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THE HEALTHY TEAM

READING THE BODY: PRO-ACTIVE MEASURES
FOR AN INJURY FREE SEASON

FITNESS TESTING AND BALANCE

EXERCISES

NUTRITIONAL GUIDANCE

Coaches Clinic
National Scholastic Sports Foundation
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Introduction

What are we looking for when we assess someone's fitness and what are we seeing when we do a "body read" on an athlete? What are the signs of imbalance from a structural, muscular and fitness point of view? And what are the likely culprits; what everyday mechanisms trigger imbalances and how are they exacerbated by sport?

These are the questions and it is our intention to provide you with some ready answers, tools that will help guide your team to a healthy and injury free season.

We will start out by looking at the how, as in, what creates a physical imbalance, apart from a traumatic event. We will follow up with the "body read" and how to perform it yourself, and finally we will give you some exercises that will help put your athletes on track if you will, for a core-centric, high level of fitness and while we are at it, we will throw in some helpful hints about nutrition, working with athletes with learning challenges, and most importantly how to build the self-esteem and self-worth of your team without tearing them down in the process.

It is all about having a positive influence in the development of responsible, self-reliant and self-confident individuals.

Everyday Triggers for Imbalance

It is the everyday influences (call them stressors) on our body that throw it out of balance. We spend long periods of time in a seated position, we have our computers on the bed, we sit cross-legged looking down into our laptop, we have poor posture, a lot of it nowadays brought about by walking while "texting," slouching in our seat as we sit through another endless lecture...the hip flexors tighten and as the glutes and hamstrings are not used nearly as much as the quads, the pull of these muscles in their tightened condition, directly affect the pelvis. The pelvis pulls downward causing the back to arch. The back is arched and the shoulders are slumped forward, knees are hyper-extended or the back is arched and the shoulders are pulled back, the heels barely touch the ground; the quads are over-developed in appearance. Everyone, (including girls these days) sits with their legs akimbo (as our grandmothers used to say). We lean on one hip, we sleep on our sides with our top leg looped over our bottom leg or on our stomachs. We over use our outer quads, and under use our inner quads.

Practically speaking, these factors, including leaving out the warm-up because practice got started late, create weakness in a muscle group. When a muscle group becomes weak, other muscle groups compensate and an imbalance takes shape.

Signs of Imbalance

Imbalances are often easily identified because of outward appearances. Poor posture, for example, is easily seen. Someone with overdeveloped chest muscles has imbalances relating to the back muscles and can also be easily identified.

Stand naturally, arms at the sides. In this position, your hands should be facing the outside of your thighs. If your chest is overdeveloped in relation to your back, your palms will be rotated inwards-because your shoulders are rotated inwards. Whether your posture is poor or you have been working your chest and not your back, the view will be the same. In extreme cases, the palms will be facing behind you.

What is a Muscle Imbalance?

A muscle imbalance indicates an inequality exists within the muscles that oppose each other that are out of proportion. A muscle imbalance is the relationship between strength (tone) and length around a joint. The muscles are arranged in groups of "mobilisers" and stabilizers. A classic example of imbalance, and the most common, is the disproportion of the abdominals to the back muscles.

Conditions that Result from Muscle Imbalance

- Ilio-tibial Band Syndrome
- SI Joint Syndrome
- Sciatica
- Frozen Shoulder
- Knee Pain
- Patellafemoral Pain
- Anterior Cruciate ligament Injuries
- Hip Pain
- All forms of Back Pain
- Ankle Pain
- Achilles Tendinitis

Core Muscle Strength and Stability Test Standing Stork Test

The objective of these two evaluations is to monitor the development and the improvement of an athlete's core strength and endurance over time. It is a great way to get athletes to keep a log and to see how far they have come. It also helps build their self-confidence and self-esteem to see their progress and to hold themselves accountable for their log entries.

See Hand-Out for Core Strength Test

Standing Stork:

Standing on one leg with hands on hips and feet in neutral position,
Raise the other leg with knee bent and toes pointed to the inside of knee.
Rise up onto the ball of the foot of the standing leg and hold.

Excellent: Boys: 50 seconds Girls: 30 seconds

Above
Average: Boys > 50-41 secs. Girls > 30-23 secs.

Average: Boys > 40-31 secs. Girls > 22-16 secs.

Below
Average: Boys: 30-20 secs. Girls: 15-10 secs.

Poor: Boys: < 20 secs. Girls < 10

Gluteus Medius

Gluteus Medius abducts the hip joint, the anterior (frontal) fibers contribute to hip flexion and hip internal rotation and the posterior fibers aid hip extension and external rotation. It helps prevent the opposite side of the pelvis from dropping during the stance phase of gait and plays a vital role in providing frontal stability during walking (and running!).

What causes the Glute med to weaken and why is it so important to insure that it is strong?

Standing predominantly on one leg with the pelvis swayed sideways and the hip joint abducted weakens the glute medius. It is also weakened by sleeping on one's side with top leg adducted over the bottom leg in an elongated position for long periods of time.

Studies have shown that strengthening weak hip abductors and lateral rotator muscles relieve patellar femoral syndrome and Achilles tendon pain-especially in distance runners.

