# **Exercise for Stroke Survivors**



An introductory guide for Individuals and therapists

China Connection Global Healthcare

This booklet is intended as a help document to share basic ideas. It is not intended as a replacement for any professional advice. Remember that before or adding to your exercise routine you should seek advice, counsel, and approval from your doctor.

This booklet was developed by a stroke survivor for stroke survivors.

#### **About**

There are a number of exercises that are effective and that can be done at home or in your room while still at the hospital. Remember exercise is very important and must be done on a regular daily basis, the stroke affected the brain and not the limbs but it doesn't take long for lack of movement in any portion of the body to have a dramatic and detrimental effect. For that reason it is key to maintain a positive attitude and build a support group that will either actively assist you in your exercises or keep you accountable and help you maintain a positive attitude and consistent activities.



## **Eyes**

This is one of the least exercised area of the body and yet most crucial. Keep in mind that the eyes are controlled by muscles, effected by the stroke, and often neglected in therapy.

If you wear glasses or contacts please do these eye exercises without them

#### **Trombone**

This exercise requires you to change your focus from something close to something far. Fix your eyes on an object such as a wall painting or clock on the opposite wall from you. Now shift your focus to a watch or small object that you hold 8 to 10 inches from your face. Switch between these two 10 times, holding your gaze on each object for a least 10 seconds. After you have completed 10 rotations rest your eyes and repeat these at least four times a day.

#### Clock

This exercise is a bit different and requires that you change the location of your glance. Look up without moving your head (this is the 12 o'clock position), hold this for approximately 3 seconds. Now shift to the right (3 0'clock) and hold, down (6 o'clock) and hold, and finally shift left (9 o'clock) and hold. After you have completed 10 rotations rest your eyes and repeat these at least four times a day.

### Reading

The following 2 pages have words in different point sizes - practice reading as much of the list as you can 4 times each day. Try and say them out loud.

Read Fun Words Each Day To Exercise Your Eyes School Lunch Time Rhyme What When Where Who How Why Bottle Base Run Walk Skip Stop Watch Change Chance Type Tell Topple Tense Sense wait gait mate mat stamp stomp can hand and an build swim swam bought bright fly flee fought taught quiet quite quit do dent tent drop drill drag different ever even enough else evenly gate girl grate grab

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### **Head & Face Exercises**

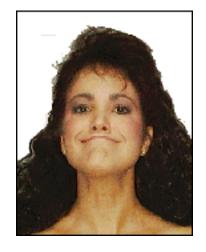


#### **UNDER EYE MUSCLES**

Gently place your fingers underneath your eyes and lift your lower lids (under eye area) without scrunching the eyebrows. Use the muscles of the lower lids to lift the weight of your fingers, then release. Repeat 20 times, twice a day.

#### **JOWLS MUSCLES**

Pull your bottom lip over your top lip. Tilt your chin up slightly and smile towards the top of your ears. Hold for the count of ten. Repeat 5 times. You should feel "the burn" in your jaw and throat.



### **TIGHTEN CHIN MUSCLES**

Lie on your back on the bed or floor. Slowly raise your head, touching your chin to your chest. Then slowly lower your head back down. Repeat 10 times, working up to 50 a day when you are stronger.

### More Neck and Throat facial exercises

Many times after a stroke and definitely as we age our neck often is prone to loose skin and poor muscle tone. These exercises will help relieve and prevent a double chin, loose skin in the neck and throat area and will also assist in toning these muscles.

#### **Cow Chew**

A great exercise it to sit upright, tilt your head back looking at the ceiling, while keeping your lips closed and then start a chewing movement (like a cow – exaggerated). You will feel the muscles working in your neck and throat area - the results will speak for themselves. Repeat 20 times.

#### The Kiss

Sit upright, tilt your head back looking at the ceiling, while keeping your lips closed and relaxed. Start puckering your lips together in a kiss and stretch the kiss, as if you were trying to kiss the ceiling. Keep your lips puckered for 10 counts, then relax, bring your head back to normal and repeat 5 times.

#### **Tongue Workout**

Sit upright, tilt your head back looking at the ceiling, while keeping your lips closed and relaxed. Open your lips and stick your tongue out as if you were trying to touch your chin with the tips of your tongue. Keep your tongue out in this position for 10 counts, and return your tongue and head to its normal position.

### **Lower Lip Lunge**

Sit upright, tilt your head back looking at the ceiling, while keeping your lips closed and relaxed. Next move your lower lip over your top lip as far as possible and keep it there for a count of 5. Relax and repeat 5 times.

