

Tucker Tips **A Better Way to Hockey Conditioning**

Back in “THE DAY” hockey conditioning was far from scientific. Coaches would often skate their players hard, right from the start of a practice, without a proper warm up or cool down, and with total disregard for potential injury. Skating hard, doing stops and starts between the lines for long periods without rest was the accepted way to condition. The standing joke was to wait and see whether the coach placed a bucket at center ice “just in case” it was needed, all the while yelling “push push, harder harder, faster faster!” Needless to say few players enjoyed the conditioning experience, but it was a requirement, a necessary evil to get in shape for tryouts. Fortunately, coaching methods have evolved for the betterment of the players with a more scientific and purposeful approach.

The human body consists of physiological systems (functions of the body), so when talking about physical conditioning, the scientific approach now recognizes the different physiologies. Each is unique and requires a different type of training (stimulus) to effectively improve overall conditioning. These systems include:

- Energy delivery systems; the aerobic system, the anaerobic lactic system, and the anaerobic alactic system. All fuel and re-fuel the muscles during different intensities of work, as well as during rest and recovery.
- Skeletal muscular system; different activities and situations require different responses from muscles. A muscle can be strong but still not able to perform effectively with continued and repeated movements, (poor muscle endurance) or a muscle can perform repeated movements but be weak (lacking strength).
- Central Nervous System “CNS”; to move muscles requires signals from the brain, and the speed of those signals determines the speed that muscles respond. A muscle can be strong but ineffective because it is slow. Muscles need to be trained to be both strong and to respond quickly; this combination is often referred to as power (force production and velocity of movement), a desired physical attribute in hockey players.
- Flexibility; flexibility is not a physiological system but to take advantage of an athlete’s strength and speed of movement, and to avoid injury, all major joints must move easily within their full range of motion.

There are two training intensities employed that refer to

how hard an athlete works; ‘steady state’ and ‘high intensity’. Intensity refers to the level, or amount of exertion/effort. Steady state is lower intensity training (75% – 85% effort) that uses lengthier drills and requires less rest between drills. Players are encouraged to pace themselves but keep moving. The focus of steady state is to improve the athlete’s;

- aerobic conditioning, that reduces recovery time after periods of high intensity and exhaustive work.
- flexibility that prepare the joints, ligaments, tendons and muscles to withstand the rigorous stresses of higher intensity training.
- muscle endurance which is the ability to generate force over extended periods of time.

Steady state conditioning is emphasized earlier on in a training program to shorten recovery times, minimize injury and prepare the athlete for increasingly higher training intensities as the program progresses.

High intensity training requires the athlete to work at 85% to 100% of their maximum effort. This involves athletes working flat out for shorter periods of time. Rest between drills is longer, and athletes should be at, or near full recovery when repeating a drill so they can continue to work at maximum intensity. High intensity includes:

- Anaerobic lactic training; trains athletes to work at 85% to 95% intensity for 30 to 45 seconds and pushes them to exhaustion. The 30 to 45 seconds simulates the average length of a shift in hockey.
- Muscular strength training; trains athletes to generate maximum force for a single movement, the push of a

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- Tucker Hockey - On Ice Instructor Last 12+ Years
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- stride, taking a shot, or pushing an opponent off a puck.
- Central Nervous System “CNS” training; trains athletes’ CNS to improve the speed and quality of the signals from the brain to the muscles increasing the speed of the muscle’s movements. The ability to get muscles responding and moving faster through faster CNS signalling combined with strength, equates to power; important for shooting and striding.
- Anaerobic alactic training; trains athletes for short spurts of up to 10 seconds, of work at 95% to 100% intensity for a breakaway race, a puck battle, or a shot.

Tucker Hockey’s Conditioning Camp goal is to prepare participants for upcoming team try-out camps without players incurring any injury. At Tucker Hockey we follow the hockey conditioning philosophy previously mentioned in all our conditioning programs. When participating in a conditioning camp each player will perform a mix of skating, puck control, passing and shooting drills, as well as one on one battles, game situation drills and scrimmages in a challenging, positive and fun environment. However, the program is not just about the drills but about how to accomplish desired fitness outcomes. In today’s hockey world, players, especially at the elite level face increasingly competitive and demanding environments and must be in top physical condition in order to showcase their optimal skills.