes you feel happier. Exercise helps block negative thoughts and distracts you from daily worries. Your body releases chemicals, such as serotonin and endorphins, that trigger a happy feeling. Exercising with other people can boost that effect even more.

Improves learning, thinking, and judgment capabilities as you age. When you exercise, your body releases proteins and other chemicals that change the brain's function and structure. It also makes the brain grow new cells that help prevent age-related mental decline.

Helps relieve symptoms of depression and anxiety. Exercise acts in a similar way to antidepressant medications for treating mild to moderate depression -- just without the side effects. Exercising improves brain function, lowers inflammation, and promotes the growth of nerve cells, all which can help your mood. Through the release of endorphins, physical activity also helps relieve tension and stress tied to anxiety. Being mindful of what your body is doing and how it feels as you exercise can also help interrupt the flow of negative thoughts and worries.

Helps manage ADHD. Exercise is one of the best ways to take charge of the symptoms of attention-deficit hyperactivity disorder, or ADHD. It helps improve motivation, mood, memory, and concentration by immediately boosting hormones that support focus and attention.

Exercise makes your muscles work and burns calories. Exercises are activities designed to improve fitness, enhance health, and prepare your body to meet the demands of life. Physical activities like running, swimming, walking, jogging, and dancing are often used synonymously with exercise. Although not technically exercise, physical activities are an excellent way to enhance health.

No matter your age, gender, or physical activity level, regular exercise can boost your physical and mental health.

If you haven't exercised in a while, you may want to try easing back into it with moderate-intensity aerobics. Soon enough, you'll start feeling the positive effects of regularly moving your body.

Helps control your weight. Whether you want to drop extra pounds or stay at your current weight, exercise is one of the best ways to do it. It helps you burn calories, and the more intense the activity, the more calories you torch. That said, the amount of calories you burn depends on a number of things, including your age, gender, weight, and type and intensity of activity.

For example, a 155-pound person will burn about 198 calories doing 30 minutes of low-impact aerobics. If they do 30 minutes of high-impact step aerobics, they could burn upwards of 360 calories.

Strengthens your muscles and bones. Exercise is vital for building and maintaining strong bones and muscles. Weightlifting can boost muscle building when you also get enough protein. As you become older, your body loses muscle mass and function. This puts you more at risk of injuries and disabilities. Regular exercise reduces muscle loss and helps maintain strength as you age. Exercise also builds bone density, which is crucial in preventing [osteoporosis](#) later in life.

Helps prevent health conditions and diseases. For a good, strong heart, exercise regularly. No matter your current weight, physical activity boosts “good” cholesterol ([high-density lipoprotein](#) or HDL) in the body. This is key for keeping your blood flowing smoothly while lowering your chances of getting conditions like:

Heart and blood vessel diseases

[Metabolic syndrome](#)

Many cancers, including breast, bladder, kidney, lung, and stomach cancers

[High blood pressure](#), [Stroke](#), Anxiety, [Depression](#)

Could boost your lifespan. Regular exercise can help you live longer. It lowers the chance of dying early from conditions like cancer and heart disease. Try to be active for at least 150 minutes a week.

Before you start any new exercise program, it's a good idea to talk to your doctor. After checking your health, they'll recommend the right amount of activity for your age.

The Healthy Way to Exercise



Image: A person using correct exercise technique or a trainer demonstrating proper form.

The Healthy Way to Exercise

Exercise is crucial for maintaining overall health and well being, but it is important to approach it in a balanced and safe manner to get maximum benefits without risking injury or burnout.

Here are key principles for exercising healthily:

1. Consult with a Healthcare Professional: Before starting any new exercise regimen, especially if you have pre-existing health conditions or concerns, consult with your doctor or a qualified healthcare professional. They can provide personalized advice and guidelines based on your health status.

2. Set Realistic Goals: Define clear and achievable goals for your exercise routine, whether it is improving cardiovascular fitness, strength training, flexibility, or weight management. Setting realistic goals helps you stay motivated and track progress.

3. Warm-Up and Cool Down: Always begin your exercise session with a warm-up to prepare your muscles and joints for activity. A proper warm-up increases blood flow, and flexibility, and reduces the risk of injury. Similarly, cool down after exercise with stretching and gentle movements to help your body recover.

