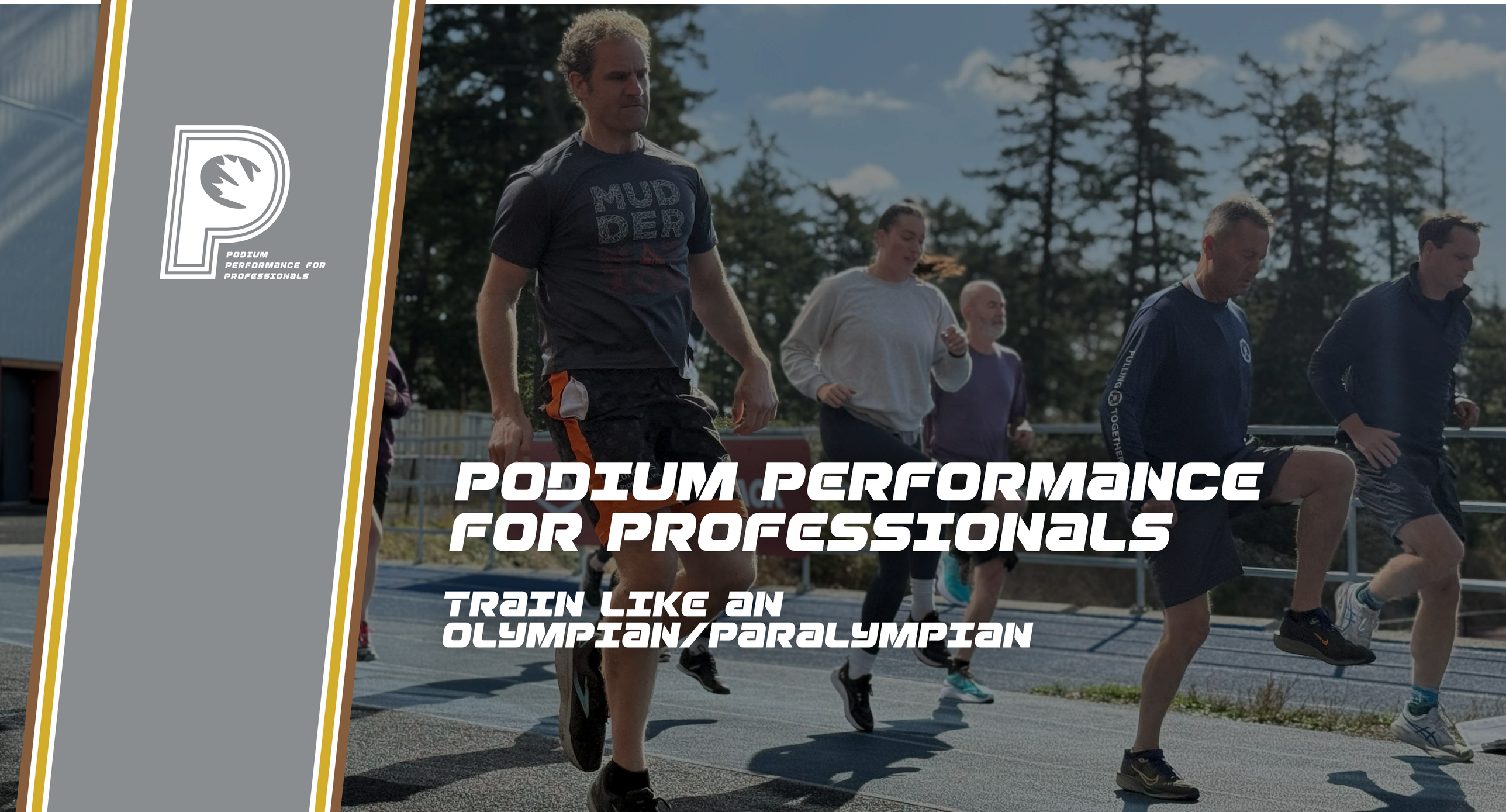
PODIUM
PERFORMANCE FOR
PROFESSIONALS



PODIUM PERFORMANCE FOR PROFESSIONALS

TRAIN LIKE AN OLYMPIAN/PARALYMPIAN

ELEVATING THE ATHLETE

The Canadian Sport Institute Pacific (CSI Pacific) is a member of the Canadian Olympic and Paralympic Sport Institute Network (COPSIN). We are focused on elevating athletes along their high-performance pathway through leadership, education, research and delivery of performance, health and wellness solutions. It includes nutrition, performance analysis, physiology, sport medicine, sport therapy, strength and conditioning, mental health and performance, and Game Plan.

Our Network of seven institutes and centres across Canada provides athletes and coaches with access to world-class facilities where they can train and excel.

What is our purpose?

Olympians and Paralympians in the COPSIN network are evaluated in a similar fashion to your experience at this unique, fun event.

The purpose of evaluations is three-fold. First, it gives you an indication of your current levels of fitness and ability. From this point, you can target specific needs and address any gaps that may exist in your exercise program. Your health and fitness influence your ability to function and thrive on a daily basis.

Second, it gives you an indication of how you compare to population norms based on your age and gender.

Third, over time, evaluations can determine if your program has addressed the specific needs and gaps targeted at the outset, and ultimately if you are improving.

