Silver Award Project Utility

Facility: Dialysis Clinic, Inc--Boonville **Silver Award User:** Erika Herting

Project Status: Active
Update Status

1. Description of Project:

The Missouri Kidney Program Hartmann project for DCI Boonville was about physical activity and exercise. The project focuses on getting patients to move in the dialysis clinic. It is documented that dialysis patients who exercise receive multiple health benefits. Studies show that exercise improved quality of life, increased muscle strength, and increased blood flow to extremities which helps remove more toxins. The focus area will be on using hand weights for as long as possible or 5 - 10 minutes for at least 1 dialysis treatment over the course of a month. If dialysis patients complete exercise and/or the hand weights, then they will receive a participation bag of goodies. Hopefully dialysis patients will feel stronger and healthier which will make them want to continue to exercise.

2. Outcomes Measured:

The physical activity and exercise project involved a pre and post survey for patients to complete.

- Pre-survey questions:
- o What is your desire to exercise or do physical activity?
- o What type of physical activity or exercise do you do weekly?
- o How often do you do physical activity or exercise in a week?
- o What are benefits of exercise and physical activity you want to achieve?
- o What are barriers you face from doing physical activity and exercise?
- Post-survey questions:
- o Will you continue to use hand weights during dialysis treatment after the hand weight project is finished?
- o Will you exercise and do physical activity after the hand weight project is finished?
- o What is your experience after doing the hand weight project?

3. Summary of Outcomes/Results:

Out of 25 patients at DCI Boonville, there were only 15 patients who completed the project. Please refer to charts attached showing pre and post survey results from questionnaires.

4. Impact on Patients:

This project appeared to have a very positive impact on the patients in the clinic. A review of the post project survey shows that most patients were either somewhat positive or extremely positive about using hand weights in the clinic. One of the most moving moments of this project was seeing an 87 year-old nursing home resident using the hand weights in the clinic. He would be observed moving both arms (he had a perm-cath) up and down in an easy rhythm. The nurses stated that he looked forward to using the weight during each treatment. Initially, there was concern that the nurses would be too busy with clinic duties to add one more thing to their plate. However, after the project started, they were actually pleased with the response from the patients. The staff worked this into their routine and began to offer the weights to the patients after they were connected on the machine. Comments from the patients were, for the most part, positive. Patients thought the project was good and that they enjoyed their time using the weights. Patients were very positive about the recognition bag they received for participating in the project. Once the project was completed, the nursing staff told us that the patients continued to ask where their bags were. It is noted that an exercise band and a list of exercises were part of the recognition bag.

5. Lessons Learned:

Part of this project was to use inexpensive exer-cycles as part of the exercises in the clinic. It was found that these devices were incompatible with the dialysis chairs, unless the patients had very long legs. The clinic is trying to come up with a way to utilize these in the waiting room while the patients are waiting to go on the machine. In retrospect, more thought should have gone into the use of this device.

Boonville Physical Activity and Exercise Report

Description of Project

The Missouri Kidney Program Hartmann project for DCI Boonville was about physical activity and exercise. The project focuses on getting patients to move in the dialysis clinic. It is documented that dialysis patients who exercise receive multiple health benefits. Studies show that exercise improved quality of life, increased muscle strength, and increased blood flow to extremities which helps remove more toxins. The focus area will be on using hand weights for as long as possible or 5-10 minutes for at least 1 dialysis treatment over the course of a month. If dialysis patients complete exercise and/or the hand weights, then they will receive a participation bag of goodies. Hopefully dialysis patients will feel stronger and healthier which will make them want to continue to exercise.

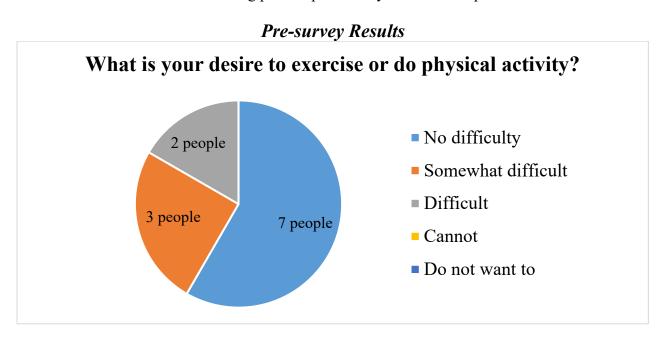
Outcomes Measured

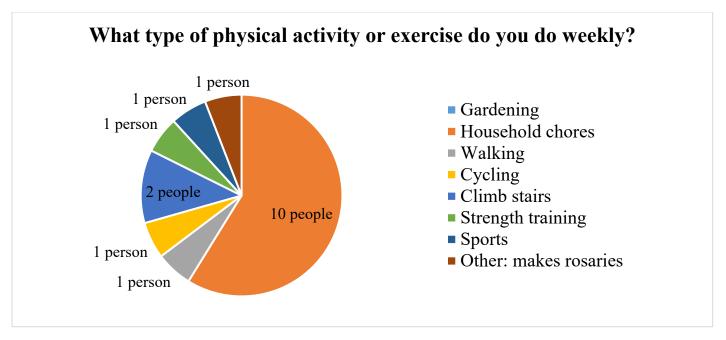
The physical activity and exercise project involved a pre and post survey for patients to complete.

