

12. Exercise & Fitness

12.1 Overview

Physical activity is any movement that expends energy; **exercise is structured physical activity** for health improvement. The WHO recommends at least **150–300 minutes of moderate-intensity aerobic activity per week** for adults, and 60 minutes daily for children. Regular exercise strengthens muscles, bones, heart, and improves mood, cognition, and immunity.

12.2 Causes / Risk Factors of Physical Inactivity

Physical inactivity has become a leading global health concern. Key factors include:

- Urban lifestyles with limited walkable spaces.
- Desk-bound jobs and reliance on vehicles.
- Excessive screen time.
- Cultural or social barriers to outdoor activity.

12.3 Symptoms / Indicators

Indicators of low fitness or sedentary lifestyle include **fatigue, poor endurance, increased resting heart rate, and gradual weight gain**. Physical activity improves cardiovascular endurance, muscle strength, flexibility, and mental well-being.

12.4 Prevention / Lifestyle

Incorporating activity into daily routines:

- **Aerobic exercise:** walking, running, cycling, swimming.
- **Strength training:** 2+ sessions per week for all major muscle groups.
- Flexibility & balance training.
- Active commuting and workplace exercise breaks (e.g., "exercise snacks").

12.5 Screening / Diagnosis

Before starting exercise programs, high-risk individuals should undergo:

- Cardiovascular risk assessment (blood pressure, ECG).
- Body composition and BMI measurement.
- Musculoskeletal evaluation for injury risk.

12.6 Management / Public Health Perspective

WHO's Global Action Plan on Physical Activity (2018–2030) promotes creating active societies through infrastructure, safe walking/cycling paths, and school fitness programs. Community-level engagement and digital fitness tools are driving new awareness.

Summary Points

- Exercise is a cornerstone of physical and mental health.
- Even moderate activity yields substantial health benefits.
- Creating supportive environments is essential for increasing population-level activity.