We hope you enjoyed your exclusive access to our world class facility and best in class practitioners on your journey to high performance!

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MULTIDISCIPLINARY APPROACH

The COPSIN utilizes a multidisciplinary approach to support athletes for success in sport and in life.

Physiology

Physiologists have a deep understanding of the body's response at rest, during exercise, and following periods of consistent training. Our team of exercise and sport physiologists use objective measures to help coaches and athletes make informed decisions around training design, adaptations, and competition day strategies.

Strength & Conditioning (S&C)

Our team of S&C professionals design, implement, and deliver training appropriate for each athlete's sport specific need including strength, power, aerobic capacity, endurance, speed, agility, coordination, flexibility, balance and reaction time.

Nutrition

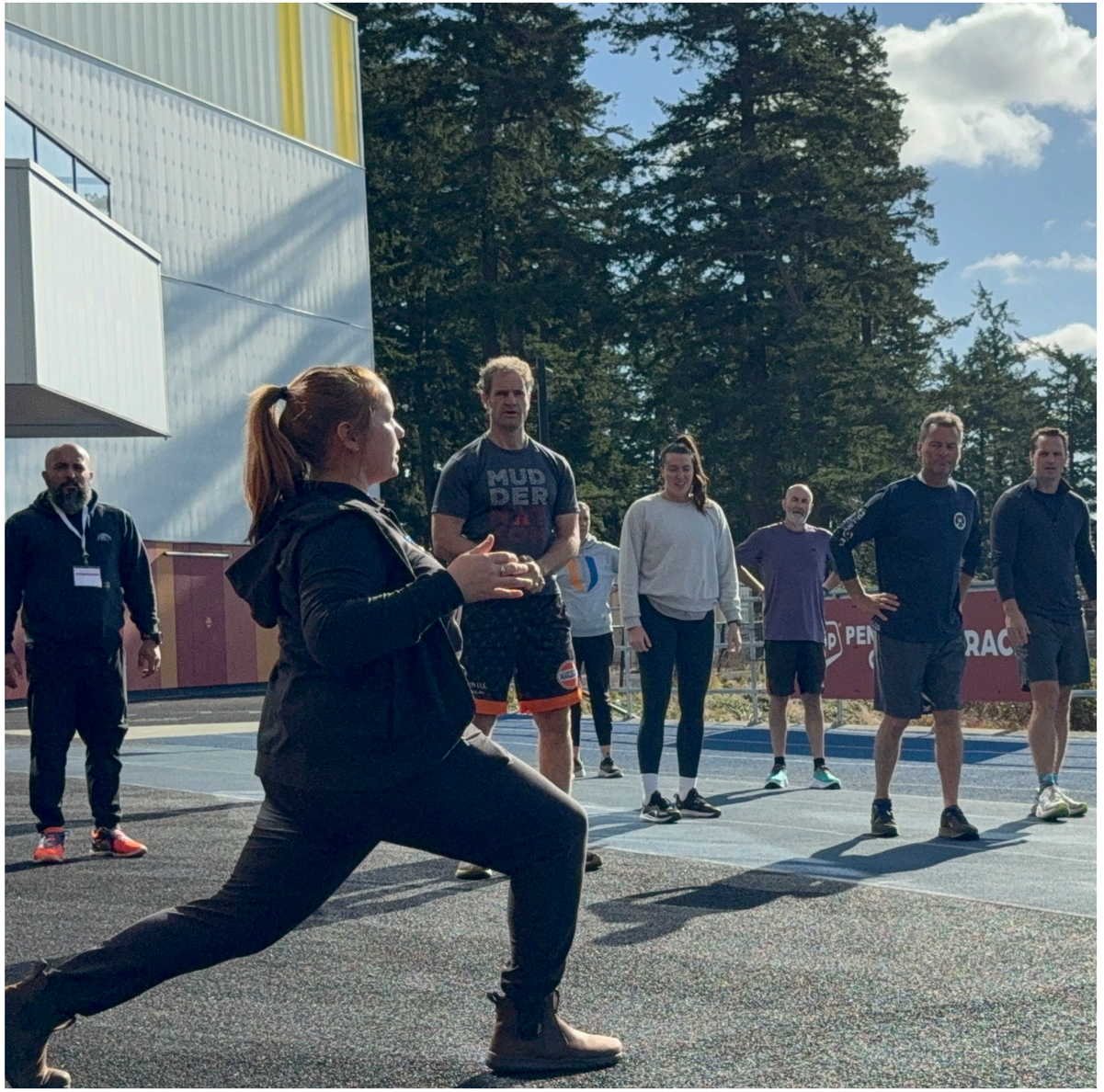
Our team of performance dietitians assess athletes' individual needs and provide nutritional consultations and educational sessions. We equip athletes with the skills they need to help make changes and ensure they can train, compete, and recover with the best possible fuel no matter where they are in the world.

Performance Medicine/ Performance Therapy

Our Performance Medical and Therapy team consists of experienced sport and exercise medicine physicians, sport physiotherapists, registered massage therapists, chiropractors, athletic therapists and pedorthist. The team works within an integrated support team, along with sport specific technical coaches and strength & conditioning coaches, for the key goals of preventing injuries and optimizing performance. We rely on in-depth intake, assessment and monitoring protocols to inform our performance planning and keep athletes safe and injury free.

