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Resistance Training

This booklet was designed as a guide to help you begin a safe and effective weight training program. The booklet includes strength and flexibility guidelines, and illustrations of exercises you can perform with your hand weights. We recommend that you read the strength and flexibility guidelines prior to using your hand weights. We hope that you enjoy the results you can attain with regular use of your hand weights.

If you have any questions regarding this exercise booklet, please contact MHealthy:

Call: 734-647-7888 | **Email:** mhealthyfitness@umich.edu

Resistance training can increase muscular strength and endurance. Resistance training has also been shown to increase bone density, delay the loss of bone mass, help prevent chronic low-back pain, increase metabolism, and improve joint stability.

ORDER AND PROGRESSION OF EXERCISES

- The illustrated exercises are ordered by muscle group.
- Work the largest muscle groups first (legs), then the smaller muscle groups (arms).
- When you can consistently do 15 repetitions in each set for three consecutive workouts, the next time you train increase your weight by the smallest amount available for that exercise.
- Record your exercises and your progress using the hand weights tracking sheet in the back of this booklet.

Guidelines

Frequency

- 3-4 days a week is ideal, however one or two is acceptable (depending on your goals).
- Rest your muscles for 48 hours between workouts to allow your muscles to recover.

Intensity

- Perform each exercise with proper form (see “Form” below) until momentary muscle fatigue is reached – the point at which you cannot perform another repetition without losing form.

Duration

- **Repetitions:** To increase muscular strength, perform the exercises so momentary muscle fatigue is reached within 8-15 repetitions for each set.
- **Sets:** One correctly performed set for each exercise may be enough. Multiple sets may provide better results, depending on your goals.
- **Rest interval:** If you do multiple sets, a typical rest interval is 30-60 seconds, but it can vary depending on your goals.

Form

- **Proper speed:** Exert force/tension (increase tension) in two counts and reduce tension in 4 counts (pull 1-2, release 1-2-3-4).
- **Range of motion:** Exercise muscles through their fullest, comfortable range of motion.
- **Protecting joints:** Do not lock your joints when performing any exercise.
- **Proper form:** If you must alter your form to complete the repetition, STOP! You have reached momentary muscle fatigue for that set. Do not sacrifice form to perform more repetitions, this is where many injuries occur.

Safety

- **Injury prevention:** To prevent injury, STOP if an exercise causes any pain!
- **Breathing:** Remember to breathe. DO NOT hold your breath while performing an exercise. Complete at least one breathing cycle (in and out) per repetition.

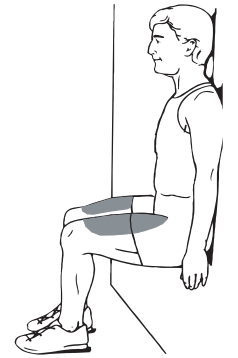
Resistance Training Exercises

LEGS: QUADRICEPS

Wall Squat

Stand against wall with feet at shoulder width stance. Walk feet away from wall and slide back down wall until knee joints are flexed to a 90 degree angle. Hold for 20 to 60 seconds.

Repeat 1- 3 times



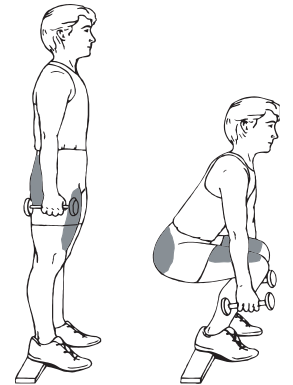
LEGS: QUADRICEPS/GLUTEALS

Squat

Stand on board, or on floor, with feet shoulder width apart. Keep back straight and weight on heels. Bend knees until knee joints are flexed to a 90 degree angle. Straighten knees and return to starting position.

Complete 8-15 repetitions.

