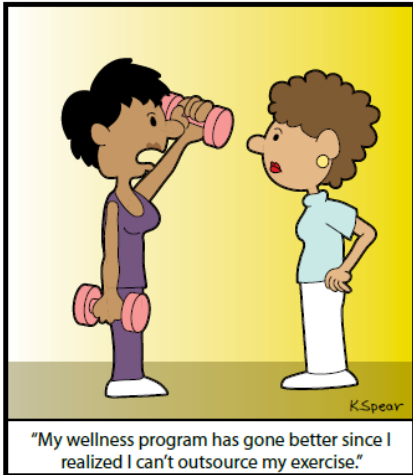


MSD PREVENTION

BUILDING TOTAL BODY STRENGTH

Strength training has been proven to benefit all populations, from young athletes to seniors. Weight lifting is also important for women. In fact, recent studies have shown significant health benefits from strength training. The benefits include increased muscle tone and body shape, increased bone density, improved hormone and mental function, decreased stress, increased metabolism, and weight loss.

THINGS TO REMEMBER ABOUT STRENGTH TRAINING



- Perform weight training 2-3 times per week.
- Prevent injury by warming up properly
- Lift and lower your weights slowly for maximum benefit.
- Control your movements. Do not jerk or swing the weights.
- Beginners should start with one set of 12 repetitions of each exercise.
- Keep breathing during exercise; holding your breath is not a good idea.
- Tighten your abs and core while lifting to protect your back.
- Stay within your target heart rate.
- To build lean muscle, use lighter weights and perform more repetitions.
- To build muscle BULK, use heavier weights and perform fewer repetitions
- Drink plenty of water during your workout.
- For personal assistance, consult with a fitness professional.

The following program consists of 3 circuits of 5 exercises in each circuit. The goal is to perform 3 sets of each circuit, performing 12, 10, and 8 repetitions in each respective set. To start, perform 1 set of 12 reps on each circuit and build your strength and endurance from there.

CIRCUIT #1



1. Shoulder Press - Position dumbbells to each side of shoulders with elbows below wrists. Press dumbbells upward until arms are extended overhead. Slowly lower to sides of shoulders.



2. Biceps Curls - Position dumbbells to sides, palms facing in, arms straight and elbows to sides. Raise dumbbells by bending elbows and rotate forearm until forearm is vertical and palm faces shoulders. Slowly lower to original position.



3. Push-ups - Place your hands about shoulder width apart on the floor. Lower yourself until your chest almost touches the floor. Then press your upper body back up to the starting position.



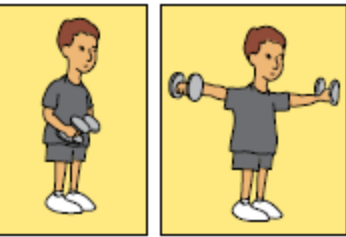
4. Sit-ups - Lie on your back with your knees bent and your feet flat on the floor. Place your hands behind your head pulling your elbows back without arching your low back. Contract your abdominal and core muscles and flex your chin towards your chest while slowly curling your torso to your thighs. Don't pull your head and neck with your arms. Slowly lower your torso back to the floor.



5. Squats with Heel Raise - Stand with dumbbells to sides. Slowly bend knees forward while keeping back straight and knees aligned with feet. Squat down until thighs are parallel to floor, then extend knees to straightened position and perform a toe raise.

MSD PREVENTION

CIRCUIT #2



1. Lateral Shoulder Raises - Grasp dumbbells in front of body with palms facing away. Raise arms to sides until elbows reach shoulder height. Slowly lower back to starting position.



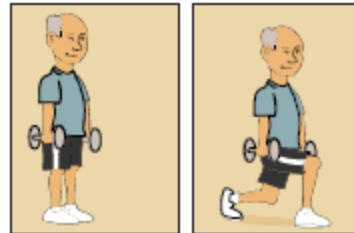
2. Flat Flies - Grasp two dumbbells. Lie on bench supporting dumbbells above chest with arms almost straight. Slowly lower dumbbells laterally to sides until chest muscles are stretched, keeping elbows slightly bent. Bring dumbbells back together above chest.



3. Triceps Extensions - Lie on bench holding dumbbells with your arms extended above shoulders. Slowly lower the dumbbells behind your head. Raise the dumbbells back up to the starting position.

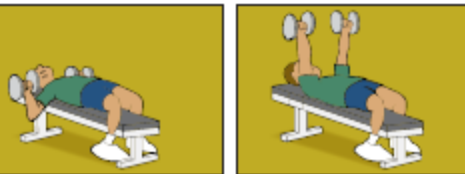


4. Single Arm Rows - Lean over bench and place the hand of supporting arm on bench. Grasp dumbbell from floor and pull up to side until upper arm is just beyond horizontal. Lower weight until arm is extended and shoulder is stretched downward. Repeat set with opposite arm.

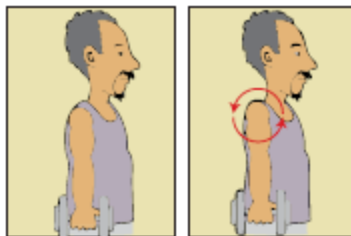


5. Lunges - Stand with dumbbells to sides. Lunge forward with first leg, landing on heel then forefoot. Lower body by flexing knee and hip of front leg until front thigh is parallel with floor. Return to original standing position by pushing and extending hip and knee of forward leg. Alternate lunge with opposite leg and repeat.

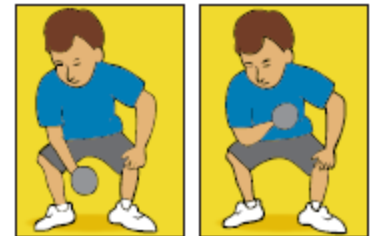
CIRCUIT #3



1. Bench Press - Sit down on bench with dumbbells resting on lower thigh. Lift weights to shoulder level and lie back. Position dumbbells to sides of chest with bent arm under each dumbbell. Press dumbbells up with elbows until arms are extended. Slowly lower weights to sides of upper chest until slight stretch is felt in chest or shoulder.



2. Reverse Shoulder Rolls - In standing position hold a dumbbell in each hand with arms to side and elbows very slightly bent. Shrug your shoulders up and then slowly roll shoulders back (pull shoulder blades together), down, forward, and up.



3. Squat Biceps Curls - Hold dumbbell in one hand. Lower down into a squat position and place elbows on the lower thighs. Curl dumbbell with first arm by bending elbow. Slowly lower to start position and repeat to complete set with opposite arm.



4. Back Extension - Use a light weight in each hand and get into starting position as shown. Lift your left arm in front of you, at the same time lift your right leg as shown. Return to the starting position. Alternate sides to complete set.



5. Bicycle Abs - Lie flat on the floor face up, as shown. Bring your knees up to about a 45-degree angle and slowly go through a bicycle pedal motion touching elbows to knees.