Mental performance

Our approach to mental performance is to empower athletes by identifying, assessing, and developing specific behavioral improvement strategies to help athletes attain peak performance on a consistent basis.



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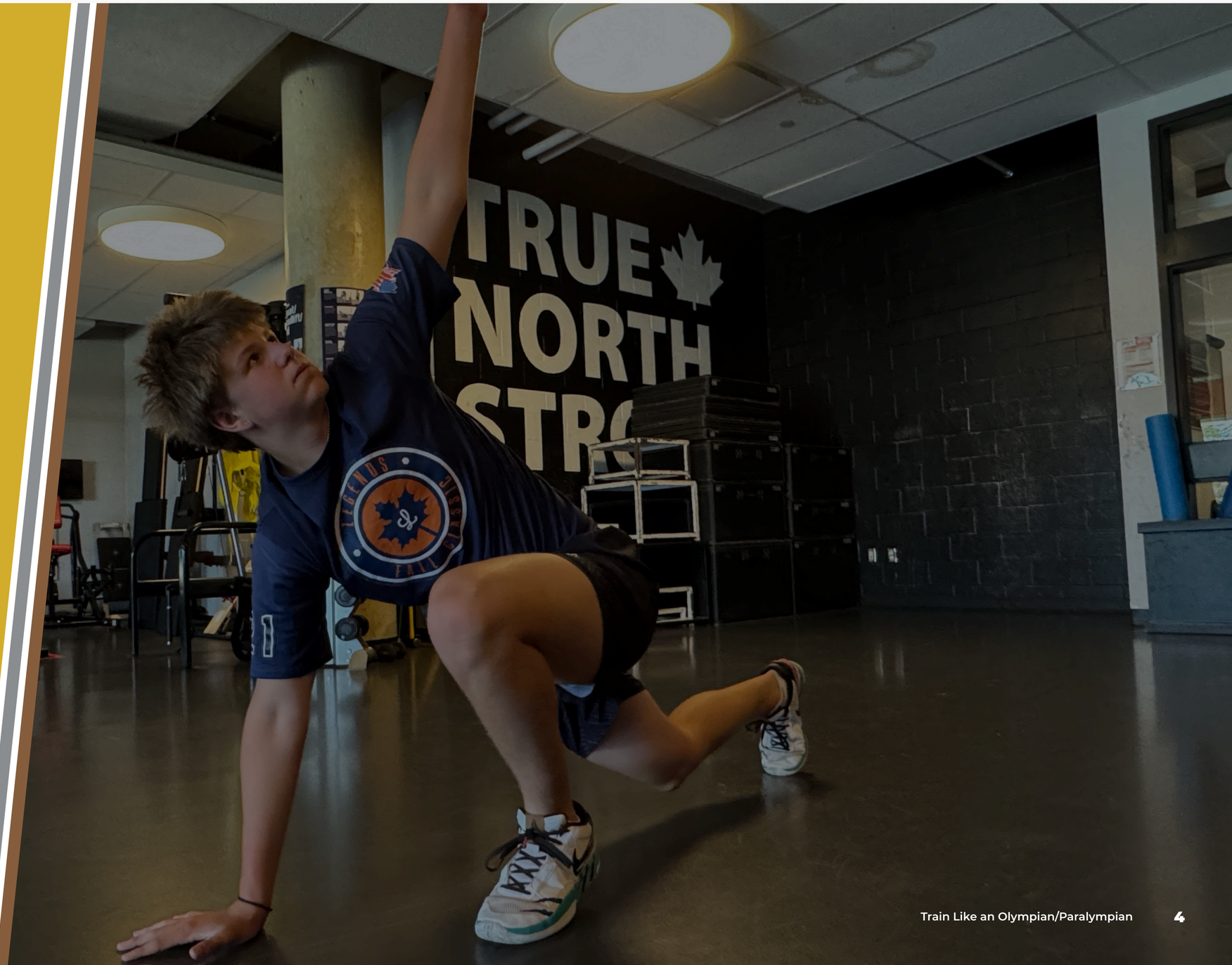


