

Introduction:

In this lesson, you begin by discovering how to create a strength training routine based on your own goals, preferences, time schedule, and available equipment. Strength training with weights makes your muscles work against the extra pounds (this is the concept of resistance). You quickly review your program variables and the essential elements to various weight-training routines. Then you will uncover how to select the right weight for each exercise.

Students take your mark, get set, let's begin lifting!

Standards:

PANPEK2: Perform activities safely and follow rules of etiquette and ethical behavior

PANPEK3: Display age appropriate self-control and discipline

PANPE1a: Plan and implement a personal / group physical activity-learning project, focusing on an alternative to traditional sports

PANPE1d: Self-assess performance of alternative physical activity skills and evaluate and adjust alternative physical activity learning plan

Objectives:

- Design your own strength training routine.
- Review the essential elements of each routine.

Guiding Questions:

1. What are some misconceptions about strength training?
2. What do you consider when designing your training program?



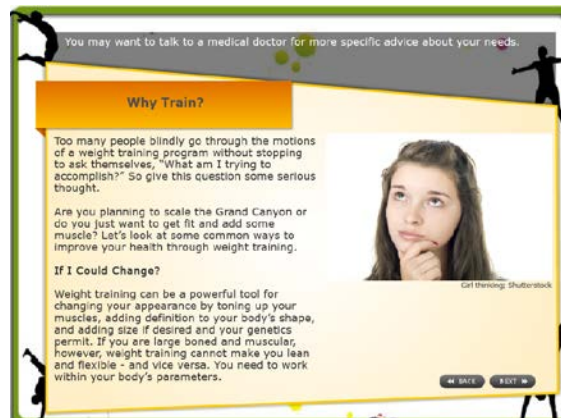
Custom Routine



Penelope Cruz; Shutterstock

You have probably read magazine articles that reveal an athlete or actor's weight training routine. Often, the stories imply that if you follow the routine to the letter, you too can become a sculpted celebrity - or at least look like one. Do not buy into this concept.

Everyone has a unique genetic makeup - and a unique set of preferences and priorities. In other words, you may not be able to dedicate three hours daily to training, hire a personal trainer to work with you daily, and hire a chef to manage all your meals. You certainly can pick up good ideas from reading about other peoples' workouts, but you are better off designing your own routines.



Girl thinking; Shutterstock

Why Train?

Too many people blindly go through the motions of a weight training program without stopping to ask themselves, “What am I trying to accomplish?” So give this question some serious thought.

Are you planning to scale the Grand Canyon or do you just want to get fit and add some muscle? Let’s look at some common ways to improve your health through weight training.

If I Could Change?

Weight training can be a powerful tool for changing your appearance by toning up your muscles, adding definition to your body’s shape, and adding size if desired and your genetics permit. If you are large boned and muscular, however, weight training cannot make you lean and flexible - and vice versa. You need to work within your body’s parameters.



Improve your strength.

If you want to increase your strength, keep your bones strong, and avoid common injuries, you do not need to spend half of your day with steel weights in your hands. Instead, you can perform one set of 8 to 15 repetitions for every major muscle group in your body.

- Butt (glutes)
- Front thighs (quadriceps)
- Rear thighs (hamstrings)
- Calves
- Chest (pecs)
- Back
- Abdominals (abs)
- Shoulders (deltoids)
- Front of upper arm (biceps)
- Rear of upper arm (triceps)

The American College of Sports Medicine (ACSM) recommends doing two or three strength workouts per week. General recommendations often need to be adapted to fit individual needs.

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Weight training; Shutterstock

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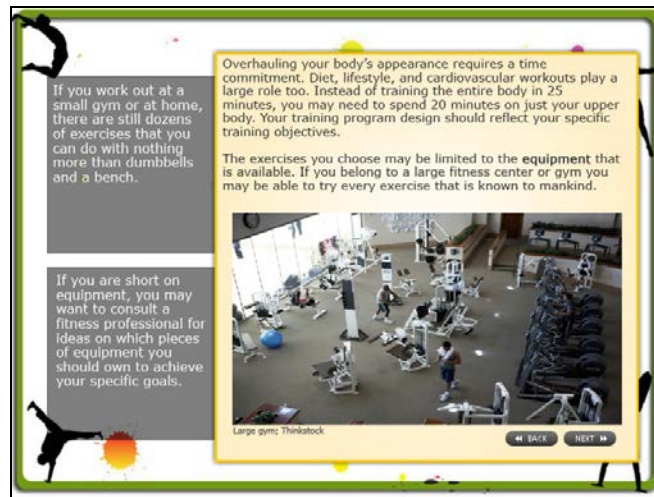
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Significantly overhauling your body's appearance requires more of a time commitment than simply improving your health. Also, diet, lifestyle, and cardiovascular workouts play a large role. Instead of training your entire body in 25 minutes, you may need to spend 20 minutes simply on your upper body. It is recommended that you perform at least three sets per muscle group to develop a noticeably firmer body. Your training program design should reflect your specific training objectives.

