

Welcome to a resource that will help you unlock the world of sports health. In this handbook you will find some top tips from industry experts on how to perform and recover better. It will give you a deeper dive into how to get involved in each profession.

As you read our handbook, keep these thoughts in mind...

Am I practicing any of these strategies already?

What is getting in the way of me doing these things regularly?

Looking forward, how can I make plans to ensure that I am maintaining good habits?

All in this Together

Optimal sporting performance comes from collaboration between ALL parties

Sport coach
Strength coach
Athletic trainer
Doctor/Surgeon

Physical therapist
Chiropractor
Nutritionist
Mental skills coach



Registered Dieticians are nutritional experts who have been trained in using food as fuel. Use these tips to prepare, perform, and recover

Drink at least half of your body weight in ounces of water

This is the minimum amount of water you'll need to stay properly hydrated. Drink even more during the hot days of the summer.

For exercise in hot conditions or exceeding 60 minutes be sure to drink a beverage with sodium and carbohydrates during and after completion. Use a water bottle to teach yourself how much water you need.

Example: an athlete weighing 140 pounds should drink AT LEAST 70 ounces of water a day. (140/2= 70)

Eat every 2-4 hours

Its as simple as that. Whether you're snacking or having a full meal, eating this often will ensure that you are giving your body enough nutrients and within manageable times for your body to process them. Start eating within the first two hours of waking up. As a high-schooler your body is continuing to grow and mature. This adds to your body's daily energy and nutrient needs.



Meal Components

Starchy Carbs, Fruits, Vegetables, Protein, and Fats will make up anything you eat. Keep these in mind when getting food or making food for yourself. Starchy carbs, fruits and fats will provide you with the most energy so use them more or less depending on if you're very or not very active. You should have a source of protein at every meal. A proper serving of protein should be at least the size of your fist. A variety of fruits and vegetables should be eaten daily and they will help your body recover.



Have a snack 60 minutes before you play

Give your body some quick fuel before training and games. You should feel more able and energized when you incorporate snacks into your routine.

A banana, PB&J, granola bar, some cereal, cheese and crackers are some examples. You should shoot for a snack with 30-60g of carbs. Try to avoid any foods (spicy, fatty, heavy) that might upset your stomach before or during training.

Get some protein within an hour of finishing performance

Whether you're having a meal, protein shake or a protein bar, make sure to eat at least 20 grams of protein after finishing your training or game. Animal or soy-based proteins provide the highest quality protein for muscle growth.

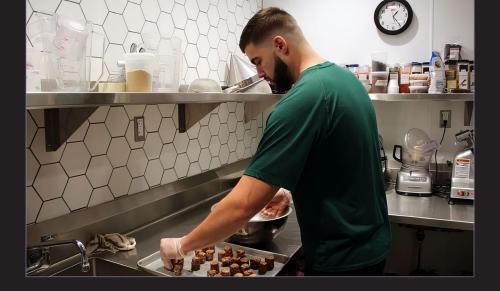
Rehydrate after you train

Make sure to have a sports drink or some water after you finish exercising to rehydrate your body. If you're playing in hot, humid weather make sure to have electrolytes (most importantly salt) in the fluids you drink when you finish.





How to Become a Sports Dietitian (RD)



Do you enjoy sports, cooking, health science and culture?

If so then this is an exciting career path you should consider!

Responsibilities of a Sports RD

- Coordinating and executing meals for a team and its staff
- Educating athletes about best foods to eat and how to supplement safely
- Understanding the nutritional value of a wide variety of foods and their relation to your body's needs

Road to becoming a Sports RD

- Pursue and complete a bachelors degree in nutrition
- Find a university that offers a Dietetic Internship
- Get experience as an intern with a collegiate or professional team

Links to Learn More

- How to become a Dietitian
- How to become a Sports Dietitian
- Collegiate and Professional Sports Dietitians Association



Strength and Conditioning coaches are specialists in injury prevention and maximizing your performance.

Use these tips to reach your full potential

Play your sport on its court or field

The weight room is important, but at no point during your games does the power rack get brought out for a lift-off. You must spend a large amount of time training in the surface that you play on.

Sprint FAST

Going for a long run is okay but the name of the game in sports is SPEED. You need to maximally sprint. Give yourself 1 minute of rest for every 10 yards of sprint.



Lift something heavy

Your body needs to lift something heavy (safely) for your tendon health.

