

We have been blessed with about five months of summer and so far a great autumn and yet, in the back of our minds the cold front that just arose, speaks future snow. At this point a plethora of ski fitness classes begin to emerge. For the most part, most will get you prepared for the rigorous conditioning of winter sport activities. However, some key factors to be addressed to ensure proper performance, injury prevention and high-level skill can make your skill experience more fun & that much better.

Training To Be Balanced is in its first week of Ski Performance. We conduct Ski Performance to Thanksgiving. It takes the body four to six weeks to neurologically adapt to an exercise stimulus or bout. Every exercise is progressive and we progress within the week. Soreness is not a goal in the first few weeks but rather an introduction and then creating a base of movement. High-level soreness to the point of pain or lack of movement has a negative effect on the body. Mind you, some soreness is good but not debilitating soreness.

The weeks to continue are what we call shocking (shocking the system within all exercises with smaller rest; providing more of a metabolic energy system development) followed by the overload stage (allowing reps to be one –two shy, not the goal but okay if done) that is our power endurance peak section before the mountain opens. In addition, we top it off by wearing full ski gear from the waist down (excluding skies, snowboard) because the first thing that tends to burn or be limiting is your feet inside of a unfamiliar tight boot. Our goal is begin skiing as it you never left.

How many people do you know have quad injuries compared to an anterior cruciate ligament (ACL) injuries? How many people do you know have abdominal muscle problems compared to low back pain? How many people do you know pectoral (chest) injuries compared to rear neck or upper thoracic (middle back) pain or discomfort?

The point is this: We train what we see in in the mirror in addition to this valley offering bent over or forward endurance sport activities such as biking, hiking, or skiing. These results are tight pectoral/hip flexor muscles, rounded backs...etc. The list goes on and I have not even mentioned what the computer world does to the body. If your ski performance class does not covered this then make sure you are: opening up your chest muscles and hip flexors; working the hamstring glute connection via the feet, low back muscles; keeping the core strong. Ski performance is more than burning jumps, lunges and squats.

Specifically, the quad area (front of thighs) makes up 40% of the legs. The glutes (butt), hamstrings (back of thighs), and calf area make up 60%. Where is most potential capacity to develop power? Front or back of the legs? Most winter sport enthusiasts choose the front and continue to over work the quads predominantly neglecting the development of the hamstring/glute muscle connection. As a result an imbalance occurs.

I use this report every year because it bares repeating, out of the University of Nevada, Las Vegas states: “If the strength of the quadriceps significantly exceeds the strength of the hamstrings, then both the hamstrings and ACL become more susceptible to injury. The hamstring is required to lengthen during knee extension, and if it is relatively weaker than the quadriceps, a strain may occur. With assistance from the hamstrings, the ACL stabilizes the knee by preventing anterior translation of the tibia on the femur [lower leg bone moving forward]. This anterior translation can occur during awkward landings and sudden changes in direction. When the quadriceps is stronger than the hamstrings, excessive anterior translation may occur during dynamic activities, and the ACL will experience higher shear forces. If the hamstrings are too weak to counteract this force, an ACL injury is likely.”

Another component that should lie within your ski performance class is power development. Powerful movements are demanded on the hill with variable terrain, bumps and variable conditions (hard packed, powder, crud). Therefore, the conditioned programs should recognize these demands by incorporating fast, resistive movements. Lunge jump switches and lateral bounding exercises together increase amount of time to sustain activity prior to fatigue.

Balance exercises increase one’s stability, therefore improving performance and reducing chance of injury. Single foot balance squats and balance step-ups on unstable surfaces such as a wobble boards, balance cushions, or half-dome balls increase the stability of knees and ankles. Foam roller exercises are also great unstable training tools.

Keeping muscles loose and flexible is ideals for sound recovery. Stretching the upper and lower extremities throughout the workout keeps blood from pooling in a fatigued muscle, and helps regenerate the muscles to perform intense

activity once again. After an intense power exercise or plyometric drills stretch the hip complex. After the workout, allow the heart rate to come down before sitting or lying down. Then do a full body stretch of the upper body, core and lower extremities. Post workout stretching allows the body to fully relax, and prevents muscles from feeling too stiff after the intense conditioning workout.

What ever you choose to do prior to the winter sport activities, ensure the above are covered and have a safe and & happy pre conditioning season!