

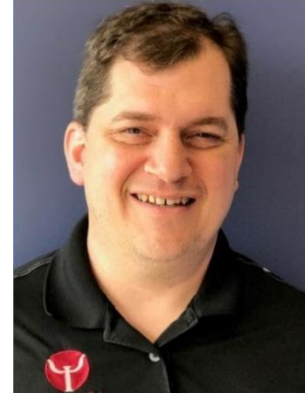


6 Things We Must Maintain to Achieve Lifelong Independence



A Word from the Author

Hi, my name is Pete Janson, and I'm so glad you've found this booklet. I hope the information you find in it will breathe more joy, fullness and engagement to your life. My mission, both personally and through my businesses, is to help people increase not just their lifespan, but also their Functional Healthspan as they age. My hope for you is that in this book as well as any additional resources I offer that you choose to avail yourself of, you find new levels of vitality, pain free living, and joy!



I help my clients stay ***Strong, Capable & Independent***. Having worked as a longevity expert for the past 15 years, I have had hundreds of clients whom I have helped regain a sense of control over their independence. I have had clients who have come to me with pain, discomfort, or loss of ability have these things restored. I have had many clients who found everyday tasks becoming more and more challenging see their abilities, stamina and mobility improve.

But the most important result that I have seen is that with each of these victories comes a ***release of the fear of the impact of the aging process***, and a corresponding ***increase in their sense of control over their own lifestyle and future***.

A handwritten signature in blue ink, appearing to read 'Pete Janson', with a long, sweeping flourish extending to the right.

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6 Things We Must Maintain to Achieve Lifelong Independence

Introduction

Some folks live to 102 and never move out of their homes. Others have to go through multiple levels of care, as they age, and their condition deteriorates over a long period of time. The question of which would you like to be is rhetorical, the answer to how you will achieve it is a little more elusive.

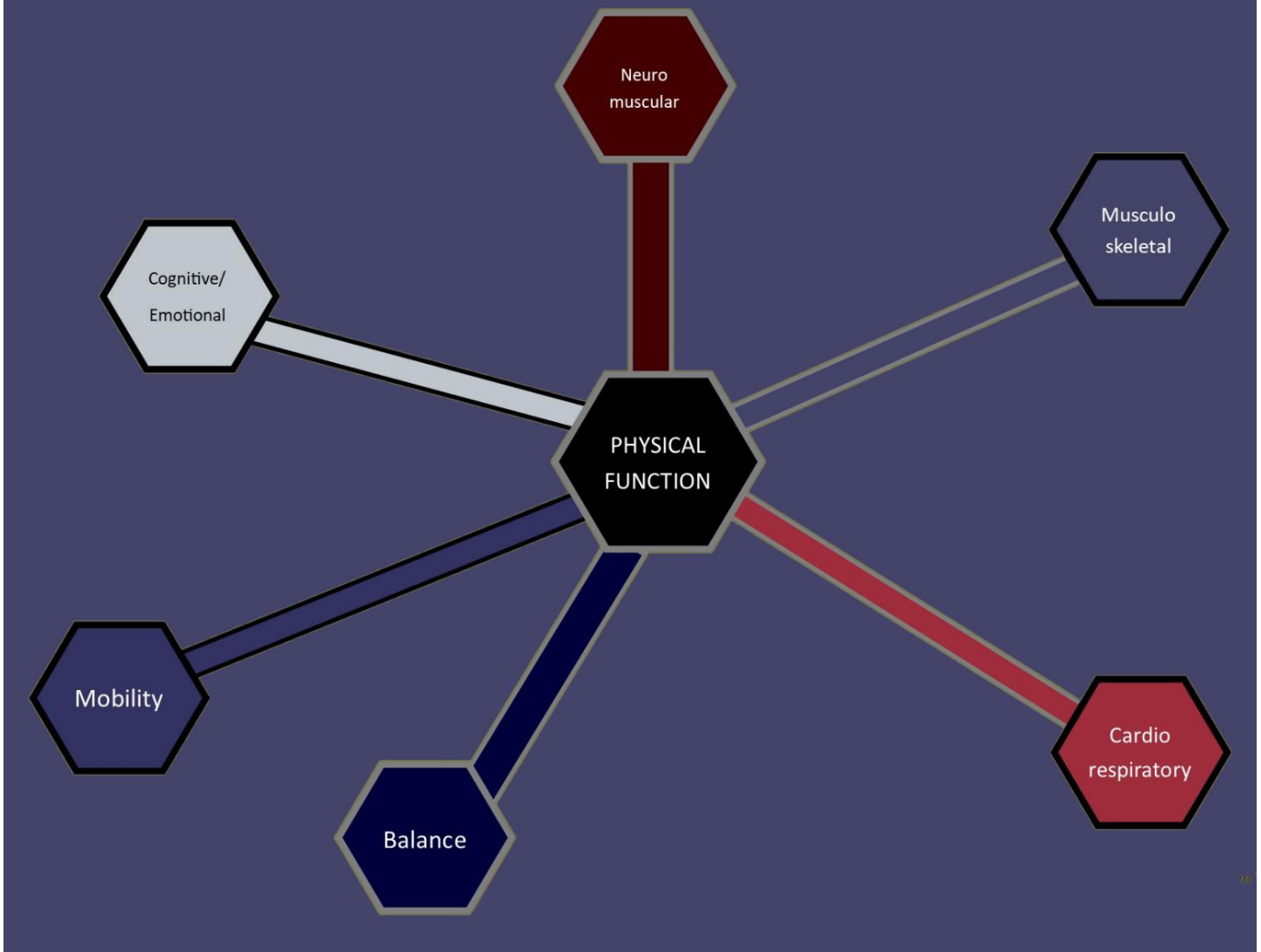
We live in a society that has largely accepted the idea that as we age, the aches and pains, the list of medicines, and the list of diagnoses pile up. We almost take it as the norm, and are surprised when we here of the 97 year old lady who still drives, or the 95 year old man who still cuts his own grass. We even have studies done on these folks, or the regions they live in to see what information or wisdom we can glean from their lifestyles. Some of those studies have given us great information about what they do or how they do it, even to the point of creating new diets around their habits.

