This set of instructions is designed for use by instructors in aerobic dance, although the instructions can also be used by individuals for an exercise program. Descriptions are given of specific exercises for the head and neck, shoulders, arms, legs, and chest and trunk. Routines for a complete aerobic dance session (warm-up, aerobic, and cool-down) are outlined. Sample programs for walking and jogging exercise are presented, outlining the weekly patterns for a 12-week walking program and a 15-week jogging program. (JD)
EXERCISE FOR WELL OR COMMUNITY LIVING
OLDER ADULTS

BY

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FOR

THE SECOND ANNUAL OLDER ADULT FITNESS WORKSHOP
GEORGE MASON UNIVERSITY
FAIRFAX, VIRGINIA 22030
JUNE 6, 1984
TIPS FOR QUALITY AEROBICS!
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CLASS CHARACTERISTICS

- Training for instructors varies from nonexistent to expert to everything in between—BEWARE!
- Popularity and price of a class are not always indicative of good instruction
- Find someone who will let you take a trial class
- Look for someone who entertains and inspires you to work up to your potential, but doesn't push you beyond your own level of fatigue
- Quality instruction means that corrections are given on a regular basis

INSTRUCTOR QUALITIES

- Keep the class running smoothly
- Monitor pulse rates regularly
- Be trained adequately in first aid and CPR
- Advise students on appropriate footwear and clothing
- Screen students for physical abnormalities

EXERCISE SUGGESTIONS

- It's the choice of exercises and the way that you do them that makes the difference
- A few modified or regular push-ups are much better than a lot of arm waving to tone arms
- Slow, gentle stretches (static) are much better than fast, violent movements (ballistic)
- Knees should not be locked or hyperextended while exercising
- Squats should not exceed 90 degrees
- Head rolls, if done at all, should be done very slowly and under complete control
- Sit-ups should be executed with bent knees and the lower back flat on the floor in a curling motion. One only needs to curl to 35 or 45 degrees from the floor.
BACK AND STOMACH SPECIFICS

- Any time the legs are lifted off the floor while lying down, students should always be reminded to press their lower back against the floor.
- Students should be reminded to pull their stomachs in and their "sitters" under while exercising ("dining room" in and "sitting room" under).

CONTENT

- Routines should develop harmony in movements, teach fine balance, coordination, grace and control.
- Workouts should include a gradual warm-up, an aerobic period and a gradual cool-down.
- The cool-down should be done slowly and with adequate stretching to avoid muscle soreness.
- The exercise bout should be 40 to 60 minutes in length with a 10 to 15 minute warm-up, then 15 to 20 minutes of exercise at one's own target heart rate, and then a 10 to 15 minute cool-down at a minimum.

REMEMBER: Aerobic exercises at one's training heart rate should be done at least 3 times per week to maintain fitness and 4 or more times per week to raise one's fitness level.
Head/Neck Exercises

1. Head Roll: to improve flexibility of the neck.
   Drop the head slowly to the front and roll it around slowly stretching as far as possible except when tilted back. Only tilt back so that you look up at a 45% angle. This will reduce friction between the first and second cervical vertebrae. Where there is tightness, hold the head longer in that area. Repeat several times in each direction.

   Sit up comfortable. Bend head forward until chin touches chest; then bend it backward as far as it will go. Return to starting position and slowly rotate head to left. Return to starting position and slowly rotate head to right. Return to starting position.

3. Face Stretches: to relief of muscle tension in the face. Raise your eyebrows and open your eyes as wide as possible. At the same time, open your mouth and stretch the muscles around your chin and nose and stick your tongue out. Hold this stretch 5-10 seconds.

Shoulder Exercises

1. Shoulder Shrug: for the upper back, to tone shoulders and relax the muscles at the base of the neck. Lift shoulders way up, then relax them.

2. Touch Shoulders: to increase the flexibility of the shoulders and elbow and tone the upper arm; can be done in a seated position. Touch shoulders with hands, extend arms straight out with fists closed, then bring arms back to the starting position.

