

SENIOR GOLF MASTERY

The Ultimate Guide for Health, Fitness and Longevity for Senior Golfers

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DEAR SENIOR GOLFER:

Of the 29 million recorded U.S. golfers, 61% are over the age of 50. 18% are between 60 and 69 and 19% are over 70.

Golf is their lifeblood.

They are avid supporters of the game in every way. They are paying greens fees, buying clubs and training aides, traveling in search of new and exciting courses and supporting the game through their daily activities on and off the course.

If it wasn't for this important age demographic, the majority of golf clubs and golf companies would probably shut their doors.



While many golf companies cater to senior golfers with products and services, there remains a significant lag in health, fitness and longevity.

All seniors really want is to enjoy the game as long as possible.

This is the message that I heard loud and clear when I played with Al.

Al is 87 and has been playing golf since he was a young man. He has more than 60+ years of history with this game. He would play every single day if he could, but his body won't let him.

He always walked the course for exercise and carried his bag without any problems well into his mid 70's. Then he found himself losing energy and getting more frustrated with the game. He became especially frustrated with his decrease in drive distance.

Golf means everything to him. His kids are grown and he retired a very long time ago. Golf is what keeps him alive and excited about life.

He used to play to a low single digit handicap, but that has since jumped about 8 to 10 strokes per round. He is still an amazing golfer. His mind is still very sharp, he's in great shape and he has an incredible short game.

Would you like to know about his greatest fear?

That he will be forced out of the game for good. He has seen his playing partners give up the game over the years because of hip replacements, poor strength, injuries and beyond.

Al is in great shape especially for his age and he's not ready to give up.

Here is his wish list.

- -Get some of his distance back. He accepts that he might not be able to bomb it like the good ole days, but he has lost too much and wants exercises and stretches to help him stay strong and flexible off the tee. He wants more and deserves more for all of his investment in golf over the years.
- **-Keep things simple**. He is not likely to do a full program or join a gym. If there are some balance exercises, basic stretches to help him with his tightness or simple strength exercises, he will do it. Otherwise, it needs to be realistic for a person his age.
- -Help him play another 5 to 10+ years. For as long as he is alive on this earth, he wants to play golf. There is always a new course to play, new partners to play with and new clubs and training aides to enjoy.

This book is for Al and every golfer who can identify with some of the same frustrations. You may be in your 50's, 60's, 70's or older. You have a tremendous passion for golf and you want to keep your body and mind as sharp as possible for as long as possible.

Here's to you, your health and the longevity of your game...

ASSESSMENTS AND SELF TESTS

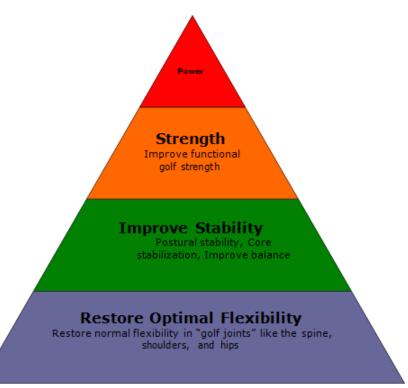
After performing golf fitness assessments on many senior golfers, I have a good sense of the top restrictions you may be facing. However, since each body is unique, it is important to find out what is <u>limiting you</u> at this particular point in time.

Most senior golfers want more distance off the tee. I will make sure you get the exercises and stretches in this book to make that happen.

Before I go any further, I want to break down how your body produces more power in your swing.

Take a look at this training continuum.

Everyone wants power, but look where it sits at the very top of the triangle. If you take care of the issues you have with flexibility and build a strong stable base, then you will find that power again or atleast be able to access it.



Too many senior golfers are playing with tight backs, tight hips, restricted shoulders and a loss of balance as a result of age. Doesn't it make sense that your power is also suffering?

This whole section is dedicated to assessments and tests for senior golfers so you can get an idea of your strengths and weaknesses. You will be tested on upper and lower body strength, core strength, core endurance, cardio endurance, dynamic and static balance, and flexibility in your hips, shoulders and spine.

As you take each test, pay attention to things like your left side vs. your right side and upper body vs. lower body restrictions. You may notice strength and flexibility discrepancies that will prove to be tied in to any particular swing issues you may have currently.

BALANCE AND STABILITY TESTS

Falls become a major concern for seniors as they age because they lose balance and coordination. You may also have a lack of balance or stability in your swing. The sensory systems used to help identify balance (visual and vestibular) are also compromised with age. Older adults begin to lose vision as well as their perspective and positioning in space.

To have good balance, your sensory system needs to provide good information about your position as it relates to your environment. The brain interprets this information and helps with coordination of your muscles and joints.

The Centers for Disease Control and Prevention say almost 1/3 of seniors over the age of 65 experience a fall each year. The good news is that research shows that balance and stability can be improved regardless of age.

The following tests will show you where you need to improve in both balance and stability.

Test #1-Dynamic Balance



Directions:

Start in an athletic golf posture and fold both hands across your chest. If you are right-handed, now move your right foot behind you and off the ground several inches. If you are left-handed, keep your right foot on the ground and do this with your left foot. Keeping your hands on your chest, rotate to a "follow-through" position and notice what is happening with your balance, knee and hip movement.

- —your knees and/or ankles are moving rapidly and you are off balance
- —you have excessive movement at either the knee or the ankle
- —you maintained your balance and have very minimal movement at your ankles and knees

Comments:

If you answer either of the first two responses, then you are likely to have balance problems in your swing. You might find yourself hanging on your back

leg in the follow through, off balance in your swing altogether or lacking power because of excessive movement.

Test #2-Static Balance





Directions:

- Stand on a hard surface with both feet together.
- Close your eyes, and lift one foot about 6 inches off the ground. Your knee will be bent at about a 45 degree angle.
- Place your arms at your hips or resting to your sides.
- Have someone record how long you are able to hold this position, without heavy swaying from side to side or resting your knee against your supporting leg.
- —you can hold this position for less than 10 seconds
- —you can hold this position from 11 to 20 seconds
- —you can hold this position for more than 20 seconds

Comments:

When you close your eyes, your sensory system is attempting to give you feedback from your feet, arms, etc. as to your position in your environment. If you are not able to stay in balance, then you can perform exercises that will help improve your balance.

Modified Test #2

A study was published in the Journal of Geriatric Physical Therapy showing a similar test and corresponding data. This will give you an idea of comparative data by age.

Similar to the test above, **stand with bare feet** on your dominant leg and the opposite leg should be lifted to about ankle height. Your foot should not be touching your opposite ankle. Find a spot on the wall that is about eye level so you can place your focus. Place your arms across your chest before lifting your foot off the ground. Try it once with your eyes open. Then do it again with your eyes closed. Make a note of your time on a stop watch.

Table 1. Unipedal Stance Test Time by Age Group and Gender for Eyes Open and Closed

Age & Gender Groups	Eyes Open Best of 3 trials (sec) Mean (SE)	Eyes Open Mean of 3 trials (sec) Mean (SE)	Eyes Closed Best of 3 trials (sec) Mean (SE)	Eyes Closed Mean of 3 trials (sec) Mean (SE)
18-39 Female (n = 44) Male (n = 54) Total (n = 98)	45.1 (0.1) 44.4 (4.1) 44.7 (3.1)	43.5 (3.8) 43.2 (6.0) 43.3 (5.1)	13.1 (12.3) 16.9 (13.9) 15.2 (13.3)	8.5 (9.1) 10.2 (9.6) 9.4 (9.4)
40-49 Female (n = 47) Male (n = 51) Total (n = 98)	42.1 (9.5) 41.6 (10.2) 41.9 (9.9)	40.4 (10.1) 40.1 (11.5) 40.3 (10.8)	13.5 (12.4) 12.0 (13.5) 12.7 (12.9)	7.4 (6.7) 7.3 (7.4) 7.3 (7.0)
50-59 Female (n = 50) Male (n = 48) Total (n = 98)	40.9 (10.0) 41.5 (10.5) 41.2 (10.2)	36.0 (12.8) 38.1 (12.4) 37.0 (12.6)	7.9 (8.0) 8.6 (8.8) 8.3 (8.4)	5.0 (5.6) 4.5 (3.8) 4.8 (4.8)
60-69 Female (n = 50) Male (n = 51) Total (n = 101)	30.4 (16.4) 33.8 (16.0) 32.1 (16.2)	25.1 (16.5) 28.7 (16.7) 26.9 (16.6)	3.6 (2.3) 5.1 (6.8) 4.4 (5.1)	2.5 (1.5) 3.1 (2.7) 2.8 (2.2)
70-79 Female (n = 45) Male (n = 50) Total (n = 95)	16.7 (15.0) 25.9 (18.1) 21.5 (17.3)	11.3 (11.2) 18.3 (15.3) 15.0 (13.9)	3.7 (6.2) 2.6 (1.7) 3.1 (4.5)	2.2 (2.1) 1.9 (0.9) 2.0 (1.6)
80-99 Female (n = 22) Male (n = 37) Total (n = 59)	10.6 (13.2) 8.7 (12.6) 9.4 (12.8)	7.4 (10.7) 5.6 (8.4) 6.2 (9.3)	2.1 (1.1) 1.8 (0.9) 1.9 (1.0)	1.4 (0.6) 1.3 (0.6) 1.3 (0.6)
Total (all ages) Female (n=258) Male (n = 291) Total (n = 549)	33.0 (16.8) 33.8 (17.1) 33.4 (16.9)	29.2 (17.4) 30.2 (17.7) 29.8 (17.5)	7.7 (9.6) 8.2 (10.8) 8.0 (10.3)	4.7 (6.0) 4.9 (6.4) 4.9 (6.2)

