PEAK PERFORMANCE
TRAINING CENTER

5 TIPS

TO BECOME A MORE

DURABLE ATHLETE

PEAK PERFORMANCE CARE

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About the Author

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FOUNDER - PEAK PERFORMANCE CARE

Ellora Maggs is a Doctor of Physical Therapy, a Board Certified Orthopedic Specialist, and an instructor for several healthcare and fitness seminars across the country.

Our philosophy at Peak is that your body is meant to move and be active and we are here to help you optimize that movement for a vibrant and healthy life. From 15+ years of experience training athletes, Ellora has tremendous faith and optimism in your body's ability to adapt and heal itself. Ellora sees coached training as a stepping stone to give her clients back the confidence they need to live the healthy, active lifestyle they deserve. No two client pathways are identical, and Ellora's unique background with a wide array of experiences enables her to find the best pathway for you to optimize your health and fitness and achieve all of your goals.

Dr. Maggs is an instructor for Active Release Technique (ART), the Selective Functional Movement Assessment (SFMA), The Running Clinic and StrongFirst. She also has full certification from the Titleist Performance Institute, which is the medical and fitness wing of the famed Titleist Golf organization. This collection of expertise in hands-on treatment skills, movement assessment, motor control retraining, higher level fitness and strength training allows her to adequately assess, protect and then challenge each patient to allow the body's natural adaptation process to thrive. Additionally, this wide range of experience gives her a unique perspective on how to guide her patients from the lowest functional levels to the highest-level performance in sport and life. She can't wait to help you along your journey to get the lifestyle you've always wanted!

Welcome to the Peak Performance Training Center!

If you're reading this, you're likely already involved in some sport or activity that you're passionate about, and you want to know what you can do to optimize your performance, and limit the chances of getting hurt or falling behind.

What exactly do we mean by being a durable athlete?

It means you can work hard, recover well, and have done everything possible to limit injury risk (we can't prevent all injuries… but we certainly can control your risk of getting the silly preventable ones!).

Being durable also means you're tough enough (in body and mind) to get knocked down and then get up again ready for another round.

We know what it takes to develop athletes from the ground up, and our team has everything you need to succeed. We've got your back!

So happy reading - If this makes you want to learn more, there's a lot more that we can share with you to help you along your path.

Simply get in touch and we'd be happy to help you further.

Get in-touch!

