

Exercise 101

A basic introduction to exercise.

Check Your Understanding Questions:

1. What is cardio exercise? Explain the four types.
2. What is strength exercise? Explain four ways to do it.
3. What is the difference between flexibility and mobility?
4. What is the difference between static stretching and dynamic stretching?
5. What are balance exercises? Give some examples.
6. What are coordination exercises? Give some examples.
7. How much should people exercise to get health benefits?
8. What's the difference between exercise and movement?



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It's common knowledge that exercise is important to a healthy lifestyle. Yet when it comes to exercising, most people just think of running or lifting weights at the gym. Exercise is a lot broader than that. This article will explain the main types of exercise:

1. Cardio

2. Strength
3. Flexibility and Mobility
4. Balance and Coordination

Then the article will end by talking about making an exercise plan and the importance of movement.

Cardio Exercise

Cardio (also called aerobic) exercise is any type of exercise that raises your heartbeat. Cardio strengthens our heart and lungs. Within cardio, there are many types of exercise based on heart rate and exertion.

1. Steady state
2. Circuit training
3. Interval training
4. HIIT (High Intensity Interval Training)

Steady state exercise is when we keep a constant elevated heart rate for a set amount of time or distance. Examples include walking and jogging. Even everyday tasks like cleaning the house, walking the dog, or gardening can be steady state exercise.

Interval training is when we exert a lot of effort for a set time, then rest for a set time, then repeat. In other words, we elevate our heart rate for a set time, then lower it for a set time, then repeat. An example is walking for 3 minutes, then jogging for 30 seconds, then repeat.

Circuit training is when we loop a series of exercises in a circuit. These exercises can include both cardio and strength exercises. An example is starting with side-to-side hops, then side dumbbell raises, then lunges, then push-ups, then repeat. You can take short rest between the exercises, or do the whole circuit and then rest.

HIIT is similar to interval training, except we really exert ourselves. An example is sprinting for 30 seconds, then walking for 15 seconds, then repeat a set number of times. Notice how it is a lot more intense than normal interval training.

Strength Exercise

Strength exercise (also called resistance training) requires a specific muscle to exert force. Strength exercise improves our strength, stamina, bone density, and sleep. It can also make many daily tasks easier, such as climbing stairs or carry groceries.

There are many different ways to do strength exercise:

1. **Dumbbells:** When carrying dumbbells, we can move freely and widely, so they are great for training stabilizing muscles.
2. **Resistance bands:** These bands provide progressive resistance, meaning the resistance becomes larger as you do a movement from start to finish
3. **Exercise machines:** These machines make it easy to adjust the weight and work out specific muscles
4. **Body weight exercises:** When you move in a way that uses your body weight against gravity. Examples include push-ups and pull-ups.

Flexibility and Mobility Exercises

Flexibility is reducing tightness in muscle, while **mobility** is increasing the range of motion a muscle has. For example, if you want to run faster, you need to be able to move your legs through their full range of motion, which is mobility. You also need your leg muscles to not be tight, which is flexibility.

Flexibility and mobility exercises involve stretching muscles and tendons. Examples include static stretching, dynamic stretching, and yoga.

Static stretching is when we stretch slowly into a final position, then we hold that position. An example is sitting with our legs out straight, then trying to touch our toes with our hands. Static stretching is best for helping muscle recover after a work-out.

Dynamic stretching is when we move parts of the body through a range of motion while slowly increasing the range or speed. Examples include high knees and lunges with a twist.

Yoga is often thought of as just static stretching, but yoga involves much more than that. Many forms of yoga combine static stretches with dynamic stretches, balance, and strength, which means yoga helps to build strength, mobility, and flexibility. A huge part of yoga is also slow and conscious breathing, which helps cultivate mental focus and peace, which it is great for our mental health as well.

Balance and Coordination Exercises

Balance exercises can help us prevent falls and make everyday movements easier. There are three types of balance exercises:

1. **Stationary balance:** Doing alternating dumbbell curls or standing on one foot
2. **Motion balance:** lunges, platform jumps
3. **Offset balance:** single-arm side raise

Coordination exercises help us use different parts of the body together smoothly and efficiently. Examples include driving a car, riding a bike, catching a ball, or dribbling a basketball. Many sports require good coordination.

Explanation Video

Most of the information above is nicely summarized in this video:

Making an Exercise Schedule

At this point, you're probably wondering, "Which exercises should I do?" The answer depends on your goals. If you want to improve your energy and heart health or lose weight, then cardio would be good. But for losing weight, choosing a healthy diet is more important than burning calories via exercise. If you want to increase your strength or muscle mass, then strength training is best. If you have muscle tightness or pain, then flexibility and mobility exercises are best. If you are an athlete, then you probably need all four.

You might also be wondering, "How much should I exercise?" Many people don't exercise because they think they need to exercise a lot to get any benefits. But according to Dr. Rangan Chatterjee, even 5 minutes of exercise a day can have tremendous benefits. That's why he wrote an entire book called "Feel Better in Five", which lists many 5-minute workouts. They range from 5-minute strength circuits to 5-minute yoga.

Here is a video from Dr. Chatterjee's demonstrating a 5-minute workout:

If you have the time to exercise 30 minutes a day or 3 hours a week, that's obviously better. But if you don't have that much time, then do 5 minutes a day; you'll still get great health benefits.

Dr. Dallas Hartwig explains that to have a healthy lifestyle, we need more movement, not just exercise. **Exercise** is a deliberate attempt to move our body in a specific way to achieve a specific goal. That goal might be to lose weight or to increase muscle or flexibility.

Movement is just living; it's being human in the world. In the past, humans had to move to find food, interact with people, get resources, and explore the world.

Although exercise is beneficial, it is not all that matters. Most exercise is done in a fixed position in a 2-dimensional highly predictable way. For example, lifting a weight is just up and down, and the movement is predictable. Healthy movement is three-dimensional and unpredictable because that's how the real world is. We can add in more movement into our lives in many simple ways:

- Taking stairs instead of the elevator
- Walk or bike instead of driving to nearby places like the grocery store or visiting a friend
- Carry groceries home rather than using a car
- Playing sports
- Dance

Conclusion

Exercise is a lot more than just running or lifting weights at the gym. There are many types of exercise, including cardio, strength, flexibility and mobility, and balance and coordination. We cannot use lack of time as an excuse to not exercise. Even 5 minutes a day can have tremendous benefits! In addition to exercise, we should add more movement into our lives, such as walking, biking, and carrying backpacks. A healthy lifestyle involves both exercise and movement.