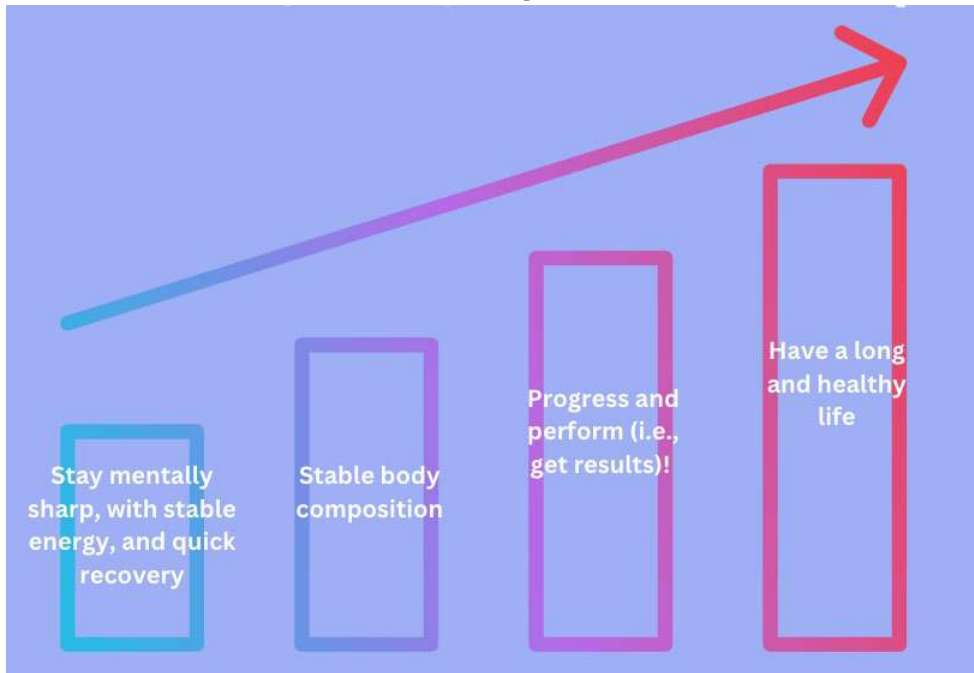


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When our nutrition habits are meeting our needs:



Assessing where you can improve:

"How is That Working For You?"

	Watch Out For:	Description
	Swings	<ul style="list-style-type: none"> Changes in energy, motivation, mood, body weight, and/or extreme hunger
	Cravings	<ul style="list-style-type: none"> Depletion - not getting enough nutrients
	Binges	<ul style="list-style-type: none"> Missing/skipping opportunities to consume ideal food to meet your demands Sign of too much x 3 - too much intensity, too much stress, too much load
	Injury/Illness	<ul style="list-style-type: none"> Sign of too much x 3
	The Way You Feel After Eating the Food	<ul style="list-style-type: none"> Pay attention to bloating, cramping, diarrhea, gas, headaches or migraines, heartburn, nausea, upset stomach Swap irritant foods with something you tolerate - milk vs rice milk, quinoa vs regular pasta