Tip No. 1

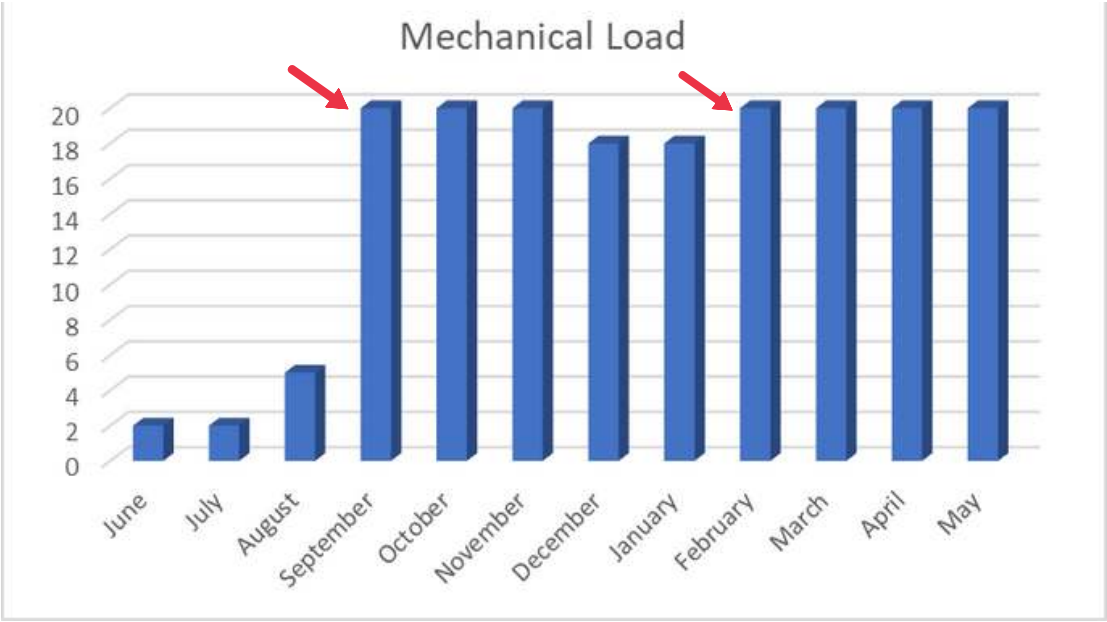
CONSISTENT TRAINING LOAD

No off seasons for your body, just periodized training rhythms

Keep your body strong all year long, and strategically place your off-seasons to allow tissue recovery (and mental recovery) without losing physical fitness. This might look like cross training with varying sports through the year, but there's a more nuanced way to look at it (see the graphs below). Now don't read this and think that we don't advocate a week off from time to time to recover from a big athletic push (such as a prolonged post-season with high intensity leading to the final push in the Championship tournament). Rest is incredibly important for the psychological factors in sports. But the worst thing you can do is to have a yo-yo of physiological load on your bones/muscles/tendons and joints. It's better to gradually scale back and gradually scale up through the season as needed compared to sudden shifts of load.

If you looked at your training load graphed on paper, would you think it looked healthy?

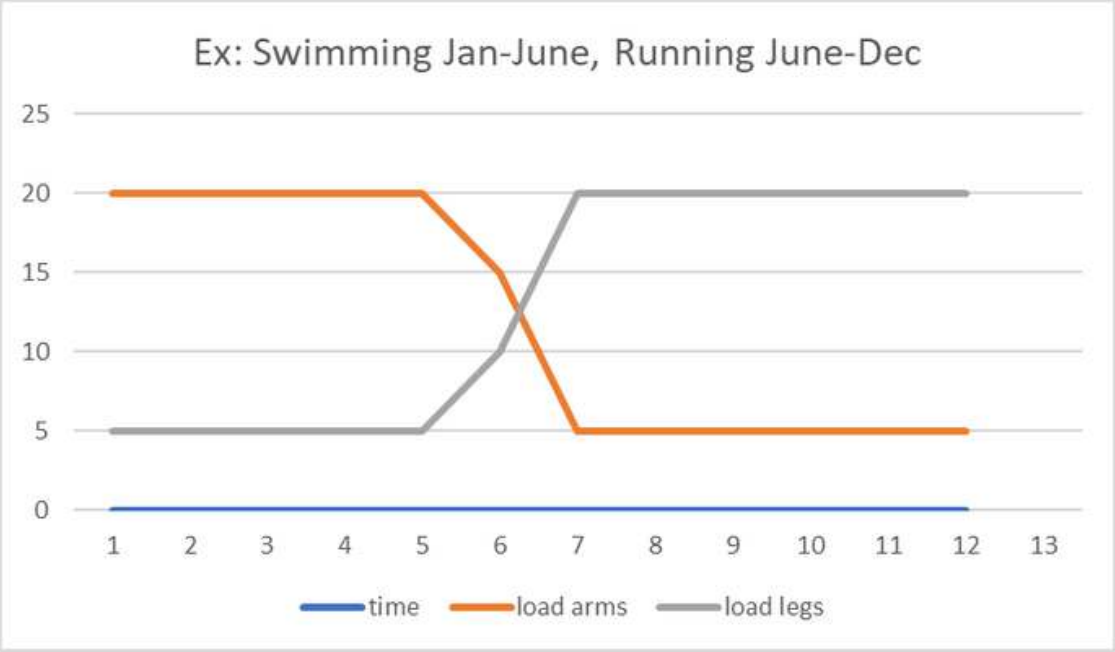
Here's a typical high school athlete who plays 3 seasons of school sports (volleyball in the fall, basketball in the winter, and track and field in the spring). Then over the summer they stay active but don't have any organized sports or training program.



