

Conditioning for Older Skiers:

Conditioning must be low impact and should be fun

1. Check with your doctor before starting any physical training.
2. Consulting a physical trainer may be a good idea.
3. Don't overtrain! Alternate training days with active rest, walking, stretching, easy bike, etc.
4. Other sports you enjoy are good for general conditioning.
5. Spinning on a bike is great for general and aerobic fitness. A stationary bike will work but the road is more fun!
6. Weight training is still one of the best types of training for any skier. Start with very light weights or just bodyweight and gradually work up.
7. Weight training with low weight, high reps is the best training for older skiers. (Rehab facilities have 90-year-olds on weight programs!)
8. Stay away from plyometric exercise (box jumps, etc.). Keep it low impact.
9. The classic skier exercises are: 1/2 squats (not too low), drive-ups/step-ups, lateral or forward lunges (not too large) crunches or sit-ups (for core strength)
10. Start easy and gradually build up.
11. Any kind of training is always more fun and easier with a training partner.
12. Don't forget easy stretching after exercise to maintain range of motion.
13. Dryland training and physical activity are the keys to keeping you skiing at a high level. Keep active. Work out!

Equipment for Seniors:

Skis:

Many older skiers remember the days of "210 for men". We are now on much shorter skis that perform far better than those old longboards.

1. The current all-mountain skis are amazing. Length should be no longer than 175cm for most men and 150/160cm for women
2. For softer Sierra snow, try a mid-fat, 80/85mm underfoot with a 15/16 meter radius and a little early tip rise/rocker.
3. Try an all-mountain carver in a softer flex with a 13/15 meter radius if you ski hard snow or stay on piste.
4. Experiment with a softer flex and softer torsion for easy carving, less hook up and loading.
5. Try before you buy! Demo skis to be sure the flex and torsion match your strength, weight, and speed.
6. Tune is critical on a 15/16 meter ski. Keep'em tuned up!
7. Many seniors are being sold very wide rockered skis by some ski shops. If your senior skier only skis off piste/powder occasionally, this is not a good choice of equipment. Wide skis (90mm or wider at the waist) will put additional loads on the knees when edged on groomed terrain. Not good for seniors!

Boots:

Many older expert/advanced skiers still ski stiffer boots. Stiff boots kill knees! Shorter carving skis don't require stiff boots to perform.

1. Boots can be softened by cutting them or removing hinge locking rivets. Any good shop can do this. You don't necessarily need to buy new boots. Boot flex is a very individual thing. In general, as you get older you will ski better in a slightly softer flex. Don't be afraid to experiment!
2. Generally, older skiers need a more upright cuff and lower ramp angle to help maintain a taller stacked stance.
3. Lateral canting needs are critical with deeper side cut skis. Be sure your boots are set up at 0%/neutral stance. If you are over-canted, or under-canted the gear will be very hard on your knees. Make friends with your boot fitter!

The right ski and boot set up for you can add years to your enjoyment of skiing.

The Learning Connection Model:

The Learning Connection Model and the Teaching/Learning Cycle can be easily used to fit the needs of the senior skiing population. Here are some specific ideas you can incorporate when teaching seniors.

1. Welcome and Introduction: Many seniors have led very interesting lives with long skiing histories. Take a couple of easy warm-up runs. Stop a few times each run. Each time get a skier's history. Seniors have a lifelong passion for the sport. This kind of exchange establishes a great group dynamic and develops the teaching partnership.
2. Welcome and Introduction: Share your own personal passion about skiing with your group. The challenge, excitement, camaraderie, social interaction, mountain environment and pure joy of skiing make it more than just a sport. For most long time senior skiers skiing is a way of life
3. Assessment: Ask about injuries, aches and pains, vision, endurance, etc. This will help you establish pace and address safety issues. Ask about general health and cardiovascular health. Be aware that altitude can have an effect on heart rate and levels of exertion. Ask what keeps them skiing. It's amazing; some people have skied 30 years without giving this much thought. You will get some interesting answers.
4. Determine Goals and Plan Experiences: Ask about what is "bugging" them about their skiing, what they want from the coach.
5. Determine Goals and Plan Experiences: Many seniors have skied the new equipment using old techniques and were not happy with the skis. To motivate these seniors to try the new gear and change their skiing, ask these questions: You're skiing 3 hours a day. How would you like to ski for 6 hours? How many ibuprofen do you take at the end of the day? Do you want less pain and soreness? How would you like to be able to keep skiing for 10/15 more years? These kinds of questions will really motivate seniors who are passionate about skiing to change techniques and equipment. Modern ski design and efficient techniques can help seniors ski longer.
6. Create Experiences for Learning: Suggest new techniques driven by new equipment can be physically less demanding and can add years to their skiing.
7. Easy stretch after warm-up. Never stretch cold muscles!
8. Guided Practice: With high-speed lifts, it's easy to set a leisurely pace with lots of stops. Keep asking about pace and terrain. Watch for a fall-off in performance and other signs of fatigue. The proper pace is very important for seniors.
9. Reassessing Students: Be aware. The group dynamic can be really strong with seniors, tired skiers may not admit fatigue if the majority wants to continue to ski, or ski more challenging terrain. Read your skiers and make that call yourself.
10. Review and Preview: Advise your seniors changing movement patterns ingrained for 30 years will take some time. One or two technical elements per training session/lesson are a good goal.