#### **Head Roll**

Lie on your bed, with your head hanging down over the edge. Slowly bring your head up towards your torso and keep it there for 10 counts. Relax and lower your head towards the floor again. Repeat 5 times.

#### Jaw Jutt

Sit upright and face forward and while keeping your lips together, separate your teeth by dropping your jaw and then push your jaw forward, keep for a count of 10, bring back to starting position and repeat 5 times.

### More for the Mouth

#### Mouth purse

Sit upright facing forwards and purse your lips together. Lift your pursed lips towards your nose and keep it there for 5 counts, relax and repeat 5 times.

#### Smile

Sit upright, facing forwards and keep your lips closed and teeth together. Smile as broadly as possible, without opening your lips, keep it there for 5 counts and when relaxing starts puckering your lips in a pointed kiss. Keep it there for 5 counts and relax - repeat 10 times.

#### **Pucker Power II**

Move your lips into a puckered kiss and while relaxing the kiss keep your lips closed and curl your lips into your mouth across your teeth. Hold this position for a count of 10 and repeat 5 times.

#### **Pucker Power III**

Sit relaxed with your lips hardly opened and pucker your lips outwards. While your lips are in the outward position, move your puckered top lip towards your nose. Hold in this position for 10 counts and repeat 5 times.

#### **Blowing Bubbles**

This may seem a bit immature, but it is a great exercise for breath control as well as pursing the lips. (Remember, you're never too old to have some fun!)

#### **Blow a Harmonica**

Here is another great oral motor exercise for breath control and lip pursing, but with this one you get to make some noise! If breath control is weak then to get "louder" sounds from the harmonica. If your lip strength is weak focus on trying to play just one note at a time.

#### Blow a Kazoo

The kazoo will not only help your *breath control*, but it will also help with **vocal control** as well. **Why?** Because you have to *hum* to get any sound out of a kazoo.

#### **Using a Straw**

Practicing with a straw will obviously work on *sucking skills*, however it also involves pursing those lips again. "Thin" liquids like *water* or *apple juice* are good starters.

As you progress try a "thicker" liquid like a milk shake.

Do not use this exercise if you have feeding or swallowing difficulties.

### **Tongue Press**

Isometrics are a type of strength training whereby you push your muscles against an immovable force. They are a very effective technique for increasing muscle strength.

For this oral motor exercise you will need a tongue depressor or a spoon. You will also need another person to provide the "immovable force."

First, stick your tongue straight out in front of you. Have the object pressed against your tongue tip. Push against the object as hard as you can for a count of 5, then relax.

Try to do this six to eight times in a row.

Next, again stick out your tongue in front of you. This time have the object placed on the right **side** of your tongue. Press against the object as hard as you can (like you're trying to push the object to the corner of your mouth). Hold for a count of 5.

Try to do this six to eight times in a row.

Do this oral motor exercise one more time pushing against the immovable object with the *left side* of your tongue.

#### Jaw Isometrics

You can do this jaw exercise yourself or have someone help you. Start with your mouth open. Have someone hold your chin firmly. Try to close your mouth using nothing but your jaw muscles - do not move your head! Hold for a count of 5.

You will definitely feel fatigue in your jaw muscles after doing this a few times. Start out only doing 3-5 of these.

Now, for the next jaw exercise you start in the opposite direction. Start with your mouth closed. This time have someone place their hand under your chin. Without moving your head try to open your mouth. Hold for a count of 5.

Try 3-5 and increase the amount as you gain strength.

**NOTE:** Even if you *can* open your mouth against your partner's hand, remember that this exercise will build strength by steadily resisting force.

Doing the exercises properly is important. Take your time and focus on each motion as well as the muscles you are using.

### **Chin Slide**

Move your chin from side-to-side without moving your head. Once you're able to do this jaw exercise pretty well you can adjust the speed from slow to fast to make it more challenging. This oral motor exercise can also be done with resistance (which will make it another isometric exercise).

The following oral motor exercises provide *tactile stimulation*.

Tactile Stimulation refers to stimulating or "waking up" a muscle area by sense of touch.

### **Brushing**

Using a toothbrush, brush the upper and lower lips. You can purchase toothbrushes with different levels of stiffness. Try to use different levels ranging from very soft to stiff (never use anything that may cause pain). You can also use the brushing technique on the muscles surrounding the mouth (including the jaw).

### Icing

Putting ice on the lips will certainly help "wake up" those muscles. You can use a plain ice cube for this exercise, but ice pops are easier to use and add some flavor as well. Run the ice from the middle of the lips outward to the corner. Do this on both sides and then ask your loved one to smile. Repeat the icing movements and the smiling attempts several times.

