

# OPTIMIZING PERFORMANCE: PRE-GAME NUTRITION FOR HOCKEY PLAYERS



## SMOOTHIE CORNER: PRE-TRAINING

\*throw it all in a blender and enjoy!

- ¾ cup blueberries (fresh or frozen)
- 1 banana (fresh or frozen)
- ¾ cup natural plain yogurt
- 1 cup milk or alternative
- 1 tbsp hemp seeds
- 2 tsp honey (optional)
- 3 ice cubes (optional)



To perform at your best, it is vital that you arrive at games and tournaments properly hydrated and nourished to play at your best. It is just as important to be prepared for practices and off-ice training sessions. This information sheet will teach you what you should eat and drink before games.

It can be challenging preparing for a single game and an even greater task to prepare for multi-day tournaments with multiple games each day. Expect the unexpected and while a good plan is important be flexible to manage any unforeseen changes in schedule. If you and your team have not created a number of different strategies, you might diminish your advances by not being prepared.

## BEGIN HYDRATED!

- At least 4 hours before a game, you should drink a minimum of 2–3mL/ lb body weight (450mL for a 150lbs player) of water or sport beverage. This will allow enough time to optimize hydration and for excretion of any excess fluid [3].
- In one study 38% of elite junior hockey players **STARTED** the game dehydrated and an even greater number of the players were dehydrated after practice [4].

## NUTRITION TIPS

- In a tournament situation you might have better results if you “graze” throughout the day, especially if there is no time for a larger meal prior to games
- Grazing may not satisfy your appetite so make a plan before to have bigger meals during larger breaks
- When training or playing in a new environment, pre-make meals and snacks so you don’t need to rely on what might or might now be available
- Stick to what you know: Eating differently before a game can be a recipe for disaster
- If time is a factor you might need to resort to carbohydrate rich drinks or bars to fulfill energy needs

## TIME BEFORE EXERCISE & SUGGESTED FOOD CHOICES

### 3-4 Hours

\*meal should be low in fat, high in carbohydrates, with some protein

- fruit salad with yogurt or cottage cheese
- pasta or rice with some lean meat and vegetables
- wrap or sandwich with lean meat or eggs, cheese and vegetables + banana

### 1-2 Hours

- fruit smoothie or fruit
- sports bar (high carbohydrates with small amount of protein)
- cereal with milk

### Under 1 Hour

\*know yourself, if you have trouble digesting prior to activity, be careful what you choice eat

- sport drink or bar or carbohydrate gel (with water)
- fruit

# OPTIMIZING PERFORMANCE: IN GAME NUTRITION FOR HOCKEY PLAYERS



For optimal performance it is key to start your training, practice or game well hydrated and well nourished, but it is just as important to **STAY** hydrated and if sessions last over an hour some nutrients are also required. You can not rely on the fuel stored in the cells (readily available sugars) for longer practices and games, which means carbohydrates are needed to stay on point, especially late in the game. This information sheet will help give you some ideas as to what to eat and when you might need to supplement your water with a carbohydrate sport drink or food. It is important to drink enough during exercise to replace the fluid you lose in sweat.

## STAY HYDRATED!

- The typical sweat rate of athletes ranges from 0.5 to 2.0 L/h [5, 8]. This means, in order to maintain fluid balance and prevent dehydration, you need to ingest 0.5 to 2 L/h of fluid in order to offset weight loss. This requires frequent ingestion of 6-8oz of water or a carbohydrate (5-8%), electrolyte (CHE) sports drink every 5 to 15-min during exercise" [2].
- Studies have indicated that ingesting a CHE solution maintains body mass throughout a 70min hockey scrimmage resulted in improved hockey performance, thermoregulation, and decreased fatigue as compared with drinking no fluid and dehydrating by 2% [5].
- One study demonstrated that despite abundant opportunities to hydrate during a hockey game, one-third of the players did not drink enough fluid to prevent sweat losses of 2% BM or higher [6].