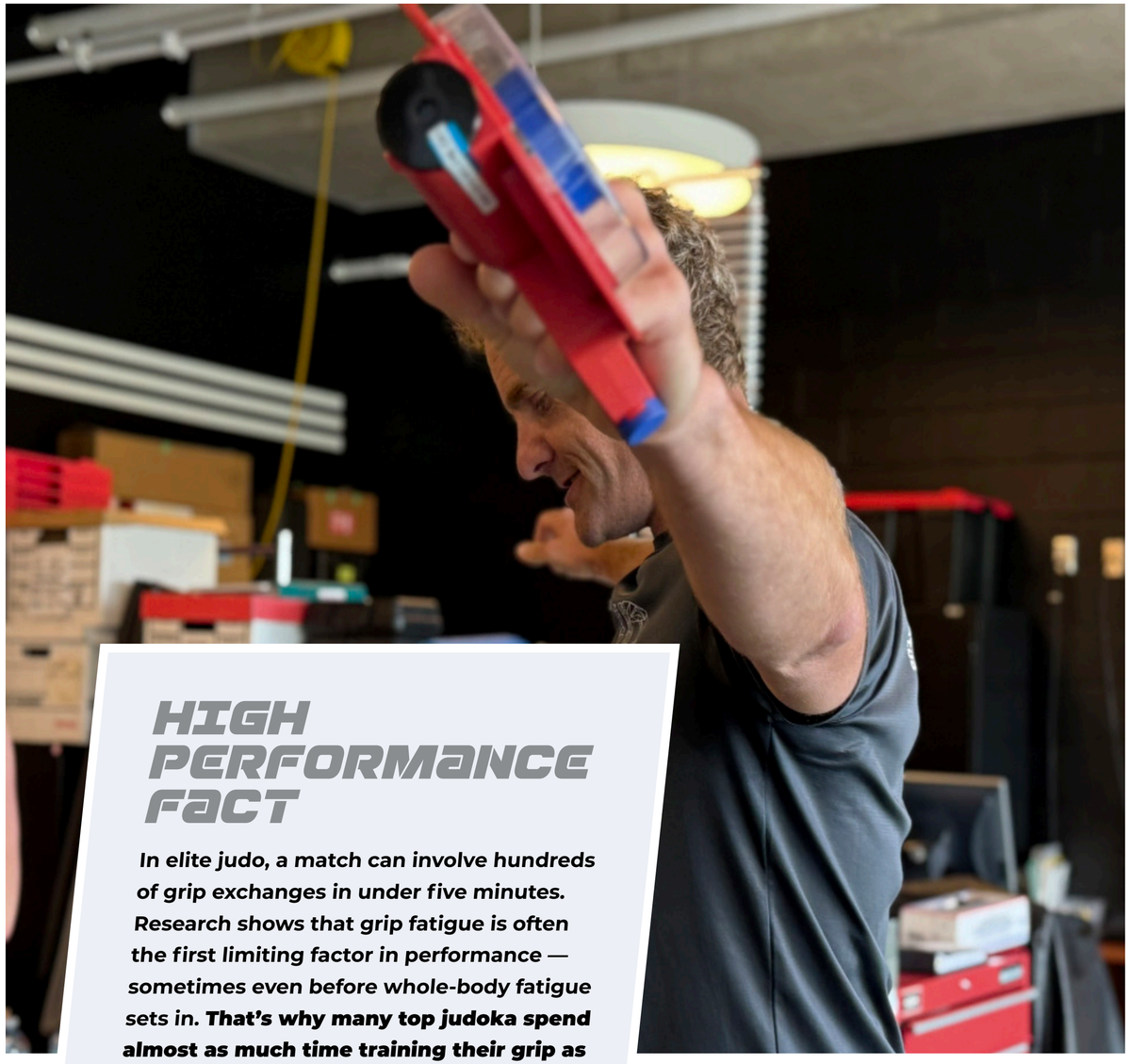
What is Combine Testing?

Often used by major sports organizations, combine testing is a common way to easily and effectively assess a wide variety of physical capacities (e.g. speed, agility, strength, power, etc.) to identify top players. Combine testing typically involves a series of field assessments with live scoring indicating leaders relative to team benchmarks.

How does Canadian Sport Institute Pacific operate?

At Canadian Sport Institute Pacific (CSI Pacific), we have the opportunity to provide high level testing for various sports organizations, including but not limited to, Snowboard Canada, Athletics Canada, Alpine Canada, Rugby Canada and the Vancouver Canucks. Our team of sports science experts come together to create an effective and professional testing environment for athletes to perform their best!

Below you will find the list of tests you completed during your combine testing day for the Podium Performance for Professionals event along with comparative results and insights on how to improve your score.



HIGH PERFORMANCE FACT

In elite judo, a match can involve hundreds of grip exchanges in under five minutes. Research shows that grip fatigue is often the first limiting factor in performance — sometimes even before whole-body fatigue sets in. That's why many top judoka spend almost as much time training their grip as they do practicing throws.

HAND GRIP STRENGTH TEST

*The handgrip **strength** test is simple and quick. You will hold a handheld device called a dynamometer in one hand, squeeze as hard as you can for a few seconds, and your maximum strength is recorded. The test is repeated with each hand, and we use your best effort to assess your result. It's safe, requires no special preparation, and provides a useful snapshot of your overall strength and functional capacity.*

Why do we do it?

Handgrip strength is a simple test used to assess overall muscle strength and function in the upper limbs. In Judo, grip strength is crucial for controlling opponents – from securing the gi (uniform) to initiating throws and defending against attacks. A stronger grip can directly influence an athlete's ability to dictate the pace of a match and maintain technical advantage. Testing handgrip strength in judokas helps athletes, coaches and physiologists monitor training effectiveness, identify imbalances, and track readiness.

Research also shows that handgrip strength is linked to general health, functional ability and even long-term outcomes such as reduced injury risk and improved longevity.

