Performance Nutrition Guidelines

Remember, all foods can fit into an athlete's diet.

Fuel & the Macronutrients

We need adequate calories/energy to fuel sport performance, growth, & build muscle mass

	Carbohydrates	Protein	Dietary Fat
Purpose	Primary fuel source for Ringette & the brain, & provides quick energy during sport	Builds & repairs muscle, supports our immune system, aids in gaining strength & lean mass	Long-term energy storage, absorption of fat-soluble vitamins, hormone production, & brain health
Sources	Breads, cereals, pasta, potatoes, rice, beans, peas, lentils, fruit, veggies, dairy products, refined sugar	Animal products like meat, dairy, eggs, fish; beans & legumes, tofu & soy products	Oils, nuts, seeds, dairy products, & eggs
Quantity	55-65% of daily energy intake should come from carbs	10-35% of daily energy intake should come from protein	20-35% of daily energy intake should come from dietary fat

Pre-Game Fueling - 3-2-1 rule of thumb

- 3-hours pre-game – full, balanced meal with whole grain carbs, protein, fruits/veg, & dietary fats (ie. spaghetti + ground beef + tomato sauce + cheese; whole wheat tortilla + ground beef + beans + cheese + veggies + salsa; chicken breast + mixed greens/veggies + pita + pesto + vinaigrette dressing)
    - The more physical demand, the more carbs we need. Fuel for the work required (ie. tournament weekend, load up on carb-rich meals the day before the tourney)
- 2-hours pre-game – mini meal with low-fiber carbs, some protein, & low in dietary fats (ie. sandwich + sliced meat; Greek yogurt + berries + granola; canned tuna + crackers + fruit; hummus + crackers; smoothie)
- 1-hour pre-game – snack that is rich in low-fibre carbs so we can use it immediately as energy (ie. granola bar; fruit sauce; fruit leathers; toast + jam; sports drink with added carb/sugar; juice; pretzels)
    - These snacks would also be great DURING a game to top up energy. Use between periods or prior to over-time, if applicable

Recovery Nutrition

- Exercise breaks us down, so we need quality nutrition to help with repair & refueling, which means having the right nutrients at the right time
- 2-step recovery nutrition protocol
    - 30-mins after training/game – snack with a 2:1, carb: protein ratio (ie. 2 c chocolate milk; 2 oz beef jerky + 8 crackers; sandwich + 4 slices meat; 2 hard-boiled eggs + fruit)
    - 1-2 hours after training/game – full, balanced meal with quality protein, whole grain carbs, & fruits/veg (ie. 1 potato + 1-2 c veggies + 3-5 oz steak; 1 c rice + 2 c veggies + 1 chicken breast; 1 burger + bun + ½ potato + 1 c veggies; 1-2 tortillas + 75 g taco meat + ½ c beans + 1 c veggies + cheese + salsa + sour cream)
- COME PREPARED WITH RECOVERY SNACKS

Hydration & Fluids

- Aim for light-yellow urine (dark yellow indicates dehydration, whereas clear urine indicates over-hydration)
- Hydrate all day – 500 mL upon waking, 1.5-2 L throughout the day, 500 mL per hour of training (sipped, not chugged!)
- After training, rehydrate with at least 750 mL over the next 1-2 hours
- High performance fluids for hydration include: water, milk, soy milk, 100% fruit juices, sports drinks (as needed)

Risks of Under-Fueling

- Health side-effects: Increased injuries, frequent illness/sickness, low mood & depression, stress fractures, increased stomach upset (bloating, gas, changes to bowel movements), low energy levels, low iron status, & loss of the menstrual cycle
- Performance side-effects: Decreased muscle growth, decreased endurance, decreased adaptation to training, decreased focus & coordination

Erin Krill, BSc, ISAK 1, RD
Performance Dietitian