Regardless of what these studies can teach us, there is one thing that we know about all of these folks who have been able to reach this milestone. We know that they have maintained 6 key areas of physical function that contribute to both longevity and independence (See diagram on page 4).

In the following pages, I will introduce you to each of these categories, as well as some of their individual sub-categories. I will also make some suggestions about how you can maintain them in your own life. At the end, I will explain how I work with my clients and explain the steps you can take if you would like my help in doing so as well.

Again, I hope you find this information helpful, and that it helps you to *live your life to the fullest!*

6 Abilities We Must Maintain to Achieve Lifelong Independence



Cognitive & Emotional Capacity

Our cognitive capacity is often addressed in the media. Most of us understand the ongoing value of completing complex mental tasks, such as word or number games, as a way of maintaining our cognitive abilities. However, if this is the only type of mental challenge we are doing, we are missing something. There is a process called dual tasking, where we do something

physical and something verbal at the same time. Research has shown this type of activity to be highly valuable in maintaining our ability to function well in the world.

A commonly understood example of the loss of dual tasking abilities is the scenario in which we turn down the radio while trying to back up the car, or when someone stops walking in order to think clearly while talking. By performing dual tasking operations intentionally throughout our day, we are better able to maintain these important skills.

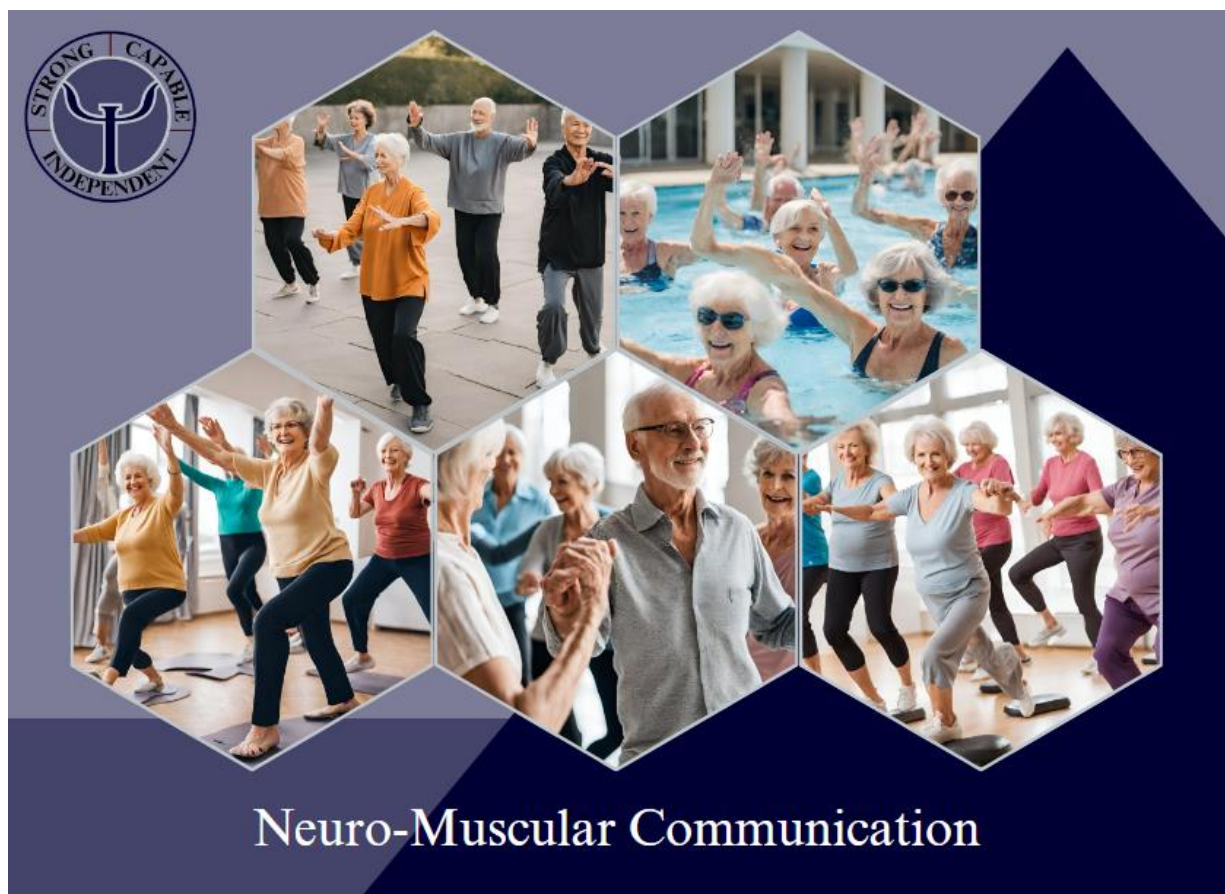