Equipment



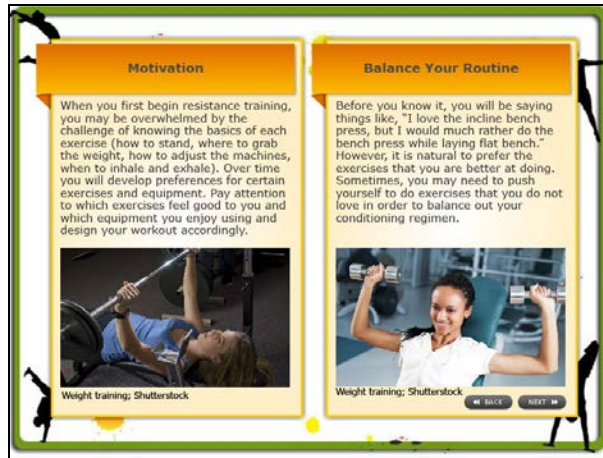
Large gym; thinkstock.com

Overhauling your body's appearance requires a time commitment. Diet, lifestyle, and cardiovascular workouts play a large role too. Instead of training the entire body in 25 minutes, you may need to spend 20 minutes on just your upper body. Your training program design should reflect your specific training objectives.

The exercises you choose may be limited to the equipment that is available. If you belong to a large fitness center or gym you may be able to try every exercise that is known to mankind.

If you work out at a small gym or at home, there are still dozens of exercises that you can do with nothing more than dumbbells and a bench.

If you are short on equipment, you may want to consult a fitness professional for ideas on which pieces of equipment you should own to achieve your specific goals.



Weight training; Shutterstock

Motivation

When you first begin resistance training, you may be overwhelmed by the challenge of knowing the basics of each exercise (how to stand, where to grab the weight, how to adjust the machines, when to inhale and exhale). Over time, you will develop preferences for certain exercises and equipment. Pay attention to which exercises feel good to you and which equipment you enjoy using and design your workout accordingly.

Balance Your Routine

Before you know it, you will be saying things like, “I love the incline bench press, but I would much rather do the bench press while lying flat bench.” However, it is natural to prefer the exercises that you are better at doing.

Sometimes, you may need to push yourself to do exercises that you do not love in order to balance out your conditioning regimen.

Keep an Open Mind

Keep an open mind. You may even grow to love the push-ups that you once hated. Ask yourself and answer honestly:

- How often can I work out per week?
- How many hours do I have to work out?

If you are a busy student who also works part-time, chances are you have less time to work out than others.

Individualized Workout/Training Plans

Age: For teens, Calisthenics, aerobics and light strength training routine are very effective starting point. Teens should avoid competitive weight lifting, power lifting, body building, and maximal lifts until they reach physical and skeletal maturity. If you have not been physically active for months & older adults, you should begin with light or moderate activities.

Body Composition: Overweight individuals are at increased risk for stress to muscles and joints and may need to limit weight-bearing activities. Underweight individuals should perform more strength-training and weight-bearing activities to ensure proper muscle and bone maintenance.

Current Fitness Level: Develop a routine that is appropriate to your fitness level. Start at a comfortable level and proceed from there.

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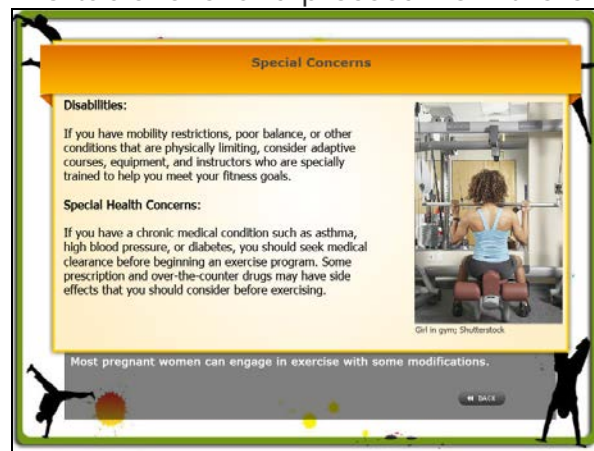
Yoga - happy place; Shutterstock
 Exercising; Stockbyte, thinstock.com
 Heart with heart rate; Shutterstock

Factors of Creating Individualized Workout/Training Plans

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Girl in gym; Shutterstock

Disabilities:

If you have mobility restrictions, poor balance, or other conditions that are physically limiting, consider adaptive courses, equipment, and instructors who are specially trained to help you meet your fitness goals.

Special Health Concerns:

If you have a chronic medical condition such as asthma, high blood pressure, or diabetes, you should seek medical clearance before beginning an exercise program. Some prescription and over-the-counter drugs may have side effects that you should consider before exercising.