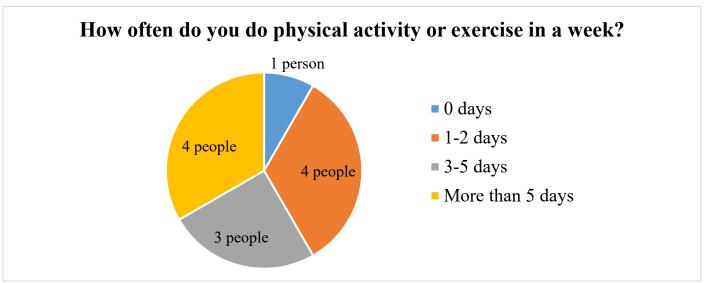
- Pre-survey questions:
 - o What is your desire to exercise or do physical activity?
 - What type of physical activity or exercise do you do weekly?
 - o How often do you do physical activity or exercise in a week?
 - o What are benefits of exercise and physical activity you want to achieve?
 - o What are barriers you face from doing physical activity and exercise?
- Post-survey questions:
 - Will you continue to use hand weights during dialysis treatment after the hand weight project is finished?
 - Will you exercise and do physical activity after the hand weight project is finished?
 - What is your experience after doing the hand weight project?

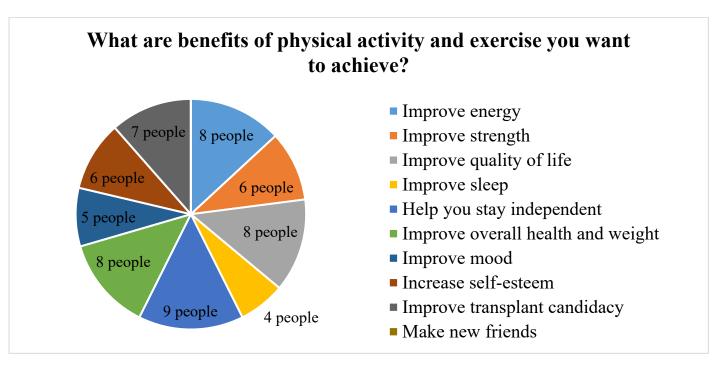
Summary of Outcomes/Results

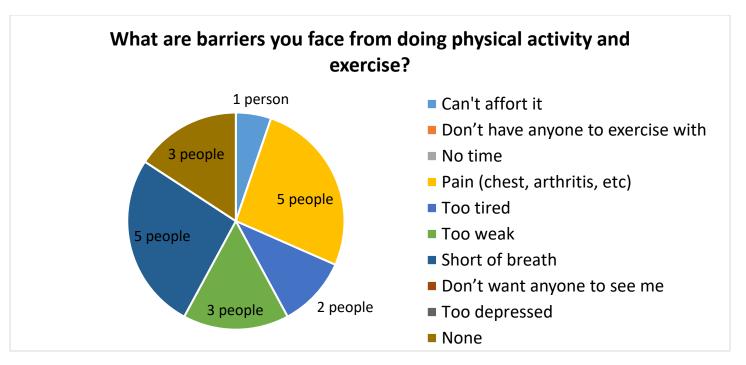
Out of 25 patients at DCI Boonville, there were only 15 patients who completed the project. Please refer to charts below showing pre and post survey results from questionnaires.



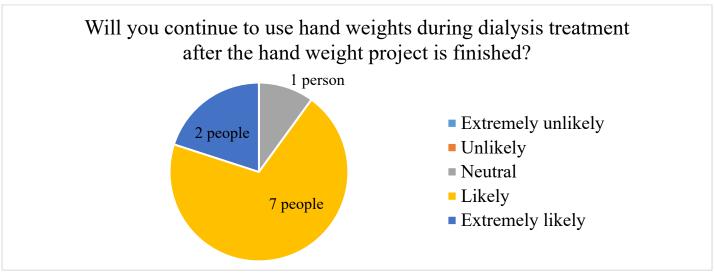


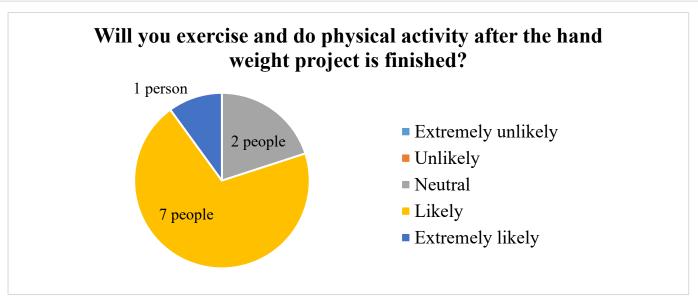


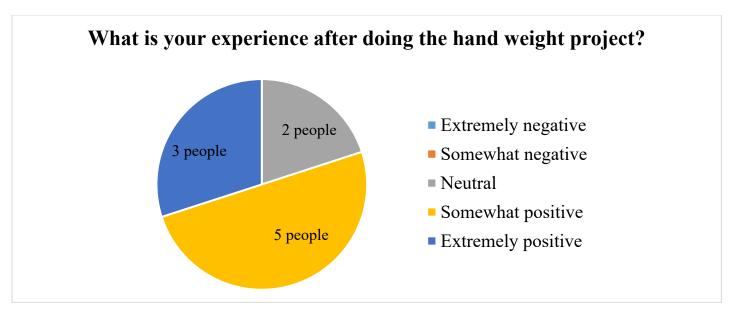




Post-survey Results







Patient Comments

DCI Boonville had 4 patient comments about the exercise and physical activity project. Patient comments include:

- Enjoyed the time
- Questionnaire asks awful questions
- Project was good
- Hand weights helped blood pressure stay up