#### **Licking Ice Cream**

Put some ice cream in a cone and let it melt a little. Then practice using just your tongue (no lips) to lick the dripping ice cream. This is a great tongue exercise and a delicious treat all at the same time.

Do not use this exercise if you have feeding or swallowing difficulties.

#### **Peanut Butter on the Lips**

Rub some peanut butter on your lips and do your best to lick it all off. Make sure you apply the peanut butter from one corner of the mouth to the other. This will force the tongue to reach from side-to-side to lick.

Do not use this exercise if you have feeding or swallowing difficulties.

If you are practicing independently, use a **Mirror** to see if you are doing the lip, tongue exercises correctly

#### **CHEEKS**

Our poor cheeks always seem to get a raw deal - they are forever ignored and not much time spent on them. Hanging skin forming that hang-dog look around your cheeks can be most aging, so here are some facial exercises to lift and firm the cheeks as well to assist with that anti-aging and ageless look.

### CHEEK (1)

Sit upright facing forward with lips closed but relaxed. Pucker and pout your lips using the muscles in your cheeks. (Feel with your fingers that you are using your cheek muscles.) Keep it puckered for a count of 10, relax and repeat 10 times.

#### CHEEK (2)

Have a relaxed smile with your lips closed and then suck in your cheeks toward and on to your teeth. Hold this for 10 counts, relax and repeat 10 times.

### CHEEK (3)

Look in a mirror while doing this exercise. Pout your top lip, turning the corners of your lips upwards and move your cheek muscles towards your eyes. You should at this stage try to get your top lip touching your nose. Keep in this position for 10 counts, relax and repeat 5 times.

### CHEEK (4)

Look in a mirror while doing this exercise. Smile a wide as possible - while keeping your lips closed and your mouth corners turned up. Try to make your mouth corners touch your ears. Next wrinkle your nose and see your cheek muscle move upwards and feel these muscles work. Keep for 5 counts, relax and repeat 10 times.

### CHEEK (5)

Keep your teeth and lips closed and blow air under your top lip and keep it there for 10 counts, then move it to your left cheek side, hold for 10, to your lower lip, hold for 10 and then to your right cheek side while holding it for a count of 10. Repeat 5 times.

#### **EYES**

The skin around the eye is the thinnest and most fragile skin found on the body, and wrinkles and poor muscle tone in this area causes great aging of the face, as the eyes are the central point of focus when people talk to you.

## Droopy eyelids can benefit greatly from facial exercises.

### EYES (1)

Gently tone the muscles of the eyes by pressing two fingers on each side of your head, at the temples, while opening and closing your eyes rapidly. Repeat 5 times.

### EYES (2)

Sit upright with your eyes closed and relaxed. While keeping your eyes closed the whole time, first look down and then look up as far as possible. Repeat the facial exercise 10 times.

### EYES (3)

Sit upright with your eyes closed and relaxed. Keep your eyes closed while lifting your eyebrows and stretching your eyelids down as far as possible. Keep in this position for 5 counts, relax and repeat 5 times.

#### **EYES (4)**

Sit upright with your eyes relaxed and open. Lift your eyebrows while closing your top eyelids until about halfway closed, then open your eyelid wide open until the white of your eye shows over your iris.

### **EYES (5)**

Sit upright looking straight ahead with your eyes open. Look up then down, while keeping your head still. Repeat 10 times. Then look left and right - repeat 10 times.

### **FOREHEAD FACIAL EXERCISES**

The area on the forehead, between the eyebrows, can easily become lined effected by stroke and age and full of wrinkles. Facial exercises can be a great help.

#### FOREHEAD (1)

Frown as much as possible and try to bring your eyebrows over your eyes while pulling the eyebrows toward one another. Then lift your eyebrow as far as possible while opening your eyes as far as possible as well. Repeat 5 times.

### FOREHEAD (2)

Lie on your bed with your head hanging over the edge. Lift your eyebrows as high as possible, with your eyes opening very wide. Relax and repeat 10 times.

#### FOREHEAD (3)

Sit upright facing forward and while bringing your eyebrows down over your eyes, wrinkle your nose as far up as possible while flaring your nostrils. Keep for a count of 10, relax and repeat 5 times.

### **Leg Exercises**

### The Squat

This exercise requires that you have the ability to stand. If you cannot stand then go to the next exercise.

The Squat is a simple exercise that will improve strength and tone the thighs, buttocks and hamstrings. It is also an exercise that will improve balance. If balance is not your strong point then use a table or chair to aid your balance while doing the squat exercises. Remember, always stay in your own comfort zone during the exercise and keep good form, move slowly and with smooth movements. Also ensure that you keep your breathing regular and try to breathe in as you squat and out as you stand up.