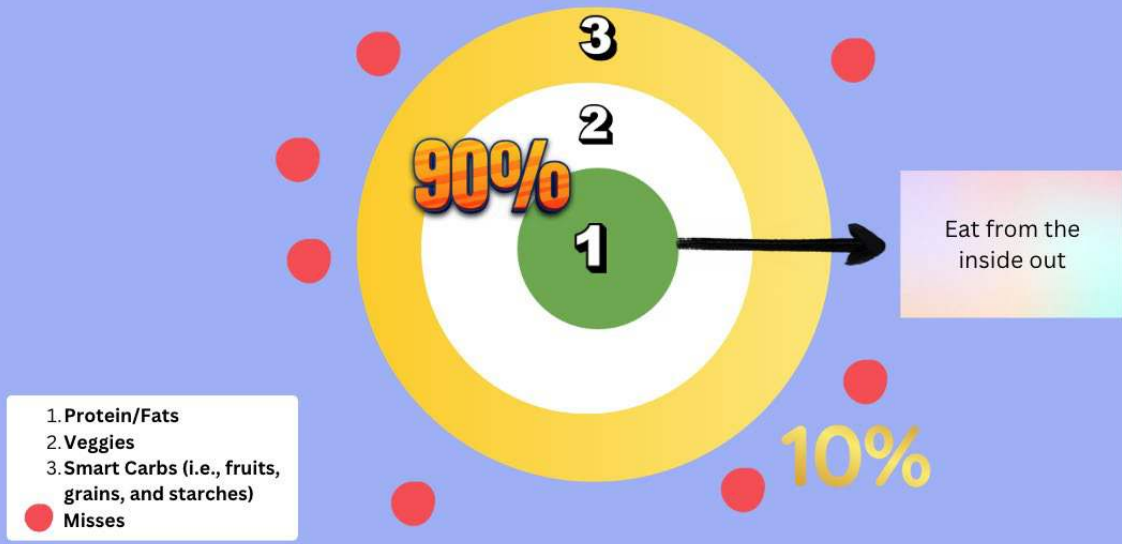


Stable body composition, energy, and stay there while feeling confident and competent (during training, racing, AND in daily life)



90/10 Concept for Nutrition "Eat to Train and Live Well Rather than Train to Eat"

DAILY EATING STRATEGIES* TO SUPPORT YOUR HEALTH, FITNESS, AND PERFORMANCE



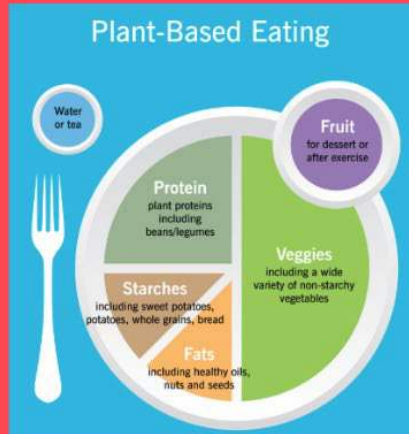
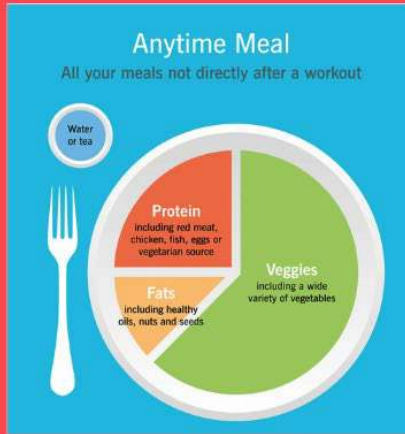
*Outside of Training - Source: UESCA Sports Nutrition Certification

Food List

Protein/Fat	Veggies	Carbs	Misses

*Prioritize foods from left to right on your list - [Click here for examples of Proteins, Fats, Carbs, and Veggies](#)

Eating Strategy #1 - Design Your Own Plate



Eating Strategy #2 - Hand Models*

1:1	2:1	3:1	4:1
<p>CHO PRO</p>	<p>CHO PRO</p>	<p>CHO PRO</p>	<p>CHO PRO</p>
<p><i>only appropriate during off-season or weight loss phase</i></p>	<p><i>majority of daily eating</i></p>	<p><i>majority of daily eating/post training</i></p>	<p><i>post hard training/competition/acute CHO loading</i></p>

Proteins and Fats

Chicken	Beef
Fish	Pork
Turkey	Milk, yogurt, cheese
Cottage cheese	Oils: olive, coconut, avocado
Yogurt	Tofu
Beans	Eggs
Nuts	Soy, almond, coconut milk
Olives, avocados	Edamame

Fruits and Veggies

Berries	Cantaloupe
Cherries	Pineapple
Kiwi	Oranges
Plums	Peaches
Apples	Pears
Bananas	Broccoli
Spinach	Kale
Sweet potatoes	Asparagus
Bell peppers	Zucchini/Squash

Grains + Starches

Quinoa	Crackers*
Spelt	Bread, tortillas*
Millet	Cereal*
Bulgur	Pancakes*
Buckwheat	Pasta*
Amaranth	Couscous*
Barley	Rice*
Triticale	Oats/oatmeal*