Impact on Patients

This project appeared to have a very positive impact on the patients in the clinic. A review of the post project survey shows that most patients were either somewhat positive or extremely positive about using hand weights in the clinic. One of the most moving moments of this project was seeing an 87 year-old nursing home resident using the hand weights in the clinic. He would be observed moving both arms (he had a perm-cath) up and down in an easy rhythm. The nurses stated that he looked forward to using the weight during each treatment. Initially, there was concern that the nurses would be too busy with clinic duties to add one more thing to their plate. However, after the project started, they were actually pleased with the response from the patients. The staff worked this into their routine and began to offer the weights to the patients after they were connected on the machine. Comments from the patients were, for the most part, positive. Patients thought the project was good and that they enjoyed their time using the weights. Patients were very positive about the recognition bag they received for participating in the project. Once the project was completed, the nursing staff told us that the patients continued to ask where their bags were. It is noted that an exercise band and a list of exercises were part of the recognition bag.

Lessons Learned

Part of this project was to use inexpensive exer-cycles as part of the exercises in the clinic. It was found that these devices were incompatible with the dialysis chairs, unless the patients had very long legs. The clinic is trying to come up with a way to utilize these in the waiting room while the patients are waiting to go on the machine. In retrospect, more thought should have gone into the use of this device.

Physical Activity and Exercise Resources

Excel Fitness Center

Address: 1420 W Ashley Rd, Boonville, MO 65233

Website: http://www.excelfitnesscenter.net/

Phone: (660) 882-6115

Boonslick Heartland YMCA

Address: 757 3rd St, Boonville, MO 65233

Website: https://www.bhymca.org/

Phone: (660) 882-8500

Boonslick Senior Center

Address: 520 Ryan St, Boonville, MO 65233

Phone: (660) 882-2344

Tuesday and Thursday arthritis, balance, and strengthening

exercises at 9 am -10 am

Boonslick Regional Library

Address: 618 Main St, Boonville, MO 65233

Website: https://www.boonslickregionallibrary.com/Boonville/

Phone: (660) 882-5864

Physical Activity Questionnaire

Name:
Age:
Please checkmark or circle your answer(s)
What is your desire to exercise or do physical activity?
 □ No difficult □ Somewhat difficult □ Difficult □ Cannot □ Do not want to
What type of physical activity or exercise do you do weekly? Please select all that apply:
 □ Gardening □ Household chores (laundry, dishes, vacuum, etc.) □ Walking □ Jogging/Running □ Cycling (biking, pedaling) □ Climb stairs □ Swimming □ Strength training (lifting weights) □ Sports (football, soccer, golf, volleyball, tennis, basketball, etc.) □ Alternative exercise (Tai Chi, Yoga, Qigong) □ Other:
How often do you do physical activity or exercise in a week?
 □ 0 days a week □ 1 - 2 days a week □ 3 - 5 days a week □ More than 5 days week

What are benefits of exercise and physical activity you want to achieve? Please select all that apply:
☐ Improve your energy
☐ Improve your strength
☐ Improve the quality of your life
☐ Improve your sleep
☐ Help you stay independent
☐ Improve your overall health and weight
☐ Improve your mood
☐ Increase self esteem
☐ Improve transplant candidacy
☐ Make new friends
$\neg \bigcirc 1$
□ Other:
What are barriers you face from doing physical activity and exercise? Please select all that apply:
What are barriers you face from doing physical activity and
What are barriers you face from doing physical activity and exercise? Please select all that apply:
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it Don't have anyone to exercise with
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it Don't have anyone to exercise with No time
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it Don't have anyone to exercise with No time Pain (chest, arthritis)
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it Don't have anyone to exercise with No time Pain (chest, arthritis) Too tired
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it Don't have anyone to exercise with No time Pain (chest, arthritis) Too tired Too weak
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it Don't have anyone to exercise with No time Pain (chest, arthritis) Too tired Too weak Short of breath
What are barriers you face from doing physical activity and exercise? Please select all that apply: Can't afford it Don't have anyone to exercise with No time Pain (chest, arthritis) Too tired Too weak Short of breath Don't want anyone to see me

Physical Activity and Exercise Project - Post Questionnaire

Nam	e:					
Please circle or checkmark one answer.						
	Will you continue to use hand weights during dialysis treatment after the hand weight project is finished? • Extremely unlikely • Unlikely • Neutral • Likely • Extremely likely					
,	Will you exercise and do physical activity after the hand weight project is finished? • Extremely unlikely • Unlikely • Neutral • Likely • Extremely likely					
3a.)	 What is your experience after doing the hand weight project? Extremely negative Somewhat negative Neutral Somewhat positive Extremely positive 					
3b.)	Explain (optional):					



SUPERSTRETCH

PREMIUM RESISTANCE BANDS

ISE AND POLITICALISE POLITICALISE



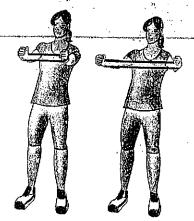
UPPER BODY EXERCISES





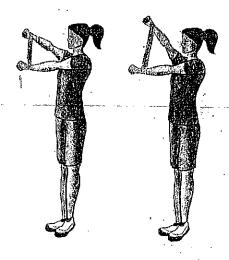
TRICEPS EXTENSIONS 10-12 REPS PER ARM

- Hold one end of the band in your left hand and brace it against your collar bone. Hold the other end in your right hand and hold it at chest level.
- Keeping your right elbow in and down, extend your right arm to full extension. Make sure that the left arm had stayed in a braced position at your mid chest.
- · Lower and repeat.