Do 1-3 sets



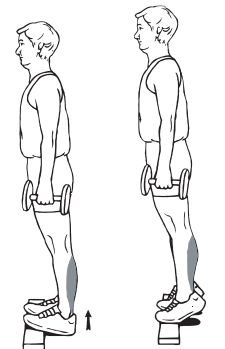
LEGS: CALVES

Standing Heel Raise

Hold weights in hands to sides. Stand on board with feet shoulder width apart and legs straight. Rise up on toes. Lower heels to starting position.

Complete 8-15 repetitions.

Do 1-3 sets.



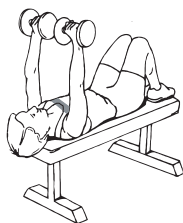
CHEST

Bench Press

Lie on your back with feet and lower back in contact with the bench. Start with weights at chest level. Press weights over chest to straight arm position. Bend arms and return to starting position.

Complete 8-15 repetitions.

Do 1-3 sets.



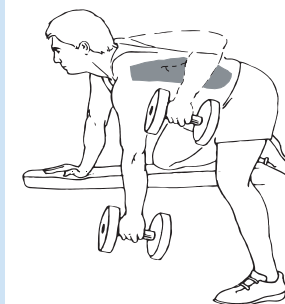
BACK: LATISIMUS DORSI

One Arm Bent-Over Row

Place right hand and knee on bench. Hold weight in left hand with straight arm. Pull dumbbell up to side of chest and squeeze left shoulder blade toward spine. Lower weight back down to starting position. Repeat with other arm.

Complete 8-15 repetitions.

Do 1-3 sets.



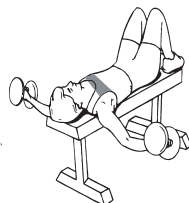
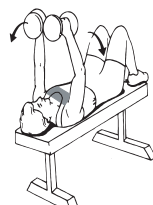
CHEST

Bench Fly

Lie on your back with feet and low back in contact with the bench. Start with weights over chest with straight arms and palms facing each other. Open arms out to sides and lower weights to shoulder level. Lift weights back up to starting position.

Complete 8-15 repetitions.

Do 1-3 sets.



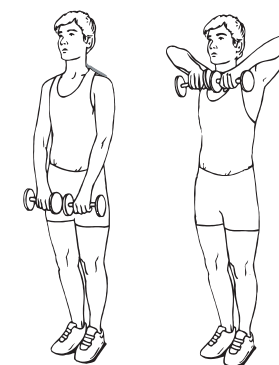
BACK: TRAPEZIUS

Upright Row

Hold weights in front of body with palms facing thighs. Pull weights up toward chin, keeping weights close together and elbows out. Lower weights back down to starting position.

Complete 8-15 repetitions.

Do 1-3 sets.



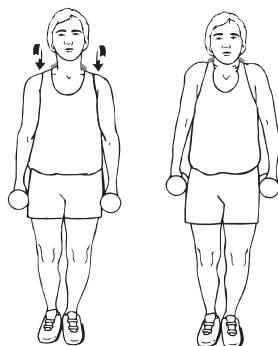
BACK: TRAPEZIUS

Shoulder Shrug

Hold weights in hands to sides. Keeping arms straight, lift shoulders toward ears. Lower shoulders back down to starting position.

Complete 8-15 repetitions.

Do 1-3 sets.



SHOULDERS

Standing Shoulder Press

Start with weights at shoulder height and palms facing ears. Press weights overhead, rotating palms to face forward, in straight arm position. Lower weights back down to starting position.

Complete 8-15 repetitions.

Do 1-3 sets.

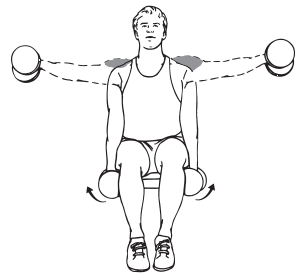


SHOULDERS

Seated Lateral Deltoid Raise

With arms slightly bent, raise dumbbells until parallel with the floor. Lower weights back down to starting position.