Misses

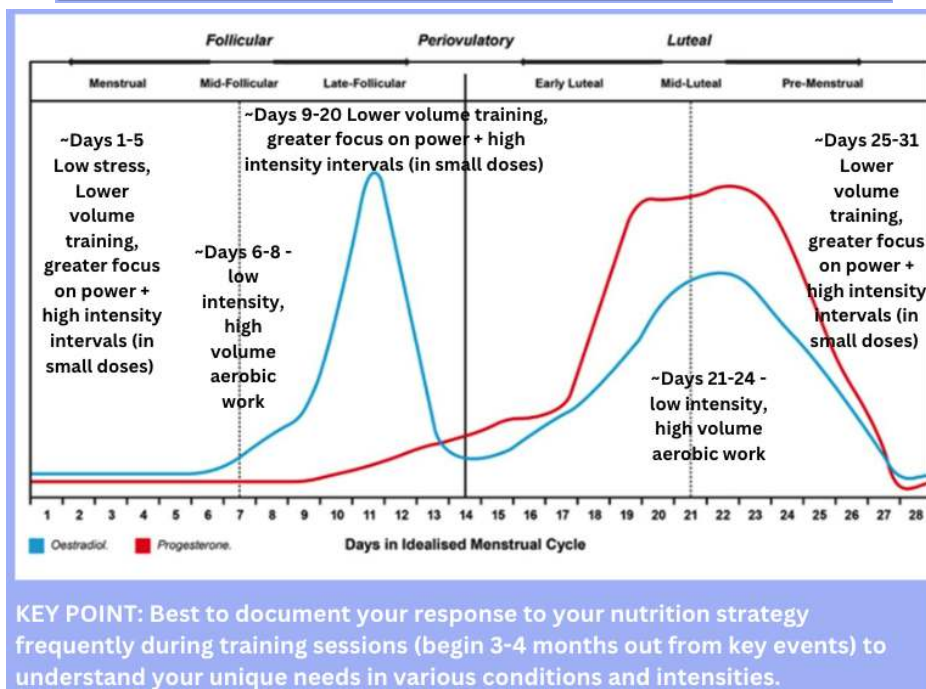
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Sport nutrition products	Chips
Cookies	Cake
Processed, refined "foods"	Candy
Chocolate	Fruit juice
Alcohol	Cupcakes

Question for you to consider - With the above guidelines what changes would you make if any to your current daily nutrition habits?

Female Considerations:

Phase	Time in Cycle	Consideration
Premenstrual and Menstrual	~Day 26- Day 5	<ul style="list-style-type: none"> • increase in stress response • immune suppression • magnesium, zinc, and omega-3 fats are important during the end of this phase due to immune suppression
Follicular phase	~Day 6- 13	<ul style="list-style-type: none"> • Good time to compete • More able to absorb higher volume and intensity training • Increased pain tolerance • Shorter recovery time • Higher carbohydrate use by the body • May need more daily carbohydrates to supply higher quality training
Ovulation/ Luteal	Day ~14- 15/~Day 16-25	<ul style="list-style-type: none"> • Increase daily and post workout protein intake (leucine is important); • focus on hydration + consider sodium supplementation during exercise outside of days 15-20; • may need more carbohydrates during exercise depending long training sessions



[Menopause Nutrition Recommendations See Dr. Stacy Sims](#)