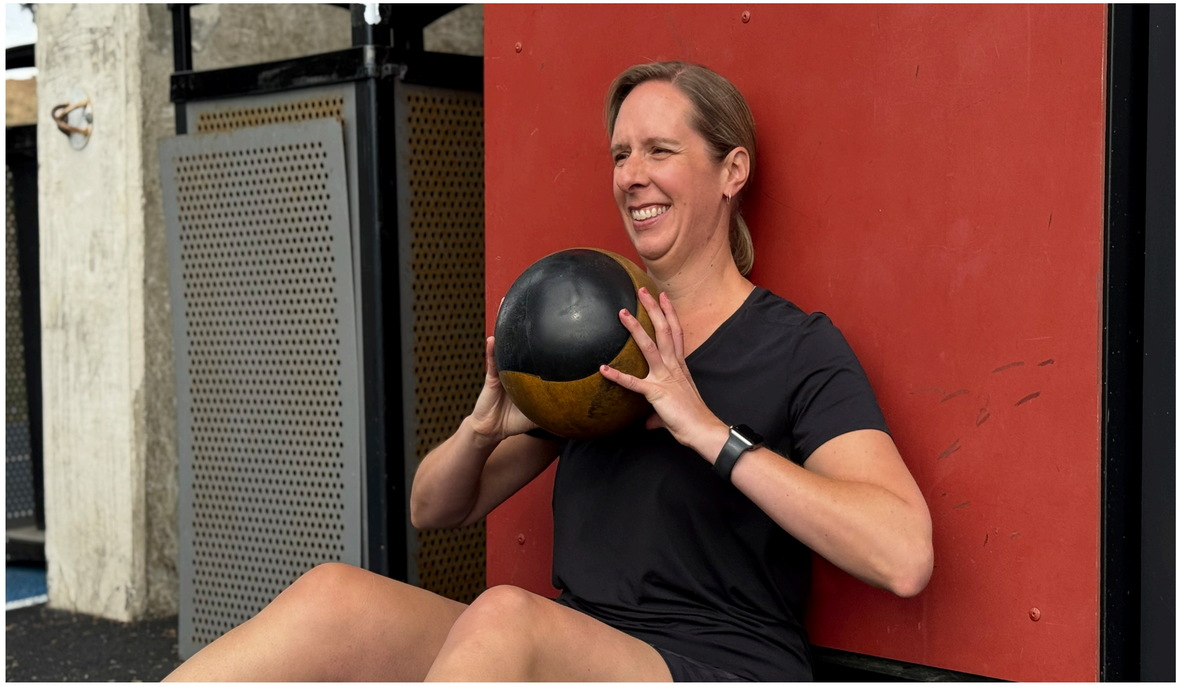
How do I improve?

Improving grip strength can be built into everyday movement. Simple exercises like squeezing a stress ball, using hand grippers, or carrying grocery bags in each hand (farmer's carries) are effective. Strength training with free weights — particularly exercises like deadlifts, rows, and pull-ups — also naturally develop grip. Even small changes, like opening jars or using a thicker handle on objects, can help. Consistency is key, and improvements usually come with just a few minutes of focused work, two to three times per week

How do I compare?

The following scores are for Judo BC, comprised of provincial-level athletes, generally in the 14-18 age range. We have compared here against the general adult population.

	Strength (kg)	
Comparison	Female	Male
Judo BC (ages 14-18)	66	94
General Population (adult)	52	86



HIGH PERFORMANCE FACT

In sit-skiing, athletes rely almost entirely on upper-body propulsion and control. Some Paralympians produce upper-body power outputs on par with or exceeding able-bodied athletes, highlighting just how well-developed and specialized their strength becomes through training.

SEATED MEDICINE BALL THROW

*The seated medicine ball throw is a simple test of **upper-body power**. While seated against a wall (to remove help from the lower body), you will throw a 4 kg medicine ball forward as far as possible. The distance the ball travels reflects explosive strength and coordination of the upper body.*

Why do we do it?

This test gives a quick and practical measure of upper-body power, which is important for functional strength in daily life - from lifting objects to pushing, pulling, and preventing injury. Because it removes the contribution of the legs, it provides a clear snapshot of upper-body performance alone.

The seated medicine ball throw is used by our Para-Alpine sit ski as well as Cross Country Ski BC athletes (located at our Whistler campus). This test helps replicate the demands of the sport in sit skiers as the upper body drives almost all the movement and control and is crucial for navigating the slopes and maneuvering the sit-ski. In the cross-country ski population, this test acts as a valuable tool to assess pure upper body power, without the sequential force transfer from the lower limbs to trunk to the arms and shoulders.

How do I improve?

To improve your upper body power, incorporate exercises that develop both maximal strength and rate of force development, such as push-ups, bench presses, overhead presses and rows. Additionally, integrating unilateral exercises, such as single arm dumbbell bench press and single arm overhead press, can address any imbalances between the arms, reducing asymmetry and enhancing overall performance. This approach is effective for athletes at all levels, from recreational participants to elite competitors.

How do I compare?

The following scores are for Cross Country BC, comprised of provincial-level athletes, generally in the 14-20 age range, as well as national team Sit Skiers, who are members of Canada's Para-Alpine Ski Team. The Sit Skier results are combined, not broken down by female/male.

Seated Medicine Ball Throw

Distance (m)

Sports Team	Female	Male
Cross Country BC	3.1	4.0
Sit Skiers (Canadan Para-Alpine Ski Team)	3.55 – 3.99 (AVG 3.77)	4.3 – 5.34 (AVG 4.97)

HIGH PERFORMANCE FACT

Studies show that swinging the arms can boost jump height by up to 10–15%, but even with hands on hips, the CMJ is still one of the best predictors of sprint speed and explosive performance. So in a way, the CMJ is like a "superpower test" for your legs - your jump height can reveal how fast you might be on the ground!