- Stand upright with your back straight and feet shoulder width apart.
- Slowly and carefully bend you knees and lower yourself towards the ground. It is important in this exercise to stay within your comfort zone and not lower yourself too far down.
- Slowly come to the squat position, as if you were about to sit on an invisible chair, pause for a second and then slowly come to the upright position again.
- Complete 3-6 repetitions if you are new to the exercise, do not do too much straight away.
- As your target muscles become stronger you can increase the number of repetitions and squat lower to the ground. This will make the exercise much more effective for strengthening an toning the thighs, buttocks and hamstrings.

#### Lunges

This exercise requires that you have the ability to stand. If you cannot stand then go to the next exercise.

Like many of the leg exercises, the Lunge is a great exercise to help you tone your legs and buttocks. It is a very versatile exercise because you can take it as far as you like, hold the lunge position for increasing amounts of time and really give those leg and buttock muscles a healthy workout. Use the back of a chair or a table to help you with your balance if you need to. Remember, always stay in your own comfort zone during the exercise and keep good form, move slowly and with smooth movements.

- Throughout the lunge ensure that you keep your body upright and positioned directly above your hips.
- Stand with both feet around 18 inches apart with the right foot out in front and the left foot to the rear, holding your hand on the back of the chair for balance if you need to.
- Lean your weight forward onto the front leg, bending both knees slightly, and lifting your rear ankle slightly off the floor.
- When you have reached a comfortable position try holding there for 5 seconds.
- Slowly straighten the legs and return to the starting position.
- Repeat the lunge another 4 times with the right leg forward, then repeat the whole exercise with the left foot forward.

#### The Front Leg Raise

The Front Leg Raise will help to strengthen and tone the front of the thighs and also will increase hip flexibility. The exercise is very similar to the **Side Leg Raise**. The Front Leg Raise also helps with balance, and it's a good idea to use a chair or table to help with the balancing. Remember to stay within your comfort zone and keep your movements smooth and fluid.

- Stand upright with feet together, place on hand on the back of a chair or table to balance.
- With your left leg slightly bent, raise your right leg out in front of you up to a height that you are comfortable with. Try to keep your right leg straight.
- Hold your leg out in front of you for 2-3 seconds.
- Lower the leg back to the starting position back to the floor.
- Repeat the Front Leg Raise a further 5 times with the right leg.
- Repeat the Raises with the left leg, keeping the right leg slightly bent throughout.

If you find this exercise easy then increase the number of repetitions of the exercise. You can also start holding the raised leg out in front for a longer and longer period of time. If you find that you still need a little more of a challenge then why not purchase some ankle weights to use during the exercise.

#### The Side Leg Raise

The Side Leg Raise, or Leg Adduction, is very similar to the **Front Leg Raise** and targets similar muscles. It will give a workout to the sides of the thighs and to the hips. The Side Leg Raise requires balance, so use a chair or table to help you while doing this exercise. Remember to stay in your comfort zone and move the legs slowly and smoothly.

- Stand next to the chair using one hand to balance.
- Throughout the exercise keep your body facing forwards. Do not rotate your hips or shoulders when you are moving your leg.
- With your left leg slightly bent, raise your right leg out sideways to a position that is comfortable for you. Keep your toe pointing forward and ensure the rest of your body is still facing forward.
- Hold the leg out to the side for 3 seconds, then return back to the starting position.
- Repeat the Side Leg Raise a further four times.
- Repeat the exercise using the left leg, keeping the body straight and the right leg slightly bent.

To make the exercise a little more challenging you can increase the amount of repetitions in your routine, or purchase some ankle weights to improve further on your strength.

#### The Rear Leg Raise

The Rear Leg Raise is another exercise that will strengthen and tone the buttocks, lower back, back of the hips and the hamstrings. As with some of the other **exercise at home** examples it can also help with balance. Use a table or the back of a chair to help you balance while doing the Rear Leg Raise. Remember to stay in your comfort zone and move the legs slowly and smoothly.

- Stand with both feet together, placing one hand on the chair for balance.
- For the best results try to keep your buttock cheeks tensed throughout the exercise. It's harder but much better for you.
- Keep your body facing forward and stand straight while doing the Rear Leg Raise.
- Take the right leg back, point your toe and touch the floor with the toe.
- Hold the leg in the rear position for 3-4 seconds.
- Return the leg back to the starting position.
- Repeat the exercise 5 times with the right leg, making sure the back and forwards moves are slow and smooth.
- · Repeat using the left leg.