3. Shoulder Stretch I: for shoulder flexibility. Interlace fingers above your head. Now, with your palms facing upward, push your arms slightly back and up. Hold stretch for 15 seconds. Feel the stretch on arms, shoulders and upper back. Good for slumping shoulders.

4. Shoulder Stretch II: to stretch your triceps and the tops of the shoulder. With arms overhead, hold the elbow of one arm with the hand of other arm. Gently pull elbow behind your head creating a stretch. Do slowly. Hold for 15 seconds. You can do this while walking.

5. Shoulder Stretch III: to stretch your shoulder and upper back, gently pull your elbow across your chest toward your opposite shoulder. Hold stretch for ten seconds.
Arm Exercises

1. Arm Circles: to strengthen shoulders and upper back. Sit or stand erect with arms at sides, elbows straight, head high. Rotate arms from shoulders in small circles. Suggested repetitions: 10 forward, 10 backward.

2. Arm Curl: to strengthen arm muscles. Use a weighted object such as a book or a can of vegetables (not more than 5 pounds). Stand or sit erect with arms at sides, holding weighted object. Bend your arm, raising the weight. Lower it. Can be done seated. Suggested repetitions: 10-15 each arm.

3. Arm Extension: to tone muscles in the back of the arm. Sit or stand erect with arms at sides. Holding a weighted object of less than 5 pounds, extend your arm overhead. Slowly bend arm until weight is behind head. Slowly extend arm to original position. The arm curl and arm extension can be done separately or together alternating arms. Can be done seated. Suggested repetitions: 10-15.

4. Forearm Stretch: with the palms of your hands flat, thumb to the outside and fingers pointed backward, slowly lean arm back to stretch your forearm. Be sure to keep palms flat.

5. Another stretch: with arms extended overhead, hold on to the outside of your left hand with right hand and pull your left arm to the side. Keep arms straight as comfortably as possible (hold for 15 seconds. Do both sides). This will stretch the arm and side of body and shoulder.
Front of Leg (Quadtriceps)

1. **Quad Stretcher:** Kneeling, place hands on floor behind hips. Sit back onto your feet and lean back until tightness is felt in thigh. Be careful not to go all the way back if you feel it will be too difficult to get up. Relax forward. Repeat.

2. **Quad Stretcher Variation:** This is an exercise that is usually done running since it is easier to do than the original quad stretcher. Standing with one side facing the wall, put the hand of that side against the wall. Grasp the ankle with the other hand and pull the leg up attempting to pull the sole of the foot toward the seat. Do not bend forward. Hold for 6-10 seconds. You should feel tightness in the front of the thigh. Remember, only go to the point of tightness, don't push it! Repeat with the other leg.

Back of Legs (Hamstrings)

1. **Trunk Bending:** Sit with legs straight and toes pulled back. Reach forward grasping the leg or foot. Walk the hands down the leg until tightness is felt in the back of the legs. DO NOT BEND THE KNEES - Keep them flat. Hold it for 3 seconds. Relax. Repeat. Gradually work your way toward the toes.

2. **Trunk Bending Variation:** If your back hurts upon bending, this is a variation of the above exercise to reduce some of the stress that you may have felt. Lay on your back, feet flat on the floor near the hips. Bring one leg towards the face. Grasp the lower leg and pull it toward your chest until you feel tightness behind the leg. Relax.

Back of Legs (Calf)

1. **Achilles Stretch (One Foot):** Stride position - one leg in advance of the othe with toes near wall. Front knee is bent and hands are on the wall. The back leg is straight with the heel flat on the floor. Lean towards the front knee keeping the back foot and heel flat. Hold for 6-10 seconds. Relax. Repeat with the other leg. If tightness does not occur somewhere in the calf in this exercise, you may not be pushing the hips in toward the wall enough or the heel is coming up off the floor.

2. **Calf Raise:** to strengthen lower leg and ankle. Stand erect, hands on heps or on back of chair for balance. Spread feet 6-12" Apart. Slowly raise body up on toes, lifting heels. Return to starting position. Suggested repetitions: 10-15.
Groin

1. Spread Groin Stretch: Sitting with legs spread as far apart as possible. Place the hands on the inside of the leg eventually attempting to reach the inside of the ankles. Bend forward keeping the knees flat. Hold as soon as you feel tightness on the inside of the legs. Relax. Repeat.

