

Strong Training for Seniors

As one ages, the need for physical activity and healthy eating become that much more vital to maintain health and wellness. But the big question is...

How???

How does a person over the age of fifty exercise in a safe and effective manner?

How are the nutritional needs of an “older” individual different from the general public?

How can a person develop, maintain, or improve balance, coordination, and flexibility?

Strong Training for Seniors will answer these (and many other) questions!

What does Strong Training for Seniors include?

- Three Phases of Strength and Cardiovascular Training
- Balance and Flexibility Training
- Nutritional Consultation to meet the needs of the client

Since many individuals who are advanced in age are diagnosed with conditions like osteoporosis, high blood pressure, and Type-2 Diabetes, starting and continuing with a personalized exercise and nutrition program are of utmost importance.

The Three Phases of Strength and Cardiovascular Training

Prior to beginning the three phases, clients will have performed a number of physical assessments. These assessments will take a week (3 sessions).

*All Phases will include at least one day devoted to yoga (mobility and flexibility).
All Phases and training days will include some balance training and stretching.*

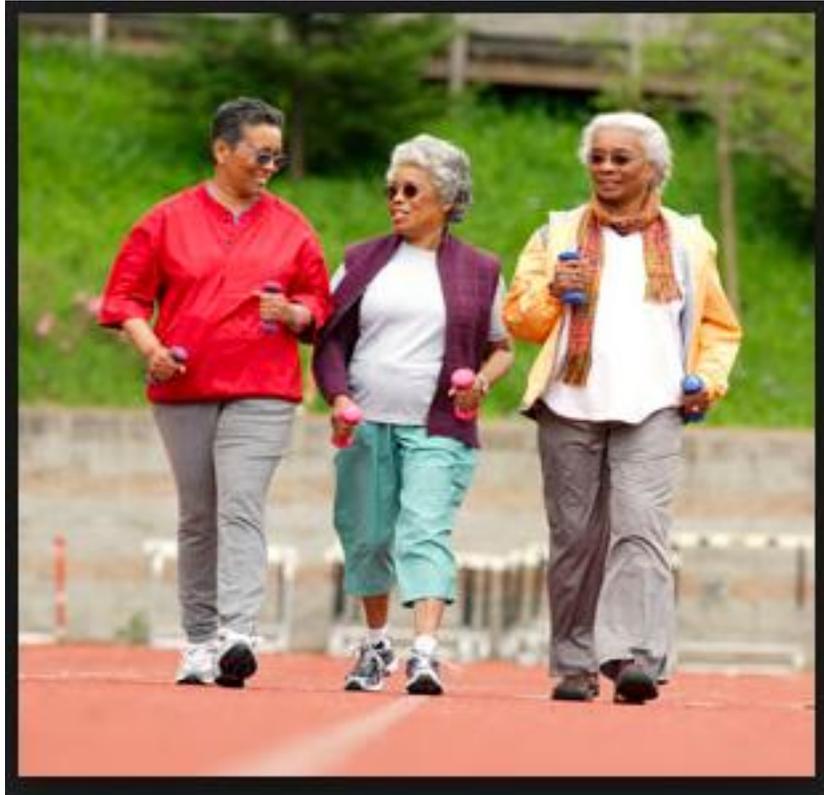


Photo taken from <https://thrive.kaiserpermanente.org/tag/hawaii-seniors-fair>

Phase 1 (4-6 weeks): Cardiovascular and Muscular Endurance (3 sessions/week)

This phase is devoted to conditioning the cardiovascular system and muscular/skeletal system for endurance. Training days will start with a warm up (5-10 minutes), balance training, endurance training, and stretching.

The first training session of the week will be devoted to cardiovascular endurance.

- Heart rate during this session will be around 40-60% of the targeted maximum heart rate.

- Cardiovascular exercise will include a variety of modalities, not limited to walking, elliptical, and/or biking.
- Bodyweight movements and light band work will be incorporated into the session.
- Movements will primarily be done in intervals/circuit style (i.e. 10 bodyweight squats, 10 wall push-ups, 10 marching in place, 10 band pull aparts).

The second training session of the week will be devoted to muscular endurance.

- Focus on correct form and movement will be the basis of this session.
- Bodyweight movements and light band work will initially be utilized. Once correct form and posture doing the movement are obtained, weight will be added for additional resistance.
- Movements will be done according to a hypertrophic-based set and rep scheme (i.e. DB squats 4 sets of 10 reps with 45-60 sec rest in between sets).

The third training session of the week will be devoted to yoga.

- Focus on correct form and breath while engaging in the postures.
- Yoga will be hatha based. Postures will be held for 30-45 secs and will work on improving balance, strength, and flexibility.
- Session will end with breathing and savasana.

Phase 2 (4-6 weeks): Cardio Conditioning and Muscular Endurance and Strength

The first training session of the week will be devoted to cardiovascular strength and endurance.

- Heart rate during this session will be around 60-70% of the targeted maximum heart rate.
- Cardiovascular exercise will include a variety of modalities, not limited to walking, elliptical, and/or biking.
- Bodyweight movements, light band work, and light weighted movements will be incorporated into the session.
- Movements will primarily be done in intervals/circuit style (i.e. 10 KB Goblet squats, 10 bench push-ups, 10 step-ups, 10 lat pull downs).