### The Alternate Leg Raise

The Alternate Leg Raise is a great exercise to tone the buttocks and thighs, and to strengthen the lower back. The exercise does not require any additional equipment and is simple to do. Remember, always stay in your own comfort zone during the exercise and keep good form, move slowly and with smooth movements.

This exercise can be done lying on a bench or bed.

- Lay face-down on the edge of the bench / bed with your hip bones /waist and upper body on the bed. Rest your hands on top of each other and your chin on top of your hands.
- Your legs and feet should be straight and extended from the end of the bed and resting with toes on the floor.
- Slowly raise your right leg and bring it in line with the rest of your body, keeping the left foot on the floor. Tense the buttocks and hold in this position for three seconds. Slowly lower the leg until it is in the starting position again.
- Repeat the exercise with the left leg, keeping the right leg in the starting position. Make sure all movements are slow and smooth.
- Repeat the exercise with both legs four more times. As the exercise becomes easier over time you can increase the number of repetitions to make the exercise a little more demanding.

#### The Leg Cross Over

Another good leg exercise is the Leg Cross Over. The Cross Over is great for strengthening and toning the inner thighs. The exercise is more effective using a piece of thigh toning equipment, but if performed regularly and with increasing repetitions can get excellent results. Its a good idea to use a chair or table for balance during this exercise. Remember, always stay in your own comfort zone during the exercise and keep good form, move slowly and with smooth movements.

- Stand next to a chair, holding the back of the chair for balance throughout the exercise. Both feet should be together.
- Keeping the body upright and the legs straight, move the right leg slightly away from the left and then in a circular movement bring the right leg in front of and across the left leg.
- Only go as far as feels comfortable, holding the leg in position for 3-5 seconds.
- Return the leg beside to the starting position with feet together.
- Repeat a further 4 times on the right leg, then repeat the whole exercise using the left leg.

As this exercise becomes easier increase the repetitions for each leg and slow the speed at which the leg moves during the exercise.

### The Thigh Squeeze

The Thigh Squeeze is the only exercise featured here that you will need a piece of equipment for. Fortunately you are almost guaranteed to already have this piece of equipment - a cushion or pillow. The exercise will help tone and strengthen the inner thighs.

- Sit on your chair with your feet together.
- Place the cushion / pillow between your knees and thighs so as not to let it fall to the ground.
- Squeeze the cushion as hard as you can between your thighs for 3-4 seconds, then relax.
- Repeat the squeeze for a further 5 repetitions, staying within your comfort zone.

If you find the exercise easy you can increase the challenge by undertaking more repetitions. You can also make the exercise more effective by using an item with more resistance than a pillow. A semi-inflated football is a good substitute for the cushion. There are also specific pieces of equipment designed for precisely this exercise.

#### **Calf Raises**

Calf Raises are a great exercise to strengthen, tone and define the calf's and lower legs. You can use a chair to balance during the exercise if you like. Remember to stay in your comfort zone and move the legs slowly and smoothly.

- Stand behind the chair with both hands on the back of the chair.
- Keep your legs straight and body upright.
- Slowly move onto your toes lifting your heels off the ground until you are on tiptoes (as long as this is comfortable for you).
- Hold yourself up on your toes for 3-4 seconds.
- Slowly lower your heels back down and return to the starting position.
- Repeat the exercise 5-10 times at first, but this can be increased if you feel comfortable.

### Hand & Leg Exercises: Thera-band

The following exercises use an Thera-band for resistance. The sheet is very thin and easy to stretch. All exercises may be done lying in bed or sitting up.

**Caution** Never use the Thera-band close to your face. If you lose your grip on it, it could injure your face or eyes. Do not do these exercises if you have any weakness or tremor or if your grip has been injured.

#### **Arm and Chest Stretch**

Grab hold of both ends of the Thera-band and stretch it sideways.

#### **Chest and Shoulder Stretch**

Stretch the Thera-band apart behind your head or back.

#### Wrist Stretch

Hold both ends of the Thera-band in your left hand

- Loop the sheet around your right wrist.
- Try to push your right wrist up against the Thera-band

Repeat with your left wrist.

#### **Calf Stretch**

- 1. Hold one end of the Thera-band in each hand.
- 2. Bend your knees and loop the sheet over the bottom of your feet.
- 3. Push down on the sheet with your feet while pulling the sheet up with your hands.

#### Leg and Thigh Stretch

- 1. Hold one end of the Thera-band in each hand.
- 2. Loop the sheet over the bottom of your left foot.
- 3. Bend your left knee toward your chest.
- 4. Push your left leg straight out against the Thera-band while pulling the sheet up with your hands.
- 5. Repeat with your right foot.