Test #3-Core Engagement



Directions:

- Cut a string long enough to tie around your waist.
- Stand upright.
- Tie the string around your waist so that it is taut (somewhat tight).
- Place an object in front of you, then bend down and pick up the object.

Repeat this test a few times and score yourself based upon what typically happens to the string when you bend down:

- —the string feels tighter around your midsection
- —the string feels the same as it did before you bent down
- —the string feels looser around your torso

Comments:

This is a test to see how well you engaged your core during movement. This can be a significant source of power gain or loss in your swing depending on how well you perform this test. The correct answer would have been that the 'string feels looser around your torso'.

Why is this?

When you are in correct set up posture, your abs are slightly taut or drawn in. Your base in stable and the swing motion occurs from here.

Recommendations:

In the Senior Golf Fitness chapter, there are several recommended programs to help build your balance, stability and core strength.

STRENGTH TESTS

Strength training is important for two main reasons. Seniors need it to carry on with life's basic daily activities (including golf) and muscle mass is needed to protect the body against gravity and the aging process.

According to research reports, 3 to 5% of an individual's muscle declines about every 10 years after your mid twenties. Bone density also declines making seniors more susceptible to various fractures if they should fall. Resistance training can help slow this decline and build new muscle. Seniors can safely perform exercises at a facility or home gym depending on your preferences and limitations. You can use exercise machines, tubing and dumbbells to help improve your fitness levels.

Recommendations:

Strength training is recommended to perform 8 to 10 exercises for 2 days each week. Exercises should be focused on the major muscles with 10 to 15 repetitions for each exercise. Exercise days should be spaced out to provide recovery in between. Always perform a warm up and cool down for 5 minutes before a strength training program.

Test #1-Core Strength and Endurance



Directions:

- Lie facedown in a pushup position, with your elbows directly beneath your shoulders.
- Push off with your feet and elbows to raise your body into the air.
- Your body should form one line from your ears to your heels.
- Hold this position for as long as you can without feeling any pain or discomfort in your lower back.

How long were you able to hold this position (without altering your posture or body position)?

- -45 seconds or less
- —45 seconds to 1 min
- —Over 1 minute

Comments:

Hopefully you passed the core engagement test first. However, most golfers do not. If you are not properly engaging your core, then you will not feel this in your stomach muscles, but rather your back. If you feel it in your back, then please stop and discontinue this test. If your core muscles are weak then all of the stress goes to your back muscles and you will have a sagging lower back. It is important to keep one line from your ankles to your head/shoulders.

Test #2-Lower Body Strength



Directions:

- Place your back firmly against a wall, feet shoulder width apart and parallel.
- Slide down along the wall until your knees are flexed to 90 degrees.
- Make sure knees do not extend over the top of your feet (don't go past 90 degrees). Try to push against the wall with the small of your back into the wall.
- Record the number of seconds you are able to hold this position.
- —You were able to maintain this position against the wall for 1 minute or less
- —You were able to maintain this position against the wall between 1 and 1 and a half minutes
- —You were able to stay against the wall for 2 minutes or longer

Comments:

Some of you may have knee pain. If this is the case, find a position against the wall where you feel pressure in your quad muscles and not your knees. It is only a matter of finding the right position.

Test #3-Upper Body Strength





Directions:

• Men should perform standard push-ups; ladies should perform modified push-ups, with your knees touching the floor.

- For standard push-ups, only your hands and feet should be in contact with the floor.
- Lower your body to within one fist height of the floor.
- Rest is allowed only in the "up" position.
- Perform as many push-ups as possible until fatigue stops you from completing one more.
- —You can do 4 or fewer push-ups
- —You can do 9 to 11 push-ups
- —You can do more than 12 push-ups

				Me	en				
Percentile*				Age (years)					
	20-29		30-39		40-49		5	0-59	60-69
90	41		32		25		24		24
80	34		27			21	17		16
70	30		24			19		14	11
60	27		21			16		11	10
50	24		19			13		10	9
40	21		16			12		9	7
30	18		14			10		7	6
20	16		11			8		5	4
10	11	8				5		4	2
				Won	nen				
Percentile*					Age (years)			
	20-29	30-	39	40-	49	50-59		60-69	70+
90	31	2	7	2:	5	19		18	24
80	27	22	2	2	1	17		15	17
7 0	21	20	0	1'	7	13		13	11
60	19	17	7	10	16 12		11		9
50	18	10	6	14	14			9	7
40	14	13	3	11		9		6	2
30	13	10	0	10		6		4	0
20	10	7		8		3		0	0
10	6	1		4		0		0	0

This table is from the NSCA's Essentials of Personal Training, p. 259

Test #4-Wrist Strength (and Flexibility)



Stand straight up with your arms at your side and elbow straight. Hold a club in your right hand at the end of the golf grip and slowly move the wrist up and down in the vertical motion. Perform a set of ten repetitions. If you can complete ten repetitions add another club. Add as many clubs as you can until you begin to lose proper form. If the club is too heavy, choke down on the grip to lessen the weight. Each repetition should be completed through a full range of motion. Repeat on both sides.

- —You can hold one club and perform up to 10 reps
- You can hold two clubs and perform up to 10 reps
- You can hold three clubs and perform up to 10 reps

FLEXIBILITY TESTS

There is a chain reaction of bad consequences when we don't stretch. Faulty loading leads to dysfunction. Dysfunction leads to pain and injury. The only way to stop this chain of events is to make sure we maintain proper flexibility. Older adults need minimum standards of range of motion in all of their joints (hips, shoulders, knees, etc.) simply to join a healthy lifestyle.

Recommendations:

Seniors can safely stretch for a few minutes each day depending on how tight they are and how often they play golf. The general guideline for seniors is to stretch a couple of times per week for 10 minutes each day.

For golf, you should find a few stretches you really like for your shoulders, hips and spine and do them every day.

Test #1-Spinal Rotation



Directions:

- Sit on an inflatable exercise ball or a chair, with good posture (back straight up and down).
- Place your feet about shoulder-width apart and look straight ahead.
- Place a long iron or 3-wood behind your shoulders and hold each end with your hands.

- Rotate to your left as far as possible, then to your right.
- Be sure your hips do not rotate along with your shoulders.
- Make note of where <u>your chest</u> (not your head) is facing as you reach maximum rotation.

If your chest is facing 12:00 on a clock face at the starting position, assign the following point values depending on where your chest points when it rotates:

- —you can point your chest only as far as 11:00 or 1:00
- —you can point your chest to 10:00 or 2:00
- —you can rotate beyond to 9:00 or 3:00

Comments:

Low handicap golfers have good spinal rotation. Pay attention to any tightness you might feel from one direction to another. As an example, is your right side tighter than your left side or vice versa? Your goal should be in the 10 and 2 area. If you can get past this, then that is awesome for a senior golfer!

