

## Fit For Sisters

Andrew Luscutof Columnist

## Maintaining muscle as we age

While once fitness in younger years may have be focused on looking good, and performing well, as the seasons of life pass more emphasis is put on function, muscle health, and enjoying leisure activity.

Without minding proper nutrition and strength baselines, these functions will decline at a surprising rate. The incidence of people who suffer from loss of function is astounding. Muscle wasting, a condition medically known as sarcopenia, is the loss of muscle mass as one ages. It is prevalent in 53 percent of men and 43 percent of women over 80.

Sarcopenia is not, however, a disease of the old and frail. In fact, it can begin if someone is inactive and sedentary after the age of 30. The statistics state someone can lose as much as three to five percent of their muscle mass per decade after age 30. This rate spikes at 60 years old and can rise to as much as 10 percent thereafter. The results affect many areas of lifestyle. One

cannot enjoy activities without risk of injury, falls, and immobility.

What are the mechanisms that cause loss of muscle and function? First, the body loses its protein synthesis efficiency. Thus it's harder for the body to utilize dietary protein for muscle rebuilding. This is a hormonal and cellular problem. While aging, hormones such as testosterone, and growth hormones decrease as well as the cellular energy systems which are needed to use the amino acids from our diet for rebuilding. Not only are positive hormones decreased, but an accumulation of stress hormone effects also lead to muscle

Another problem comes from the diet. It's estimated that 15 to 40 percent of older adults are not consuming adequate protein based on the recommended daily allowances set by the USDA. Without amino acids, which are substrates of dietary protein, the body doesn't have the proper building blocks to build muscle. The quality of dietary protein is also important. Lean proteins, supplementation, and plant sources are effective because they do not also have additional fat and cholesterol. Those are considerations, because many are advised to lower their saturated fat and cholesterol levels.

Last, and certainly of major concern, is the lack of activity many older adults constrain themselves to. As one grows into adulthood, activity takes a backseat to raising a family, growing a career, and keeping up with the Joneses. Healthy activity that engages many of the

physiological systems like muscle strength, coordination and endurance through multiple planes, will be essential.

Often, people recognize their lost muscle function after retirement. By this time, the effects have been accumulating for years.

Exercise and activity should be a high priority no matter what someone's circumstances demand.

The best way for older adults to combat the onset of sarcopenia is to follow a resistance training protocol. With resistance training, going through the motions won't cut it. The SAID principle (specific adaptations to imposed demands) should be observed. What this means is that the body doesn't adapt until it is pushed to do so. This means that resistance training needs to be pushed hard enough to impose these demands.

Following weightlifting, the proper nutrition will allow the muscles to flourish with plenty of building blocks for new tissue. Aim to get 20-30 grams of protein in meals. This is around a palm-sized portion of meat, 1.5 cups of beans, or a cup of yogurt.

Muscle wasting and lack of strength is a consequence of the aging process but, with some considerations, it can be abated. The older adult should not be relegated to spending their retired years inactive, and left feeling incapable - and they need to heed to the body maintenance required to stay active. Thankfully, many of the problems that once were thought of as inevitable are actually avoidable with proper exercise and nutrition.

## **Boys soccer falls to Molalla in opener**

**By Rongi Yost**Correspondent

The Outlaws fell 6-1 at Molalla on Wednesday, August 30, in their first game of the season. Despite the loss, they gained valuable experience and will work hard in practice this next week

The Indians scored three goals in the first half and added another three in the second. With three minutes left in the contest, the Outlaws scored their lone goal when Cole Seymour knocked in a goal off a cross from Colby Simeral.

Coach Rob Jensen said, "I thought our midfield held its own. However, Molalla was able to take advantage of the inexperience of our back line. Most of the goals were

scored off of correctable mental errors that we will work to fix."

Sisters was able to control some possession and string together a bunch of short passes. They have been forced to practice indoors for the past week due to the smoke, and Jensen told *The Nugget* that affected their ability to have field vision past 10 yards.

Gabe Patton was a key player in the contest and showed a valiant effort at center back, and Asher Bachtold, Willie Stewart, and Keaton Green kept the center midfield controlled defensively.

The Outlaws were to play at Madras on Tuesday, September 5. They will play at home against Summit on Thursday, two days later.