COUNTERMOVEMENT JUMP TEST

*The countermovement jump measures **lower-body power**. Starting from a standing position and using a quick dip (countermovement) before take-off, you will jump as high as you can. The use of arms is allowed. The height of the jump reflects how much force and speed the muscles of the legs can generate in a single explosive action. You will be given 2 attempts, and the highest score will be recorded. We will be using our VALD force plates which are a highly precise and accurate measure.*

Why do we do it?

The countermovement jump test is a field test that reflects your lower body strength and power, both of which are important for overall fitness, mobility and injury prevention. We use this assessment with a variety of sports such as volleyball, field hockey, basketball and diving. Our elite level divers must generate upward lift from the board or platform to create the time and height needed to perform complex spins and twists before entering the water.

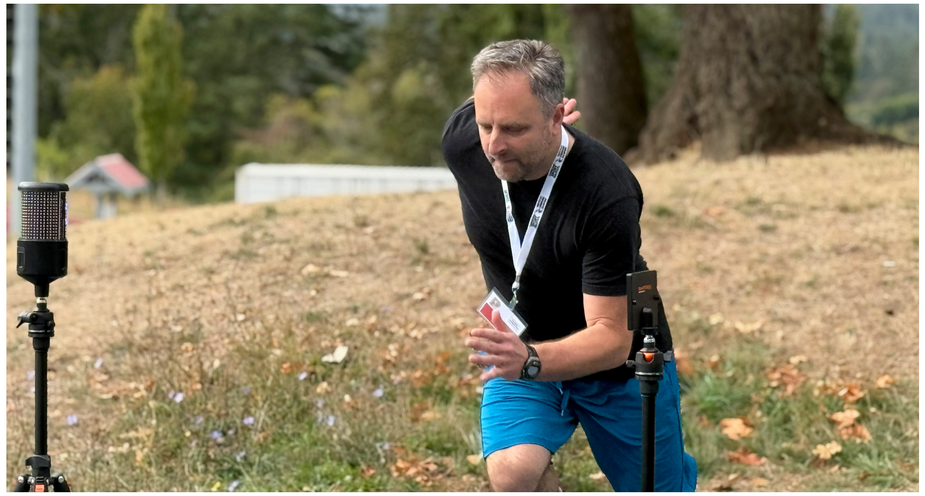
How do I improve?

To improve lower body power and address asymmetries, incorporating strength exercises that emphasize explosive movements and bilateral strength is essential. Plyometric exercises such as box jumps and drop jumps, help to develop the rapid force production needed for powerful movements like sprinting or changing directions. Additionally, integrating single leg exercises such as split squats and step ups, can address any imbalances between the legs, reducing asymmetry and enhancing overall performance. This approach is effective for athletes at all levels, from recreational participants to elite competitors.

How do I compare?

The following scores are for BC Diving, comprised of provincial-level athletes, generally in the 15-30 age range. We have compared here against the general adult population.

	Height (cm)	
Comparison	Female	Male
BC Diving (ages 15-30)	40.7	67.8
General Population (adult)	29.93 (± 6.28)	30.24 (± 6.79)



HIGH PERFORMANCE FACT

Elite sprinters often reach speeds of over 40 km/h in less than 4 seconds. Team Canada's gold medal winning performance in the 4x100m relay in Paris 2024 was highlighted by Andre De Grasse's impressive anchor leg, completing his 100 meters in 8.89 seconds.

10 METRE SPRINT

*The 10m sprint measures **short-distance acceleration** - how quickly someone can reach top **speed** from a standing start. Unlike longer sprints, which reflect speed endurance, this test zeroes in on raw explosiveness and initial power. Starting in a sprint position, you will run as fast as possible over a 10m distance. We will use electronic timing gates to capture split-second accuracy. You will be given 2 attempts, and the fastest time will be recorded.*

Why do we do it?