HORIZONTAL ARM EXTENSIONS 10-12 REPS PER ARM

- While maintaining a straight back, place the resistance band around your wrists and put your arms in front of you.
- Keeping your arms slightly bent, pull the band apart by applying outward pressure to your forearms.
 Your arms should move in a horizontal plane.
- Hold the extended position for 3 seconds.
- Return to the start position and repeat.



VERTICAL ARM EXTENSIONS 10-12 REPS PER ARM

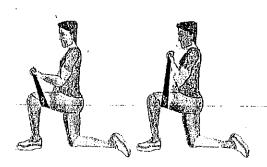
- Stand with your feet shoulder width apart, and place the resistance band around your wrists. Put your arms in front of you, with one above the other.
- Keeping your arms slightly bent, pull the band apart by applying outward pressure to your forearms.
 Your arms should move in a vertical plane.
- Hold the extended position for 3 seconds.
- Return to the start position and repeat.





REAR ARM ÉXTENSIONS 10-12 REPS PER ARM

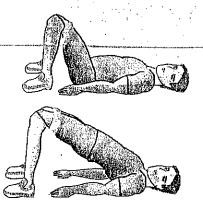
- With feet shoulder width apart, place the resistance band around your wrist and hold your arms behind you.
- Keeping your arms slightly bent, pull the band apart by applying outward pressure to your forearms.
 Your arms should move in a horizontal plane.
- Hold the extended position for 3 seconds.
- Return to the start position and repeat.



BICEP CURLS 10-12 REPS PER ARM

- Loop the resistance band around your left knee, and hold the other end in your left hand.
- Kneel down on the right knee and grab the loop band with palms up grip.
- Keeping your lower back arched, curl the band up to your chest level. Squeeze the biceps tightly in the fully contracted position.
- Slowly lower to the start position.

LOWER BODY EXERCISES



RIDGE THRUSTS 0-12 REPS PER LEG

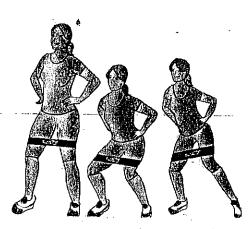
Loop the resistance band around your lower thighs, just above the knees.

Lie face up on the floor with knees bent and arms by your sides.

Lift your hips as high as you can while keeping hands and feet firmly on the floor.

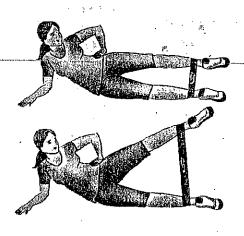
Hold the top position for 3 seconds.

Slowly lower to the start position.



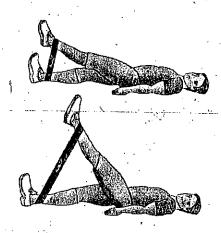
SIDE STEP SQUATS 10-12 REPS PER LEG

- Loop the resistance band around your lower thighs, just above the knees.
- · Stand with your legs shoulder width apart.
- Move the right leg out horizontally as if doing a side step. At the same time go down into a squat position.
- Hold the bottom position for 3 seconds.
- Return to the start position.



LYING HIP ABDUCTIONS 10-12 REPS PER LEG

- · Loop the resistance band around your ankles.
- Lie down on your right side, supporting your torso with your right arm on the floor. Your legs should be stacked on top of each other.
- Spread your legs so that they are shoulder width apart.
 Now lift the top leg to as full as an extension as possible. Hold the top position for 3 seconds.
- . Slowly lower to the start position.



LYING LEG RAISES 10-12 REPS PER LEG

- · Lie on your back with the band around your ankles.
- Brace your abs and stabilize your body with your hands.
- Squeeze your butt and lift your left leg up, keeping both legs straight. Concentrate on contracting the glutes, keeping the hips stacked and the body in a straight line.
- · Lower your leg and repeat.



HIP ABDUCTIONS 10-12 REPS PER LEG

- Stand with the resistance band around your ankles and your hands on your hips. Spread your feet to shoulderwidth.
- Extend your right foot out horizontally, keeping the leg straight. Squeeze and contract the glutes throughout this movement.
- Hold the position for 3 seconds then return to the start position.

DEVELOPING FLEXIBILITY

our joints and muscles get stiff and tight when you don't use them.

Daily stretching can help you stay flexible and make it easier for you to move. Stretching exercises can be done anytime, but they work well as part of a warm-up before cardiovascular exercise.

Simple Rules

Do it right. Think about the muscle(s) you are stretching. Gently stretch until you feel light tension. Stop and hold the stretch for 10 to 20 seconds. DO NOT BOUNCE. The feeling of tension should go away as you hold your stretch. If it doesn't, relax a bit until you can hold your position comfortably.

Take it easy. A good stretch is gentle, never painful. You should never get dizzy or lightheaded or have any burning or pain in your muscles, joints, or back. If you do, relax the stretch and breathe deeply. Pain

during or after stretching could be a sign that you are over-stretching. Take it easy!

Stretching Is Easy To Learn!

Breathe. DO NOT HOLD YOUR BREATH WHILE STRETCHING. Breathe slowly and deeply as you stretch. Breathe in as you stretch out. Exhale slowly as you hold the stretch position. Breathe deeply, but don't move your shoulders up and down.

Think tall. Sit or stand up straight when you stretch. Imagine that a string is attached to your head, pulling and lifting your whole body in a very straight line. It is especially important to remember good posture throughout all your exercises.