## SOME BENEFITS OF STAYING HYDRATED & NOURISHED

- Provides energy
- Helps maintain mental function
- Combats fatigue and hunger late in games
- Decreases chances of becoming irritable
- Maintain aerobic performance and ability to play hard throughout the entire game
- Decreases recovery time between shifts which can increase potential to play full shifts

## TIMING & SUGGESTED FOOD CHOICES

30-70g of carbohydrates per hour can improve performance:

- Piece of fruit (between periods or during a break in a long practice or training session)
- Sip carbohydrate rich (8%) sport drink or fruit juice during activity

## MAKE YOUR OWN SPORT DRINK:

\*One litre = 54 g (5.4%) carbohydrate and 0.5–0.7 g sodium

500mL unsweetened juice  
500mL water  
1.5mL salt



# OPTIMIZING PERFORMANCE: POST GAME NUTRITION FOR HOCKEY PLAYERS



Refueling after a game or a hard training session is essential and should be treated as part of the workout itself. The goal of recovery is to help the body repair and regroup so that the body can adapt to increase endurance, strength and build muscle. While there are a number of things you can do to help the recovery process such as cold baths and compression suits, nutrition and hydration are an easy way to help repair muscles. This information sheet will give you some ideas on how to optimize your recovery routine.

## REHYDRATED!

- To properly replenish the fluids lost, you need to consume at least 700mL of water for every pound lost [2].
- Rehydration beverages and salty foods at meals/snacks will help replace fluid and electrolyte losses during games and practice [3].

## 1,2,3 TO RECOVERY

### 1. Fluids to rehydrate

You can lose a lot of fluids and electrolytes during a game or long, intense workout or practice and while it is important to sip water during the sessions, it is also vital to continue to drink fluids after games. Monitor your hydration level by the color of your urine (the color of pale lemon juice means you are re-hydrated). Water is great but a smoothie or chocolate milk replenishes your carbohydrates and protein.

### 2. Carbohydrates to refuel

Refueling with carbohydrates restores muscle glycogen, the energy burned during physical activity, and quick absorbing, liquid forms of carbohydrate, such as chocolate milk, may restore glycogen faster than solid foods. The evidence continues to show that consuming carbohydrates within 30 minutes of intense exercise helps to increase endurance capacity and performance, which means you can last longer on the ice and perform the skills needed to win games [1].

### 3. Protein to recharge

Muscles need protein to repair and research has shown that consuming a protein source after resistance training will promote muscle gain and increase lean body mass. Chocolate milk is not the only fast absorbing source but it is a good one.

## SMOOTHIE CORNER: BANANA-ALMOND RECOVERY

- |         |                          |
|---------|--------------------------|
| 1 scoop | whey protein             |
| 1       | banana (fresh or frozen) |
| 1Tbsp   | almond butter            |
| ¾ cup   | milk or alternative      |
| 3       | ice cubes (optional)     |





There are so many factors that change when traveling; unusual eating times, inactivity, increased fluid loss, and long periods of time with little or no access to whole foods. The impact travel can have on you directly affects your performance for your away games. Whether you are traveling three hours in a bus or on a cross-continental flight, it is key to have a plan. **BE PREPARED!** Make pre-made meals for snacks or full meal and be sure to pack extra hydration. Find a great water bottle that you love and take it with you everywhere!

### HYDRATION ON THE ROAD

- Air-conditioning on the bus and cabin pressure on the plane raises fluid losses, which increases the risk of becoming dehydrated. While fluids are served on flights they don't often come regularly and on bus trips you are totally responsible for your hydration needs.
- Travel with herbal tea bags to make warm tea on flights or pre-made herbal iced teas or lemon water to sip on the bus! If you are at a gas station choose sparkling water or coconut water rather than pop or an energy drink.
- The key is to hydrate, not to add sugar to your travel nutrition plan.

### Top 10 Travel Challenges [7]

1. Plan ahead
2. Eat & drink well when on the move
3. Take a travelling food supply
4. Establish a new routine quickly, based on new nutritional goals and your new timetable
5. Be wary of food and water hygiene
6. Learn about your new food culture
7. Organize catering ahead of time
8. Make good choices in restaurant and fast food outlets
9. Have a buffet strategy to avoid making bad choices or overeating in an 'all you can eat' venues
10. Think about the lessons learned for the next time

### SMOOTHIE CORNER:

#### NUTRIENT-DENSE

- 1tsp chia seeds
- 4tsp water
- 1 green apple
- 10 fresh mint leaves
- large handful of spinach or kale
- ½ c fresh apple juice
- 3-4 ice cubes



### MAKE IT ROUTINE

- Pre-competition meals need to be routine.
- Create pre-competition meals that you like and that you eat regularly before training, practices and games.
- Smoothies are a great pre-game snack and there are so many options.
- Travel with a blender, the Bullet is small and easy to travel with.



## References

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