Tip No. 1

Where are they most likely to develop an injury? Where the red arrows are, because this is where the training loads make an abrupt shift (from one sport to another, OR from 1 off-season/rest period to a more intense training period. In this case, we would recommend making sure the holiday/winter break and summer break off seasons are supplemented with some form of consistent training to keep the body's capacity at a higher level.

How are different sports different?



We looked at swimmers and runners here because they represent extreme examples. But remember that ALL sports have specific tissue demand, so even a change from volleyball to basketball can be an abrupt change for your body. You can address ALL of these nuances with a strategic cross training plan, and we're happy to help so you can be successful this year!

Tip No. 1

The body will adapt, which can be a good or a bad thing.

Check out this fun video that our very own Dr. Maggs made to explain this concept

Click here to watch!

It might seem counterintuitive to think that you want consistent load all year round… doesn't the body want and need some rest?? In some ways, yes but most injuries and durability issues come from changes in the season when the training loads spike after a low period/off season. So it's important to make sure your off-season isn't weeks/months of relative rest. If this is what your off-season will look like, simply plan on a much longer ramp up into your athletic season to avoid injuries.

Make a plan, don't wing it

Strategic athletic planning is something we do everyday in our office. Meet with an expert who can listen to YOUR goals, hear YOUR unique life/sport needs, assess YOUR body's capacity, and make a customized plan to let you focus on your training with the confidence that you're nailing this key variable in becoming a durable athlete!

Tip No. 2

ADEQUATE SLEEP

Quantity matters

What's the difference between 6 vs 8 hours of sleep?

Well, as it relates to injury risk you'd be horrified to know that these 2 short hours of sleep missed makes you 2X more likely to get injured during your season (specifically 70-120% greater chance of sustaining an injury, depending on the study). And the 1st step in being a durable athlete is to stay on your training plan and avoid being injured.
https://pubmed.ncbi.nlm.nih.gov/30888337/

WHY IS SLEEP SUCH A BIG DEAL WITH INJURIES?

Think about all the magic that happens when you sleep… All the microtears in your muscles from yesterday's training load get repaired (or partially repaired) as your body does the construction work at night. Sleep is also critically important for your hormone regulation, and if your hormones aren't optimized your performance can suffer (or things can just feel harder). And perhaps most importantly, sleep is essential for your body's anti-oxidant pathways. All that hard work from your training creates a LOT of oxidative stress, and while you're sleeping your body is busy quenching that oxidative stress and neutralizing those compounds so they can't create tissue damage.

So all in all, limited sleep = limited recovery, which leaves you vulnerable to gradually overloading the tissues during training and competition, and ultimately leaves you more vulnerable to injury.

Quality matters

Sleep quality is more complicated than just "did you fall asleep and stay asleep" (although that simplistic question does tell us a LOT about your sleep quality!). Consider the rhythm of your sleep schedule - do you often go to bed and wake up at the same time, or is it highly variable? A more variable schedule makes it harder for your body to consistently recover.

Is your sleep/wake schedule in line with the normal path of the sun? (ie you go to bed shortly after sunset and wake up near the time of the sunrise?). If so, you are making it easier for your body to keep the hormone cycles in a predictable and healthy pattern, so keep it up!

Bottom line = your circadian rhythm is essential with regulating your hormones, and therefore is critically important to your athletic performance and recovery.

So now that you know all of this…

"What would it take to optimize your sleep for athletic performance?"

If this involves some lifestyle/behavior changes, is it worth it to you?
If you know your sleep habits are working against you, do the best you can and optimize the rest of the variables to buffer against this durability variable.

Tip No. 3

ADEQUATE PROTEIN INTAKE

Why protein?

