



As I was watching the Winter Olympics the past few weeks, I am reminded at how incredible the human body is. The abilities of the athletes were astonishing! Every sport from curling to downhill skiing requiring their own specific set of amazing skills in order to perform at the highest level of competition.

With curling, the athletes have to be able to judge how hard to push the stone, when to release it, how much spin to apply, how much sweeping is required, and even which direction to sweep the ice to affect the shot! On the surface this seems like a really simple task, however, the amount of fine motor skill and tactile sensitivity to create the perfect shot is remarkable! One event that I found very fascinating because of the adaptability of the human body was skiing aerial jumping. In this event, the athletes have to judge how high up the hill to begin their descent and then perform acrobatic flips and turns while flying up over 60 feet to post a perfect landing! The amount of force that goes through the legs of a 175 pound athlete falling from 60 feet would be nearly 23,000 pounds of force! This seems like a nearly impossible feat and yet these athletes are able to do it and make it look very easy. How is this possible?

The very simple answer is that they have trained their bodies over time to be able to handle those forces and perform those movements. Most of these athletes have been training their whole lives for this moment. As such they have developed the strength, endurance, and body awareness to perform at these high levels.

You might be thinking, that's all well and good but those people are gifted with the right talents and genetics to perform these incredible feats. What does all this have to do with me wanting to be able to run a 5k? The awesome thing is that everyone has potential to become better at all physical activities. The key is a simple technique called the SAID principle. This means Specific Adaptation to Imposed Demands. The simplest way to explain this is that if you want to get better at running then you need to expose yourself to the exertion levels that you would experience when running a 5k. This doesn't mean that you should start from day one running as hard as you can for as long as you can. You have to slowly, over time introduce higher levels of intensity and duration in order to allow the body to adapt to the exercise that you are performing.

Going back to the example of the aerial ski jumpers, they did not begin jumping up 60 feet in the air and landing when they began training for this event. They started out with smaller jumps and landings. In order to perfect the movements, they probably practiced on a trampoline or even jumping into a foam pit to allow safe landing. In the same way you have to gradually train your body to perform the activities that you want to be able to do. Whether it is biking, swimming, running, hiking, skiing, or even just walking; the same SAID principle applies to ensure that you are able to safely train your body for that activity or event. Come see us at Conifer Physical Therapy and ask how we can help you reach your goals!

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