Hexibility Exercises

The exercises on pages 17 to 20 make up a basic stretching routine. The illustrations give step-by-step instructions and show you where you should feel the stretch (blue area). Start with your head and neck and work down to your legs. Most of the exercises can be done from a sitting or a standing position.

When you can comfortably and easily hold each stretch for 10 to 20 seconds *and* can do at least three repetitions of each, you're ready to add some new stretches. Check the list of publications on page 43 for where to find more information.

DEVELOPING FLEXIBILITY

our joints and muscles get stiff and tight when you don't use them. Daily stretching can help you stay flexible and make it easier for you to move. Stretching exercises can be done anytime, but they work well as part of a warm-up before cardiovascular exercise.

Simple Rules

Do it right. Think about the muscle(s) you are stretching. Gently stretch until you feel light tension. Stop and hold the stretch for 10 to 20 seconds. DO NOT BOUNCE. The feeling of tension should go away as you hold your stretch. If it doesn't, relax a bit until you can hold your position comfortably.

Take it easy. A good stretch is gentle, never painful. You should never get dizzy or lightheaded or have any burning or pain in your muscles, joints, or back. If you do, relax the stretch and breathe deeply. Pain

during or after stretching could be a sign that you are over-stretching. Take it easy!

Stretching Is Easy To Learn!

Breathe. DO NOT HOLD YOUR BREATH WHILE STRETCHING. Breathe slowly and deeply as you stretch. Breathe in as you stretch out. Exhale slowly as you hold the stretch position. Breathe deeply, but don't move your shoulders up and down.

Think tall. Sit or stand up straight when you stretch. Imagine that a string is attached to your head, pulling and lifting your whole body in a very straight line. It is especially important to remember good posture throughout all your exercises.

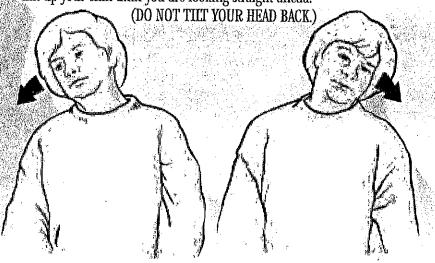
Hexibility Exercises

The exercises on pages 17 to 20 make up a basic stretching routine. The illustrations give step-by-step instructions and show you where you should feel the stretch (blue area). Start with your head and neck and work down to your legs. Most of the exercises can be done from a sitting or a standing position.

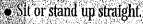
When you can comfortably and easily hold each stretch for 10 to 20 seconds *and* can do at least three repetitions of each, you're ready to add some new stretches. Check the list of publications on page 43 for where to find more information.

- Sit or stand up straight. Look straight ahead.
- Slowly lower your right ear toward your right shoulder. Bring your head back up and lower your left ear to your left shoulder. Repeat with right ear to right shoulder. Drop your chin to your chest and slowly roll your chin across your chest until your left ear reaches your left shoulder.

Lift up your chin until you are looking straight ahead.



Neck
Stretch



- Stretch your arms straight out in front of you at shoulder height.
- Stretch out all your fingers, then make a fist and stretch out your fingers again. Repeat.
- Keep your arms
 stretched out and
 slowly make small
 circles with your wrists.
 First clockwise, then
 counterclockwise.



2
Arm/Hand
Stretch
[Hands and wrists]

Shoulder Shrug & Rotation [Shoulders, upper back, and chest]

- Stand or sit up straight.
- Shrug your shoulders up to your ears. Hold. Lower and repeat.
- Make forward circles with your right shoulder. Then with your left.
- Make backward circles with your right shoulder. Then with your left,





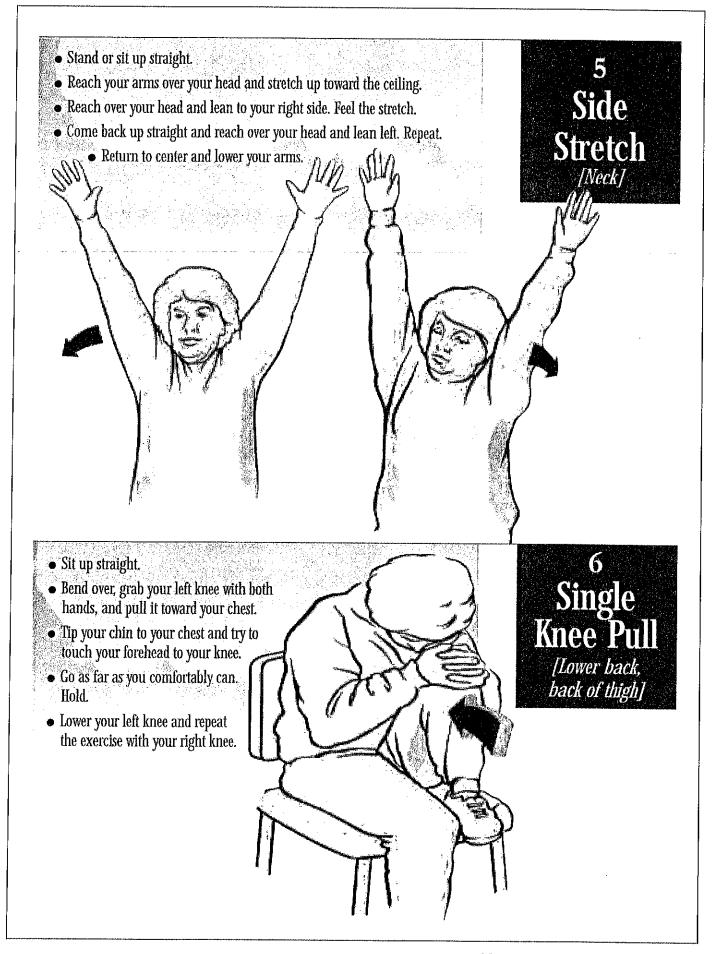
4 Chest & Upper Back Strength [Shoulders, upper back, and chest]