In addition to dual tasking, we have seen cognitive benefit from activities where we cross our midline (as one might in a boxing class) both in the general population and those with neurodegenerative diseases such as Parkinson's and dementia. Finally, there is evidence coming out now regarding the benefits of vigorous exercise as it relates to the robustness of health in individual brain cells.

One aspect of brain health that is often not discussed when thinking about longevity is the emotional one. However, our emotions can have a significant impact on our lifestyle as we age. For instance, the more confident we remain in our ability to do a given thing, the more likely we are to do it. In a use it or lose it scenario, which much of the aging process is, this is a crucial point to acknowledge.

Additionally, our confidence in smaller tasks will always impact (positively or negatively) our confidence in the larger, more complex arena. For instance, if I am confident I can get up from the floor on my own, I have less fear of falling. If I have less fear of falling, I continue to do the activities I have always done, thereby maintaining my strength and ability, and positively impacting my emotional state.

Neuro-Muscular Communication

Neuro-muscular communication and control are both *use it and improve it* and *use it or lose it* propositions. The research is clear that both the communication and the control will decrease with a lack of use. In order to keep our bodies moving well and in accordance with the brain's instructions, we need to move them often. And, we need to challenge the communication process. Motor learning (the process of learning or re-learning a pattern of movement) has been shown to have significant benefit on the wiring of the brain as we age. This is one reason that dance, tai chi and choreographed aerobic classes are so valuable. They require the participant to both physically and mentally engage at a high level.