### **Thigh Stretch**

- 1. Hold one end of the Thera-band in each hand.
- 2. Loop the sheet over the bottom of your feet.
- 3. Try to spread your legs apart against it.

#### **Straight Arm Lifts**

- 1. Lying on your back, place your arms down by your sides.
- 2. Keeping your elbows straight, lift your arms up and as far back over your head as you can.
- 3. Keeping your elbows straight, lower your arms to your sides.

#### **Side Arm Lifts**

- 1. Lying on your back, place your arms down by your sides.
- 2. Keeping your elbows straight, bring your arms out to the sides and on up over your head until your hands touch.
- 3. Keeping your elbows straight, lower your arms back to your sides again.

#### **Elbow Touches**

- 1. Lying on your back, place your hands behind your head, elbows flat on the bed.
- 2. Bring your elbows together in front of your body.
- 3. Lower your elbows back down to the bed.

#### **Straight Arm Crosses**

- 1. Lying on your back, put your right arm out straight to the side at a right angle to your body.
- 2. Keeping your elbow straight, bring your arm across your chest to your left side.
- 3. Keeping your elbow straight, return your arm to its original position.
- 4. Repeat with your left arm
- 5. Try to use both arms at once, crisscrossing them in front of you.

#### **Elbows And Wrists**

The following exercises help preserve the mobility of your elbow and wrist.

#### **Elbow Bends**

- 1. Lying on your back, place your arms down by your sides and make a fist with each hand.
- 2. Bring your fists up to your shoulders, bending your elbows.
- 3. Lower your fists to their original position.

#### Wrist Rotation

- 1. Lying on your back, make a fist with each hand.
- 2. Make small inward circles with your fists.
- 3. Reverse directions and make small outward circles.

Now is a good time to **stop** and **rest**. If you are tired, pause and take ten to twenty deep, relaxing breaths! Try to relax your neck and shoulders. Don't let tension build up, and you won't tire so easily. Place your hand on your stomach and try to make it rise when you inhale. Blow out as long as you can.

### **Hips, Knees And Ankles**

The following exercises mobilize and strengthen your walking mechanisms.

#### **Knee To Chest Lifts**

- 1. Lying on your back, place your legs together flat on the bed.
- 2. Bend your left leg and bring your knee up toward your chest.
- 3. Straighten your knee while lowering your leg slowly to the bed.
- 4. Repeat with your right leg

#### **Straight Leg Lifts**

- 1. Lying on your back, place your legs together flat on the bed.
- 2. Keeping your knee straight, lift your left leg as high as you can.
- 3. Keeping your knee straight, lower your leg slowly in the bed.
- 4. Repeat with your right leg.

#### **Knee Touches**

- 1. Lying on your back, bend both knees, keeping your feet flat on the bed.
- 2. Relax and let your knees fall slowly outward as far as they will comfortably go.
- 3. Bring your knees back up together.

#### **Ankle Rotation**

- 1. Lying on your back, lift your right heel a little off the bed and make small inward circles with your foot.
- 2. Reverse direction and make small outward circles.
- 3. Repeat with left foot.

#### **Trunk**

The following exercises strengthen your trunk.

#### Side-to-Side Rolls

This exercise helps prevent bedsores.

**Caution:** If you are in a hospital bed, do this exercise with the bedrails raised. If there are no bedrails, have someone stand beside the bed, to make sure you do not roll out of bed.

- 1. Lying on your back, slightly bend your knees and elbows.
- 2. Lift your left shoulder and roll to the right reaching with your left arm for the bedrail or the side of the mattress.
- 3. Roll back and repeat the exercise on your other side.

### **Trapeze Bar Pull-Ups**

- 1. Lying on your back, put both hands up on the trapeze.
- 2. Lift your buttocks up off the bed.
- 3. Try to get your nose or chin up to the bar.

#### **Partial Sit-Ups**

- 1. Lying on your back, clasp your hands behind your head.
- 2. First, try to lift your head off the pillow.
- 3. Next, try to lift your head and shoulders up.

#### Hand Exercises: Clothespin and Rubber Band

The following exercises use a clothespin and rubber band to strengthen your hands and fingers. These exercises can be done even if you have an intravenous feeding tube in your arm.

### **Finger Squeeze**

- 1. Squeeze the clothespin between your thumbs and first two fingers. If this is too difficult, squeeze the clothespin between your thumb and four fingers.
- 2. For added resistance, wrap a rubber band around the tip of the clothespin and repeat the exercise.