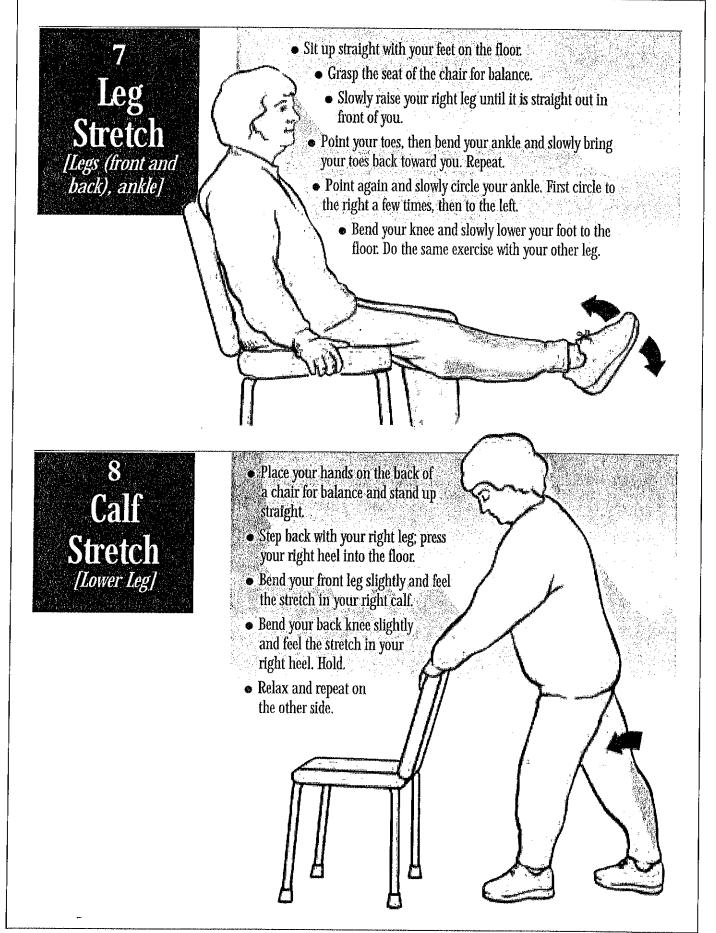
Stand or sit up straight.

- Put your hands on your shoulders with your elbows out to the side.
- Make circles with your elbows. First forward, then back.
- Stop circling and touch your elbows together in front of your chest.
- Open your elbows out again and squeeze your shoulder blades together.
 Feel the stretch across your chest. Repeat.









Strengthening Exercises

The exercises in this section make up a beginning strengthening routine. Exercises 1 through 9 are basic exercises. Exercises 10 through 14 are intermediate.

The illustrations give step-by-step instructions and show you which muscles are working (blue area). Almost all these strengthening exercises can be done either with or without weights. Do not use weights at first.

Here's how to build your strengthening routine.

- Start with exercise number one and repeat it as many times as you can (up to ten times). Then, move on to exercise number two.
- Do ten repetitions (reps) of each basic exercise (Exercises 1 to 9). This is one set.
- Gradually increase the number of reps from 10 to 15. Then, increase the number of sets from one to two.
- When you can comfortably do three sets of the basic exercises (with 15 reps of each), add the intermediate exercises (exercises 10 to 14).
- When you can comfortably do three complete sets (15 reps each) of all the exercises (exercises 1 to 14), you are ready to add weights.

Adding Weights

Use very light weights (about 1- or 2-lb) at first. You can purchase weights or make your own using household items. For upper body/arm weights, use soup cans, or put sand or water into plastic laundry or juice containers that have handles. For ankle weights, put a one-pound bag of rice or beans into an old sock and tie it around your ankle or strap it on with Velcro® or a bungee cord.

When you can comfortably complete three sets with 1-lb weights, you can gradually begin to increase the weight, one or two pounds at

Sample Strength Training

2 TO 10 TO 1				8
Week#	Strength Exercises	#of Reps	# of Sets	Weight
1	#1-#9	10	1	
2	#1-#9	12	1	
3	#1-#9	15	1-2	
4	#1-#9	15	2	_
5	#1-#9	15	2-3	_
6	#1-#9	15	3	
7	#1-#9	15	3	-
8	#1-#14	10	3	
9	#1-#14	12	3	
10	#1-#14	15	3	
11	#1-#14	10	3	1 lb
12	#1-#14	12	3	1 lb
13	#1-#14	15	3	1 lb
14	#1-#14	10	3	2 lb
15	#1-#14	12	3	2 lb
16	#1-#14	15	3	2 lb

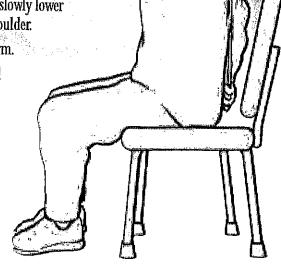
a time. (See Sample Strength Training chart.)