2. Stride Standing: Standing, place one leg in front of the other, both feet facing forward. Bend forward onto the front leg. Let the back leg drop towards the ground. When tightness occurs, hold it. DON'T BOUNCE. Change legs. Repeat.

Ankles

1. Ankle and Foot Circling: to improve flexibility and range of motion of ankles. While sitting, cross right leg over opposite knee, rotate foot slowly, making large complete circles. 10 rotations to the right, 10 to the left on each foot.

2. Lateral Ankle Stretch: this should be done before running. Standing with the feet shoulder width apart, gently allow one foot to roll under so that the sole is turned towards the center and part of the weight is borne on the outside edge of the foot. Gradually increase the pressure until a stretch is felt on the outside of the ankle. Hold. Change. Repeat.
Fingers

1. Finger Stretching: To maintain finger dexterity. With the palm of the right hand facing down, gently force fingers back toward forearm, using left hand for leverage; then place left hand on top and force fingers down. Suggested repetitions: 5 each hand.


Elbows

1. Elbow Stretch I: Alternate flexion and extension of elbow joints.

2. Elbow Stretch II: Stretch arms behind back with fingers interlaced behind your back. Slowly turn your elbows inward while straightening your arms.

3. Elbow Stretch III: If stretch II is fairly easy, lift your arms up behind you until you feel a stretch in the arms, shoulders or chest. Hold an easy stretch for 5 - 15 seconds.

Wrist

1. Hand Rotation: to maintain wrist flexibility and range of motion. Grasp right wrist with left hand. Keep right palm facing down. Slowly rotate hand 5 times each clockwise and counterclockwise. Suggested repetitions: 5 each hand.

2. Alternate flexion and extension of wrist joints.

Chest/Trunk Exercises

1. Knee pushups: very good for upper body development and maintaining muscle tone. Start on your hands and knees, with hands parallel to each other and a little more than shoulder-width apart. The wider apart your hands are, the more you work your chest (pectoral muscles).

2. Chain Breaker: Standing, raise the arms to shoulder level in front of the chest. Elbows should be out and palms down with middle finger tips touching. Push elbows to the rear as far as they will go keeping them parallel to the floor. Straighten the elbows and begin to reach back with hands, palms facing forward. Do not allow shoulders to shrug or let the arms drop below shoulder level.
3. Tall Stretching: Standing, place the hands behind the head. Place one hand in the other and grasp that hand, both palms facing upward. Reach as high overhead as possible and then stand on your tip toes. If you lose your balance, just walk around in place trying to stay on your tip toes. Relax and then repeat with the other hand clasped.

4. Side Bending: Standing, reach tall and clasp hand as in tall stretching above. Bend to the side of the grasping hand, pulling the clasped hand to that side. Try to squeeze the ears. Keep the head and eyes facing forward. Hold. Relax, then change sides. May be done in combination with tall stretching.

5. Trunk Twisting: Standing, place the arms straight out to the sides. Twist the trunk to one side. Allow both arms to rotate also so that they will both be behind you. This means that one arm will bend as it crosses in front of the chest. Look toward the hand that is fartherest back. Hold. Relax and swing the arms gently to the opposite side. If you begin to get a cramp along your upper side, twist back easily in the opposite direction.
Exercise Routine I  (Warm-up)

* Get a resting pulse rate before starting session. Encourage participants to walk 5 - 15 minutes prior to session as an initial warm-up.