Gluteus Medius exercise hand-out

Consulting with one of the top strength coaches in New York, Yaniv Meirovitch who advises keeping the exercises simple and multi-purpose. He uses a 25 lb. Plate on the gym floor and standing hip width apart pushes the plate to the side and then brings both legs together. 3 sets of 5 reps with each leg and then he takes a smaller plate to work the adductor group (especially vastus medialis). This mimics Monster Walks, without the tubing. He also recommends the sumo stance in dead lifts as it fires the posterior chain, keeping the spine neutral.

Rhomboids

Rhomboids originate on the spine and attach on the inner portion of the scapula (shoulder blade). They are responsible for initiating many shoulder movements. They play a major role in drawing the shoulder blades together and are responsible for downward rotation of the shoulder blades and they assist in elevating the traps. The rhomboids and the lower lats are the most under-developed muscles of the back and therefore a major contributor to pain and shoulder instability.

In terms of developing overall strength and promoting muscle growth, nothing compares to the Pull-Up. Add Superman's, Pull-ups, Chins and Seated Rows into your team workouts.

Preparing an athlete is the major focus of this talk, hearing from former high-school athletes now competing in college often brings up what might have worked better for them and what they have learned. What comes up most often is this; "Coaches don't know how to train athletes for different events" "My injuries result from poor body mechanics during high-school" "Lack of nutrition" "Little or no Warm-up"

Learning Disabilities

Studies show that 10-15% of all school children are diagnosed with learning disabilities. They are of average or above average intelligence. Those with language and math disabilities may struggle to absorb and process certain information. Students who fall into this category can sometimes have problems with short term memory or developing strategies for learning and recalling new information.

An athlete with a learning disability may have trouble with the following:

- Trouble following directions
- May be unable to process data relating to numbers, times, sets, reps.
- May have trouble with written instructions

An athlete with attention disorder can have difficulty absorbing information because they can't listen long enough to get the entire message.

ADHD is an OVER ATTENTION to everything. Take extra care with communication.

VAK

Visual, Auditory, Kinesthetic

When teaching an exercise, demonstrate it visually and explain it in words. Then you must make sure that they physically carry out the movement correctly while you are there to help. Non-learning disordered athletes usually only need one set of instructions but the learning disabled needs the other two.

Give instructions one at a time

Repeat Information

Consider the Setting-ask them to repeat what you said and demonstrate but be careful, above all RESPECT their dignity. Bear in mind that you are not dealing with a small child.

A learning-disordered athlete is not a good reporter- so check in regularly. Some learning disordered are more sensitive to touch- slow down, verbally explain what you are going to do before you do it. Being injured may carry a greater impact. It is even more important to keep the athlete feeling connected to the team.

2 BIG RED FLAGS: Sarcasm and Yelling

Often learning disordered athletes take everything literally, they don't understand sarcasm. If a coach is yelling, they will often hang their heads.

A learning disordered athlete can be the most motivated, engaged, and helpful member of the team. They can be Leaders. All it takes is someone who cares and meets them where they are.

Nutrition Advice

Healthy eating is more about a pattern of behavior than individual foods. What we have mentioned year after year here at NSSF is the need to encourage, lead by example, a healthy and well-balanced lifestyle. The argument always lies in what is a good diet not just for athletes, but for everybody. It isn't as hard to eat healthy as we make it out to be. It requires us to stop, slow down, come to the table and eat.

Insuring that one gets enough of essential vitamins and minerals one must be including enough foods high in magnesium, fiber, lycopene, vitamin E, Omega 3 fatty acids, protein, and calcium.

Oh and by the way, none of these things are found in Coke or Diet Coke!

Instead of reaching for a bag of potato chips how about this little recipe for one of the healthiest things you can put in your body. I tested it out on my 8 men on Super Bowl Sunday, including 5 teenage boys! They loved them and were blissfully unaware of the health benefits.

Kale Chips

2 bunches of kale, or collard greens

Trim the main stem off and break the kale up into small pieces (not too small)

Set the oven to 300°F

Toss kale with a little (very little) olive oil, lightly salt

Place on cookie sheet and Bake for about 15 minutes (or until they become chip-like)

They won't lose their nutritional value and they taste great.

Tools Discipline for High Performance

Goal Setting

Every morning take 3-5 minutes to write out your top goals in the present tense. Use a spiral notebook. By writing down your ten goals at the beginning of each day, you will program them deep in your subconscious mind. The daily goal writing will activate your mental powers. It will stimulate your mind and make you more alert.

Planning and Organizing

Take a few minutes, before you go to bed, and plan out the activities of the following day. Always work from a list and always think on paper. This is one of the most powerful and important disciplines of all for high performance.

Priority Setting

The essence of time management, personal management, and life management is contained in your ability to set priorities on the use of your time. This is essential for high performance.

Resouces

Advance for Directors in Rehabilitation 800-355-1088

Training and Conditioning.com

Raising Self Reliant Children in a Self-Indulgent World; Seven Building Blocks for Developing Capable Young People, H.Stephen Glenn, Ph.D. and Jane Nelsen, Ed.

Sports Injury Bulletin.com

Slowfood USA.org: This site is helpful in finding good food in your area, everything from Farmer's Markets, Co-Ops to Food Pantries, restaurants , jobs and school lunch programs!

Yoga to the People.org : find out where you can take yoga for just a donation (even in NYC it is only 5 dollars for a class!!!)

Kinesiotaping.com
Theratape.com

Spidertech.com
Roccktape.com