Test #2-Shoulder Flexibility







Directions:

- From a standing position, reach *over* your right shoulder and towards your left shoulder blade.
- Note the final resting position of your fingertips.
- Now take your left hand, reach *under* your back (as shown) and towards your opposite shoulder blade. Note the final resting position of your fingertips. Can your hands touch from behind your back?
- —You couldn't touch your hands anywhere near your opposite shoulder blades
- —You could nearly reach your opposite shoulder blades
- —You could comfortably reach both opposite shoulder blades and touch hands from behind your back

Comments:

Shoulder tightness is very common in older golfers. You will have a difficult time keeping your swing on plane if your shoulders are tight.

Test #3-Lower Body Flexibility

Sit on the ground with your legs straight and your toes pointing up. Keep both your spine and legs straight as you slowly tilt you upper body forward towards your feet. See how far forward you can go without losing your spine angle and hunching over.

- —your body cannot reach vertical
- —your trunk can move from vertical up to 45 ° forward bent
- —you can move past 45°

Test #4-Hip Flexibility



Directions:

- Stand with your back against a wall and your feet about hip-width apart.
- Slowly rotate your right heel outward, then do the same with your left heel.
- Be sure that your leg is straight and you don't move your hips from a square position, against the wall.
- Notice how far you were able to rotate your heels.
- —You rotated your heel out slightly
- —You rotated your heel out to 45 degrees
- —You rotated your heel past 45 degrees

Comments:

If your hips can't rotate then they probably 'slide' in your backswing and follow through. You want them rotate slightly to help give you some lower body power for increased distance.

CARDIO ENDURANCE TEST

With age, there are decreases in cardiac output, maximum heart rate and resting stroke volume. The goal in improving endurance revolves around increasing aerobic capacity. This helps you last longer in activities you enjoy while strengthening their heart muscle and improving their breathing. Older adults can see rapid declines in their health when they are not active or eating right.

Aerobic activity can range from walking to hiking to a favorite cardio machine and beyond. Seniors can start from no activity at all to slow increases in endurance.

It also doesn't matter if you only take a cart or tend to walk the course. You may not be getting your heart rate up while playing golf, but ignoring this part will quickly affect the shape you are in.

It is important to monitor your heart rate when exercising. Here are two ways to get an accurate reading.

Target Heart Rate

This is the rate at which each person uses to monitor their exercise activity. Depending on the fitness goal, this number can range from 60 to 70% for a beginner, 70 to 80% for an intermediate fitness level and 80 to 90% for a more experienced fitness level.

How to Calculate Target Heart Rate

The formula to measure heart rate is 220 minus your age. Here is a chart provided by the American Heart Association that shows what a training target heart rate would look like for various age groups.

The figures are averages, so use them as general guidelines.

Age	Target HR Zone 50-85%	Average Maximum Heart Rate, 100%
20 years	100-170 beats per minute	200 beats per minute
30 years	95-162 beats per minute	190 beats per minute
35 years	93-157 beats per minute	185 beats per minute
40 years	90-153 beats per minute	180 beats per minute
45 years	88-149 beats per minute	175 beats per minute
50 years	85-145 beats per minute	170 beats per minute
55 years	83-140 beats per minute	165 beats per minute
60 years	80-136 beats per minute	160 beats per minute
65 years	78-132 beats per minute	155 beats per minute
70 years	75-128 beats per minute	150 beats per minute

How to Measure Heart Rate

The fastest and easiest way to measure heart rate is with a heart rate monitor or fitness device (like Fitbit) which gives you second to second monitoring of your activities. While many people have these, it's also important to know how to measure your heart rate without any device.

Place two fingers on your pulse at your neck are or wrist. Use the first two fingers together to press lightly. Start by counting the number of beats over 10 seconds. Multiply this number by 6 to get a 1 minute heart rate count.

Borg Scale

Another way to monitor heart rate is through the *Borg Scale*. It is a way of offering a personal assessment as to your exercise effort on a scale from 1 to 20. A borg rating of 6 or 7 would describe an activity like tying your shoes. In other words, very light activity. Numbers between 9 to 12 would describe a

fairly light effort. Numbers from 13 to 14 would describe somewhat hard. 15 to 16 would be considered hard. Between 17 to 20 would explain activities that are very difficult.

Recommendations:

Seniors are encouraged to exercise with moderate intensity for 30 minutes, up to 3 days per week. Moderate intensity is defined as a 10 to 13 on the Borg scale.

Cardio Test #1

2 Minute Step Test (Rikli, Jones 1999)



- Take resting vital signs
- Stand next to a wall. Measure the height of your hip and knee and mark it on the wall. Then place a piece of tape on the wall half the distance between the two.
- On the signal "go" begin stepping (not running) in place, raising each knee to the mark on the wall, for as many times as possible in the 2 minute period.

- Only count the number of times the <u>right</u> knee reaches the required height. That is the score.
- If the proper knee height cannot be maintained, then slow down, or stop until you can regain the proper form, but keep the stopwatch running.
- At the end of the test, provide a cool down by walking slowly for a minute.
- A person with impaired balance may use the back of a chair as a touchhold for stability.
- Take post exercise vital signs.

Range of scores between the 25% and 75% percentiles						
Age	Number of steps – Women	Number of steps – Men				
60 - 64	75-107	87-115				
65 - 79	73-107	86-116				
70 - 74	68-101	80-110				
75 - 79	68-100	73-109				
80 - 84	60-90	71-103				
85 - 90	55-85	59-91				
90 - 95	44-72	52-86				

⁺Scores less than 65 were associated with lower levels of functional ability

SENIOR FUNCTIONAL FITNESS TEST

A series of senior fitness tests were published in the Journal of Active Aging. Credits go to C. Jessie Jones Ph.D. and Roberta E. Rikli, Ph.D. Both are professors of kinesiology at California State University Fullerton.

If you are the kind of person who loves to know how you compare to others in your age group or like to know what you should improve on, I think you will love these additional tests. At the end of this series of tests, you can also see how you compare to others your age.

Test #1

30 Second Chair Test



Purpose

To assess lower body strength, needed for numerous tasks such as climbing stairs, walking and getting out of a chair, tub or car. Also reduces the chance of falling.

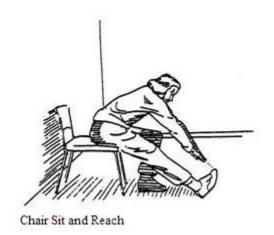
Description

Number of full stands that can be completed in 30 seconds with arms folded across chest.

Risk zone

Less than 8 unassisted stands for men and women.

Test #2 Chair Sit and Reach



Purpose

To assess lower body flexibility which is important for good posture, normal gait patterns and various mobility tasks.

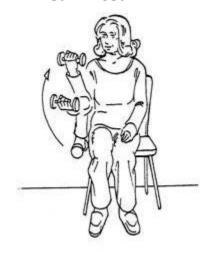
Description

From a sitting position at front of chair, with leg extended and hands reaching toward toes, the number of inches (cm) (+ or -) between extended fingers and tip of toe.

Risk zone

Men: Minus (-) 4 inches or more Women: Minus (-) 2 inches or more

Test #3 Arm Curl Test



Purpose

To assess upper body strength, needed for performing household and other activities involving lifting and carrying things such as groceries, suitcases and grandchildren.

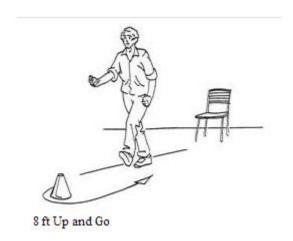
Description

Number of bicep curls that can be completed in 30 seconds holding a hand weight of 5 lbs (2.27 kg) for women; 8 lbs (3.63 kg) for men.

Risk zone

Less than 11 curls using correct form for men and women.

Test #4 8 Foot Up and Go



Purpose

To assess agility/dynamic balance for seniors.

Description

Number of seconds required to get up from a seated position, walk 8 feet (2.44 m), turn, and return to seated position.

Risk zone

More than 9 seconds.