4. Choose Variety: Incorporate a variety of exercises into your routine to target different muscle groups and prevent overuse injuries. Include aerobic exercises (like walking, jogging, or swimming), strength training (using weights), flexibility exercises (stretching or yoga), and balance exercises.

- 5. Progress Gradually:** start at a comfortable level of intensity and duration. especially if you are new to exercise or returning after a break Gradually increase the intensity, duration, or frequency of your workouts to avoid overtraining and reduce the risk of injury.
- 6. Listen to Your Body:** Pay attention to how your body responds to exercise. If you experience pain, discomfort or unusual symptoms during or after exercise, modify your routine or consult a fitness professional.
- 7. Stay Hydrated and Fuel Your Body:** Drink plenty of water before, during, and after exercise to stay hydrated. Eat a balanced diet that provides adequate nutrients to support your activity level and promote recovery.
- 8. Rest and Recovery:** Allow time for rest and recovery between exercise sessions. Adequate rest is essential muscle repair, injury prevention, and overall performance improvement.
- 9. Maintain Proper Form:** Use correct technique and form during exercises to minimize the risk of injury and maximize the effectiveness of your workouts. Consider working with a certified fitness trainer to learn proper techniques, especially for complex exercises.
- 10. Monitor Progress:** Keep track of your exercise activities, progress towards your goals, and how your body feels. Adjust your routine as needed to continue challenging yourself while maintaining safety and enjoyment.

Following these principles ensures that exercise enhances your overall health boosts energy levels, improves mood, and reduces stress, contributing to a balanced and healthy lifestyle.

Principles of Exercise



F.I.T.T. PRINCIPLE

	Cardiovascular Endurance	Muscular Endurance	Muscular Strength	Flexibility
Frequency	Exercise 3-5 times per week	Exercises 2-4 times per week	Weight train 2-4 times per week.	Daily stretching.
Intensity	Train at 60-80% of target heart rate.	Add or maintain weight and repetitions.	60-75% of max 3 sets of 8-12 repetitions.	Stretch muscles and hold beyond its normal length.
Time	20-60 minutes per session.	About 30-60 minutes.	About 30-60 minutes.	Hold each stretch 10-15 seconds.
Type	Any aerobic activity keeping the heart rate within the target zone.	Resistance training yoga, Pilates, light weights.	Anaerobic activities such as weight lifting and sit ups.	Stretches that allow the body to move through the full range of motion.

Assessing Cardio-respiratory Fitness

Treadmill stress test(TMT)



OBJECTIVES

AT the end of the session the group will be able to

- ✓ Define exercise stress test
- ✓ Know synonyms of TMT test indication
- ✓ Enumerate the indication of TMT test
- ✓ Describe use of TMT test
- ✓ Explain absolute and relative contraindication of TMT Test
- ✓ Know the different protocols for TMT test
- ✓ Identify the indications for terminating the exercise
- ✓ Describe the interpretation of TMT test
- ✓ Elements of TMT test
- ✓ TMT test score and risk stratification
- ✓ Explain the pre-procedure,during and after procedure care of client



IMPORTANCE OF ASSESSING CARDIO-RESPIRATORY FITNESS:

Cardio-respiratory fitness, often referred to as aerobic fitness, is crucial for maintaining overall health and well-being. It indicates how efficiently the heart, lungs, and muscles work together to supply oxygen-rich blood to the working muscles during exercise and remove waste products, such as carbon dioxide.

Benefits of good cardio-respiratory fitness include:

1. **Improved Heart Health:** Strengthens the heart muscle, lowers blood pressure, and reduces the risk of cardiovascular diseases.
2. **Enhanced Endurance:** Increases the ability to perform prolonged physical activities without fatigue.
3. **Better Metabolism:** Improves the body's ability to use oxygen and burn calories efficiently, aiding in weight management.
4. **Increased Respiratory Efficiency:** Enhances lung capacity and oxygen uptake.

METHODS FOR ASSESSING CARDIO-RESPIRATORY FITNESS:

Several methods can be used to assess cardio-respiratory fitness, each offering different insights into aerobic capacity:

1. **VO2 Max Test:** This is considered the gold standard for assessing cardio respiratory fitness. It measures the maximum amount of oxygen an individual can utilize during intense exercise. Typically conducted using a treadmill or stationary bike while monitoring heart rate and oxygen consumption.
2. **Sub maximal Exercise Tests:** These tests estimate VO2 max by measuring heart rate response to sub maximal exercise intensity. Examples include the Rockport Walk Test or the 1-Mile Walk Test
3. **Field Tests:** Practical and accessible, these tests assess aerobic fitness using activities like running, cycling, or swimming over a set distance or time. Examples include the Cooper 12-Minute Run Test or the 6-Minute Walk Test.