First, our bodies must move in a coordinated fashion. The right side must know what the left is doing and vice-versa. The upper and lower must be able to work together to accomplish a

task. Otherwise, we end up with niggling injuries that come up often as we move incorrectly, for instance, tweaking your back when you pick up an empty laundry basket because you moved poorly.

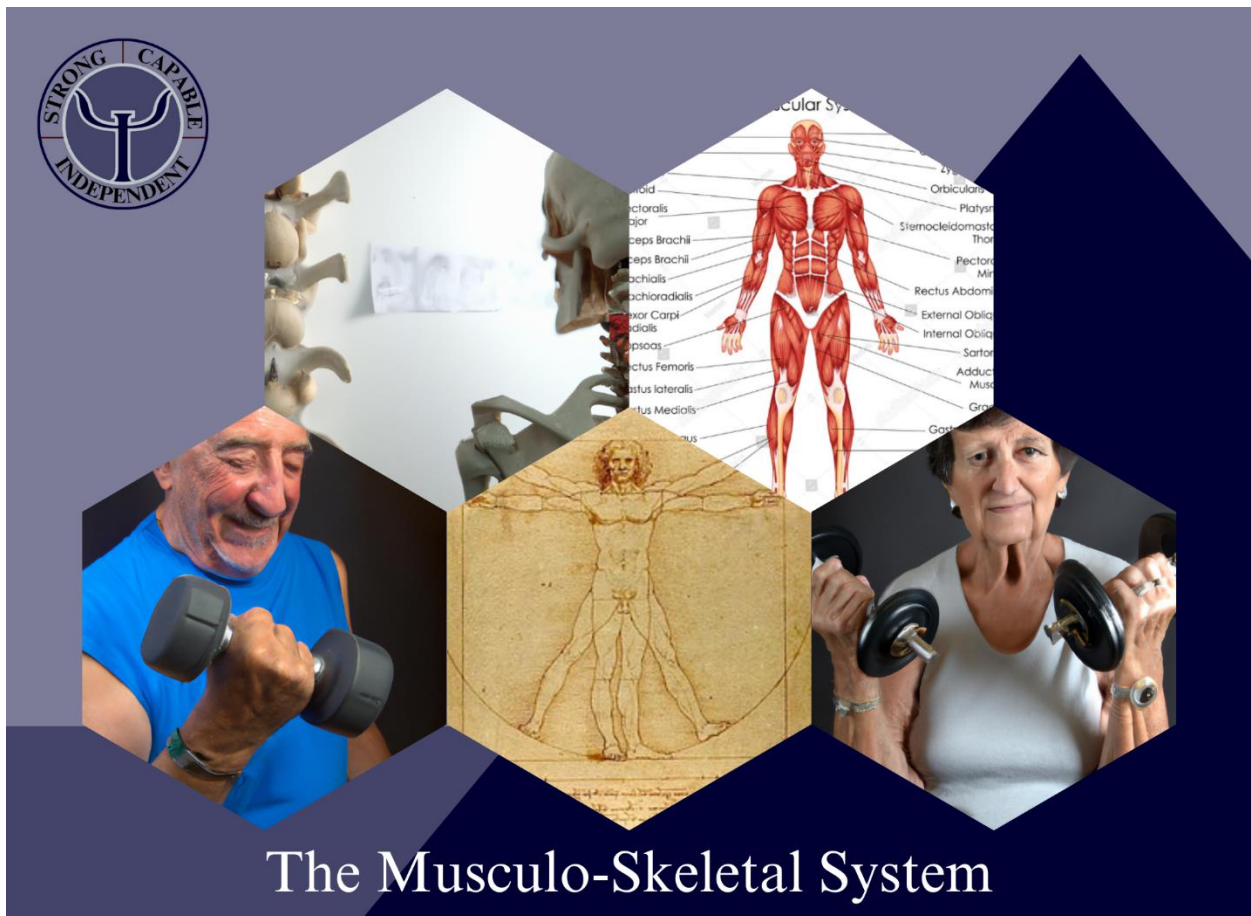
Reaction time, or the body's ability to quickly and accurately respond to signals from the brain, is key when assessing for and improving fall risk. This is one area of neuro-muscular communication that can literally save your life!

