

ST. FRANCIS DE SALES

ATHLETICS



#GoKnights

Athletes & Nutrition

SFS Sports Medicine Department

SUMMER WORKOUTS

- **Fuel before morning workouts**
 - 16-20 oz fluid
 - Carbohydrate/protein focus 30 minutes before workout
- **Post workout recovery**
 - Replenish, Rebuild, Rehydrate
 - Carbohydrates, Protein, Fluids
 - Within 45 minutes post workout
- **Hydrate consistently**
 - 1 bottle an hour during workout
 - 90 minutes + require sports drink
 - 16 oz for every lb lost during a workout
- **Summer eating schedule**
- **Prioritize rest and recovery**
 - 8-10 hours of quality sleep



Morning Workouts

- **Hydrate**
 - **16-20 oz water**
- **Nutrient dense meal- *less volume, more energy***
 - **Carbohydrate heavy** with some **protein**
 - ***Protein helps stabilize blood sugar***
 - $\frac{2}{3}$ -1 cup of granola
 - Eat dry on the way to workouts or in yogurt
 - Increases thirst to help with encouraged hydration before workouts
 - Energy Bites- oats, honey, peanut or almond butter, protein powder
 - Bars
 - Cliff duos, RXBARS, granola bars, BOBO's oat bites or mini muffins
 - Peanut butter pretzels



Post Workout Recovery

- Re-fuel within **45 minutes post workout**
- **Replenish**
 - Carbohydrates
- **Rebuild**
 - Protein
 - Amino acids to repair muscle breakdown
- **Rehydrate**
 - Fluids
 - Low fat chocolate milk
 - Shakes
 - Protein & fluids
 - Fruit smoothies
 - Carbs & fluids
 - Sports drink with a protein bar

FULL MEAL WITHIN 2 HOUR POST WORKOUT WINDOW

DON'T SKIP POST WORKOUT SNACKS!!!!



Hydration

Key is consistency

- **90 minute + workouts** require **sports drinks** for replenishing **electrolytes**
- As humidity increases, dehydration increases
 - sweating = loss of fluids and sodium and potassium
- **16-20 oz of fluids before activity**
- **5-10 oz of fluid for every 20 minutes of consistent exercise**
 - *1 bottle an hour*
- **16-24 oz post workouts**
 - If weigh-in pre and post workout
 - *16 oz for every lb of body weight lost during workout*

HYDRATE THROUGHOUT THE DAY!

- Fruits = carbs, nutrients, & fluids
- Popsicles
- Smoothies/shakes
- Chocolate milk



Summer Eating Schedule

- Plan meal and snack times
 - Set alarms or reminders on phone
- Have snacks/meals prepared
 - ***Shelf stable, nutrient dense snacks***
 - Trail mix- Carb, Protein, Fat
 - Beef jerky
 - Protein bar & fruit (banana or apple)
- Training off days
 - athletes might sleep in
 - missed breakfast and/or mid morning snack = ***missed nutrition***
 - Playing catch up all day with nutrition and hydration
- Hydrate consistently even on off training days
- Prep on Sunday
 - Granola and jerky into 7 baggies
 - Add as one additional snack each day of the week



Football Nutrition Cheat Sheet

*5 svg. of color to reduce muscle soreness & increase recovery!

Breakfast



Turkey egg English muffin +
fruit+ PB + Fairlife protein

Lunch



Beef rice veggie burrito +
fruit + milk/H₂O

@Nutrition_with_Wendi

Snacks/Pre & Post-Workout/Game Day Pairings



-Greek yogurt parfait

-Pretzels + fruit + oatmeal

-Jerky + fruit

-Hard boiled eggs + chocolate milk + creatine



Dinner



Chicken steak rice
veggie bowl +
fruit cup + milk
Dessert: Protein
Ice cream

60 min-Pre-sleep



Cottage cheese + fruit
for muscle
growth
recovery



Rest & Recovery

Prioritize sleep like you prioritize training and nutrition

- **8-10 hours of QUALITY sleep**
- Recommend a **bedtime routine- 1 hour prior to sleep**
 - Reading
 - Epsom Salt bath
 - Meditation
 - **PUT THE PHONE DOWN**
- **Decrease in sleep and recovery = decrease in training progress... Stress/Recovery Adaptation Model**
- **Rest days or OKAY!**
 - Increased intensity training session probably requires a lower intensity day the following day
 - Listen to your body
 - 20-30 minutes naps encouraged