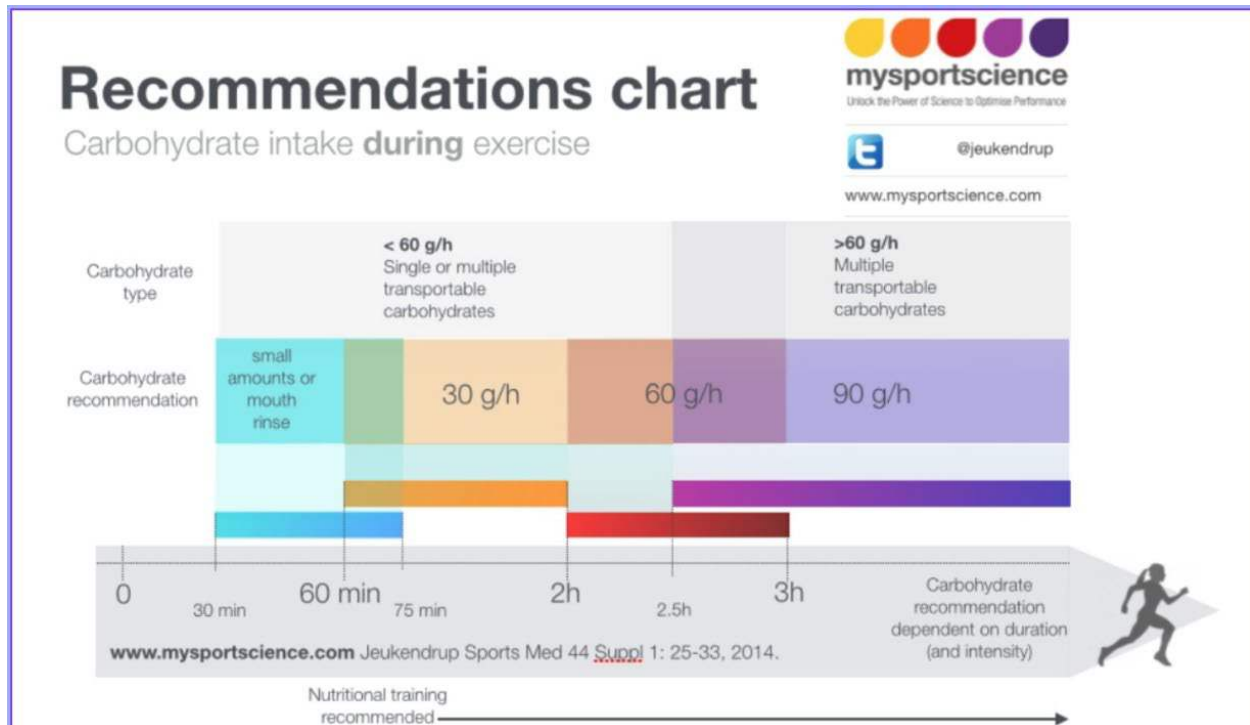
PLAN YOUR INTAKE BEFORE TRAINING

Nutrient	Before	Options
Fluid	<ul style="list-style-type: none"> • Did you just wake up? • Have you had 4-6 hours to rehydrate after previous session? 	<p>Water</p> <ul style="list-style-type: none"> • ~500 - 750ml (<30 mins before) • Total daily consumption = 0.033 x body weight (kg)
Carbohydrates (CHO)	<ul style="list-style-type: none"> • What are your goals for the training session (i.e., lower intensity endurance or high intensity intervals)? • What type (i.e., swim, bike, run, strength), length and intensity of the session? • Are you training more than once per day? • Have you consumed adequate carbs before training (i.e., morning vs daytime/evening training)? • Are you male or female? 	<ul style="list-style-type: none"> • Nothing or light snack (gender and quality based) <ul style="list-style-type: none"> ◦ 20-40 grams (palmful) • Are you immunosuppressed?
Protein (PRO)	<ul style="list-style-type: none"> • What is the length and intensity of the session? • Are you over 40 years old? 	<ul style="list-style-type: none"> • Nothing or light snack (gender and quality based) <ul style="list-style-type: none"> ◦ 20-30 grams (palmful)
Fat	<ul style="list-style-type: none"> • Do you need to be more efficient at using carbohydrate or fat as an energy source for the session? 	<ul style="list-style-type: none"> • Minimal (1-2 servings) • Banana + 1-2 tbsp of nut butter <ul style="list-style-type: none"> ◦ Thumb sized is one serving
Electrolytes	<ul style="list-style-type: none"> • Are you going to eat something? • What length and intensity of the session? 	<p>Depends on session length:</p> <p>45-60 min - 500 mg of sodium, 100 mg potassium chloride, 60mg magnesium malate</p> <p>> 60 min and/or high intensity - ~1000 mg of sodium, 100 mg potassium chloride, 60mg magnesium malate</p>

Question for you to consider - With the above guidelines what changes would you make if any to your current pre training nutrition habits?










PLAN YOUR INTAKE DURING TRAINING

Nutrient	During	Options
Fluid	<ul style="list-style-type: none"> Is your session longer than 60 minutes? Are you training in heat/humidity? Do you chew gum? 	<p>"It Depends"</p> <ul style="list-style-type: none"> Water ~1 ml per lb of body weight every 15 minutes Adjust for: Temperature/humidity, intensity, duration (length), sweat rate
Carbohydrates (CHO)	<ul style="list-style-type: none"> What are your goals for the training session (i.e., lower intensity endurance or high intensity intervals)? What type (i.e., swim, bike, run, strength), length and intensity of the session? 	<ul style="list-style-type: none"> <60-75 minutes nothing >75 minutes 20-90 grams per hour If going into session fasted you may need have 20-60 grams per hour from the start Sports nutrition product
Protein (PRO)	<ul style="list-style-type: none"> What is the type, length, and intensity of the session? 	<ul style="list-style-type: none"> <3-4 hours usually none: if you do add any - EAA 10-20 grams/hr with carbohydrate Practice many times in training Turkey and cucumber wrap
Fat	<ul style="list-style-type: none"> Are you an ultra athlete competing at lower intensities and need more calories per hour? 	<ul style="list-style-type: none"> Usually none unless ultra training >4hrs Choose wisely (fats you can digest and practice consuming many times in training) Nut butters
Electrolytes	<ul style="list-style-type: none"> Is your session longer than 60 minutes? Are you training in heat/humidity? Do you have a high salt daily nutrition plan? Are you a heavy sweater 	<p>Depends on session length, intensity, and conditions:</p> <p>> 60 min and/or high intensity - ~500-2000 mg of sodium, 200 mg potassium chloride, 60mg magnesium malate per hour</p>