Complete 8-15 repetitions.
Do 1-3 sets.

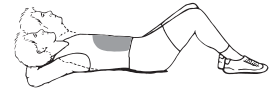


CORE: ABDOMINALS

Crunch

Place hands behind head and bend knees. While keeping head and neck in line with spine, elevate shoulders and upper back toward ceiling, then slowly return to starting position.

Complete 8-15 repetitions.
Do 1-3 sets.

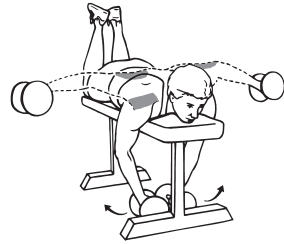


SHOULDERS

Rear Deltoid Raise

Lie on your stomach on bench, lift weights out to sides raising them to shoulder height. Lower weights back to starting position.

Complete 8-15 repetitions.
Do 1-3 sets.

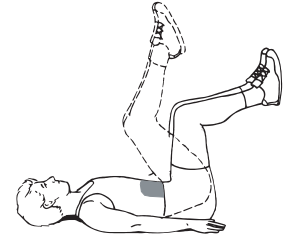


CORE: ABDOMINALS

Reverse Crunch

With knees bent at 90° angles, curl hips up until lower back raises slightly off the floor.

Complete 8-15 repetitions.
Do 1-3 sets.

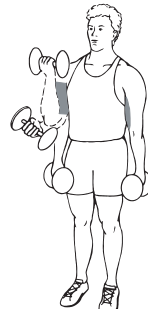


ARMS: BICEPS

Standing Alternating Curl

Hold weights in hands to sides. Curl one arm to shoulder with palm facing up and arm close to side. Lower arm back down to starting position. Alternate arms.

Complete 8-15 repetitions. Do 1-3 sets.

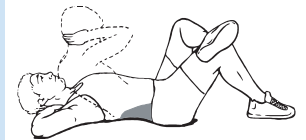


CORE: OBLIQUES

Crunch

Lie on back and place feet on the floor. Cross one foot over opposite thigh. Lift upper back off the floor. Twist torso and point shoulder to the knee that is crossed. Untwist the torso and lower back down to starting position. Repeat with opposite side.

Complete 8-15 repetitions.
Do 1-3 sets.



ARMS

Standing One-Arm Extension

Lift left arm overhead and brace arm with right hand. Bend left elbow and lower weight to upper back then return to starting position. Repeat with other arm.

Complete 8-15 repetitions. Do 1-3 sets.



Stretching & Flexibility Training

Stretching is one of the basic components of a sound exercise program. Good flexibility is not only important for exercise, but also for daily activities such as bending down to put on socks or reaching overhead to grab a tool in your garage. Regular stretching should be incorporated into your daily exercise routine.

WHY SHOULD I STRETCH?

- To improve your flexibility.
- To improve muscle performance.
- To promote better circulation.
- To reduce the chance of muscular injuries.
- To help prevent muscular stiffness and soreness.
- To help reduce tension and to encourage relaxation.
- To help you develop better awareness of your body.

WHEN SHOULD I STRETCH?

- After your warm-up but before you begin your physical activity, primarily to loosen muscles.
- After your physical activity, primarily to increase flexibility and improve your range of motion.

HOW DO I STRETCH?

- Stretch in a slow relaxed manner.
- Stretch until you feel a slight discomfort in the muscle.
- Hold each stretch for at least 20 seconds.
- Repeat each stretch one or more times.
- Don't bounce.
- Never stretch to the point of feeling pain.
- Breathe normally.

WHAT DO I STRETCH?

- Concentrate on the muscles you are going to use, or have used during your activity.
- Emphasize any area that is particularly tight.