Protein is made up of amino acids, and when you eat protein it gets broken down into these amino acids, which can be used by any tissue in the body for repairs, building stronger tissue, and other essential functions. Of the 3 types of macronutrients in our food (Protein, Fat, and Carbohydrates), protein and certain types of fats are the only ones we actually NEED to get from our diet. There are daily minimum amounts of protein needed to exist as a human, and these minimums assume you're a couch potato doing basically the bare minimum of activity. If you're reading this, I know that's not you! SO it's critical that you exceed these dietary minimums if you want to be a durable athlete.

Why might athletes need more?

Since as an athlete you are consistently pushing your body in training, there is a constant tissue breakdown occurring with your training. This breakdown is happening in your muscles, bones, tendons, ligaments and joint cartilage - and all of these need repair in order to get stronger with your training (rather than gradually getting weaker). You need to make sure that your body has enough raw materials (ie amino acids and protein) to supply the building projects of recovery happening all over your body (while you sleep, see above!).

A big part of being a durable athlete is your ability to recover, and protein is the single most important dietary component to get right to facilitate your recovery.

This topic has been heavily studied in the medical literature, and our very own Dr. Maggs compiled an awesome video to explain what the minimum requirements are and how and why daily protein requirements go up for athletes and those recovering from an injury.

Click here to watch!

Tip No. 3

COMMON PROTEIN SOURCES AND HOW MUCH PROTEIN YOU ACTUALLY GET

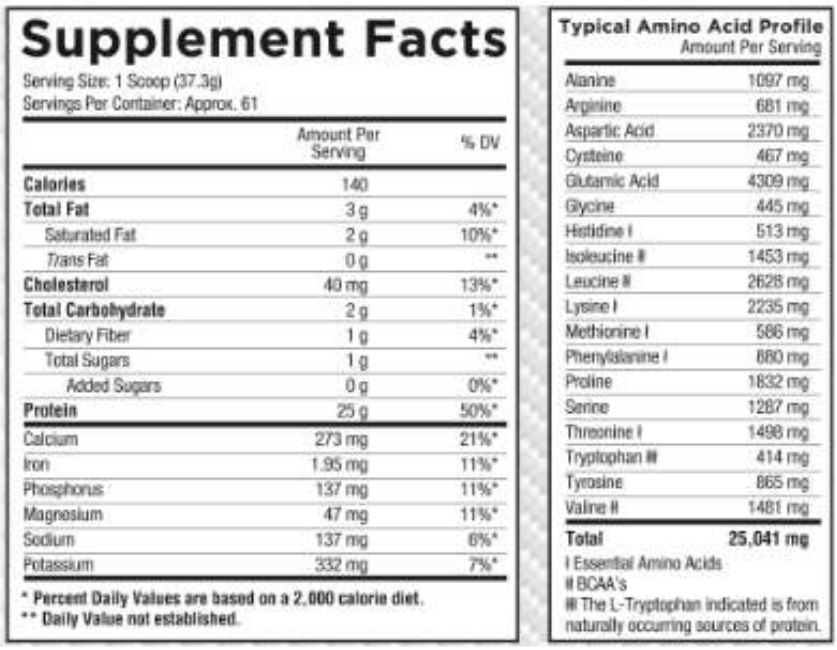
Source	Grams of Protein
6 oz chicken, steak, turkey (in order of max protein → least protein)	50-56 g
6 oz tuna, salmon	44 g
3 oz shrimp	20 g
6 oz Greek yogurt (regular yogurt)	18 g (regular = 11 g)
4 oz cottage cheese	14 g
½ cup pinto beans (all other beans a bit less)	11 g
½ cup Quinoa	4 g
1 oz nuts/nut butter (walnuts and cashews have the lowest at 4g)	6-8 g
1 oz cheese	6 g
2 scoops whey protein isolate	33 g

Tip No. 3

What about protein supplements?