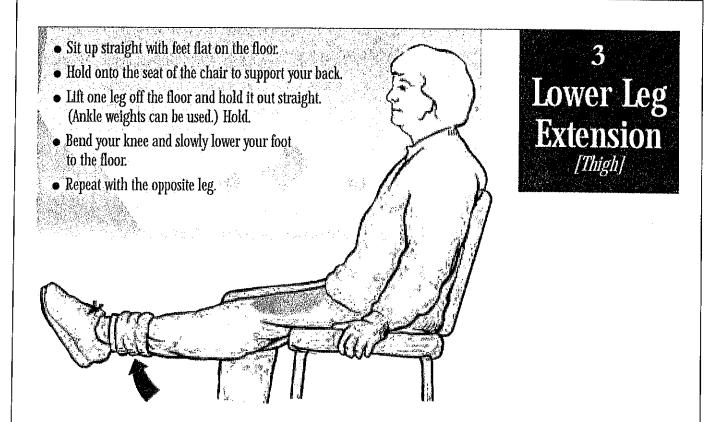


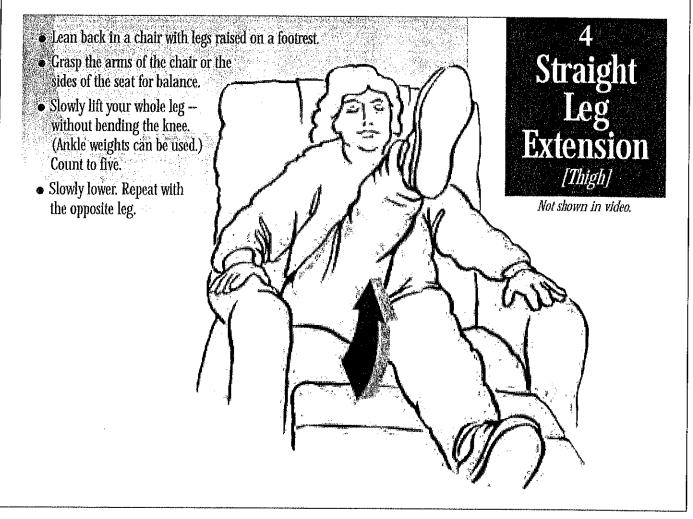
- Stand or sit up straight in a chair.
- Keep your elbows close to your sides and bend your arms at the elbows.
 - Turn your palms up and make a fist with each hand.
 - Slowly lift one fist (with or without weight) up to your shoulder and lower. Alternate arms.

2
Arm
Extension
[Upper arm (back)]

- Stand or sit up straight.
- Bend one arm at the elbow and bring your elbow up close to your ear. (Your hand will go behind your shoulder.)
- Keeping your bent elbow pointing out in front of you and close to your head, straighten your arm above your head. (Imagine you're throwing a baseball.)
- Bend the elbow again and slowly lower your hand behind your shoulder.
- Repeat with the opposite arm.
- Use a stretch band or small weight to add resistance.



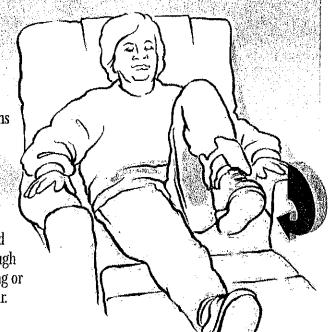




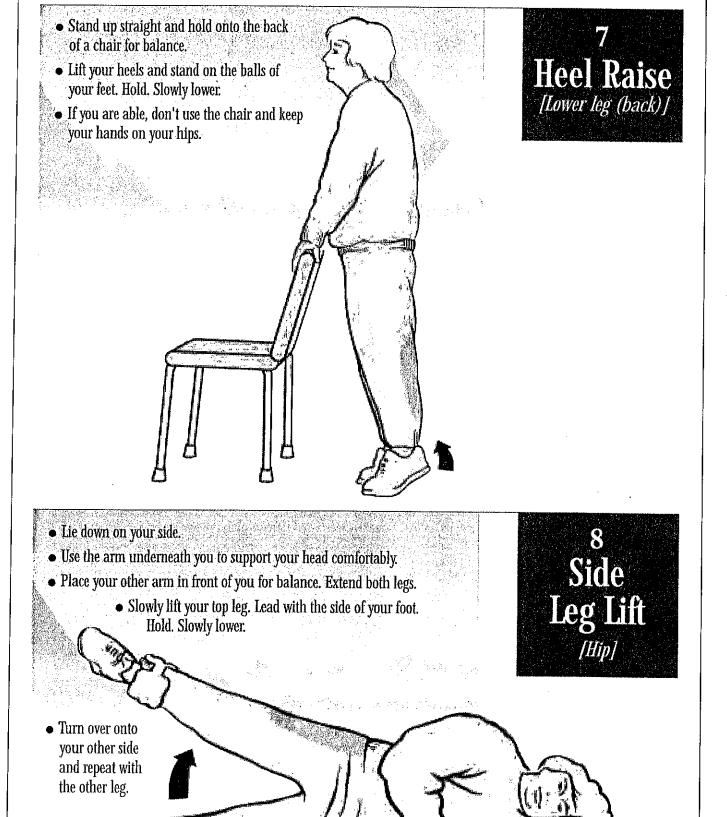
5 Seated Marching [Thigh (front and back), abdomen]

Not shown in video.

- Lean back in a chair with legs raised on a foot rest.
- Place your hands on the seat or arms of the chair for balance.
- Bend your legs at the knee, one at a time, and slowly bring them toward your chest as though you were marching or bicycling in the air.







Strengthening Exercises

The exercises in this section make up a beginning strengthening routine. Exercises 1 through 9 are basic exercises. Exercises 10 through 14 are intermediate.