Normal Range of Scores - Men

	60-64	65-69	70-74	75-79	80-84	85-89	90-94
Chair stand							
(no. of stands)	14 - 19	12 - 18	12 - 17	11 - 17	10 - 15	8 - 14	7 - 12
Arm Curl							
(no. of reps)	16 - 22	15 - 21	14 - 21	13 - 19	13 - 19	11 - 17	10 - 14
6-Min Walk							
(no. of yds)	610 - 735	560 - 700	545 - 680	470 - 640	445 - 605	380 - 570	305 - 500
2-Min Step							
(no. of steps)	87 - 115	86 - 116	80 - 110	73 - 109	71 - 103	59 - 91	52 - 86
Chair Sit-&-Reach							
(inches +/-)	-2.5 - +4.0	-3.0 - +3.0	-3.5 - +2.5	-4.0 - +2.0	-5.5 - +1.5	-5.5 - +0.5	-6.50.5
Back Scratch							
(inches +/-)	-6.5 - +0.0	-7.51.0	-8.01.0	-9.02.0	-9.52.0	-10.03.0	-10.54.0
8-Ft Up-&-Go							
(seconds)	5.6 - 3.8	5.7 - 4.3	6.0 - 4.2	7.2 - 4.6	7.6 - 5.2	8.9 - 5.3	10.0 - 6.2

Table 2: Normal range of scores for women, with *normal* defined as the middle 50% of the population. Those scoring above this range would be considered *above average* for their age and those below the range as *below average*.

Normal Range of Scores - Women

	60-64	65-69	70-74	75-79	80-84	85-89	90-94
Chair stand	00-01	03-03	10-11	10-10	00-01	00-00	30-31
(no. of stands)	12 - 17	11 - 16	10 - 15	10 - 15	9-14	8 - 13	4-11
Arm Curl	12-17	11-10	10-13	10-13	3-14	0-13	4-11
(no. of reps)	13 - 19	12 - 18	12 - 17	11 - 17	10 - 16	10 - 15	8 - 13
6-Min Walk							
(no. of yds)	545 - 660	500 - 635	480 - 615	430 - 585	385 - 540	340 - 510	275 - 440
2-Min Step							
(no. of steps)	75 - 107	73 - 107	68 - 101	68 - 100	60 - 91	55 - 85	44 - 72
Chair Sit-&-Reach							
(inches +/-)	-0.5 - +5.0	-0.5 - +4.5	-1.0 - +4.0	-1.5 - +3.5	-2.0 - +3.0	-2.5 - +2.5	-4.5 - +1.0
Back Scratch							
(inches +/-)	-3.0 - +1.5	-3.5 - +1.5	-4.0 - +1.0	-5.0 - +0.5	-5.5 - +0.0	-7.01.0	-8.01.0
8-Ft Up-&-Go							
(seconds)	6.0 - 4.4	6.4 - 4.8	7.1 - 4.9	7.4 - 5.2	8.7 - 5.7	9.6 - 6.2	11.5 - 7.3

SENIOR GOLF FITNESS

You just finished taking a wide variety of golf and age related fitness assessments. How did you do? Hopefully you learned a lot about yourself. Some golfers are surprised by their own personal results. The results can also be affirming in that you may have suspected you were lacking in one area or another and now you know with more certainty.

You should also notice there are many cause and effect things happening with your fitness and your swing. Perhaps you know that you struggle with keeping your club on plane and it is now obvious how tight your shoulders are. Or perhaps you now know that you tend to slide your hips from left to right instead of rotate them. Ironically, you failed the hip rotation test so it makes sense why these two things are related.



Here are some other common swing faults that are fitness/flexibility related.

- —An inability to transfer weight to your right side in the backswing and/or to your left side in your downswing
- —Insufficient rotation of your hips both back and through
- —Loss of balance during or after the downswing
- —Inconsistent posture (lifting your upper body during the swing)
- —Inability to get enough separation between your shoulder and hip rotation

- —Excessive rolling of the feet during the downswing
- —Difficulty maintaining a firm grip on the club at impact

If you want to play good golf and you want to have some longevity in the game, then you have to maintain a 'normal' level of flexibility, strength and mobility - especially in your hips, back and shoulders.

By using the terms flexibility and mobility, we refer to the range of motion your body is able to produce in your various joints as well as how you move them.

Some golfers have this naturally because of the way there bodies are structured. A small percentage of golfers are hyper flexible which works against them because some joints move too far and lack stability.

By far the biggest majority of golfers simply don't have enough range of motion to swing the club the way they want. This is by far the most common group of golfers playing the game today.

It's not your fault. Part of it is the way your body is built. Part is the aging process and how it changes your movement patterns over time. Part of it also relates to your gender, your connective tissue, your musculature and so on...

The main goal of performing any stretches or exercises is to protect your body from injury, promote longevity, and improve swing quality.

Based on your assessment results choose one or more of the following programs that addresses your weakest links. The programs are broken down to Balance-Stability-Core, Strength, and Flexibility. There is also a special section on exercise program goals for specific conditions and issues you may be facing.

A few thoughts on developing power...

Here are some of the things to consider when setting up your body for proper power production.

- A solid base to work off (contact to the ground)
- Alignment of all parts (spine angle)
- Solid connection between all joints (core, muscles and connective tissue)
- Synchronization of all moving parts (nervous system)
- Uninterrupted transfer of power through the body (flow)

Our nervous system is our control unit which learns by repetition. What our body does most, it will remember best and therefore repeat when asked. This is the reason we need to take our training seriously and concentrate on every move we do, no matter how easy of an exercise we perform. Each exercise needs to be executed perfectly every time. I believe through the right training, you will see results that contribute 50% by getting mechanically stronger (muscles, connective tissue, flexibility, etc.) and 50% improvement of the nervous system knowing what muscles to fire and at what time.

The right firing order is very important because it teaches our individual body parts to move in a synchronized fashion to efficiently create and deliver power. The power generation is similar to an engine. If the firing order of the cylinders is off, the engine runs very rough and the power output is greatly affected.

Please keep these principles of alignment and good posture in mind as you complete any of the following programs.

BALANCE-STABILITY-CORE PROGRAMS

Few golfers understand which muscles constitute the core, which exercises activate the core and what it feels like when you do. Understanding this basic notion is one of the most fundamental of golf training, yet probably the most misunderstood.

The golf swing relies upon core strength, endurance and proper engagement in seeking elements of stabilization, control and coordination. Core conditioning is very important for a golfer because all movements in your entire body stem from the strength in this area. Wherever you find a weak core, you find a major source of energy leaks in the golf swing.

The core is where the body's center of gravity is located and where force production begins. Most people have a very weak core, and as a result, chronic posture problems. Over time, this creates wear and tear on the body. A golfer with a weak core is vulnerable to injury and struggles with efficiency in their swing. Muscles of the core include the abdominals, muscles that surround your hips, lumbar spine (low back), thoracic spine (mid back) and cervical spine (upper back and neck).



Core Training Exercise

Tuck one hand underneath your lower back and the other hand touches your mid stomach muscles.

Begin this exercise by pulling in your stomach muscles so that your low back feels flat against your lower hand.

Perform this exercise several times while focusing on the motion and 'feel' of flattening your low back against your hand and towards the floor. This re-enforces the feeling of a neutral posture position.

When you're ready, lift your knees to a 45 degree position and see if you can keep the same neutral position with your posture.

Many golfers will feel a loss of the tension in their abdominal muscles. This is a sign that you need additional strengthening and re-enforcing exercises for your mid section and postural muscles.

If you completed stage 2 without any problem, try progressing to alternating leg lifts between your left and right while still concentrating on the same neutral posture position. Are you shifting from a 'soft belly' to 'hard belly' feeling in your stomach muscles or are you able to hold the same relative tension in your mid section throughout? This will be a strong indication of your ability to hold a solid spine angle throughout your golf swing when needed.

Exercise Program #1



Shoulder Turn Drill

Start by standing on one leg with knee flexed ~ 15 degrees and balance in your golf address posture.

Your eyes will be open and cross your arms over your chest. Next balancing on your right leg, rotate your shoulders as if you are performing your backswing motion then return to address position.

Perform 10 repetitions, then repeat on your left leg. Perform on each leg while going from your address position to follow through for 10 repetitions.

Note: This may be a very deceiving exercise for some seniors. It looks pretty simple, but it will be challenging if you failed some of the balance tests.

I encourage you to stay with it and see how many repetitions you can complete. If you can't lift your foot up in the beginning, then try just placing your toe on the ground in the back (keeping all your weight on the front foot) for support until you work up to it.



Standing Medicine Ball Rotations

Stand in golf posture with arms extended straight out in front of chest holding medicine ball.

Rotate with one piece motion to right then rotate to left side keeping ball parallel to floor. This is 1 repetition and you will want to return to start position.

