



Active Lifestyle Challenge

WEEK FOUR

Strength Training

Welcome to week four of the Active Lifestyle Challenge!

Included in this packet are all the resources you need for your fourth week.



ACTIVE LIFESTYLE CHALLENGE

Week Four Overview

Strength Training

Remember to track each completed activity on your challenge tracking sheet!

Watch 'TED-ED What Makes Muscles Grow?'

4-Minute Video

Watch Now



Read 'Benefits of Strength Training'

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Benefits of Strength Training



Strength training is an important component of overall health and fitness for everyone. By incorporating a regular strength training regime you can reduce your body fat, increase lean muscle, and burn calories more efficiently.

Did you know?

Muscle mass naturally decreases with age at a rate of **3-8% per decade** after the age of 30. However, strength training helps to preserve and enhance muscle mass as you age.

There are many options when it comes to strength training. It can be done at the gym or in the comfort of your home; with or without equipment.

Body Weight Exercises

Push-ups, pull-ups, dips, squats, crunches and planks.

Resistance Bands

Inexpensive, light-weight tubing that provides resistance when stretched.

Free Weights

Barbells and dumbbells are the classic strength training tools. You can get creative with whatever you have around the house!

Weight Machines

Most fitness centers offer a wide variety of resistance machines. You can also invest in weight machines for your home.

When starting a weight training regime, it is important to know what your goals are as they will impact the way you should lift weights. In general, there are two types: conditioning and strengthening regimes.

Conditioning Weightlifting Routine

Consists of lighter weights and higher repetitions.

Strengthening Weightlifting Routine

Consists of heavier weights and smaller repetitions.

Recent research has shown that both regimes will produce similar results as long as you are lifting to muscle fatigue within approximately 90 seconds (anaerobic zone).

Additional Health Benefits of Lifting Weights

- › Increase metabolism
- › Develop strong bones
- › Reduce body fat
- › Increase muscle strength and endurance
- › Reduce risk of injury
- › Manage chronic conditions
- › Improve coordination, focus, and balance



Weightlifting Tips

- › If you can complete all sets with ease, increase your weight.
- › If you are sacrificing form to complete all your sets, decrease your weight.
- › Work all major muscle groups- not just those you see in the mirror.
- › Each lift should be completed through the joint's entire range of motion.
- › Allow muscles to rest and recover in between works outs (24-48 hours).



Basics of Resistance Exercise

Getting Started

Resistance training, also called strength training, is done to improve muscular fitness. It increases muscle strength, size, power, and endurance by making your muscles work against weight or force (free weights, weight machines, resistance bands, body weight etc.). Resistance training should support daily activities and movements, can prevent injury, bone loss and reduce risk for chronic disease. Resistance training is especially important with age.

Resistance Training Prescription for Adults

It is recommended that healthy adults should perform muscle strengthening exercises 2 times per week working all major muscle groups (chest, shoulders, upper and lower back, abdomen, hips, and legs) with at least 48 hours separating training of the same muscle group. You may choose to train all muscle groups in the same training session, or you may choose to do a “split” routine to focus on specific body parts on different days.

Training Goal

Identify your training goal as a first step. Is your goal to maintain overall health, improve your running performance or be able to lift a specific weight? Find exercises that will help you meet these goals keeping in mind that importance of developing proper stabilization and alignment foundations in order to prevent injury. If you are seasoned in the gym, but experiencing unexpected weakness or plateau, you may need to work on your stabilization, mobility or core strength to progress.

Helpful Definitions

Reps (Repetitions)

The number of times you lift and lower a weight in one set of an exercise (i.e. if you lift a dumbbell 5 times before you put it down, that's 5 reps).

Sets

A group of reps. If a workout calls for 3 sets of 10 reps, you'll complete the exercise ten times and repeat that 2 additional times.

Failure

The point in an exercise when your muscles are so fatigued that you can't perform any more reps with strict form. Sometimes a workout will say “complete a set until failure” meaning you do as many reps as you can, with good form.

RPE (Rate of Perceived Exertion)

A subjective scale to measure how hard an exercise feels. On a scale of 0-10 you can rate how difficult an exercise is.

AMRAP (As Many Reps As Possible)

Similar to saying “go to failure.”

1RM (One Rep Max)

The maximum amount of weight that you can lift for a given exercise.

PR (Personal Record)

A record of your best performance in a specific exercise, workout, or task.

Assess your current fitness level and review where you fall on the OPT (Optimal Performance Training) model. This model was created by the National Academy of Sports Medicine as a method to progress training and fitness levels while avoiding injury. Review the chart below for descriptions and recommendations on how to advance to each level.

Summary Chart of the OPT Model

Level	Phase	Primary Adaptations	Primary Methods of Progression
Stabilization	1. Stabilization Endurance Training	› Mobility and flexibility › Core and joint stabilization › Postural alignment and control › Muscular and aerobic endurance	› Progress exercises proprioceptively (controlled, yet unstable) › Increase the complexity of exercises once basic movement patterns have been established.
Strength	2. Strength Endurance Training	› Core strength and joint stabilization › Muscular endurance and prime mover strength	› Decrease rest periods. › Increase the volume of exercises (reps + sets). › Increase the load (weight) of resistance training exercises. › Increase the complexity of resistance training exercises.
	3. Muscular Development Training	› Core strength › Muscular strength and hypertrophy	› Increase the volume of exercises. › Increase the load of resistance training exercises. › Increase the complexity of resistance training exercises.
	4. Maximal Strength Training	› Core strength › Maximal muscular strength	› Increase the load of resistance training exercises. › Increase the sets of resistance training exercises.
Power	5. Power Training	› Core strength › Maximal muscular strength › Rate of force production	› Increase the load of resistance training exercises. › Increase the speed (repetition tempo) of exercises. › Increase the sets of exercises.

Progress Your Routine

Change your routine every 4-6 weeks for continual progress and to combat boredom. Your muscles need to be continually challenged to make changes. Consider changing your frequency, intensity, time or switch up your routine with interval or cross training. Consider trying a new exercise class!

Frequency

Are you training each major muscle group two or more days each week? Are you working out three days a week? Can you add another day?

Intensity

Add more weight or resistance bands to your workout.

Time

How many sets and repetitions are you performing, and how long are you resting between sets? Lengthen your workouts by adding in cardio or endurance training.



Mini Challenge

Flip a Coin Workout

Toss a coin 10 times and complete the heads or tails exercise associated with each side!

	Heads	Tails
1 st <i>Flip</i>	15 Jumping Squats	25 Calf Raises
2 nd <i>Flip</i>	10 Pushups	12 Triceps Dips
3 rd <i>Flip</i>	15 Lunges	Plank <i>60 Seconds</i>
4 th <i>Flip</i>	10 Glute Bridges	10 Deadlifts
5 th <i>Flip</i>	15 Bent-Over Row	15 Squats
6 th <i>Flip</i>	20 Sit-Ups	10 Pushups
7 th <i>Flip</i>	Mountain Climbers <i>60 Seconds</i>	Burpees <i>60 Seconds</i>
8 th <i>Flip</i>	10 Overhead Press	10 Bicep Curls
9 th <i>Flip</i>	Lateral Raise <i>60 Seconds Each Side</i>	Front Raise <i>60 Seconds</i>
10 th <i>Flip</i>	Plank <i>60 Seconds</i>	Wall Sit <i>90 Seconds</i>



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