Lift something light for a lot of reps

In order to grow your muscles, you need to place your muscles under tension for a lot of time. This will be done with higher rep schemes of 12-15 reps per set.

Lift something as fast as you can

Like with running, you need to learn how to contract and relax your body AS FAST AS POSSIBLE. Do this by lifting light weight swiftly for 1-4 reps per set.



Lift with a spotter

When lifting weight, be sure you have a safety spotter to help in the event you cannot lift the weight yourself. Having a spotter on each side of the bar is extremely safe and ensures each spotter will only have to help with half of the weight.

Use the safety bars/catches when training

When lifting for your lower body (squat, lunges, etc....) power racks have bars or catches that will stop the bar from hitting the ground in the event of an unsuccessful lift. Stay lifting inside of these safety catches.

Ensure bar is loaded correctly on both sides, put collar on

Ensure the bar is properly loaded with the same weight on both sides; many times people do not realize they made a mistake. Always double check. Lastly, make sure that the safety collar is on the bar so the weights do not slide off!





Need a degree in exercise science

Can be related field – kinesiology, exercise philology. You will most likely need a masters degree as well. Look for Graduate Assistant positions that will help pay for your education

Need to be certified

There are 2 governing bodies of strength and conditioning that will allow you to be employable – National Strength and Conditioning Association (NSCA) and Collegiate Strength and Conditioning Coaches Association (CSCCa). The NSCA certification is the CSCS, the CSCCa certification is the SCCC. The CSCS can be obtained in your senior year of college – the SCC requires 600 hour internship in addition to the exam.

Need real life experience

Once you have your degree and certification you are employable, but people need to know you are reliable. This means you will need to work for people so they can recommend you for positions. Your network is your Networth.

Links to Learn More

- Becoming a Strength and Conditioning Coach
- National Strength and Conditioning Association
- Collegiate Strength and Conditioning Coaches Association
- African American Performance Coaches Association



Keeping You Playing

Athletic Trainers use their skills to keep athletes on the field and court. Returning from injury is difficult, use these tips to help prevent injuries from happening or recovering once they occur

An ounce of prevention is worth a pound of cure

- Warm up for every workout. A movement based warm-up like biking or jogging help prepare the body to perform
- Gradually progress your activity-start slow and work your way into practice. Gradually increasing the load on your body will help it adapt
- Hydrated muscles are happy muscles-Hydration helps with heat illness and decreasing soft tissue injuries
- Rest when tired. Listen to your body and make sure to get enough rest. Sleep is when your body resets
- Supplement your sport specific practice with adequate strength training. Resistance training helps to increase your body's ability to perform
- Use tape, braces, mouth guards, helmets and other appropriate equipment. These devices and methods are specifically designed to help prevent injury

WHAT IS B.A.S.H?

The Baltimore Area Sports Health Initiative was founded in 2020 to advance the healthcare provided for athletes in the Baltimore area. The first organization of its kind, BASH is leading the way in growing the efficacy and accessibility of sports health through education, advocacy, and interdisciplinary collaboration.



Area Sports Health Initiative

www.baltimoreathletehealth.org













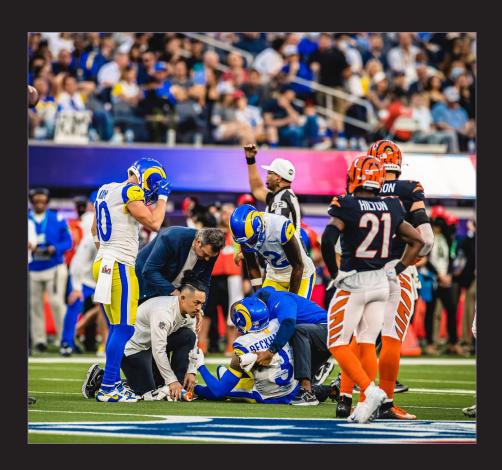
Follow us on social media at BaltAthHealth

Injury Recovery

PRICE Principles for injury recovery

If you are injured, seek advice from a medical professional immediately. On your way to the doctor practice **PRICE** Principles

- **Protect** properly protect the injury from further damage. Use of crutches or a boot can take days off of your recovery
- Rest avoid exercise and reduce use of injured body part
- **Ice** apply an ice pack, ice bag, or bag of frozen vegetables to the affected area for 20 minutes every two hours. Put a barrier between the ice and your skin
- **Compression** use elastic compression bandages to limit the swelling
- **Elevation** raise the injured body part above your heart, allow gravity to help you heal





An athletic trainer is an allied health professional who specializes in multiple areas of health care:

- Primary care
- Injury and illness prevention
- Wellness education
- Emergent care
- Examination and diagnosis

- Therapeutic intervention
- Rehabilitation of injuries
- Injury risk reduction
- Health care administration

Not only in athletics

Athletic Trainers are not only involved in athletics! Athletic Trainers are seen in military, hospital, industrial and clinic settings. Athletic Trainers are even working at places like Amazon to create safe work environments for factory workers.