Repeat for 3 sets of 10 repetitions.

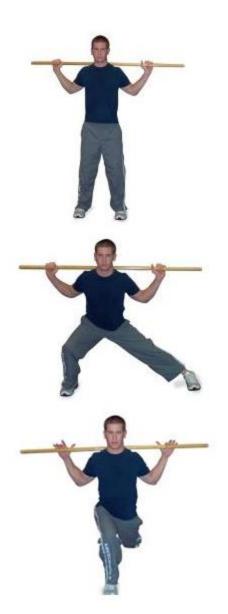


Diagonal Medicine Ball Chops

Stand in golf posture holding a 2 kilogram medicine ball with your arms extended. In a one piece takeaway motion rotate upper trunk rotating ball to your side hip.

Rotate from the low position to a high position over your opposite shoulder.

Repeat 10 repetitions per side. Perform for 3 sets each side.



Multi Directional Lunges

Place a golf club across the top of your shoulders. Stand with good posture and pull your belly button in slightly toward your spine so your abs are engaged.

Take a step to the side and bend back and down. Lunge as deeply as you are comfortable. Return to your starting position, then step to the opposite side.

Now take one step forward and lunge down until your back knee is just off the floor. Or as low as you are comfortable.

Breathe out as you push yourself back up.

Perform 2 sets of 10 steps to each direction.

Shoulder Y and T's



Lie facedown over the top of a ball with abs in the middle.



Chest should be off the ball and feet are on your toes.

Lift your arms above your head with hands clinched and thumbs up.

Extend arms up and out as far as you can comfortably (forming a Y at the top).

Then bring your arms back to the starting point. Repeat again only reaching arms to the side to form a T (as shown in the sequence on the ground.)



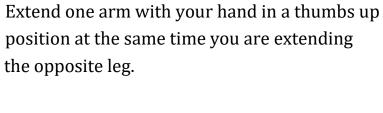
Note: If you do not have a ball, simply lie on the floor and repeat the same exercise.



Alternating Arm and Leg



Begin with your hands and knees on the ground and your spine in a neutral position.





Hold for a few seconds then return to the starting point. Repeat on the opposite side.

Complete 10 repetitions per side.



Repeat 10 repetitions on each side.

Hip Lift

Begin in a lying position with both knees bent. Place your hands around one knee and bring it towards your chest.

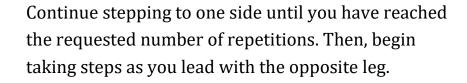
Push off of your remaining foot and lift your glutes up as high as possible. Slowly lower to your start position.



Lateral Walks

Place a mini band around your ankles. Assume an athletic posture with knees slightly bent and shoulders back and down.

Take one step to the side creating tension in your lower body, specifically your glutes and hips.





Take 10 steps to one side, then walk back to the starting point with the opposite leg leading.

Repeat this exercise twice to each side.

Note: If you do not have an exercise band, do you have any ankle weights?

Exercise Program #2



Single Leg Partial Squat

Place a medicine ball in your hands and stand in an athletic position. Begin by taking one foot off of the ground several inches and weight not too far forward.

Lower your body back and down as low as you can.



Push through your heel to return to your start position.

If you do not have access to a medicine ball, just clasp your hands together to complete the exercise.

Complete 7 to 10 repetitions per side.

Note: Stand near a wall or tall chair to use for balance support if needed. You only need to squat a few inches to help build better strength and balance.





Place a dumbbell in each hand and put your feet slightly apart with your abs tight. Lean forward and extend one arm forward at a time while the other reaches back.

Rotate with one piece motion to right then rotate to left side keeping ball parallel to floor. This is 1 repetition and you will want to return to the start position.



Repeat for 3 sets of 10 repetitions.



Sitting Russian Twists

Sit on the ground holding on to 2-4 kilogram medicine ball in a one piece arm position with knees bent and focusing on keeping your back straight.

Now lean your upper trunk back to a \sim 45 angle while lifting heels off ground.

Next rotate shoulders to the right then to the left side focusing on shoulder turn. (This is one repetition) Perform 2 sets of 10 repetitions.

Remember to keep your abs engaged. If you feel it in your back, then stop the exercise. Only perform as many as you can with keeping good posture.

Note: You can also use a dumbbell, kettlebell or extend your arms out without weight. If this is too much pressure on your posture or your back, use this exercise as an alternative.







Kneel down with one knee up and the other on the ground. Grab a cable, fitness band, dumbbell or kettlebell in one hand.

Pull the weight from a low position to straight across your back. You will be rotating your body slightly with the pull motion. Pull your abs in tight and keep your shoulders down and close to your body.



Repeat with 2 sets total and 10 to 12 repetitions per side.



Reach and Extend

Stand with good athletic golf posture and abs tucked in.

Pick one foot off the ground and lean forward with both hands in front of your body. Keep your mid section tight.



Lean as far forward as you can without losing balance or changing your posture.

Complete 7 to 10 repetitions per side. Focus on keeping your ankles and knee in alignment.

Lying Alternating Arm and Leg



Lie on your back with knees bent and arms together and lifted above your chest.

Tighten the abdominal muscles and slightly squeeze the buttocks in order to press the small of your lower back into the floor.

Alternate arm and leg movements together so the left arm is slowly

extended overhead while at the same time the left leg is lifted. Then, repeat with opposite leg and arm. Always keep your back flat against the floor.

Complete 10 repetitions per side.

Side Planks



Lie on your side and then elevate your body on your elbows and feet. One foot will be stacked on top of the other.



Keep your ab muscles in tight and your body in alignment from your ears to your feet.

Try and hold this position for 30 seconds per side.



As a variation, try lifting the top leg up a few inches for a greater challenge to your core.

The last variation is to prop up your body on the side with your arm instead of your elbow (see photo #3).





Begin in a lying position on your side. You can use a medicine ball between your feet or use nothing as shown in the second set of photos.



Slowly lift your legs off the ground while keeping your body in good alignment.

Repeat 10 repetitions on each side.



Exercise Program #3

This is an advanced balance and core program for senior golfers who are already relatively fit and strong, but want to maintain their edge. If you had trouble with the balance and core tests, please master exercise programs 1 and 2 before trying the exercises in this program.



Golf Club Drill

Start by standing on one leg with knee flexed ~15 degrees and balance with your club at address position.

Take a backswing to a 9 o'clock position then return to address focusing on a proper shoulder turn.

Perform 10 repetitions then repeat on your left leg.

Note: You do not have to lift your leg off the ground. You can begin by keeping your back toe touching the ground for support.

Single Leg Balance





Place your back foot on a step or stair.

Place your arms in front of you. Keep your head up and eyes fixed forward at eye level.

Slowly lower your body as low as you are comfortable. Push through your front heel to return to the start position.

Repeat the exercise for 10 repetitions on each side.



Standing Side Bend

Stand with good posture and knees slightly bent. You can hold a dumbbell, kettlebell or nothing in your hands. The opposite hand will be on your stomach.

Pull in your stomach muscles slightly and bend to the opposite side. You are not leaning, but rather bending at the waist. Keep your body in balance the whole time.



Hold for just a moment then return to your starting point. Repeat 10 to 12 times per side.

Glute Bridge



Lie down on the floor on your back. Bend your knees and place a medicine ball between your knees while arms are at your side.



Engage your abdominals and glutes, then slowly lift your hips off the ground. Don't let the glutes touch the ground while you perform repetitions.

Complete 2 sets of 10 to 12 repetitions.

Sumo Squats with Shoulder Raise



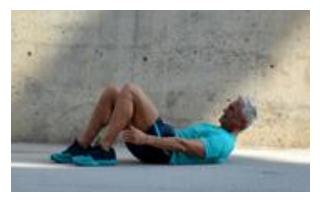
Begin in a standing position with feet more than shoulder width apart. Take a nice wide stance.

Slowly lower your body with knees going to the side and arms over your head. Squat as low as you are comfortable.

Engage your ab muscles and keep good posture throughout. You may also want to perform this exercise

against a wall so you can use it for support.

Complete 2 sets of 10 to 12 repetitions.



Lying Side Crunches

Lie down on the floor on your back, then bend your knees. Your arms will be at your side. If you choose, you can place one hand behind your head for support.

Engage your abdominals and slowly move one arm to the side towards your ankle. You should feel it in your side ab muscles. Return to your start position, the repeat with the opposite side. Perform 10 to 12 repetitions.