1. Shoulder Stretch I (4X)
2. Alternate arm reach up (4X)
3. Alternate arm reach across body (4X)
4. Alternate arm reach to opposite knee (4X)
5. Shoulder shrug up and down (4X)
6. Shoulder shrug forward and backward (4X)
7. Arm circles forward (4X)
8. Arm circles backward (4X)
9. Trunk rotations (4X each way)
10. Forward lunge and touch floor (2X with each foot in front)
11. Shoulder stretch II (4X)
12. Shoulder stretch III (4X)
13. Push-Pull with elbows high and stretching hands (4X)
14. Side bends (4X each side)
15. Ankle and foot circling (4X each way)
16. Arm circles in front of body, bending low and reaching high (4X each way)

* Take a pulse check
Exercise Routine IIa (Aerobic)

1. Walk or jog in place lifting knees high and moving arms (16 counts)
2. Lunge forward, dip and dive (2X with each foot in front)
3. Plie' (4X)
4. Lunge to sides, dip and dive (2X to each side)
5. Push-Pull forward 8 and backward 8 (4X)
6. Skip to right, back to left and then to center (4X)
7. Twist to the side while facing front and bend (4X each side)
8. Arm circles while walking in place (4X forward and backwards)
9. Step kicks or knee lifts (16X)
10. Gallop to right, back to left and then to center (4X)
11. Twist to right then full turn to left (4X)
12. Plie' (4X)
13. Alternate arm circles while walking in place (4X forward and 4X backwards)
14. Breaststroke arm movements while walking in place (8X)
15. Walk to right, back to left and then to center with arms moving and knees up high
16. Standing straddle stretch to floor (4X)

* Take a pulse check (we are striving to reach the target zone during this aerobic routine.)
Exercise Routine III  (Cool-down)

1. Step-close-step going side to side (8X)
2. Step-hops while circling (16 step-hops)
3. Grapevine right and left (4X)
4. Ankle rotations (4X with each foot)
5. Rock forward and rock backwards (4X each way)
6. Arm circles in front of body, bending low and reaching high (4X each way)
7. Lunge forward, big arm circles and pull (4X with each foot in front)
8. Straddle stretch while sitting (4X to each side and center)
9. Modified hurdle stretch (4X each side)
10. Curls (own pace for 16 or 32 counts)
11. Push-ups - show all variations (16 or 32 counts at own pace)
12. Kneeling Press and Stretch (flex and extend under body then hydrant - 4 to 8X each)
13. Knee to chest pull (4X each side, lying on back)
14. Both knees to chest pull (4X)
15. Total body stretch (1 or 2X with a static (no bounce) stretch)
16. Plié (4X)
17. Standing and breathing (you can do push-pull or try inhaling and exhaling 8 counts at a time -- stress relaxing the body and good posture)

* Take a pulse check, walk some more if heart rate is still high for further cooling-down.
There are many ways to begin an exercise program. Following are two examples—a walking and a jogging program. These activities are easy ways for most people to get regular exercise because they do not require special facilities or equipment other than good, comfortable shoes. If walking or jogging does not meet your needs, look for other exercise programs in pamphlets and books on aerobic exercise and sports medicine.

If you find a particular week's pattern tiring, repeat it before going on to the next pattern. You do not have to complete the walking program in 12 weeks or the jogging program in 15 weeks.

### A SAMPLE WALKING PROGRAM

<table>
<thead>
<tr>
<th></th>
<th>Warm Up</th>
<th>Target Zone Exercising</th>
<th>Cool Down</th>
<th>Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session A</td>
<td>Walk slowly 5 min</td>
<td>Then walk briskly 5 min.</td>
<td>Then walk slowly 5 min.</td>
<td>15 min.</td>
</tr>
<tr>
<td>Session B</td>
<td>Repeat above pattern</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Session C</td>
<td>Repeat above pattern</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Continue with at least three exercise sessions during each week of the program