Teaching Fundamentals:

- Collaborate on long-term goals and short-term objectives.
- Manage information, activities, terrain selection, and pacing.
- Promote play, experimentation, and exploration.
- Facilitate the learner's ability to reflect upon experiences and sensations.
- Adapt to the changing needs of the learner.
- Manage emotional and physical risk.

Skiing Model for Seniors:

The technical elements, skills, and turn mechanics discussed here are not specific just to senior skiers. Many of these technical elements are visible in men's and women's World Cup Skiing. Racers use these elements because they need to be strong to deal with the forces in the turn. Older skiers can use these technical elements because they keep us stacked, balanced, and stronger!

Technique:

1. Tall stacked athletic stance, strength in length, feet on the footbeds, constant ski/snow contact, ankles, knees, and hips moderately flexed. Stance is absolutely critical. Skiers move within this balanced stance. Spend lots of time developing this stance. Most balance drills can be modified to work with seniors.
2. Track both skis, constant width stance. This really helps with lateral balance and is less fatiguing than the old "foot to foot". Coach muscular tension of inside foot to keep inside leg active and parallel to outside leg. Many older skiers will let the inside leg "A" frame or bounce around. Develop an active inside leg. Keep ankles closed to control the inside ski.
3. Replace excessive active rotary with a forward diagonal move to hook up the tips and pull the skis into the turn. Easier on abductors/adductors. Most crossover drills will work if modified for seniors. Instructor quote, "The magic of skiing lives in the front cuffs of your boots!"
4. Skiers need a strong inside half. Use the "US Ski Team" drill, (inside hand up and forward, outside hand on outside hip) or other drills that create a countered stance. Stay away from javelin turns or other demanding drills with most seniors.
5. Less knee, more hip. Edging the skis with hip angulation helps keep the senior skier in a tall stacked stance. A stacked stance makes life much easier on the knees. Railroad track and long leg, short leg drills on easy terrain will begin to develop these contemporary edging skills/early hookup with seniors.
6. Work on "scarving", a slightly skidded soft carves with those seniors that need to control speed with less loading of joints and muscles. Less work than a harder carve.
7. Pole plant changes-Many older skiers have habitual hard blocking pole plants. Work on pole plant in the glide phase to facilitate and direct crossover/diagonal move downhill, rather than the "up and over" move associated with a blocking pole plant. This keeps the rhythm and flow down the hill arc to arc and is much less work for the older skier.
8. Much less need to unweight using contemporary techniques on groomed terrain. This is less physically demanding. Be aware of the "park and ride" syndrome. Skiers still need to actively flex and extend to guide and edge skis turn to turn.

Tactics for Moderate Steeps and Bumps:

Many older skiers just don't enjoy skiing bumps and steeps anymore. However, there is a percentage of strong Senior skiers that still enjoy the challenge. They are capable of skiing moderate steeps and moderate bumps. The tactics and line described below will help seniors ski this terrain with more control and less physical effort.

1. Coach a round line on steeps, no "hits" or hard edge sets. Use the same contemporary technique we've been working on. Quote from author and coach Warren Witherell, "pick the slow line and ski fast on it". This round line will help control speed with fewer physical demands.
2. Coach the "old man's line" in small to moderate bumps. This is a very round line that goes up and over the shoulder of the bump. Stay out of the troughs. The round line controls speed with less impact and less need to flex deeply to absorb the bump.
3. Stronger senior skiers may still want to ski off-piste/powder. For these folks moderate to easy terrain selection is critical. The appropriate powder ski is important. Good soft snow and less new snow depth means much less effort and fatigue. Pick your spots with your senior skiers!
4. When skiing moderate bumps steeps or powder with strong seniors, always watch for a drop-off in the performance of your skiers. Call for a break or a return to blue groomers at the first signs of fatigue.

Some Things to watch out for at the High End:

Some technical elements of contemporary skiing may not be helpful to seniors.

1. Extremely high edge angles at the turn apex can create "snap"/rebound/tremendous energy from the ski, requiring great strength and balance. This may be too athletic for many seniors.
2. Retraction moves, very evident in modern technique can be hard on seniors with knee issues or balance and strength issues.
3. Flexible boots that are canted correctly are a must for seniors on deeper side cut skis. A good boot fitter can soften and make canting adjustments to a senior skier's current boots. Evaluate your skiers!
4. As we clinic and play with these ideas, you will see this is really about contemporary skiing as applied to intermediate and advanced seniors.
5. It's as much about addressing seniors' needs as it is about changing techniques.
6. We are just adjusting the skiing model and teaching model to fit the cognitive, affective, and physical needs of our seniors. That's what the teaching partnership is all about.

With the right coaching, technique, equipment, conditioning, and a passion for skiing, we can keep seniors sliding for a long, long time!

Have Fun! Ted Pitcher