This is a slight variation to a side crunch. Lie on your side with your elbow resting on the ground. Place your outside leg over the top of the resting leg for a stretch to your hips.

Place your arm across the back of

your head. Begin a crunch motion as you bring your elbow to your knee. Repeat 10 to 12 times per side.

SUPER SENIOR FITNESS PROGRAM

One of the reasons it took me so long to write these individual senior programs is the wide variety of fitness levels among seniors. I have seen 55 year old golfers who have the balance and strength of a typical 75 year old. I have seen 75 year old golfers with a fitness level of a typical 55 year old. Age does not define your fitness level.

Have you ever heard of Ernestine Shepard? She is considered the oldest body builder at 80. She started working on her body at 71!

If you want to see some inspirational photos and videos, then 'google' her name and her physique will amaze you.



While she is the extreme on one end, I recognize many of you will look and feel your current age. The best way to know is to take the self tests I introduced in the first section of this book.

If you took the tests and became discouraged because of how you performed or you are at an age where you feel you have a long road to improve, I wanted you to start out with a very basic program that can help you a lot.

This exercise program is for super seniors who need to start with a very basic program.



Standing Balance

Stand on one foot with your arms extended straight out to the sides and the other foot approximately 6-8 inches off the ground.

See how long you can maintain your balance. Repeat this exercise a few times and work towards increasing your time.



This is the same exercise with a slight variation. Get into golf posture and lean slightly forward while bending from the hip. One foot is off the ground.

At first, feel free to touch your back toe on the ground. Work towards lifting it higher. You may also use your arms to the side as needed.

Sumo Squats with Shoulder Raise



Begin in a standing position with feet more than shoulder width apart. Take a nice wide stance.

Slowly lower your body with knees going to the side and arms over your head. Squat as low as you are comfortable.

Engage your ab muscles and keep good posture throughout. You may also want to perform this exercise against a wall so you can use it for support.

Complete 2 sets of 10 to 12 repetitions.



Walk the Line

You can either mark a line or follow an imaginary one. Your arms can be down low or up high. Do what you need to keep balance. Walk forward with one step at a time. With each step, the foot in front will come directly in front of the last step with one heel touching the opposite toe.

Take 10 to 15 steps forward with each foot.



Partial Lunges with Assistance

Your arms can be down low or up high. Do what you need to keep balance.

Walk forward with one step at a time. With each step, take a partial lunge. Always push through your front heel to give you strength to take your next step.

Take 10 to 15 steps forward with each foot.



Wall Push Ups

Place your arms against the wall about shoulder height and width apart. Your feet will be slightly apart as well.

Bring your body into the wall, then use the strength of your upper body to push you back into your starting position.





Place a dumbbell in each hand and put your feet slightly apart with your abs tight. Lean forward and extend one arm forward at a time while the other reaches back.

Rotate with one piece motion to right then rotate to left side keeping ball parallel to floor. This is 1 repetition and you will want to return to start position.



Repeat for 3 sets of 10 repetitions.

ALREADY FIT SENIOR PROGRAM

This special program is for seniors who already consider themselves to be fit and strong. You may not be at the level of Ernestine, but you are looking for some exercises that continue to offer you a challenge as you age.

Lunge to Lift



This exercise can be very challenging to your balance and your core. Take a step forward into a lunge position.

Push through your front heel to lift yourself back up to where you started. When you return, see if you can keep that front foot off the ground and into a

standing position with your knee up (as shown).



Standing Bird Dog

This is an exercise I have seen many pros perform. It helps with balance, coordination and postural stability.

Stand with both arms at your side and feet slightly apart. Lift one leg behind you as you bend from the waist. Lean forward while extending both arms to your front.

Return to the starting position and switch legs. Repeat 10 times per side.

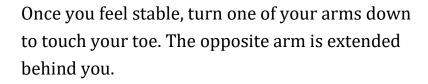


Here is a variation with arms out at your side.





Stand with your feet shoulder width apart and knees slightly bent. Lean forward while bending at the hip. Arms are extended out to each side. One leg is lifted behind you.



Return to your start position and repeat up to 10 times per side.

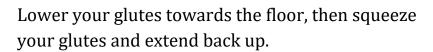




Hip Extension with Leg Lift

Sit on a fitness ball, then walk forward until your head and neck are supported on the ball.

Lift hips up until they're in line with your shoulders and knees.



As you approach the top of the movement, lift one leg up as you lead your knee towards your chest.

Complete 10 repetitions on each side.





Squat to Shoulder Press

Start in a standing position with good posture. Squat down and back as low as you are comfortable where there is no pain in your knees and all of the load is on your quads and supporting core muscles.

Always check your knees to make sure they are not extended over your toes when you squat down.

Slowly lift yourself up as you push through your heels.

On your way up, lift your arms overhead and one leg to the side at the same time.

Repeat for 10 times each side.



Push Up to Extend

This exercise has an extra progression if you want to continue to challenge your upper body strength and core.

Begin in a push up position against a bench.

Make sure the bench is solid so it doesn't move.

Keep your body in good postural alignment as you bring your body down into a push up.

As you push your body up, also raise one arm out in front of you.

For an extra progression, instead of raising one arm out in front of you, place one arm across your chest and hold for the count of 1 second.

Complete 10 repetitions per side.

STRENGTH PROGRAMS

You need strength throughout your body if you want to swing the club the way you want golf. Strong back muscles allow the golfer to endure the explosive movements in the swing. Strength in the trunk region or "core" area of the body produces stability and helps to generate power. Combined muscle strength produces balance and coordination. Strong ligaments and tendons also prevent the joints from going beyond their range of motion.

Strength Program #1





Single Arm Push

Set the cable so that the pulley lever is slightly above your shoulders. Assume an athletic stance with one foot in front of the other. Knees should be slightly bent.

Hold the elbow at shoulder height. Contract the abdominals and push your arm forward so it extends in front of your chest.

Complete 10 to 12 repetitions per side.

Note: You do not have to use a cable. You can use a fitness band at home to do the same exact thing.

Low Back Row





Sit upright with a fitness band around your feet. Keep your elbows close to your body and your shoulders down.

Squeeze your back shoulder blades together as your drive your arms straight back. Your elbows will move straight forward and back and not side to side.

Repeat the exercise for 2 sets of 10 to 12 repetitions.



Standing Side Bend

Stand with good posture and knees slightly bent. You can hold a dumbbell, kettlebell or nothing in your hands. The opposite hand will be on your stomach.

Pull in your stomach muscles slightly and bend to the opposite side. You are not leaning, but rather bending at the waist. Keep your body in balance the whole time.



Hold for just a moment then return to your starting point. Repeat 10 to 12 times per side.

Glute Bench Bridge



Lie down on the floor on your back with your feet on a bench, chair or step.

Lift up your hips and engage your core to keep your body alignment in place. Squeeze your glutes and lift as high as you can while still keeping good

alignment. Your body should be in one line from your knees (at the top) to your shoulders.

Lower your body, then repeat. Complete 2 sets of 10 to 12 repetitions.

Squat to Shoulder Press



Place a fitness band below your feet and stand in a ready athletic position. Squat down as low as you are comfortable.

You should feel this in your quads and not your knees.

Sit further back in your squat if you feel it in your

knees.



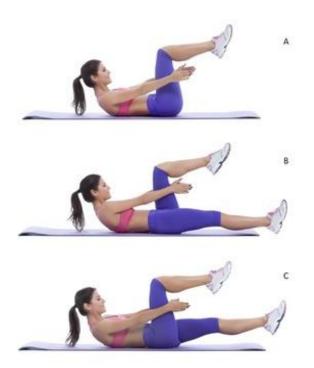
Stand back up while raising your arms above your head.

Complete 2 sets of 10 to 12 repetitions.

Note: If you do not have a fitness band, you can do the same exercise with a kettlebell or dumbbell as shown.



Lying Ab Clap



Lie on your back on the floor with your knees bent.

Lift your chest up slightly and bring in one knee while the other leg is extended.

Clap your hands behind your flexed knee.

Return to your starting position then repeat for 2 sets of 10 repetitions.

Strength Program #2

Side Shoulder Raise



Place one hand at your side and the other holding a fitness band. Palm is facing down.