GOAL DURING SUMMER TRAINING

Create a PLAN and be CONSISTENT

- **FUEL before morning workouts**
 - 16-20 oz fluid
 - Carbohydrate/protein focus 30 minutes before workout
- **POST WORKOUT recovery**
 - Replace, Rebuild, Rehydrate
 - Within 45 minutes post workout
- **HYDRATE consistently**
 - 16-20 oz before workout
 - 1 bottle an hour during workout
 - 90 minutes + require sports drink
 - 16 oz for every lb lost during a workout
- **Summer eating schedule**
- **Prioritize SLEEP**



80/20 Rule

80% of the time

- Eating whole grain carbs, lean protein, healthy fats, fruits, veggies and water

20% of the time

- okay to indulge in lower nutrient, higher calorie foods

This creates a balance for athletes, promoting a healthy relationship with food along with sustaining consistency fueling the body with nutrient rich foods to promote energy, recovery, and performance.



80%

- Quality, nutrient dense food
- Whole grain carbohydrates
- Lean protein
- Healthy fats
- Fruits and vegetables

Energy production (fuel) and **recovery** (muscle repair/growth) are dependant on quality and nutrient dense foods and fluids.



Energy Production and Muscle Repair

- **Energy production**
 - Whole grain carbohydrates and fruits
- **Muscle repair and growth** -amino acids for protein synthesis
 - Lean protein
 - Beef, pork, poultry, fish
 - Eggs, yogurt, cheese
 - beans, legumes
- **Fruits and vegetables**
 - Vitamins and minerals
 - Antioxidants
 - Promote immune health, aid in recovery and repairing cells, decrease inflammation



20%

Indulgent foods, higher calorie and less nutrient dense

- Pastries, baked goods, fried foods, typical fast food establishments
 - Higher in saturated fats and added sugar
 - Higher percentages in diet over longer periods can cause increased inflammation attributing to lower energy stores and decreased recovery
- These foods help create a positive relationship with food and help athletes sustain the 80% goal
 - Parties, holidays, circumstances where these foods are present
 - Eating a cookie and surrounding it with a whole grain turkey sandwich, fruit and water is OKAY!
- Mental health
- Boost morale



Balance Energy Intake

Goal is to eat, ***consistently***, throughout the entire day to promote fueling energy stores in the body and recovery to repair muscle growth.

Avoid CALORIE GAPS during the day.

Athletes should be eating constantly throughout the day, think alternate carb focus then protein focuses snack/meals.

Eating balanced meals, allowing for 20% of indulgent food on the plate, promotes energy, recovery, mental health, performance as well as a healthy relationship with food.



Environmental Support

Parents & Coaches....Practice what you preach.

- Snacks available in locker room or at home
- Food provided pregame or post game
- Road game fast food stops
- Encourage a balanced plate using the 80/20 rule

Create an environment to help support athletes making positive decisions when it comes to food and nutrition.

Parent donations to programs

Athletic Boosters



FLUIDS

HYDRATE THROUGHOUT THE DAY!

Can include foods like fruits or vegetables for increased fluid intake

- Doesn't have to be water
 - **Sports drinks**
 - Electrolytes
 - **Chocolate milk**
 - **Smoothies**
 - **Shakes**
 - 3 R's- carbohydrate, protein, water

Avoid high processed sugar drinks and high levels of caffeine

- Soda
- Energy drinks



Supplementing

Supplements SHOULD NOT be the starting point.

- Can be helpful in addition to proper diet & recovery
- Most have limited research in younger, healthy adolescents
- Research what supplements from reputable companies are on the market before incorporating them in the diet
- THIRD PARTY TESTED!!!
 - ***NSF for Sport***
 - ***Informed Sport***

Without proper nutrition from foods, even reputable supplements on the market are not benefitting energy stores and recovery as intended.



PRE-COMPETITION NUTRITION

- **Ideally 3-4 hours before competition**
- Closer to game time
 - Easier to digest food
 - More calories per bite
- **Complex carbohydrates**- longer sustainable energy
 - Pasta, rice, sweet potatoes, oatmeal, beagles, whole grain waffles
 - $\frac{1}{3}$ - $\frac{1}{2}$ of the plate
- **Lean protein**
 - Chicken, turkey, lean beef, fish
 - $\frac{1}{3}$ - $\frac{1}{4}$ of the plate
- **Fruits and vegetables**
 - Extra hydration and carbohydrate
 - Salads, green beans, carrots
 - Avoid high fiber veggies
- **16-20 oz of fluid pregame**
 - Urine color- pale to clear is the goal



Examples

Breakfast:

- Scrambled eggs, bagel, fruit and yogurt, water/sports drink
- Breakfast sandwich with fruit and water
- Picky eaters
 - more calorie per bites
 - granola and fruit
 - energy bites with fruit and beef jerky