Most pregnant women can engage in exercise with some modifications.



Weight training; Shutterstock

Reality Check

Do not expect to look like the people who sell fitness-training products on TV or in magazine ads. Many of these models have unusual genetics, have taken drugs, and/or have undergone liposuction and added implants to achieve their looks.

Additionally, professional film producers may have digitally enhanced the photos. In fact, among men, chest or pecs and calf implants are popular, while more and more women are getting butt implants. Mentioning this phenomenon is not to advocate plastic surgery. This is simply to let you know that most people who have bodies that look a little too perfect are likely to have achieved that look through unnatural means. So do not set yourself up for failure by wanting to look like a movie star or top model without using natural methods. Remember that SMART goals are specific, measurable, achievable, realistic and time specific"

Program Variables

There are six basic program variables that you need to keep in mind when designing your training programs.

- Exercise selection
- Exercise order
- Training frequency
- Number of sets
- Amount of weight and number of reps
- Rest periods

Weight training; Shutterstock

Fitness Level

If you have not lifted weights in a few months, do not try to lift the entire gym. Otherwise, you can expect to be sore, and receive an injury or two. Do not let your enthusiasm, flexible schedule, or access to fancy equipment impair your judgment in designing your routine. The best goals are those that are achievable, and to be achievable, your plans need to be realistic.

Weight training; Shutterstock

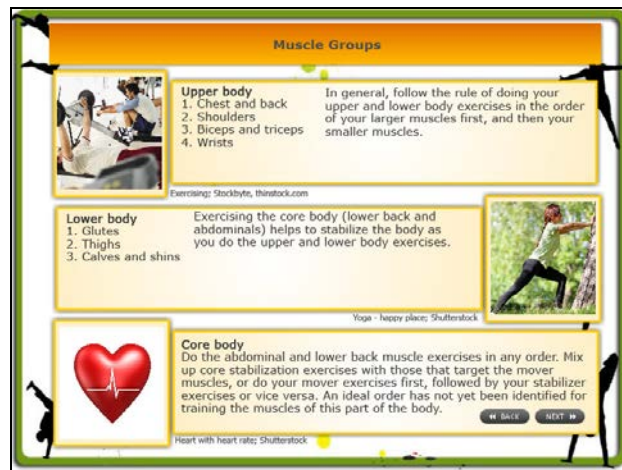
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Yoga - happy place; Shutterstock
 Exercising; Stockbyte, thinstock.com
 Heart with heart rate; Shutterstock

In general, follow the rule of doing your upper and lower body exercises in the order of your larger muscles first, and then your smaller muscles. Lastly, exercise your middle body, your lower back and abdominals, as they serve to stabilize your body as you do all the prior exercises.

Upper body

1. Chest and back
2. Shoulders
3. Biceps and triceps
4. Wrists

Lower body

1. Glutes
2. Thighs
3. Calves and shins

Core body

Do the abdominal and lower back muscle exercises in any order. Mix up core stabilization exercises with those that target the mover muscles, or do your mover exercises first, followed by your stabilizer exercises or vice versa. An ideal order has not yet been identified for training the muscles of this part of the body.

Summary

It is important to understand the limitations as well as the possibilities of strategic planning. A plan is not a wish list or a report card. It is certainly not a magic bullet or a quick cure for everything that ails you. What a plan can do is shed light on your unique strengths and weaknesses, enabling you to pinpoint new opportunities or the causes of current issues.

If you are committed to implementing your plan, it can be an invaluable blueprint for positive change enabling you to take stock of where you are now. A plan can help you determine where you want to go, and chart a course of how to get there.

Student Practice:**Workout Routine**

In this laboratory assignment, you will develop an understanding of a basic workout routine.

Instructions: You will research and create two workout routines geared for beginners. Create these workout routines in a separate word document or excel file. The workout routines need to be in a chart format.

Personal Best

In this activity, you will begin, develop or maintain their fitness level.

Instructions:

Read and complete the workout routine. Log your activity and review the log with your parent, facilitator or physical educator/fitness professional at your school or local gym. Have them sign the form to verify your activity.

Check for Understanding

Critical Thinking

This activity assesses your understanding of Activity & Nutrition principles and concepts.

Instructions: Answer the following question in one or more paragraphs each consisting of 3-5 complete sentences.

Question: Describe in detail the essential elements of a resistance training routine.

Resources

The Physician and Sports Medicine Online – www.physsportsmed.com

The Physician and Sports medicine Online is a source for primary care sports medicine clinical and personal health articles. This site contains articles on exercise, nutrition, injury prevention, personal fitness, and rehabilitation.

National Safety Council: back care - www.nsc.org

The National Safety Council (NSC) functions to educate and influence society to adopt safety, health and environmental practices that prevent suffering and economic losses. There is an online library at this site that contains periodicals, upcoming conference information, and product and services.