Athletic trainers are not: water person, personal trainer, physical therapist

Athletic Trainers have foundational education on hydration and the proper balance of water and electrolytes

Athletic Trainers have foundational education on strength and conditioning principles. Many Athletic Trainers further their education and have certifications including CSCS (Certified Strength and Conditioning Specialist), PES (Performance Enhancement Specialist) and CES (Corrective Exercise Specialist)

Links to Learn More

- Become an Athletic Trainer
- Towson University Athletic Training Education Program
- Frostburg State University Athletic Training Education Program
- National Athletic Trainers Association

Movement is Medicine

Physical therapists are movement experts who improve quality of life through exercise, care, and education.

Physical therapy patient population

Physical therapists are able to diagnose and treat people of all ages, from newborns to senior citizens. Many patients get referred to physical therapy because of an injury, but PTs also care for people who want to live a healthier lifestyle and prevent future problems.

Physical therapists work closely with surgeons

After surgery physical therapists are in constant communication with the surgeon on how the patient is progressing. Physicians have strict guidelines that PTs use to help the patient recover.

Stick to the plan

Physical therapists examine each person and use set protocols to develop a treatment plan for their patients. Physical therapists can have a life changing effect on their patient's lives. They help the, achieve fitness goals, regain independence, and lead active healthy lives.

■ Wide skill set

Physical therapists' skills include:

- Gait training
- Normalizing range of motion
- Strengthening
- Myofascial release
- Manual therapy
- Edema/swelling control
- Functional rehabilitation





Physical Therapists can work in

- Private practices
- Hospitals
- Schools
- Sports and fitness facilities
- Private practices
- Home health agencies
- Outpatient clinics
- Inpatient rehab facilities

Dual credentialed professionals

When working in athletics physical therapists can work at a high school, university, or professional team. Traditional physical therapy education does not include acute care or emergency medicine, taping, and other specific skills. To fill the education gap you can earn both PT and AT credentials. These professionals are considered AT/PT, or "dual credentialed."





The field is evolving

The gold standard degree is the Doctorate in Physical Therapy. Typically takes 3 years. Class content includes anatomy, cellular histology, physiology, exercise physiology, biomechanics, kinesiology, neuroscience, pharmacology, pathology, behavioral sciences, communication, ethics + values, management sciences, finance, sociology, clinical reasoning, evidence-based practice, cardiovascular and pulmonary, endocrine and metabolic, and musculoskeletal.

Roughly 80% of the DPT curriculum is classroom and lab study and the remaining 20% is dedicated to clinical education.

How to get in to DPT school

- Most DPT programs require applicants to earn a bachelor's degree prior to admission.
- However with the trend in academics more education typically provides an advantage Masters are suggested.

Links to Learn More

- Become a Physical Therapist
- Morgan State University Pre-PT Program
- American Physical Therapy Association



STRESS + REST = GROWTH

Your body needs (physical) stress and rest in order to improve. If you skip one or the other, you will not be able to train at your best.

STRESS + NO REST = OVERTRAINING

If you only train hard and don't rest (recover) with 7-9 hours of sleep daily, and good nutrition habits listed above, you are at risk for an injury from overtraining.

NO STRESS + REST = UNDERTRAINING

If you only rest and never actually train hard, your body will not be prepared for the stress of your sport, and you are at risk for an injury from being under trained.



CLOSING NOTEFOOD FOR THOUGHT

BASH was built on the idea of collaboration.

Our members work together by contributing their expertise and thoughts in order to bring you this content. We would like to ask you how you can actively collaborate in your team setting!

What does collaboration look like to you?

When is it difficult to work with others? How can you overcome that?

How can you bring your idea of this to life in your sport?

How can you inspire others to work together?



www.baltimoreathletehealth.org