<p>| Week 2  | Walk slowly 5 min. | Walk briskly 7 min. | Walk slowly 5 min. | 17 min. |
| Week 3  | Walk slowly 5 min. | Walk briskly 9 min. | Walk slowly 5 min. | 19 min. |
| Week 4  | Walk slowly 5 min. | Walk briskly 11 min. | Walk slowly 5 min. | 21 min. |
| Week 5  | Walk slowly 5 min. | Walk briskly 13 min. | Walk slowly 5 min. | 23 min. |
| Week 6  | Walk slowly 5 min. | Walk briskly 15 min. | Walk slowly 5 min. | 25 min. |
| Week 7  | Walk slowly 5 min. | Walk briskly 18 min. | Walk slowly 5 min. | 28 min. |</p>
<table>
<thead>
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<th>Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 8</td>
<td>Walk slowly 5 min.</td>
<td>Walk briskly 20 min.</td>
<td>Walk slowly 5 min.</td>
</tr>
<tr>
<td>Week 9</td>
<td>Walk slowly 5 min.</td>
<td>Walk briskly 23 min.</td>
<td>Walk slowly 5 min.</td>
</tr>
<tr>
<td>Week 10</td>
<td>Walk slowly 5 min.</td>
<td>Walk briskly 26 min.</td>
<td>Walk slowly 5 min.</td>
</tr>
<tr>
<td>Week 11</td>
<td>Walk slowly 5 min.</td>
<td>Walk briskly 28 min.</td>
<td>Walk slowly 5 min.</td>
</tr>
<tr>
<td>Week 12</td>
<td>Walk slowly 5 min.</td>
<td>Walk briskly 30 min.</td>
<td>Walk slowly 5 min.</td>
</tr>
</tbody>
</table>

Week 13 on:
Check your pulse periodically to see if you are exercising within your target zone. As you get more in shape, try exercising within the upper range of your heart zone. Remember that your goal is to continue getting the benefits you are seeking and enjoying your activity.

● A SAMPLE JOGGING PROGRAM: After completing the walking program, you can start with week 3 of the jogging program below.

Week 1
Session A Stretch and limber up for 5 min.
Then walk 10 min. Try not to stop and stretch 2 min.
Then walk slowly 3 min.

Session B Repeat above pattern

Session C Repeat above pattern

Continue with at least three exercise sessions during each week of the program

Week 2
Stretch and limber 5 min.
Walk 5 min., jog 1 min., walk 5 min.; jog 1 min.
Walk slowly 22 min.

Week 3
Stretch and limber 5 min.
Walk 5 min., jog 3 min., walk 5 min., jog 3 min.
Walk slowly 3 min., stretch 2 min.

Week 4
Stretch and limber 5 min.
Walk 4 min., jog 5 min., walk 4 min., jog 5 min.
Walk slowly 28 min.
<table>
<thead>
<tr>
<th>Week</th>
<th>Warm Up</th>
<th>Target Zone Exercising</th>
<th>Cool Down</th>
<th>Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 5 min., walk 4 min., jog 5 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>28 min.</td>
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<tr>
<td>6</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 6 min., walk 4 min., jog 6 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>30 min.</td>
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<tr>
<td>7</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 7 min., walk 4 min., jog 7 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>32 min.</td>
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<tr>
<td>8</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 8 min., walk 4 min., jog 8 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>34 min.</td>
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<tr>
<td>9</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 9 min., walk 4 min., jog 9 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>36 min.</td>
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<tr>
<td>10</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 13 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>27 min.</td>
</tr>
<tr>
<td>11</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 15 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>29 min.</td>
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<tr>
<td>12</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 4 min., jog 17 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>31 min.</td>
</tr>
<tr>
<td>13</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 2 min., jog slowly 2 min., jog 17 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>31 min.</td>
</tr>
<tr>
<td>14</td>
<td>Stretch and limber 5 min.</td>
<td>Walk 1 min., jog slowly 3 min., jog 17 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>31 min.</td>
</tr>
<tr>
<td>15</td>
<td>Stretch and limber 5 min.</td>
<td>Jog slowly 3 min., jog 17 min.</td>
<td>Walk slowly 3 min., stretch 2 min.</td>
<td>30 min.</td>
</tr>
</tbody>
</table>

continued
Check your pulse periodically to see if you are exercising within your target zone. As you become more fit, try exercising within the upper range of your target zone. Remember that your goal is to continue getting the benefits you are seeking and enjoying your activity.

The exercise patterns for both of the sample exercise programs are suggested guidelines. Listen to your body and build up less quickly, if needed.