Another key area of neuro-muscular communication that we must maintain is proprioception, or your body's ability to know where it is in space at any given time. A simple, yet common example of how loss of proprioceptive skills can negatively impact us is the simple story of the person who bangs their knee on that same coffee table that's been there for 40 years. A more dangerous, yet also common example is the person who trips on the rug in their bathroom or dining room every time they pass it.

Musculoskeletal System

The ongoing, deteriorating function and state of the musculoskeletal system is one of the things that we have accepted as the norm in our society. And, while it is true that due to changes in hormone production, we do lose muscle mass as we age, it is not the case that this is the only cause. Much of the loss in bone density and muscle mass/strength can be attributed to changes in types, intensities and durations of activity. Research clearly shows that bone density can be improved at any point in life by placing the skeletal system under stress with either physical labor or strength training. This is one of the reasons that in working with clients, I encourage away from water based activities like pool classes, as they do not offer the bone density benefits that land based exercise offers.

This same lack of activity often leads to joint pain. The physical therapist’s adage of “motion is lotion” has been borne out in study after study, as it applies to mild arthritis, as well as general achiness. By adding more movement, we can increase range of motion, drive synovial fluid (think of it as the WD-40 of your joints) back into the joint, and improve the quality of movement in the joint itself. Additionally, if we can strengthen the muscles around the joint, they will stabilize the painful area, often reducing pain.



This is often seen in the shoulder joint. When people have pain there, just by moving it and opening up the space between the ball and the socket, we can get the tendons, ligaments and nerves that are running down the arm from the spine and clavicle to stop getting rubbed against. This will often lead to a reduction in both swelling and pain. Now, the individual is pain free in activities such as getting something heavy off a high shelf or using their arms to push themselves

up from a seated position. Just these two simple things will help many people have a deeper sense of confidence in their own abilities and their long term outlook, which goes back to the importance of confidence previously discussed.

Cardiovascular and Respiratory Function

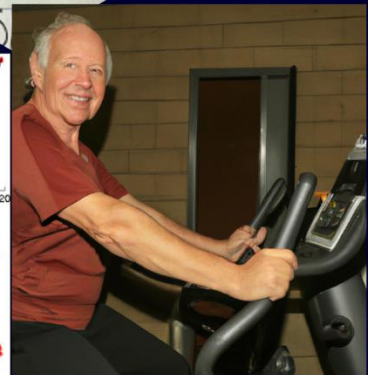
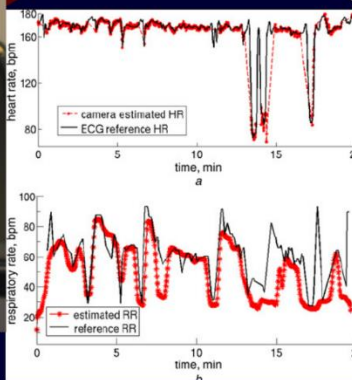
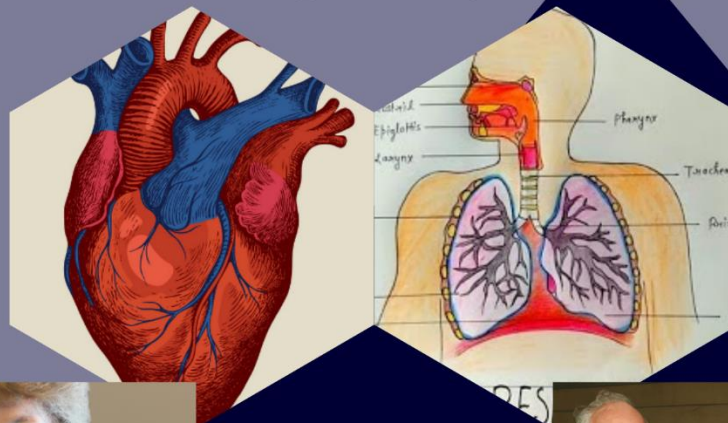
The cardio-respiratory system is one of the most misunderstood areas of physical function when it comes to the aging process, even when it comes to fitness professionals whose job it is to improve it. This system's main function is for the heart, blood vessels and lungs to deliver the energy necessary for whatever activity the body is trying to perform. It is comprised of three main delivery systems: aerobic, anaerobic and creatine phosphate (CP). Each of these systems is responsible for a different intensity/duration of activity.