4. **Heart Rate Recovery:** Measures how quickly the heart rate returns to normal after exercise, indicating cardiovascular fitness and recovery ability.

5. **Functional Tests:** These assess aerobic fitness through activities that mimic daily tasks, such as climbing stairs or brisk walking.

ASSESSING CARDIO-RESPIRATORY FITNESS SAFELY:

It is essential to conduct fitness assessments under controlled conditions and with proper supervision, especially for individuals with existing health conditions or who are new to exercise.

Key considerations include:

1. **Medical Clearance:** Consultation with a healthcare professional before starting any Fitness assessment, particularly for those with cardio vascular or respiratory conditions.
2. **Proper Warm-up:** Ensure participants warm up adequately to prepare muscles and cardiovascular system for exertion.
3. **Monitoring:** Continuously monitor heart rate, blood pressure, and symptoms of discomfort or fatigue during the assessment.
4. **Cool-down:** Allow for a gradual cool-down period post-assessment to promote recovery and prevent injury.

Assessing cardio-respiratory fitness provides valuable information about an individual's cardiovascular health and aerobic capacity. By understanding one's fitness level, appropriate exercise programs can be tailored to improve overall health, endurance, and quality of life. Regular assessments also help track progress and adjust fitness goals over time.

Regular assessment helps track fitness progress and tailor exercise programs for improved health and performance.

Exercise and Health

Starting an Exercise Program

Workout Plan FOR BEGINNERS Week 1

1. Monday

15 Minute Walk
30 Jumping Jacks
20 Squats
3 Sets of 10 Push Ups
20 Butt Kicks

2. Tuesday

20 Minute Walk
35 Jumping Jacks
30 Sit-Ups
30 Second Side Plank
25 Butt Kicks

3. Wednesday

25 Minute Walk
40 Jumping Jacks
25 Squats
3 Sets of 15 Push-Ups
30 Butt Kicks

4. Thursday

30 Minute Walk
45 Jumping Jacks
35 Sit-Ups
35 Second Plank
35 Butt Kicks

5. Friday

35 Minute Walk
50 Jumping Jacks
30 Squats
35 Second Side Plank
40 Butt Kicks

6. Saturday

40 Minute Walk
55 Jumping Jacks
40 Sit-Ups
3 Sets of 20 Push-Ups
45 Butt Kicks

7. Sunday **REST**

Choosing an Exercise Program

Types of Exercise

@HelloFriendTV

1) Aerobic:
Continuous Movement.
E.g. Swimming, running, etc.



2) Strength:
Helps increase muscle power & strength.
E.g. Resistance training, weight lifting, etc.



3) Calisthenics:
Basic body movements done
without gym equipment. Examples include
sit-ups, push-ups and pull-ups.



4) High-intensity interval training (HIIT):
Repetitions of short bursts of high-intensity exercise
followed by low-intensity exercises or rest periods.



5) Balance or stability:
Strengthens muscles & improves body coordination.
E.g. Pilates, core-strengthening exercises, etc.



6) Flexibility:
Aides muscle recovery, maintains range of motion
and prevents injuries. Examples include yoga or
individual muscle-stretch movements.



Exercise and the Elderly



Senior Health Education Programs

A scene of elderly individuals from various descents such as Caucasian, Hispanic, Black, Middle-Eastern, and South Asian, participating in health education activities. They are engaging in exercises suitable for their age like yoga, resistance bands routines, and low-impact aerobics. The environment consists of a calm outdoor park during a sunny day with some sitting on benches and mats, while others are standing. A passion for lifelong learning and dedication to maintaining their health is visible on their faces.

Where to Get More Information

A list of trusted sources or a website with exercise resources.

- Fitlab
- Yogamaya
- Soul Cycle
- Boombox Boxing
- Ytfitnesslab
- BK Yoga Club
- Crunch Fitness
- The Limit
- Local Gyms and Fitness Facilities

Exercise – Keep It
Going



