INTEGRATIVE MEDICINE APPROACH TO WELLNESS & NUTRITION FOR ATHLETES

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Preparing for game day, a big race, a dance or cheer tournament, or a gymnastics meet doesn't just start the night before. If you want to perform like a pro you need to:

- 1. Believe you can perform like a pro
- 2. Eat like a pro
- 3. Boost your wellness

What is Wellness? An active process of making choices toward a healthy lifestyle with change and growth toward physical, mental, and social well-being.

Steps to Wellness:

- 1. <u>Exercise</u>: Easy for an athlete! Did you know daily exercise reduces stress, reduces systemic or overall body inflammation decreasing risk of disease and cancer, improves our immune system, helps us maintain a healthy body weight, and reduces our risk of heart disease.
- 2. <u>Time in Nature</u>: Time spent outside, looking at trees or plants, gardening, walking or exercising has been well documented as a means to improve mental health and physical health. Having pictures of nature on your screensaver, your wall, or plants in your room or office will reduce your stress which will decrease toxins and inflammation in your body.
- 3. <u>Pets</u>: Pets have been shown to reduce pain, lower blood pressure, decrease stress, and help our gut microbiome or gut health which improves our immune system.
- 4. <u>Sleep</u>: When we sleep our muscles and bodies heal, toxins are released from our brain and overall healing occurs with a decrease in inflammation. Not getting enough sleep puts us at risk for anxiety, depression, infection, and illness. In general, adults need between 7 and 9 hours of sleep per night and teens need 9 hours per night. Tips on getting good sleep: avoid exercise and caffeine 3-4 hours before bedtime, avoid "screens" phones, computers or video games 1-2 hours before bed, keep your bedroom cool, dark, and electronic-free.
- 5. <u>Manage Stress</u>: Ideas for stress relief include yoga, talk therapy, meditation, mindfulness exercises, spending time with friends and family, journaling, and practicing a faith or belief system.
- 6. <u>Optimism</u>: Defined as a tendency to expect a good outcome or focus on the most positive aspect of a situation. The trait of optimism can be taught or self-taught and has been associated with improved health outcomes, reduction in illness, cancer, and heart disease. Guess what? Being optimistic helps with athletic performance!

- 7. Resilience: defined as a person's ability to bounce back or adapt in the face of adversity or a negative experience. This can be taught and totally helps with sport/athletic performance. Think of teams that come back from so far behind and end up winning the event. "Fall down seven times, get up eight" Japanese Proverb

 Ways to Improve Resilience: make quality connections with people, avoid seeing difficult things as insurmountable, accept change, move toward a goal, be decisive, look for new and challenging opportunities, focus on positivity and hope, take care of yourself, and keep things in perspective.
- 8. Humor: Believe it or not, laughter really is the best medicine. Studies have shown that laughing reduces inflammatory markers in our bodies helping with pain and swelling. Other studies have shown that laughter helps our blood vessels, reduces stress, and promotes healing.
- 9. <u>Gut Health:</u> The human microbiome is an ecosystem inside us of good bacteria, viruses, and fungi that takes care of our immune system, brain, nervous system, and hormones, and controls how well we digest our food and use our nutrients

What can we do to help our gut microbiome?

- Encourage prebiotic foods-foods that our current gut bacteria can "eat" such as vegetables, fruit, beans, nuts, seeds, dried fruit, lentils, grains, raw honey, dark chocolate, flaxseed, hempseed, olives, spices, coffee, red wine, green and black tea
- Encourage probiotic foods-foods that are fermented that add good bacteria such as yogurt with live active cultures, "live" sauerkraut and pickles, kimchi, kombucha, kefir, miso, and tempeh
- Limit meat especially red meat to only once or twice a month
- Limit saturated fats like French fries and fried foods
- Avoid processed foods, food dyes, and artificial sweeteners (stevia, Splenda, Nutra sweet)
- Avoid pesticides. The EWG "dirty dozen" is a list of the fruits and vegetables with the highest pesticide content. Try to eat organic for the following 2020 dirty dozen: strawberries, spinach, kale, nectarines, apples, grapes, peaches, cherries, pears, tomatoes, celery, potatoes.
- Play in the dirt and hug your dog!
- 10. <u>Nutrition</u>: There is no one right diet for everyone but there are lots of harmful things we eat. The Anti-Inflammatory Food Pyramid/diet has been shown to help reduce inflammation, cancer, heart disease, diabetes and strokes. Here are the basics:
 - Focus on eating real or whole food and avoid boxed, packaged, or processed foods
 - Eat lots of vegetables and fresh fruit
 - Eat healthy grains such as quinoa, brown rice, steel cut oats, artisan sourdough bread, whole and cracked grain bread (where you see the seeds and nuts) and avoid processed grains such as "whole wheat bread," donuts, cookies, pastries (treats are always ok and homemade is always better as devoid of chemicals and preservatives)