The one we are all most familiar with is the aerobic system. Many people work hard throughout life to maintain or improve their "cardio." By this what they really mean is their aerobic, or endurance, system. They engage in long (30 min.+) duration, steady state activities that improve the lung and heart capacity. This is an excellent thing for them to do. However, it is only covering one of three bases.

The anaerobic system is responsible for higher intensity, shorter duration (typically lasting 30 – 90 seconds) activities. The CP system is responsible for the highest intensity, shortest duration (typically lasting 3 – 30 seconds) activities. These two systems are generally neglected in the activities promoted for older adults, and thus, their capacity to put them to use falls by the wayside. They are, however, very important!



Cardio-Respiratory Function



For instance, how long in duration is a physical activity like:

- Going up the stairs?
- Carrying in the groceries?
- Getting up from the floor after playing with a grandchild?



All essential activities of daily life which promote independence and bring joy and fulfillment. None of these abilities are improved by working on the aerobic system. However, if we will put the effort into training the anaerobic and CP systems as we age, we can certainly maintain much of the activity related to them as part of our repertoire!

Balance

Balance, or the body's ability to maintain its desired position both statically and while moving through space, is a multi-faceted process which, like many things, takes more than one of the body's systems to maintain. Some of the components that lead to success in this ongoing process are core strength, proprioceptive awareness, a strong vestibular system, good vision and center of gravity control.

It is not always as simple as standing on one foot for thirty seconds three times a day to maintain it. Sometimes when we find we have a problem with it, we may find we need to dig into other areas to rebuild what has been lost. The same can be said of maintenance. By addressing every area of balance that we can, before it becomes problematic, we improve our fall risk, thus improving our confidence, quality of life, and long-term outlook.

Mobility/Motility

Excellent mobility can be defined as our ability to actively move a joint through its full range of motion without pain while maintaining control of the joint. As we age, and through disuse, we often tend to lose mobility at a given joint. This leads to stiffness, achiness and further disuse. By mobilizing each joint in our body on a regular basis, and going to the end range of each joint, we can begin to regain some of the mobility necessary for optimal, long-term function. We often see a reduction in pain as this happens, as well.

Motility is our ability to move our bodies through space. It includes our regular walking gait, but also the ability to sidestep, turn well, go up or down stairs and hills, etc. It is all too common to begin to walk poorly as we age, shuffling (which significantly increases fall risk), hunching over, or developing an altered gait pattern due to pain in the low back, hip knee or

ankle. If we can maintain excellent, or even good, motility skills, we can greatly reduce our risk of falling and seriously injuring ourselves as well.

An Offer

If you would like to have a conversation about what it might look like for us to work together to maintain or improve all of the six skills listed above, visit <https://www.strongcapableindependent.com/booking-page> to fill out a short survey and book a Zoom call with me, or call me at 717-690-2957 to set up a time to speak.

I look forward to engaging further!

Client Reviews

Paula – I no longer have back or knee pain and can only contribute this to the exercises that are designed specifically for a mature (well, senior lol) person and the balance, flexibility and strength exercises have helped me immensely. I'd give twenty stars if I could.

Sarah – Peter took time listening to my concerns, evaluated me and then set up a personalized program that best fit my needs. He answered all of my questions and demonstrated all of the moves for me. When demonstrating he explains what to do and not do so there is no chance for injury. My body is already starting to feel stronger.

Pam – After a bad fall left me unable to get up for over an hour, I knew I had to do something to gain strength and mobility. If I just joined a gym, I knew it would only be a

matter of time before I made excuses for not going. I decided that I needed to do a 1-on-1 type program with an athletic trainer. I found a few options, but after talking with Pete, I knew I found the right place for me. Pete explained this is not a typical exercise program. We would work on mobility and stability, while we were also working on getting me stronger overall. I have now been doing this for almost 3 months and I actually look forward to it! It has challenged me to do activities I never thought I could do. My posture and core strength is improving and so is my confidence! I am so happy with the choice I made in choosing this program!

Doreen – Highly recommend if u want to sustain a program or practice for a healthier, happier, longer life.