### **Advanced Finger Squeeze**

- 1. Hold the clothespin between your thumb and first finger, trying to keep your thumb and finger in a circle.
- 2. Open the clothespin to its fullest and hold it open for a few seconds.
- 3. Repeat with your thumb and each of your other fingers.
- 4. For added resistance, wrap a rubber band around the tip of the clothespin and repeat the exercise.

### **Finger Spread**

- 1. Place a rubber band over the fingers of one hand, stretching the rubber band.
- 2. Spread your fingers apart.
- 3. Repeat with your other hand.

### **Hand Exercises: Exercise Putty**

The following exercises use exercise putty to give coordination control and to strengthen your hands. The putty can be pulled, worked in a ball, or bounced.

### First and Second Finger Pinch

- 1. Place a ball of putty between your thumb and first finger.
- 2. Squeeze through the ball until your thumb and finger meet.
- 3. Repeat with your thumb and each of your fingers.

### **Wrist Pull-Ups**

- 1. Place your left forearm on a table and hold a piece of putty in your left hand.
- 2. Hold the other end of the putty in your right hand.
- 3. Pull the putty up with your right hand, bending your right wrist back.

Repeat with your other hand.

### **Finger Spread**

- 1. Make a loop out of the putty.
- 2. Place the loop around the fingers of one hand between the two top joints.
- 3. Spread your fingers apart against the loop.
- 4. Repeat with your other hand.

### **Finger Opening**

- 1. Smash the putty flat with the palm of your hand.
- 2. Stick your thumb and first finger into the putty close together.
- 3. Push your thumb and first finger apart.
- 4. Repeat with your thumb and each of your other fingers.

### **Hand Squeeze**

Squeeze the putty in your hand like a ball, moving it about at the same time.

### Hand& Leg Exercises: Sponge Ball

The sponge ball is lightweight, easy to handle and safe -- it won't bruise your skin if hits you. Some of the following exercises are done lying down others sitting up.

### **Knee Squeeze**

Lying down or sitting up, put the ball between your knees and try to hold it there.

### **Leg Lift**

Lying down, put the ball between your feet and try to lift it off the bed. (Blow out as you lower the ball back to the bed).

#### **Hand Squeeze**

Squeeze the ball in your hand, moving it around at the same time.

### **Up and Down Toss**

Sit up (make sure your bed rails are up), throw ball up and catch it.

#### Side-to-Side Toss

Toss the ball from one hand to another, leaning from side to side to catch it.

### **Clap and Catch**

Toss the ball back and forth with a friend. For more coordination, try clapping your hands just before catching the ball.

#### **Balance**

Contrary to popular belief, balance is something that you can practice and improve. There are a couple of balance exercises below the help you get started but it may be worthwhile joining a yoga or tai chi class to help you improve further. While practicing the exercises below you should have one hand on or ready to place on the back of a chair to help steady yourself.

- Hold on to the back of a chair or table for support.
- Lift one foot off the ground and try to hold it up without losing balance.
- When you feel confident that you can balance without using your support, let go and try to balance without the support. If you lose your balance then use the support to steady yourself.
- Build up on the amount of time you can balance for until you are happy to balance without the help of the support.

Once you are confident with your new found balancing skills you can start to take it a step further and add in your own balancing moves. Here is an example of another balance exercise to give you an idea of what you can do to improvise.

- Again it is a good idea to use some support then trying out the new balancing move.
- Lift one foot slowly off the ground until it is about 6 inches off the floor.
- Slowly and carefully lean forward a little, and at the same time move the foot that is off the ground out backwards until the leg is straight. Keep the support handy just in case you start to lose your balance.
- Continue to lean forward and extend your leg straight out behind, keeping within your comfort zone.
- Return to the upright position with both feet back on the floor.



## 8 Minutes to Get Rid of Upper Body Sags

Advanced Exercises: advanced mobility required to perform these exercises.

### **Equipment Needed**

Any exercise aimed at toning your body needs something to provide resistance for your muscles to work against. Most of the exercises below use hand-held weights to provide resistance: these can be as simple as water bottles (or even cans of

food) you can grip comfortably, or dumbbells in the range of 1lb-5lb/0.5-2kg.

### **Timing and Repetitions**

10 repetitions of each exercise should take about 8 minutes. As with all exercise you should warm-up first. Marching or jogging on the spot for a few minutes interspersed with some gentle stretches will do the trick.

#### **Caution**

Body toning exercise can be a pretty painful experience if muscles have been dormant for a while. The problem is, it's not until 24-48 hrs after your exercise that you'll realize you've overdone it! Body toning exercise should not be painful while you are doing it - if it is you're using too much weight.