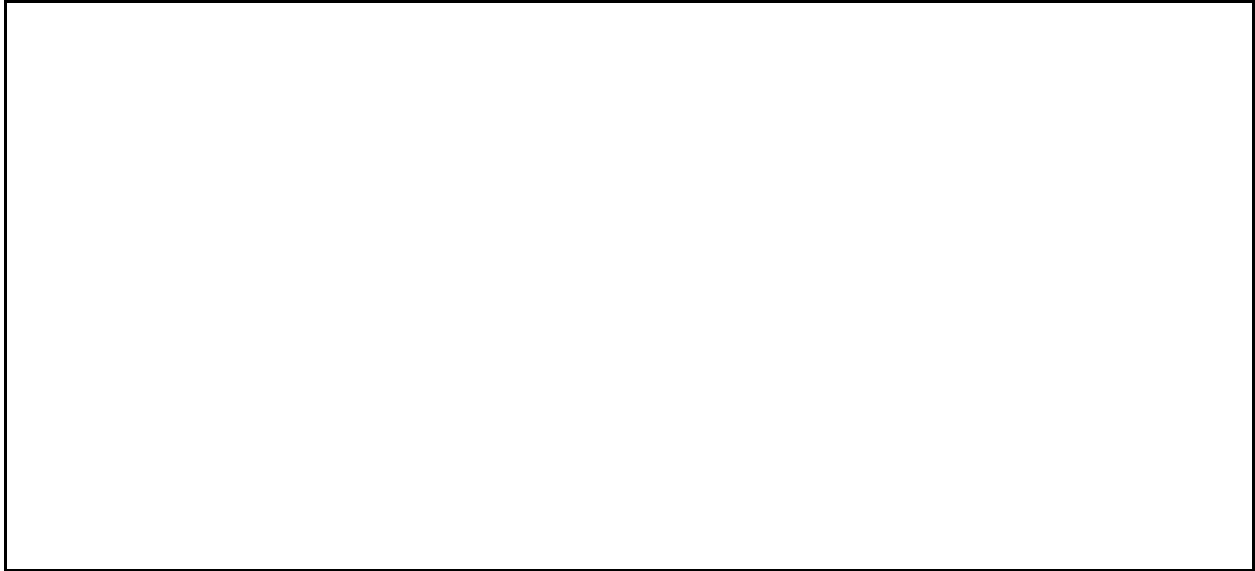
Question for you to consider - With the above guidelines what changes would you make if any to your nutrition habits during training?

PLAN YOUR INTAKE AFTER TRAINING

Nutrient	After	Options
Fluid	<ul style="list-style-type: none"> How much did you consume before and during training? 	<ul style="list-style-type: none"> Water ~500ml for every pound lost or ~1000 ml per kg of body weight lost <ul style="list-style-type: none"> compared to pre training body weight
Carbohydrates (CHO)	<ul style="list-style-type: none"> What are your performance, nutrition, and health goals? 	<ul style="list-style-type: none"> 1:1 (carb to protein) or 2:1 meal/snack <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">CHO </div> <div style="text-align: center;">PRO </div> <div style="text-align: center;">CHO </div> <div style="text-align: center;">PRO </div> </div>
Protein (PRO)	<ul style="list-style-type: none"> What are your performance, nutrition, and health goals? 	<ul style="list-style-type: none"> 1:1 (carb to protein) or 2:1 meal/snack <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">CHO </div> <div style="text-align: center;">PRO </div> <div style="text-align: center;">CHO </div> <div style="text-align: center;">PRO </div> </div>
Fat	<ul style="list-style-type: none"> What are your performance, nutrition, and health goals? 	<ul style="list-style-type: none"> > 2 hours after training add 1 to 2 thumb sized portions with meal/snack Nut butter, 1/2 avocado, olive oil, almonds, etc. <div style="text-align: right;">  <small>A portion of fats = 1 thumb</small> </div>
Electrolytes	<ul style="list-style-type: none"> How much did you consume before and during training? Do you need to rehydrate quickly? 	<p>Depends on session length:</p> <ul style="list-style-type: none"> ~ 500 mg of sodium, 100 mg potassium chloride/citrate, 60mg magnesium malate sodium assists with fluid absorption in the body

Question for you to consider - With the above guidelines what changes would you make if any to your nutrition habits after training?