The illustrations give step-by-step instructions and show you which muscles are working (blue area). Almost all these strengthening exercises can be done either with or without weights. Do not use weights at first.

Here's how to build your strengthening routine.

- Start with exercise number one and repeat it as many times as you can (up to ten times). Then, move on to exercise number two.
- Do ten repetitions (reps) of each basic exercise (Exercises 1 to 9). This is one set.
- Gradually increase the number of reps from 10 to 15. Then, increase the number of sets from one to two.
- When you can comfortably do three sets of the basic exercises (with 15 reps of each), add the intermediate exercises (exercises 10 to 14).
- When you can comfortably do three complete sets (15 reps each) of all the exercises (exercises 1 to 14), you are ready to add weights.

Adding Weights

Use very light weights (about 1- or 2-lb) at first. You can purchase weights or make your own using household items. For upper body/arm weights, use soup cans, or put sand or water into plastic laundry or juice containers that have handles. For ankle weights, put a one-pound bag of rice or beans into an old sock and tie it around your ankle or strap it on with Velcro® or a bungee cord.

When you can comfortably complete three sets with 1-lb weights, you can gradually begin to increase the weight, one or two pounds at

Sample Strength Training

Week#	Q4.2.212 T2	Sample Strength Training		
	Strength Exercises	# of Reps	# of Sets	Weig
1	#1-#9	10	1	
2	#1-#9	12	1	
3	#1-#9	15	1-2	
4	#1-#9	15	2	
5	#1-#9	15	2-3	
6	#1-#9 .	15	3	
7	#1-#9	15	3	-
8	#1-#14	10	3	
9	#1-#14	12	3	
10	#1-#14	15	. 3	
11	#1-#14	10	3	1 lb
12	#1-#14	12	3	1 lb
13	#1-#14	15	3	1 lb
4	#1-#14	10	3	2 lb
.5	#1-#14	12	3	2 lb
6	#1-#14	15	3	2 lb

a time. (See Sample Strength Training chart.)



- Stand or sit up straight in a chair. aims at the elbows.
 - Keep your elbows close to your sides and bend your
 - Turn your palms up and make a fist with each hand.
 - Slowly lift one fist (with or without weight) up to your shoulder and lower. Alternate arms.

Arm Extension [Upper arm (back)]

Stand or sit up straight.

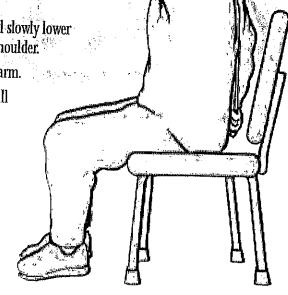
 Bend one arm at the elbow and bring your elbow up close to your ear. (Your hand will go behind your shoulder)

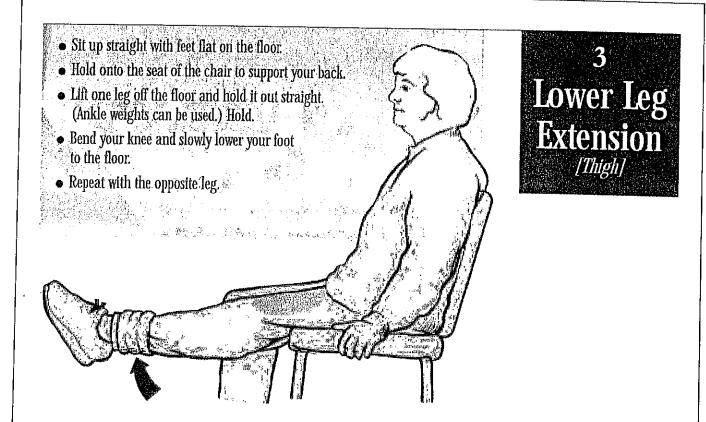
 Keeping your bent elbow pointing out in front of you and close to your head, straighten your arm above your head. (Imagine you're throwing a baseball.)

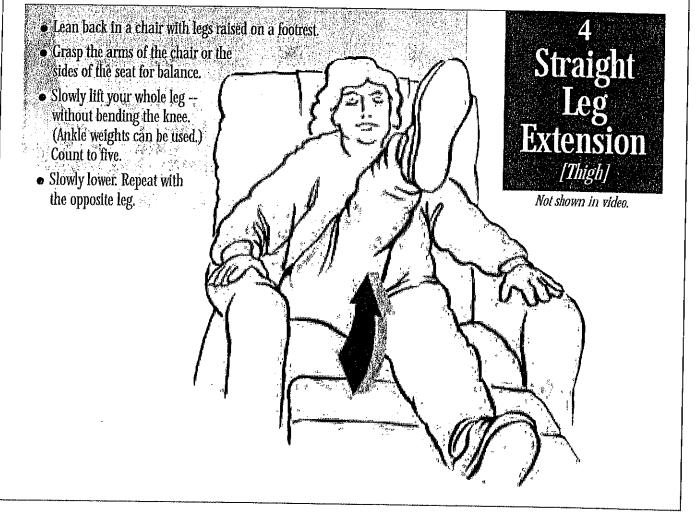
 Bend the elbow again and slowly lower your hand behind your shoulder.

Repeat with the opposite arm.

• Use a stretch band or small weight to add resistance.







5 Seated Marching [Thigh (front and back), abdomen]

Not shown in video.

- Lean back in a chair with legs raised on a foot rest.
- Place your hands on the seat or arms of the chair for balance.
- Bend your legs at the knee, one at a time, and slowly bring them toward your chest as though you were marching or bicycling in the air.