Go Slow!

### The Workout

#### **Exercise 1 - Chest and Shoulders**

Lie on your back and grasp your weights with the palms of your hands facing up, and your arms outstretched to the sides. With your elbows slightly bent, lift your arms above your chest until your hands are almost touching. Return to starting position and repeat.

This is a standard exercise for the able now let's make a few modifications for the stroke survivor. While you are on a bed, use your good hand to reach and grasp your bad hand. Pull it up and toward the middle of your chest. Repeat this 10 times.

#### **Exercise 2 - Chest and Shoulders**

Lie on your back and grasp your weights with the palms of your hands facing up, and your arms outstretched above your head. Grip your weights and bring them over your head and down to your hips, by your sides - a semi-circular motion. Lift back to starting position and repeat.

This is a standard exercise for the able now let's make a few modifications for the stroke survivor. While you are on a bed, use your good hand to reach and grasp your bad hand. Pull it up over your head and rotate it in as big a circular motion as you can make. Repeat this 10 times.

#### **Exercise 3 - Back and Shoulders**

If you can stand then stand with feet shoulder width apart and arms by your sides, gripping the weights with palms facing outwards. Making sure your movements are slow and concentrated, tense your shoulder and upper back muscles, then slowly "shrug" them up and down.

### **MODIFIED FOR BED OR CHAIR**

While sitting on the edge of your bed or in a chair allow your arms to hang down off the bed. Begin by shrugging your shoulders and then rotate your shoulders. Repeat this 10 times.

#### **Exercise 4 - Shoulders and Upper Arms**

Stand with feet shoulder width apart and arms raised straight up above your head, grip your weights with your palms facing behind you. Slowly bring your arms forward and down, without bending at the elbow, until level with your shoulders. Lift back to starting position and repeat.

#### **MODIFIED FOR BED OR CHAIR**

While sitting on the edge of your bed or in a chair with arms raised straight up above your head, grip your weights with your palms facing behind you. If you cannot grip a weight then use the good hand to move the bad by interlacing your fingers. Slowly bring your arms forward and down, without bending at the elbow, until level with your shoulders. Lift back to starting position and repeat.

### Exercise 5 - Upper Arms, Shoulders and Back

Standing with feet slightly apart, grasp your weights and bend at the waist until your torso is parallel to the floor. Extend your arms towards the floor with palms facing outwards. Lift your arms out to the side, keeping them straight, until parallel to the floor. Return to the starting position and repeat.

#### MODIFIED FOR BED OR CHAIR

While sitting on the edge of your bed or in a chair grasp your weights and bend over at the waist until your torso is parallel to the floor. Extend your arms towards the floor with palms facing outwards. Lift your arms out to the side, keeping them straight, until parallel to the floor. Return to the starting position and repeat.

### Exercise 6 - Upper Arms, Shoulders and Back

Standing with feet slightly apart, position your arms straight down in front of you almost against your body - with your weights almost touching. Bend your elbows and lift your weights towards your chin, bringing your elbows out to the side, in line with your shoulders. Return to the starting position and repeat.

#### MODIFIED FOR BED OR CHAIR

While sitting on the edge of your bed or in a chair position your arms straight down in front of you in your lap - with your weights almost touching. Bend your elbows and lift your weights towards your chin, bringing your elbows out to the side, in line with your shoulders. Return to the starting position and repeat. Again if you can't use weights then interlock your fingers in your lap and bring them up to your chin.

#### **Exercise 7 - Arms and Chest**

The classic push up. With your hands shoulder width apart place your palms on the floor. Stretch out your body with either your knees on the floor, or if you're feeling ambitious, your toes - so you are supporting your body weight. Keeping your back straight and using your arms lower yourself gently toward the floor until you are hovering just over it. Push yourself slowly back to your starting position and repeat. Remember - don't lower yourself to the point where you come into contact with the floor, it'll be much harder to push back up.

#### **MODIFIED FOR BED OR CHAIR**

Most forget this and figure it is too difficult but we've made a few changes. While sitting on the edge of your bed position your arms at your side and push down on the bed attempting to straighten your arm and lift yourself in the air. This resistance is a great exercise.

### **Exercise 8 - Arms**

In a sitting position with your back straight, relax your arms in line with your body. Grip your weights with your palms facing upwards and curl them up towards your shoulders, then back down again. Repeat. Keep your torso still and back straight, let your arms do the work.

#### **Exercise 9 - Forearms**

Holding your weight with your arm outstretched in front of you, tilt your wrist up and down repeatedly. Try doing this with both an overhand and underhand grip on your weight. Do one arm at a time.