The second training session of the week will be devoted to muscular strength and endurance.

- Focus on correct form and movement under load will be the basis of this session.
- Weights will be increased as the phase continues.

- Movements will be done according to a hypertrophic-based set and rep scheme and will be supersetted (i.e. Alternating between 4 sets of 10 reps of DB squats and 4 sets of 10 reps of alternating lunges).

The third training session of the week will be devoted to yoga.

- Focus on correct form and breath while engaging in the postures.
- Yoga will be hatha based. Postures will be held for 30-45 secs and will work on improving balance, strength, and flexibility.
- Session will end with breathing and savasana.

Phase 3: Cardio and Strength for Life

After completing the first two phases, client and trainer will determine what course of training will best suit the client's future needs.

If six weeks is not enough time for the client to build a solid muscular and cardiovascular base, then Phase 1 OR Phase 2 may be repeated until a solid foundation is created.

If maintenance of physical development is priority, a muscular strength, cardiovascular endurance, flexibility, and balance training program will be created.

If a client is desiring to pursue a specialized sport OR wants to continue building strength and endurance, then an increase in training volume and intensity is needed. Along with this increase comes additional recovery time (stretching, mobility, and rest).

Nutrition for the Ages

Food is life. It really is!!! Many people don't recognize the vital role nutrition plays in one's ability to function and thrive.

It is true that as a person ages, his muscle mass will decrease while fat mass will increase. Although weight training and cardiovascular endurance can help slow down these changes, what an individual eats is also important.

The Dietary Guidelines as suggested from the USDA and U.S. Department of Health and Human Services are the following:

Women

Not Physically Active	1600 calories
Moderately Active	1800 calories
Active Lifestyle	2000-2200 calories

Men

Not Physically Active	2000-2200 calories
Moderately Active	2200-2400 calories
Active Lifestyle	2400-2800 calories

How does one eat that many calories a day? Oreos and ice cream? Getting a mix of all the macronutrients (proteins, carbohydrates, and fats) as well as a variety of vegetables and fruits are key. Water is not considered a macronutrient, but maintaining appropriate hydration levels is also of great importance.

The DASH (Dietary Approaches to Stop Hypertension) Plan also is used to help combat high blood pressure. The plan focuses on lowering salt, sodium, sweets, added sugars, fats, and red meats.

Nutrition 101: Macronutrients

Macronutrients make up the food we eat. You may have heard that term thrown around at the gym or in daily conversation. Macros. Macronutrients. If you think about it, the word is broken down to two parts: “Macro” which means “overall” and “nutrient” which means “a substance essential for the growing of life”.

Basically, one cannot live without the three major macronutrients. What are these three? And where are they commonly found?

Macronutrient #1: Protein is used to build and repair tissues and make enzymes, hormones, and other body chemicals. Protein is an important building block of bones, muscles, cartilage, skin, and blood. Most people think of meat, chicken, fish, or eggs as protein. That is true, but dairy products such as milk, yogurt, cottage cheese, whey powder, and the like are also protein. Plant-based sources of protein can be soy-based (tofu, tempeh), or found in products like nutritional yeast (one of the easiest to add to any dish to increase protein amount) or hemp (likewise, also easy to add). Beans and legumes are also sources of protein, yet also contain a moderate amount of carbohydrates.



A mix of lean proteins...



And healthy carbohydrates...

Macronutrient #2: Carbohydrates are used as an energy source, and there are two kinds: simple and complex. When one thinks of simple carbohydrates, the fast-acting type of carb comes to mind: candy or sugar foods. That is true, yet fruit is also a simple carbohydrate as the sugars from fruit are simple in nature. The major difference between an apple and a twizzler (both being simple carbs) is that one has fiber and micronutrients that are not found in the other (can you guess which is which?). Complex carbohydrates are what most people see as the “healthier” type of carbohydrate: rice, whole wheat bread and pasta, potatoes, and other types of starchy carbs. Although the media has demonized this type of carbohydrate, complex carbohydrates usually contain some amount of fiber as well which slows down the rate of digestion. Carbohydrates are also stored in the muscles as fuel (more on this later), so eating carbs that can be ready for use for physical activity is highly desirable.

Macronutrient #3: Fats are essential to give your body energy and to support cell growth. They also help protect your organs, help keep your body warm, absorb some nutrients, and produce important hormones. There are four different kinds of fats: saturated, unsaturated, trans fat, and cholesterol.



Specific Needs for Seniors

As one ages, osteoporosis becomes much more of a valid risk. The way to combat osteoporosis (besides weight bearing exercise) is making sure to get the appropriate amount of calcium, Vitamin D, Vitamin B-12, Potassium, and Vitamin K on a regular basis.

Many seniors also experience a lack of olfactory senses—smells and taste buds no longer work as they once did. That issue plus difficulty swallowing can cause the elderly to NOT eat and eventually lose weight (which is not ideal).

Other nutritional needs specific for seniors are also related to illness and disorders that occur as one ages. Some of these ailments, such as Type-2 Diabetes, Parkinson’s Disease, and dementia, required individualized nutrition and exercise regimens.