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BRIAN COLES – HEALTH ANALYST

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<u>Athletic Trainer Corner</u>

Female ACL Injury

Non-contact, anterior cruciate ligament (ACL) tears in the knee occur at much higher rates in females than males. Female athletes when running, will frequently turn to change directions and tear the ACL. A lot of research has taken place speculating the reason for this injury. Several risk factors have been identified to help lower risk. One risk factor that cannot be changed is the groove that the ACL sits in. The groove is more narrow and vertical in the female anatomy. When a female athlete plants her foot when running fast and then transitions to another direction, the ACL is on full tension and pinned against the edge of the groove. If inward collapse of the knee also takes place, the fully tensioned ACL cannot absorb the stress without straining or tearing. When the inward force of the knee collapse is great enough, the ACL ruptures.

To assess risk potential for ACL tear a few simple tests can be conducted to see how much inward collapsing takes place at the knee joint. Exercises to strengthen the identified weak muscles can be introduced. Muscle education will help to overcome poor muscle memory and movement patterns, and will improve proprioception (subconscious balance and spatial awareness). Improving specific muscles with strength and movement patterns can lower non-contact ACL tear risk.

If you have a young athlete that you would like assessed for this or any injury risk please feel free to contact Brian Coles.

High Blood Pressure the Silent Killer

Approximately one in three adults have high blood pressure and about half of those people are properly managing it. Blood pressure is the amount of pressure exerted against the arterial walls when the heart pumps. This is presented as two numbers. The top number, systolic is when the heart beats. The bottom number, diastolic is when the heart is at rest.

High blood pressure can have many causes and usually develops over time. Although, normally blood pressure raises and lowers throughout the day. High blood pressure can be caused by genetics, unhealthy lifestyle, diabetes, lack of exercise, or stimulants such as caffeine etc. One mistake that people make is, they don't realize high blood pressure does not usually have signs or symptoms. You cannot always feel it. This is why it is referred to as the "silent killer."

Management of high blood pressure begins with improving lifestyle and regular self-checks, or checked by a health care provider. Brian, Kolby, or any EMT can measure blood pressure here at IPSC. High blood pressure, when caught early, can often be reversed with lifestyle changes.

- Get at least 150 minutes of physical activity each week (about 30 minutes a day, 5 days a week)
- Avoid tobacco/vaping products
- Eat a healthy diet
- Limit sodium (salt)
- Do not overeat.
- Keep a healthy weight
- Limit alcohol intake
- Limit high intake of energy drinks
- Manage stress

High blood pressure can damage internal organs/arteries slowly over time. High blood pressure can also lead to dementia, heart disease, heart attack, stroke, vision problems, kidney failure, liver damage, lung conditions, etc. Many of these conditions develop after many years of having high blood pressure and is not always reversible. Brian and Kolby can help with lowering and managing blood pressure. If you need help please feel free to contact them.

Sources:

https://www.cdc.gov/bloodpressure/about.htm#print

https://www.cdc.gov/bloodpressure/about.htm#:~:text=High%20blood%20pressure%20is%20called,not%20know%20they%20have%20it.

Quarterly Wellness Initiatives

All Initiatives and challenges are open to employees and spouses. Forms are located at <u>www.ipsc.com</u> or outside Brian's office.

Current programs are also accessible by using the **QR code**.



New Program

<u>March Madness</u> -- Combine your picks for the NCAA tournament with completion of certain wellness activities to
receive a gift card and have your name entered in a March madness drawing. Prizes will be given for those who
complete the activities and score the most picks in their tournament bracket. Picks must be made and returned to
Brian between March 17 and March 19.

Current Programs

- Reconnect/Unplug Connect with people again and decrease electronics device use to feel better.
- **Resolution Staywell** Improve nutrition and fitness.

On Going-Repeatable Each Quarter:

- ✓ Spouse Staywell Letter incentive —
- ✓ Shoulder Protection Initiative —
- ✓ 100 Winks Sleep Initiative —
- ✓ Radon Test —
- ✓ Weight loss/Maintenance —
- ✓ Diabetes Prevention and BP/Cholesterol Improvement Initiative —
- ✓ Qtr. Prove IT Fitness Challenge —