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Before 15 minutes to 3 hours (more to less food as you get closer to training)	During >45-60 minutes	After 0-15 minutes Then 2-4 hour intervals that day
<ul style="list-style-type: none"><input type="checkbox"/> Fluid<input type="checkbox"/> Electrolytes<input type="checkbox"/> Carbohydrates<input type="checkbox"/> Proteins<input type="checkbox"/> Fats	<ul style="list-style-type: none"><input type="checkbox"/> Fluid<input type="checkbox"/> Electrolytes<input type="checkbox"/> Carbohydrates<input type="checkbox"/> Proteins<input type="checkbox"/> Fats	<ul style="list-style-type: none"><input type="checkbox"/> Fluid<input type="checkbox"/> Carbohydrates<input type="checkbox"/> Proteins<input type="checkbox"/> Electrolytes<input type="checkbox"/> Fats


*All 3 impact each other

Race Week Taper Nutrition/Hydration

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Consideration	Action Step
Foods You Know	<ul style="list-style-type: none"> • Stick to foods you know digest well for you the week of the race (nothing new race week)
Amount of Food And Water	<ul style="list-style-type: none"> • No need to eat or drink more than normal this week as you are naturally expending less due to low training volume • May need to add electrolytes to fluid/water (1/4 tsp salt/500ml of water)
Carbohydrate Loading	<ul style="list-style-type: none"> • No need for more than 24-48 hours of carbohydrate loading <ul style="list-style-type: none"> ○ May need to decrease fiber ○ May need to decrease fat (macronutrient displacement)

Overcoming Nutrition/Hydration Challenges During Training/Racing

<p>If abdominal cramping, stomach upset, diarrhea, GI distress</p>  <p>POSSIBLE SOLUTION</p> <ul style="list-style-type: none"> • Decrease or stop carbohydrate intake, swish and spit, decrease intensity until it subsides • Smaller sips and bites - chew solids completely before swallowing and take with water can help absorption (every 5-15 minutes) 	<p>If Bloating, Stomach Sloshing, Extremity Swelling</p>  <p>POSSIBLE SOLUTION</p> <ul style="list-style-type: none"> • Decrease or stop carbohydrate intake, swish and spit, decrease intensity until it subsides • Check electrolyte vs water intake up until that point. Add electrolytes if not meeting target or decrease fluid intake if not absorbing. • Small sips 	<p>Weakness, Fatigue, Overheating</p>  <p>POSSIBLE SOLUTION</p> <ul style="list-style-type: none"> • Heat and humidity increase hydration needs (less required in cooler temperatures) • Increase fluid, calorie, and electrolyte intake (e.g., 500ml water + 300-600mg sodium, 30-60grams of carbs in 5 min increments)
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Customize Your Hydration Plan Through Documentation

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Key Areas To Document (best to document by hour):

- What did I consume during the session and at which time intervals?
- How much fluid (ml or litres)?
- How many calories (fluid and solid calories)?
- How much electrolytes (Sodium, Magnesium, Potassium)?
- What did you take in (which products)?
- Temperature, wind, humidity conditions during the ride.
- Intensity of the session (e.g., smart watch data)
- How did you feel during the session (good areas and rough patches)?

Additional Information for further insight:

- Pre and post session body weight to measure fluid loss?
- Any cramping, GI distress, nausea, pain, dizziness, chills, etc.?
- Female - What day in your cycle was this session completed?
- Want to use what the race course will provide for hydration? Practice with it in training several times prior to the race!

Sample Hydration/Nutrition Document Planning and Evaluation Spreadsheet

[\(click here to view and copy\)](#)

Training/Racing Nutrition/Hydration Planning Table

Time	Type of Fluid and volume (ml) (-include sports drinks)	Fluid calories and grams of carbohydrate, protein, fat	Type of Solids (include gels and any foods)	Solid calories and grams of carbohydrate, protein, fat	Sodium (mg)	Potassium (mg)	Magnesium (mg)	Effort Rating (1 very easy, 10 maxim effort), or average power/heart rate
Pre-Training/Event								
Hour 1								
Hour 2								
Hour 3								
Hour 4								
Hour 5								
Hour 6								
Post Session/Race								

Anticipated Conditions (Temperature, Humidity, Wind) =