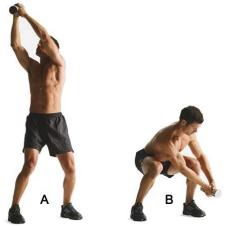
Start with your hand in front of you then raise it up and to the side as high as possible.



Same as above except your palm is open and you are raising your arm across your body and up.

Perform 10 repetitions per exercise per side.

Reverse Wood Chop



Start in a squatted position with weight slightly over your left foot.

While keeping arms straight, stand up and rotate arms and torso diagonally to the right so that the weight is over your right shoulder.

Your arms should be fully extended towards the ceiling at the end of the movement.

Repeat the exercise for 10 repetitions on each side.

Note: You can use anything for weight...medicine ball, dumbbell, etc.

Lying Toe Touch



Stand with good posture and knees slightly bent. You can hold a dumbbell, kettlebell or nothing in your hands. The opposite hand will be on your stomach.

Pull in your stomach muscles slightly and bend to the opposite side. You are not leaning, but rather bending at the waist. Keep your body in balance the whole time.

Hold for just a moment then return to your starting point. Repeat 10 to 12 times per side.

Lunge with Shoulder Raise



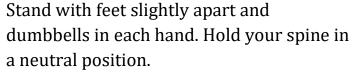
Face forward with your back foot on a stair or small step. Place weights in your hand with your arms close at your side.

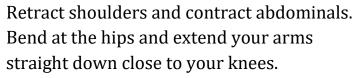
Take a step into a lunge. Bring your left knee down to the floor while at the same time raising your arms in front to shoulder level. Push your right leg through standing yourself up and brining your arms back down to your side. Then step back with the other leg. Repeat.

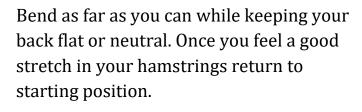
Complete 2 sets of 10 to 12 repetitions.

Single Leg Romanian Deadlift











Complete 2 sets of 10 to 12 repetitions.



The easiest way to do ab crunches is by lying on a ball. It helps protect the back and gives you more freedom to move. It also has the added benefit of balance coordination. However, I don't want you to feel discouraged if you don't have a ball and don't want to get one. No problem. You can do these on the floor as well.

Slowly lower your body as low as you are comfortable. Push through your front heel to return to the start position.

Repeat the exercise for 10 repetitions on each side.

FLEXIBILITY PROGRAMS

When it comes to stretching, I want you to try a technique called AIS. It stands for Active Isolated Stretching and I think it will be very effective for you. Which stretches you do will depend on how you performed on the tests. For example, if you have tight shoulders, please perform an extra set of these or stretch them more often. Just keep it simple so you see results.

Here is a video which explains how AIS works from a top sports performance coach.

http://www.coreperformance.com/knowledge/training/active-isolated-stretching.html.

Please look at the first stretch they show for hamstrings. At about the 35 to 40 second mark, listen carefully to what he says about **exhaling and then going further**.

When you stretch like this, you will be shocked at how much further you can go.

You will be placing your body into a stretch for the count of 1 to 2 seconds. At the top of the stretch, you will take a deep breath and as you exhale, see if you can go a little further into the stretch. Every stretch will be performed this same way. Please do 10 to 12 repetitions per side and 2 sets.

Hip Stretch



Place both your front and back legs bent to 90 degrees. Place one hand inside your thigh and one hand outside the same thigh.

Keep a flat back and bend forward from the hip as far as you can maintain the same spine angle.

Hold one to 2 seconds, then release. Repeat 10 times.



Kneeling Mid Back Stretch

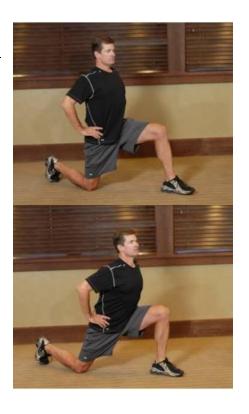
Kneel on the ground with hands and knees in contact with the floor. Place your right hand on the back of your head. Begin rotating your upper body up and back until you feel mild tension in your mid back.

Hold 1 to 2 seconds, then release. Repeat 10 times.

Lower Body Stretch

Place your body in a lunge position with your spine angle straight and stomach muscles contracted. Lean forward into the stretch keeping the same straight back.

Hold 1 to 2 seconds, then release. Repeat 10 times.







10 times.

Shoulder and Mid Back Stretch

In a seated position, extend your left leg while tucking the other close to your body. Place your left hand on your right knee and left hand over the top of your opposite shoulder.

Use your hand on your knee as leverage to extend further into your stretch as you rotate your body towards your folded knee.

Continue reaching further down your back with your right hand towards your opposite shoulder blade.

Hold 1 to 2 seconds, then release. Repeat



Lying Glute Stretch

Lie on your back with your legs extended and arms at your side. Begin by placing your right hand on your left heel. Bring your heel towards the opposite shoulder blade.

Hold 1 to 2 seconds, then release. Repeat 10 times.

Lying Back Stretch

Lie on the floor with your arms and legs extended out. Begin by placing your left leg over your right with the knee bent.

Place your right hand on the knee joint and allow the bent knee to reach towards the ground.

Hold 1 to 2 seconds, then release. Repeat 10 times.





Neck and Shoulder Stretch

Place one arm around your back at the level of your belt line. Begin the stretch by turning your head away from the direction of the bent arm.

You should feel a stretch across your neck and shoulders. Remember to keep your shoulder blades back and down. Hold and then return to the start position.

Perform 10 to 12 repetitions on each side. Turn your head as far to one side as you can. Then take a deep breath in and as you slowly blow it out, see if you can get a little more stretch in this moment. Hold the stretch for a count to roughly 2 seconds, then release.





Neck Flexors

Sit down on a chair or weight bench with upright posture. Place one hand around the edge of the bench or stool. Place your opposite hand on the middle of the top of your head. Gently

bring your head towards your shoulder. Hold this stretch and then guide your head back to neutral. Repeat. Perform a separate set for each side.

Standing Mid Back Stretch





Start by flexing your knees and placing both hands on your thighs. Bend forward from the waist until you reach a comfortable position. Begin the stretch by turning your right shoulder in as you open your chest toward the opposite shoulder. You should feel a good stretch across your mid back. Be sure to keep your chest up and stomach muscles taut throughout this movement. Hold this position and then return to your start position.

Perform 10 to 12 repetitions on each side. Turn your spine as far to one side as you can. Then take a deep breath in and as you slowly blow it out, see if you can get a little more stretch in this moment. Hold the stretch for a count to roughly 2 seconds, then release.

Upper Back and Shoulder Stretch

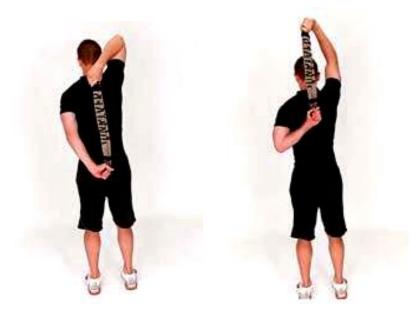


Place one arm straight up next to your head with palm facing forward. Take your opposite arm and bend it across your head grasping your straight arm on the backside of your elbow joint.

Gently pull your straight arm back into a stretch. Be sure to keep your body straight as tight shoulders will want to pull on your whole upper body backward. Keep your stomach muscles taut and posture upright. Then proceed to stretch your shoulder until you reach a place of slight discomfort.

Perform 10 to 12 repetitions on each side. Move your hand up as high as it will go without forcing it. Then take a deep breath in and as you slowly blow it out, see if you can get a little more stretch in this moment. Hold the stretch for a count to roughly 2 seconds, then release.

Shoulder Stretch



Grab a golf towel with one hand and place it behind your back. Reach behind with your opposite hand and take hold of the towel. Pull the towel up with the top hand, and then slide the towel down with your lower hand.

Perform 10 to 12 repetitions on each side. Move your hand up as high (or as low) as it will go without forcing it. Then take a deep breath in and as you slowly blow it out, see if you can get a little more stretch in this moment. Hold the stretch for a count to roughly 2 seconds, then release.

MOVEMENT PREPARATION AND WARM UP

Here's a dose of reality for senior golfers: you have to get warmed up before you play golf or exercise. It doesn't have to be a big deal or take very much time, but it can help a lot. Just a few simple moves and your body should be warm and your blood will be flowing and ready to work. It's your best hope at keeping an injury free body for longevity in golf.

