

投影片 1

Principles of Assessment,  
Prescription, and Exercise  
Program Adherence  
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投影片 2

Key Points

- Principle of exercise testing
- Principles of prescription
- Exercise program
- Professional certification



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投影片 3

What is your **responsibilities** as  
an exercise specialists?

- Educating
- Conducting pre-test health evaluation
- Selecting, administrating, and interpreting
- Designing
- Leading
- Analyzing
- Do's Don'ts
- Motivating

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投影片 4

What is your **role** as an exercise specialists?

- Educator
- Leader
- Technician
- Artist

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投影片 5

Components Of Physical Fitness

- Cardio-respiratory Endurance  
"Is the ability of the heart, lungs, and circulatory system to supply oxygen and nutrients to working muscles efficiently"

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投影片 6

How do we measure, ne??

- Vo2 Max
- Rate of oxygen utilization of the muscles

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投影片 7

**Components Of Physical Fitness**

- **Musculoskeletal Fitness**  
"The ability of the skeletal and muscular systems to perform work"  
  
Requires muscular strength  
muscular endurance and  
Bone strength

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投影片 8

**What is the best ways to train?**

- **Resistance Training**

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投影片 9

**Components Of Physical Fitness**

- **Body weight and body composition**
  - The size or mass of the individual  
Aerobic exercise and resistance training

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投影片 10

**Components Of Physical Fitness**

- **Flexibility**  
"The ability to move a joint or series of joints fluidly through the complete range of motion"  
  
Dailey Stretching exercise can greatly improve

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投影片 11

**Components Of Physical Fitness**

- **Neuromuscular Relaxation**  
"The ability to reduce or eliminate unnecessary tension or contraction in a muscle group"  
  
Progressive relaxation and Tai-Chi

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投影片 12

**Purpose of Physical Fitness Testing**

- Classify Disease risk
- Identify any contraindications to exercise testing
- Obtain their informed consent
- Develop physical fitness profiles

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投影片 13

**Testing Order**

- Resting blood pressure and heart rate  
(neuromuscular tension and stress levels)
- Body composition
- Cardio-respiratory endurance
- Muscular Fitness
- Flexibility

ACSM, 1995

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投影片 14

**Testing Environment**

- Testing Anxiety
  
- Establishing good rapport
- Projecting a sense of relaxed confidence
- Creating a friendly, quiet, private, safe, and comfortable environment

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投影片 15

**Test Validity**

- The ability of a test to accurately measure, with minimal error
  - Validity cannot exceed 1.0
  - Excess of  $r = .80$

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投影片 16

**Test Reliability**

- The ability of a test to yield consistent and stable scores across trails and over time
  - Example: Skinfold testing
  - Technician obtains similar values when taking duplicate measurements on the same person
  - It is possible to have an excellent reliability but poor validity
  - Exceed  $r = .90$

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投影片 17

**Test Objectivity**

- Known as intertester reliability
  - "Similar test scores for agiven individual when the same test ls administrated by different technicians"
- Exceed  $r = .90$

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