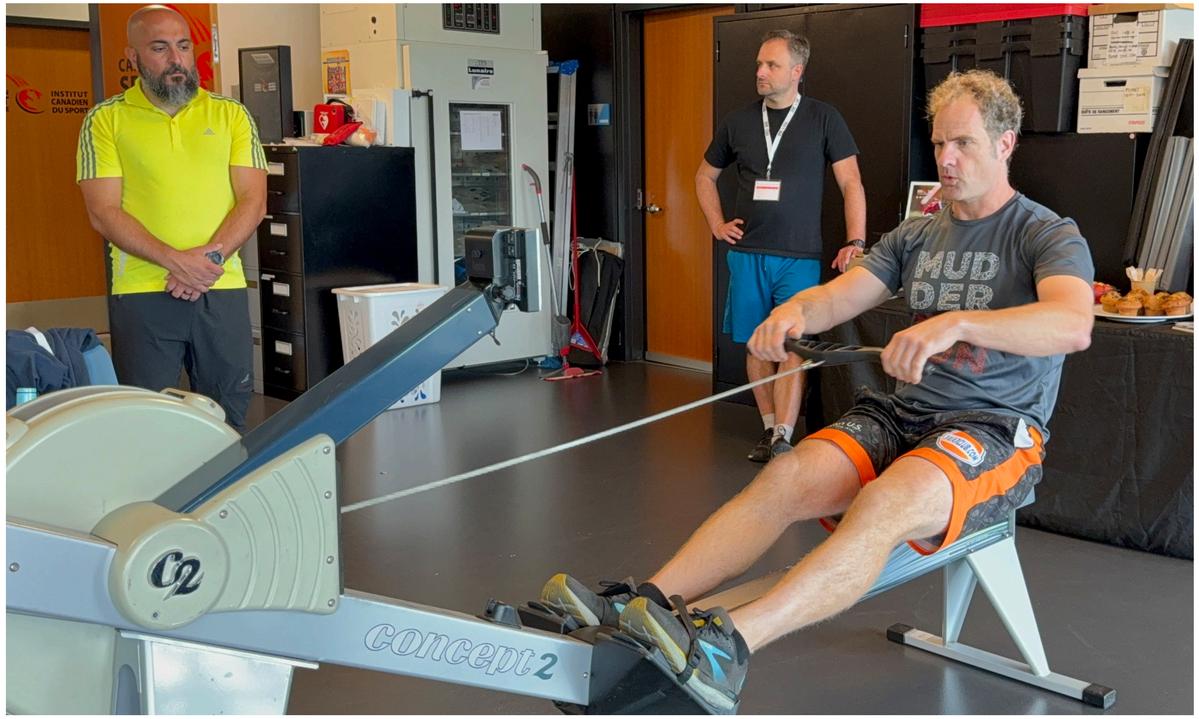
Acceleration is a fundamental part of human movement, whether it's reacting quickly on a sports field, avoiding a fall, or simply crossing the street with confidence. The 10m sprint test provides a fun, simple, and highly motivating way to measure speed and explosive power - and because results are timed down to fractions of a second, small improvements are easy to track. In Athletics, the ability to accelerate off the start line can decide a race. Even over 100m, the first 10m are crucial.

How do I improve?

Even for those not training to be elite sprinters, improving short-distance acceleration can have meaningful benefits for overall power, coordination, and functional movement. Practicing short sprints of 5–10 metres at maximal effort, with full recovery between repetitions, helps the nervous system fire more efficiently. In addition, developing lower-body strength through exercises such as squats, lunges, step-ups, and deadlifts builds the muscles that drive explosive movement. With just a few focused sessions per week, you will see noticeable improvements in your sprint speed.

How do I compare?

Comparison Group	Female	Male
Elite	1.8-2.0	1.6-1.8
Well-trained	2.1-2.3	1.9-2.1
Average	2.7-3.1	2.4-2.8



HIGH PERFORMANCE FACT

In the rowing 10-second peak power test, elite rowers can produce over 1,000 watts - that's about the same power needed to run a small microwave or briefly light up an entire row of stadium floodlights. It's like turning your body into a human power plant for 10 seconds!

ROWING 10 SECOND PEAK POWER

The Rowing 10 Second Peak Power Test is a short-duration, high-intensity assessment designed to measure ***maximal anaerobic power and force production capabilities****. This test is typically performed on a Concept2 rowing ergometer. Following a technical demonstration, you will have about 5 minutes to familiarize yourself with the rowing stroke. When ready, you will row as hard as possible for 10 seconds. The highest power output achieved during the 10 seconds is recorded.*

Why do we do it?

The 10s peak power test provides invaluable insights into an individual's anaerobic power, which is crucial for various functional movements in daily life and workplace activities. Improving peak power can enhance overall physical performance, reduce the risk of injury, and increase energy efficiency during short bursts of activity. For elite level rowers, this test is essential for evaluating the anaerobic power component of their performance profile. Peak power is a critical determinant of performance in rowing, especially during the initial phase of a race where explosive power is required.

How do I improve?