Oh boy, this topic could be an entire book in and of itself! There are countless supplements on the market, and this supplement market is NOT regulated the way the food industry is. So buyer beware… there's a LOT of false advertising (that eventually gets caught and prosecuted), and it's not readily apparent what brands are good and what brands are taking advantage of you. But here's what we've done: it's critical to find a brand that displays not only the Supplement Facts (legally required) but also the Amino Acid Profile (see pictures below) so you can judge the quality for yourself. Not sure how much you need? Get in touch with us so we can have a personalized conversation to optimize your performance.

PICTURES OF LABELS



Supplement Facts

Serving Size: 1 Scoop (37.3g)
Servings Per Container: Approx. 61

	Amount Per Serving	% DV
Calories	140	
Total Fat	3 g	4%*
Saturated Fat	2 g	10%*
Trans Fat	0 g	**
Cholesterol	40 mg	13%*
Total Carbohydrate	2 g	1%*
Dietary Fiber	1 g	4%*
Total Sugars	1 g	**
Added Sugars	0 g	0%*
Protein	25 g	50%*
Calcium	273 mg	21%*
Iron	1.95 mg	11%*
Phosphorus	137 mg	11%*
Magnesium	47 mg	11%*
Sodium	137 mg	6%*
Potassium	332 mg	7%*

* Percent Daily Values are based on a 2,000 calorie diet.
** Daily Value not established.

Typical Amino Acid Profile

	Amount Per Serving
Alanine	1097 mg
Arginine	681 mg
Aspartic Acid	2370 mg
Cysteine	467 mg
Glutamic Acid	4309 mg
Glycine	445 mg
Histidine I	513 mg
Isoleucine II	1453 mg
Leucine II	2628 mg
Lysine I	2235 mg
Methionine I	586 mg
Phenylalanine I	880 mg
Proline	1832 mg
Serine	1287 mg
Threonine I	1498 mg
Tryptophan III	414 mg
Tyrosine	865 mg
Valine II	1481 mg
Total	**25,041 mg**

I Essential Amino Acids
II BCAA's
III The L-Tryptophan indicated is from naturally occurring sources of protein.

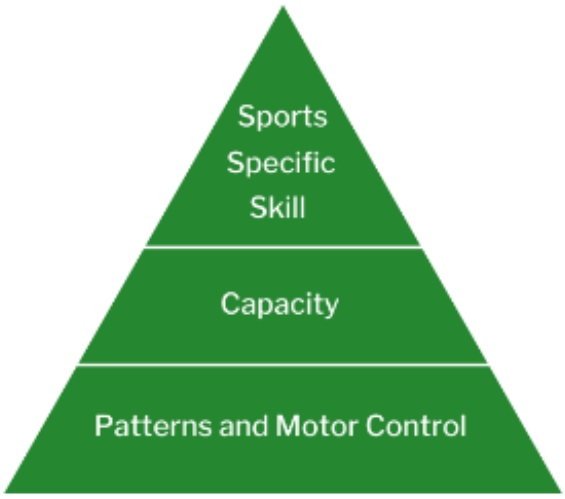
We spent 6 months vetting various companies as we selected which products to sell in our office. As a fellow athlete, we're happy to help save you the time and extend an introductory offer…

Mention this guide for 15% off your 1st order of protein supplements!

Tip No. 4

OVERSHOOT YOUR CAPACITY NEEDS

Athlete pyramid - build capacity on a strong foundation



If you're spending 90% of your training time on **sport-specific skills**, you'll inevitably become a top-heavy pyramid. **This is the best way to get injured!**

It's important to build a strong foundation, then maintain your base athletic capacity throughout the year. For each athlete this will look different, but the cornerstone philosophy is the same regardless of your sport or your age.

Do you need help understanding what PATTERNS are essential in your sport? Do you feel confident knowing how to build CAPACITY within each of those patterns?

If you're less than 100% confident in this, we're here to help. Simply get in touch to let us know where you need guidance.

Learn more!

Tip No. 4

Training should prepare you for MORE than what you're actually going to do

Our job in the gym is to make you stronger, fitter, faster and more agile than you'll ever NEED to be in your sport or activity. That way, when the toughest situation arises out there you know you're strong enough to handle it and you can rely on your confidence for added mental and physical strength.