Research on a Warm Up and Clubhead Speed

According to a study produced by the British Journal of Sports Medicine, a dynamic warm up can have a significant impact on your clubhead speed. In fact, following a study conducted on 20 golfers, those who performed dynamic warm up stretches as opposed to those who did nothing before play, clubhead speed was increased by over 24%!

Dynamic stretches are those that keep the body in constant motion. They are not stretches which you hold for 10, 20 or even 30 seconds. These are stretches you hold for no more than 1 to 2 seconds and keep your body temperature warm with fluid movements. One of the critical reasons why golfers use this stretching method is based on research which has shown that static stretching (stretch and hold) performed just prior to an event can temporarily decrease strength levels. This is obviously not the desired outcome for any level of golfer, so be sure to stick with dynamic stretches before play.

Let's keep it super simple and perform these 5 stretches before you play.

Hamstring-IT Band Standing Stretch



Place both hands over your head while grasping the club slightly further than shoulder width apart. Cross left leg over the top of right leg and bend forward from the hip while keeping a straight back.

Golf Swing Revolutions



Hold a club out in front of your body with hands on opposite ends of the club. Place your spine in a neutral position. Begin with small swings, gradually increasing your range of motion and keeping a nice easy rhythm from backswing to downswing.

Advanced Side Stretch



Place both hands on your club slightly further than shoulder width apart. Place right foot forward with knees slightly bent. Begin by shifting weight over to the opposite side, stretching both your hip flexors and obliques.

Standing Shoulder Stretch



Place your left hand on the shaft of the club and underneath your arm pit with the face of the club pointed up. Hold the face of the club with your right hand. Begin this stretch by lifting your hand up a couple of inches until you feel slight tension in the top of your shoulder.

High Knee Lift



Start this stretch with an athletic body position. Lift one leg and place both hands around the knee, pulling the extended knee in close to your body and up towards your chest. Once your balance is established, try lifting your heel up on your single leg.

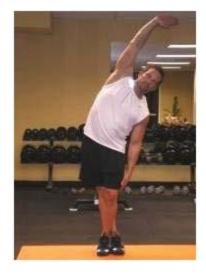
Warm Up Before Exercise

Everyone needs a warm up to prepare their body for the work ahead. This is typically 5 to 10 minutes. It takes time to get the blood pumping, circulation increased and the body warm enough to protect it from injury.

There are a wide range of movements or exercises you can do for a warm up. You can take a brief walk, use an exercise bike or perform some basic body movements like these.

Movement 1: Arm circles. Stand with your feet hip width apart and begin making circles with your arms. Make low circles with your arms low and near your hips.

Movement 2: High Knees. You can take high marching steps or bring in one knee at a time and squeeze it into your chest. Keep the body moving for 10 to 12 reps per side.



Movement 3: IT and Obliques. Cross one foot over the other, reach up and over. Repeat 10 to 12 times for each side and keep the body moving.

EXERCISES FOR CONDITIONS

Heart Disease

Cardiovascular disease is a condition that compromises the blood flow that circulates throughout your body. Plaque can build up in the arterial walls, limiting the passageway for optimal circulation. When the body doesn't get enough blood or oxygen, it becomes susceptible to a heart attack or stroke, arrhythmia and other related heart issues.

Excess weight is a contributing factor to high blood pressure and the inflammation that can occur with blood vessels. You can lower your risk of developing heart disease and related factors by losing as little as 5 to 10% of your current bodyweight.

Exercise Recommendations:

- The American Heart Association recommends being physically active to improve cardiovascular health
- Recommended activity is 30 minutes a day for a minimum of 5 days a week (can be split up into smaller sessions each day)
- Can generally participate in strength training as long as it well supervised. The goal is 2 days each week.
- Special attention to teaching proper breathing as it is dangerous for a client to hold their breath
- Concentrate on teaching full range of motion with each exercise
- Low risk clients should start with 1 set of 12 to 15 reps. Begin with 8 to 10 exercises designed for major muscle groups.
- Heart rate should never exceed 11 to 14 using he Borg scale.

Cancer

There are two lifestyles factors that contribute to cancer: a poor diet and an inactive lifestyle. Both of these factors can be controlled. There are a number of cancers like breast, pancreas, colon, etc. that can be stimulated through excess weight. When someone is overweight, it makes the body produce higher levels of certain hormones that have the potential for cancer growth.

Exercise Recommendations:

- Walking and other low impact activities for 3 to 5 hours per week
- Focus on building (rebuilding) strength, muscle, balance and endurance
- Light to moderate intensity
- Teach proper warm up and cool down exercises and stretches
- Teach the principles of healthy eating
- If clients have a low white blood cell count, consider training them at home so they are not exposed to germs at public facilities
- Look for swollen ankles, shortness of breath and unexpected weight gain as these are signs that should be discussed with their physician

Type 2 Diabetes

There are many reasons a person can develop Type 2 diabetes, a condition where blood sugar can increase and jeopardize health through heart disease, stroke and a number of other life threatening diseases. Some of these factors are not controllable like your age or family history. However, other factors like your weight, physical activity and daily nutritional choices are controllable and can have an impact on attracting this disease.

Exercise Recommendations:

- Focus on weight loss as a primary goal
- Exercise is recommended at intensities of 11 to 16 on the Borg scale)
- Aerobic exercise recommended for 45 min to 1 hour, 5 or 6 days a week
- Choose 8 to 10 exercise for major muscle groups and perform 8 to 12 repetitions
- Strength training recommendation is 2 times weekly
- Check blood glucose levels before and after exercise
- Make sure you have a carb snack available if needed during exercise
- Better to exercise at the same time each day
- Keep well hydrated throughout exercise

Metabolic Syndrome

Lifestyle factors are known contributors to metabolic syndrome – a condition where a person has several over weight related risk factors. These factors include high triglycerides, excess weight at the waistline, and high blood pressure among other factors. Possessing some of these risk factors places a person at a higher level of risk for heart disease, diabetes, high blood pressure, etc.

Keeping a healthy weight, no smoking, engaging in regular physical activity and following a healthy well rounded diet has been shown to help prevent this condition.

Exercise Recommendations:

- Focus on weight loss and cardiorespiratory fitness
- Depending on the overall weight/obesity, you may want to consider water aerobics
- Teach basic fitness and wellness principles
- For beginners, start with low intensity exercise and build up 9 to 13 on the Borg scale.
- Two times per week strength training; 5 or 6 days a week low impact activities.

Osteoarthritis

Osteoarthritis describes the degradation of cartilage that protects the body's major joints like the hips, low back and knees and causes pain and discomfort. Carrying excess weight can place even more stress on the joints. Eating a healthy diet and maintaining an appropriate weight can avoid this extra pressure. It can also help to reduce the inflammation associated with arthritis.

Exercise Recommendations:

- Focus should be on joint mobility, regaining strength and endurance and improving cardiovascular fitness.
- Low impact activities and watch for any exercises or activities that provides too much stress on joints
- Work on duration so you can build endurance. Goal is 30 minutes a day for 3 to 5 days a week.

- Take time with spinal alignment and good posture as this can be compromised with arthritis
- Make sure to warm up, cool down and rest periods to decrease stress and inflammation
- Start with low repetitions and increase up to 10 or 12 as you are able to handle
- Consider water aerobics and other forms of non weight bearing activities
- Help create a caloric deficit so eating plan compliments physical activity

Final Thoughts for Seniors...

This book was designed to bring you improved mobility, increased flexibility, better strength and longevity in golf regardless of your current fitness level.

However, there is one more important study I wished to share with you regarding your longevity in general.

According to a fascinating study published in the Journal of the American Medical Association, your longevity can be predicted by how fast you walk. A very large study was done with over 34,000 seniors (over 65) which concluded those with faster walking speeds were expected to have longer lives.

The presumption which was tested and confirmed over a 21 year period that walking required synchronization and coordination of your muscles, heart, lungs, joints, brain, etc. By keeping up a healthy speed, your systems would prove to be more efficient and sustain over a longer period of time.

According to Dr. Stephanie Studenski who coordinated the research, <u>"speed of movement seems to be linear, with each increase correlating with an increased prediction for years of life."</u>

So...please...stay active, keep walking, stay flexible and enjoy this amazing game of golf for many years to come.