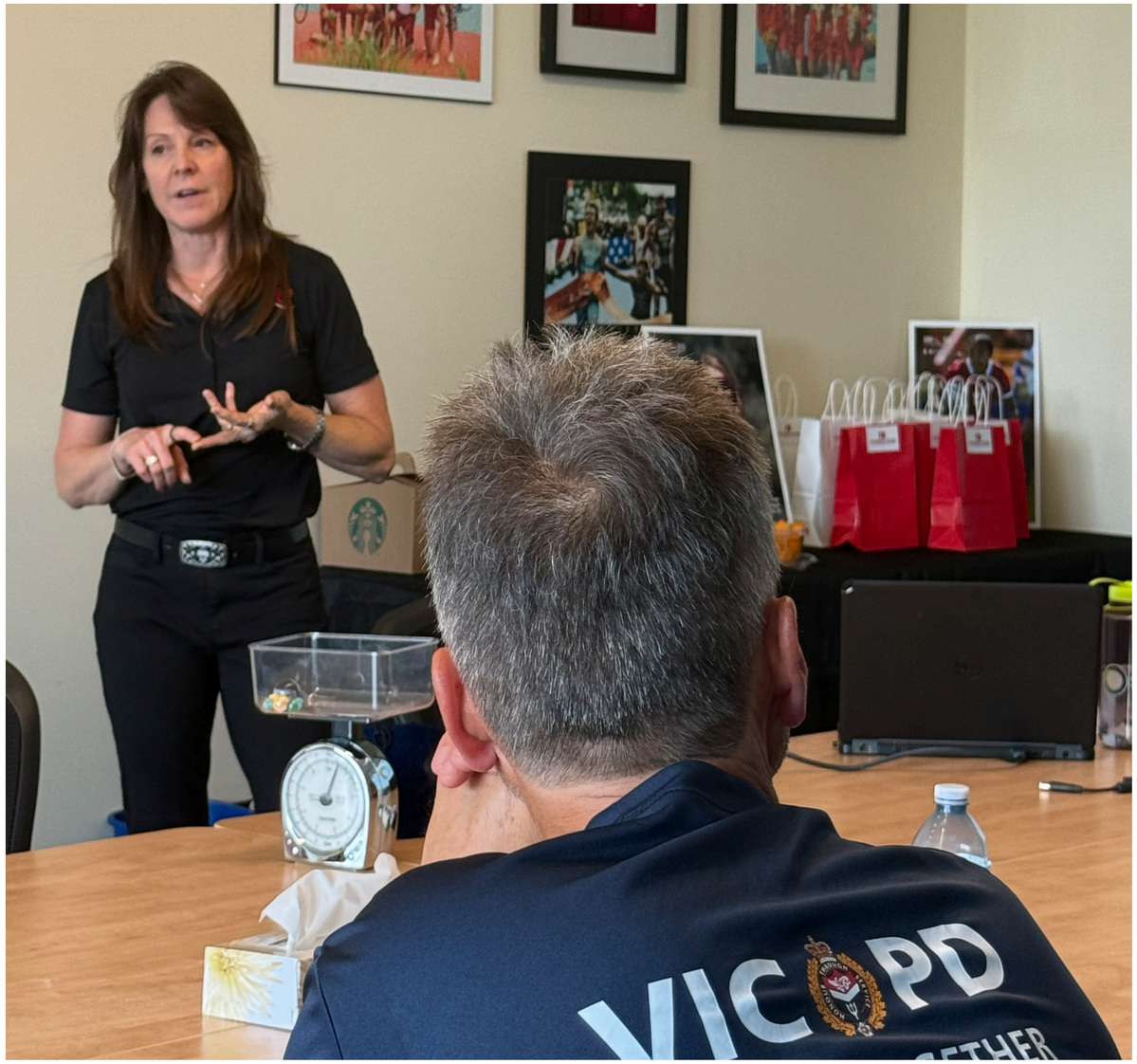
Improving peak power involves engaging in exercises that enhance both strength and explosive power. Incorporating resistance training, such as squats, lunges, and deadlifts, can build the necessary muscle mass and strength. Plyometric exercises like box jumps, kettlebell swings, and medicine ball throws can improve the rate of force development. Completing these sessions about two times a week will help you improve your peak power which should also ideally result in an increased 2k performance.

How do I compare?

Power (Watts)

Comparison	Female	Male
Elite Athletes	681 ± 71	892 ± 131

* data from female athletes is limited to five athletes



MENTAL PERFORMANCE

Just like how our Mental Performance team help athletes excel under pressure, build resilience and optimize focus, these skills can also apply to the corporate world. Our certified experts can offer tailored support in goal setting, self-regulation, team culture and recovery, empowering professionals to perform their best on a daily basis. Choose from a variety of topics including:

Stress/Emotional Regulation

Part of being a high performer in the workplace involves coping with difficult conversations, major decisions, and your own mental well-being. Prepare like an athlete for the big moments in your career.

Culture of Excellence

Whether teams are deliberate about creating a culture or not – they're going to have one. Learn tips on how to intentionally contribute to an environment that works to foster both people and performance.

Emotional Intelligence

Team dynamics are everywhere – not just Olympic & Paralympic teams. Learn foundations of Emotional Intelligence and how you can level up these skills to make better decisions, communicate more effectively and overcome challenges.

Recovery

Sport recovery isn't just about physical repair -it's crucial for mental performance as well. Proper recovery helps reduce stress, improve focus, and enhance decision-making, allowing athletes to perform at their best under pressure. Rest, relaxation, and mindfulness techniques can prevent burnout, boost motivation, and support overall mental resilience.

NUTRITION

Our expert sport dietitians can cover a wide range of topics essential for enhancing day-to-day corporate and personal performance. From optimizing daily training nutrition to nutrition tips for shift workers or nutrition while on the road, hydration strategies, grocery shopping and meal planning and mindful eating, our sessions provide comprehensive guidance for all professionals. By addressing key aspects of nutrition in a supportive group setting, professionals gain valuable knowledge and practical skills to optimize their dietary habits, ultimately elevating their performance in and out of the boardroom.

Choose from a variety of topics including or customize your own presentation:

Top 3 Things We Tell Athletes That Apply to Everyone

We will let you in on a few secrets that are at our foundation of our performance nutrition pyramid. These 3 nuggets may shock and surprise some. A sneak peek inside the building blocks of performance nutrition.

Blend and Go Masterpieces

Fast, convenient, and packing a huge nutrient punch are the blended feeding options. Athletes incorporate these blended masterpieces any time of the day and anywhere. Learn some of the tricks of the trade at making these beauties. Take away some fresh ideas on the classic smoothie.

SPORT INSTITUTE NETWORK

RÉSEAU DES INSTITUTS DU SPORT

Canadian Olympic and Paralympic Sport Institute Network (COPSIN)

Elevating Athletes. Powering Performances.

We are the trusted team behind Canada's Olympic and Paralympic athletes.

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