- Reduce refined sugars in "sweets" and avoid sugar drinks like juice and soda
- Incorporate olive oil as your main oil with expeller pressed organic canola oil as a good substitute. Avoid saturated and trans fats. Avoid fried foods.
- Increase healthy fats such as olives, nuts, seeds, avocado
- Steaming or baking foods preserves their nutritional benefit more than other styles of cooking
- Reduce red meat and eat more fish, lean white meats, nuts, tofu, beans, and lentils
- Add green tea daily (not from a bottle or can but use fresh brewed tea)
- Increase water
- Switch to 70% or higher dark chocolate

11. Tips for Athletes: There is no "One Size Fits All"

We are all so unique with our own genetics, metabolic needs, gut microbiome, and fitness level that only you can decide what you need BUT here are some ideas.

- DO NOT TRY ANYTHING NEW ON RACE OR GAME DAY
- Talk with other runners and athletes, hear what they are using and what has worked for them and what hasn't. Learn from everyone!!
- Practice all the fluid, electrolyte, pre-race/game nutrition, and during the race/game nutrition during your training runs or practices and stick with what works until it doesn't work.

<u>Night Before a Race/Meet/Game</u>: Try a little protein, a little carbs, and not too much roughage (fruits, veggies, fiber) BUT a sweet potato or brown rice may work well and all the other days of the week please eat your roughage.

Morning Before the Work-Out: Many people eat nothing unless they are running 10 miles or more. Most athletes will eat toast and nut butter or half a bagel. For run of 5-10 miles, I do a Huma Banana Blackberry Chia and add Skratch electrolyte drink in the summer. For 10 or more miles, I eat sourdough toast with pb & honey or jelly. Play with it and see what works for you.

<u>During the Workout</u>: If workouts are more than an hour a general rule is to consume about 200 calories per hour or 20 calories/pound of body weight every 1 to 1.5 hours, BUT we are all different. This will depend on how hard you are working, the heat, your age, your fitness level etc.

Possible "gut bombs" (meaning having to go potty during your race, game, or meet) found in some gels or gu's are fructose, maltodextrin, and artificial sweeteners. The more natural the better. Huma chia gel or Honey Stinger are the more natural gu's.

<u>Hydration</u>: Hyperhydrate with plenty of water the week before the race or tournament and if going to high altitude or extreme heat make sure to add some electrolyte drink during the week. Avoid artificial sweeteners such as Splenda, stevia, Nutrasweet etc

because you really need some glucose (real sugar) and salt to absorb the water your body needs. Also, many people get "gut bombed" by artificial sweeteners. Studies have also shown some changes and injury in gut microbiome/gut health with the artificial sweeteners.

<u>Rule of thumb for Hydration</u>; 4-6 oz water every 20 minutes of running or working out but if going faster or its hotter about 6-8 oz per 20 minutes of running OR

1.1 ounce per pound of body weight per hour Remember, there is no "one size fits all"

<u>Electrolytes</u>: Everyone is very different in their electrolyte needs as well, so a general rule is for more than an hour or extreme heat, use electrolyte drinks and try to avoid those with artificial sweetener and food dyes. For those who crystallize after a run, consider Salt Stick chews or capsules. For both your drink and your salt chews try to find brands with sodium, potassium, calcium and magnesium.

<u>Post Work-Out:</u> Hydrate with lots of water, electrolytes if you are dizzy or its hot and try to take in about 25-30 grams of protein with 5-7 grams of BCAA (branch chain amino acids) within 30 minutes (especially for ladies the timing is really important to help in recovery and increase glycogen stores). You also need some carbs or sugar. Real food is always best, but a protein drink with whey protein is good plus a banana or sweet potato. For vegans or vegetarians, I like Vega Sport or Garden of Life Raw Organic Meal and Garden of Life has one without artificial sweeteners. Experiment and see what will work for you.

References:

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