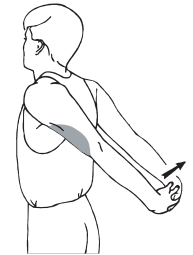
Stretching Exercises

ARMS: BICEPS

With arms straight and fingers interlaced behind back, raise hands toward ceiling.

Hold for 20-30 seconds.

Repeat one or more times.

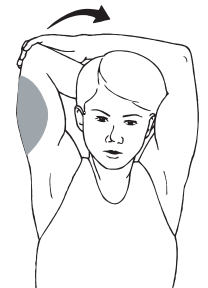


ARMS: TRICEPS

Bend elbow and place hand of bent arm on back of neck. Using the other hand, pull elbow behind head.

Hold for 20-30 seconds.

Repeat one or more times with each side.

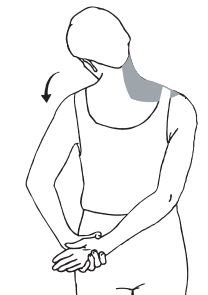


NECK: TRAPEZIUS

Tilt head to left side. With arms behind back, use left hand to pull right arm over and down to the left.

Hold for 20-30 seconds.

Repeat one or more times with each side.

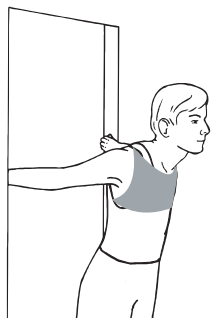


CHEST: PECS

Grab both sides of doorway one inch below shoulder height. Lean forward until stretch is felt in chest. Keep back straight and feet shoulder width apart.

Hold for 20-30 seconds.

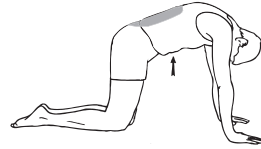
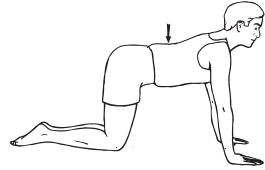
Repeat one or more times.



BACK: LUMBAR EXTENSORS

With head raised up and lower back slightly arched, tuck chin to chest and round back toward ceiling. Return to starting position.

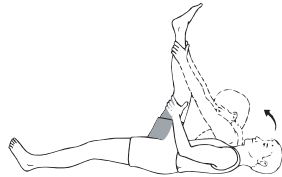
Hold the arched and round back positions briefly. Repeat one or more times.



LEGS: HAMSTRINGS

With head raised up and lower back slightly arched, tuck chin to chest and round back toward ceiling. Return to starting position. Hold the arched and round back positions briefly.

Repeat one or more times.



LEGS: QUADRICEPS

Lie on side with knees bent and hold top foot with same-side hand. Pull heel in toward buttock, keeping knees in line and hip pressed forward.

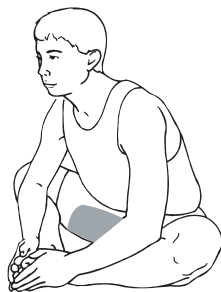
Hold for 20-30 seconds. Repeat one or more times with each leg.



LEGS: GROIN

Place soles of feet flat together. Gently lean forward and push down on knees with forearms.

Hold for 20-30 seconds. Repeat one or more times.



| Exercises | Wall Squat | | Squat | | Heel Raise | | Bench Press | | Bench Fly | | Bent Over Row | | Shoulder Shrug | | Upright Row | | Shoulder Press | | Arm Curl | | One Arm Extension | | Crunch | | Reverse Crunch | | | |
|-----------|------------|-----|-------|-----|------------|-----|-------------|-----|-----------|-----|---------------|-----|----------------|-----|-------------|-----|----------------|-----|----------|-----|-------------------|-----|--------|-----|----------------|-----|--|--|
| | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | REP | SET | | |
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- 1-3 sets per exercise
- 8-15 repetitions per set
- Increase weight by the smallest unit available when 15 reps can be completed easily.



Hand Weights Tracking Sheet

Name _____