Later in the day meals:

- Turkey sub sandwich with lettuce, cheese, tomato and fruit
- Pasta with meat sauce, green beans and whole grain rolls
- Grilled chicken, baked potato, salad, and rolls



Foods to AVOID

- High fiber
- High fats
- Garlic or spicy seasoning to avoid GI issues

Pre-game HACK

- **BREAD**
 - Whole grain rolls, corn bread, breadsticks
 - Extra carbohydrate
- **Electrolytes**
 - Sports drinks or salt on the table to add extra on meals



Pre-game SNACKS

- ***Carbohydrate and electrolytes***
 - Pretzels, goldfish, go-go squeeze applesauce, peanut butter pretzels or crackers, granola bar, or energy bars
 - Peanut butter and jelly or peanut butter and banana sandwiches
- **Sports drinks**
 - Fluid
 - Electrolytes
 - Carbohydrate
- Available in locker room after warm up or at halftime
 - Some sports warm up for an hour or more before ever beginning competition
 - Adrenaline works similar to insulin, pulling glucose out of the blood to fuel muscles, draining blood sugar resulting in low energy



POST-COMPETITION NUTRITION

During exercise the body is in a catabolic state

- **“break down”**
 - burning carbohydrates for energy

To enter into an anabolic state

- **Body uses nutrition to flip that switch**

Goal in the 2 hour window

- **Immediate snack**
 - **Within 45 minutes**
- **Immediate meal**



Immediate Snack

45 minutes post competition

Simple carbohydrates

- Fruit, honey, smoothie, milk, yogurt
- Breaks down quicker into the bloodstream to replenish glycogen

High quality protein

- Amino acids
- 15-25 grams of protein
- Milk, yogurt, energy bar, protein powder

Examples

- **Chocolate milk**
- ***Smoothie* *****
- **Post workout shake**
- **Protein bar and sports drink**

Readily available and logistically accessible after activity



How much protein?

For muscle protein synthesis (rebuilding muscle)

- **15-25 grams** for the average athlete
- **Larger athletes**- OL/DL or post positions
 - **25-35 grams**
- Want Leucine
 - Amino acid
 - In most protein
 - Highest in Whey protein- milks
- Research suggests ***after 40 grams***
 - ***body DOES NOT use that protein to synthesis muscle***



Meal

Very similar to pregame meal

Within 2 hours post competition/training

- **Complex Carbohydrate**
 - $\frac{1}{3}$ - $\frac{1}{2}$ of the plate
- **Protein**
 - $\frac{1}{4}$ - $\frac{1}{3}$ of the plate
- **Fruits and Vegetables**
- **A LOT of FLUID**
 - Smoothies, shakes, post-workout drinks
 - Sports drinks
 - Electrolytes
 - **SODIUM** and Potassium



Meal Examples

- **Sub sandwich**
 - Turkey or chicken with cheese and lettuce
 - Baked chips/pretzels (salty carbohydrates)
 - Fruit or veggies
 - Sports drink/chocolate milk or water
- **Pasta dish**
 - Salad
 - Water
- **Grilled chicken**
 - Baked potato
 - Fruit and veggies
 - Water or sports drink



Competition ends later at night, the athlete still needs to eat!!

Challenge later in the evenings, not feeling hungry...

- **Smoothies**

- Milk
- Yogurt
- Honey
- Nut butter
- Protein powder

- Energy bites- oats/honey/nut butter with chocolate milk

The post competition “meal” does not need to look like a traditional high carb and protein focused plate.

Nutrition recovery after competition to **replenish** glycogen, **rebuild** muscle, and **rehydrate** electrolytes is essential.



SLEEP

8-10 hours for athletes

Stress/Recovery- **Adaptation Model**

- Sleep is essential for recovery
- Without recovery, adaptation cannot happen

Direct correlation with **sleep and hormone/glucose regulation** along with **cognitive development**

Screens increase blue light decreasing melatonin secretion disrupting sleep cycles

- ***PUT THE PHONE DOWN 30 MINUTES to an HOUR BEFORE BED***

Prioritize sleep like you prioritize training and nutrition



Platforms referenced & to follow on social/podcasts

Amy Goodson, MS, RD, CSSD, LD - The Sports Nutrition Playbook

Full website of information to reference along with programs that can be purchased

Brad Jensen- The Key Nutrition Podcast (general population and athletes)

www.keynutrition.com

The Thorne Podcast

<https://www.thorne.com/sports-performance>

Certified for Sport: www.nsfssport.com/certified-products

Informed Sport: www.sport.wetestyoutrust.com