An important part of being a durable athlete is knowing how to push yourself hard in the gym without inadvertently harming yourself or making your tissue weaker. This is where we can help - an extra set of eyes and ears can help you interpret what your body is telling you, and you can learn to use that feedback to calibrate your training intensity.

Adequate volume can actually be protective against injury

Does it surprise you that we actually recommend MORE training than you need? Are you used to experts and professionals telling you to back off?

We see the body differently, and we'd love the opportunity to show you what we mean:)

But for now, here's an interesting study done on runners.
Study link: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1756136/

The bottom line is that runners who had MORE weekly volume actually had fewer injuries through the season. This basically throws the 'wear and tear' idea out the window, so long as you're training with a strategic focus and listening to your body. The reason this works is that by training more (and doing it well), you're actually building more resiliency and capacity in all your tissues. This helps you become a more durable athlete!

Our bottom line advice is this - if you are building your volume of training, you must do it gradually, and you must listen to your body and know what warning signals to look out for. If you're interested in learning more about this, just get in touch!

Learn more!

Tip No. 5

BE EXCELLENT AT MANAGING PSYCHOLOGICAL STRESS

Grit and mental toughness for stress and pressure within your sport

No matter how strong of an athlete you are, if your weak link is in your confidence or your ability to be mentally tough when things aren't going your way, your competition can smell that a mile away. It's critical to know how you think and behave under pressure, and even more important for you to learn your BEST way of overcoming that pressure. This is not a cookie-cutter strategy, just because something has worked for your friend doesn't mean it will work for you. Sports psychology is a specialty in and of itself and we can help you identify if that has become your weakest link. Your grit is directly related to your success as a durable athlete. Develop this with the same intensity you develop your strength and you'll do just fine:)

Coping mechanisms for stress unrelated to sports

It's no secret in the clinical world that psychological stress is highly correlated with injuries. In fact, in a recent study they found that psychological stress was the #1 predictor of low back pain (more than prior injuries, MRI confirmation of disc or other injuries etc). How you manage (or mismanage) your stress has a big impact on your durability as an athlete. External stress can come from school or work deadlines, relationship stress with family or friends, or any number of other variables impacting your life at the time. Your ability to acknowledge and deal with stress in a way that keeps you optimistic and positive has a huge impact on your ability to regulate your hormones and recover from your training cycles.

Competitive edge with the ability to move onto the next point/next hole/next game

Have you ever had a total screw-up where you hit/kicked the ball way off, missed a gate on your skis, tripped and fell at a crucial moment and you just can't believe you made such a stupid mistake?? Yup, we've all been there. The best athletes in the world can learn from that missed opportunity and move on quickly. Don't get stuck in that moment. Acknowledge it for what it is then move on. If you need to spend time reviewing that mistake later so you don't make it again, allow yourself that time. But don't let your mistakes pull your focus off the task at hand when you're in competition. If you know you could benefit from some strategies to improve your mental toughness and emotional control during competition, reach out to us and let us know how we can help you.

Our team has experts in overcoming bad habits and would love to help you overcome yours!

Learn more!

Disclaimer

The information in this report is strictly for educational purposes and is not intended to be prescriptive in any way.

All efforts have been made to encourage individual evaluation for personalized recommendations, and otherwise resources have been recommended for the reader to gain a broader perspective before implementing any ideas presented here.

We strongly recommend all readers get medical clearance from their doctor before implementing any tactics relating to their health and wellbeing.

For any individuals with pain or a current injury, it is impossible to give a 100% complete accurate diagnosis and prognosis without a thorough physical examination and likewise, the information given for the management of an injury cannot be deemed wholly precise in the absence of this examination from one of the clinicians at Peak Performance Care.

Significant injury or health risk is possible if you do not follow due diligence and seek suitable professional advice about your injury or illness.

No guarantees of specific results are expressly made or implied in this report.