

U16 AAA PROGRAM OF EXCELLENCE WEBINAR SERIES

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GENERAL MEETING RULES

- If you wish to ask a question, raise your hand virtually and the moderator will connect to your question. You may also ask your question in the chat room.
- Please state your name and then your question.
- Please be brief and to the point to allow the greatest opportunity.
- You will have the opportunity to have one follow up to your original question.
- If someone is belligerent or not respecting the ground rules they may be removed from the meeting.

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Hydration For Hockey Players

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Lecture Outline



- The Hockey Athlete



- Hydration



- Energy



- Putting it Together



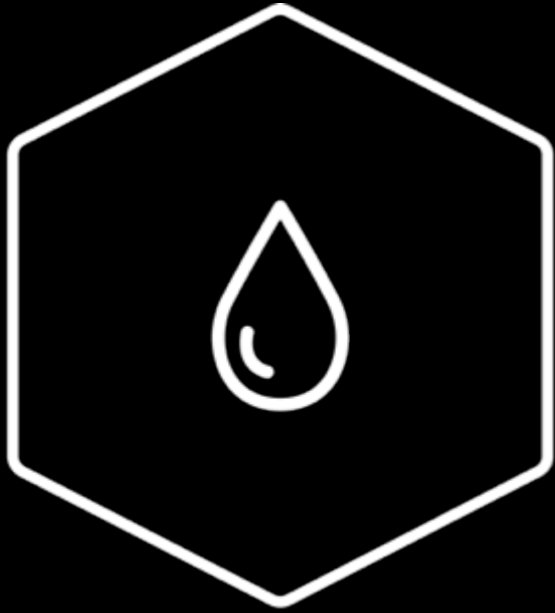
The Hockey Athlete

Best Performance



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HYDRATION

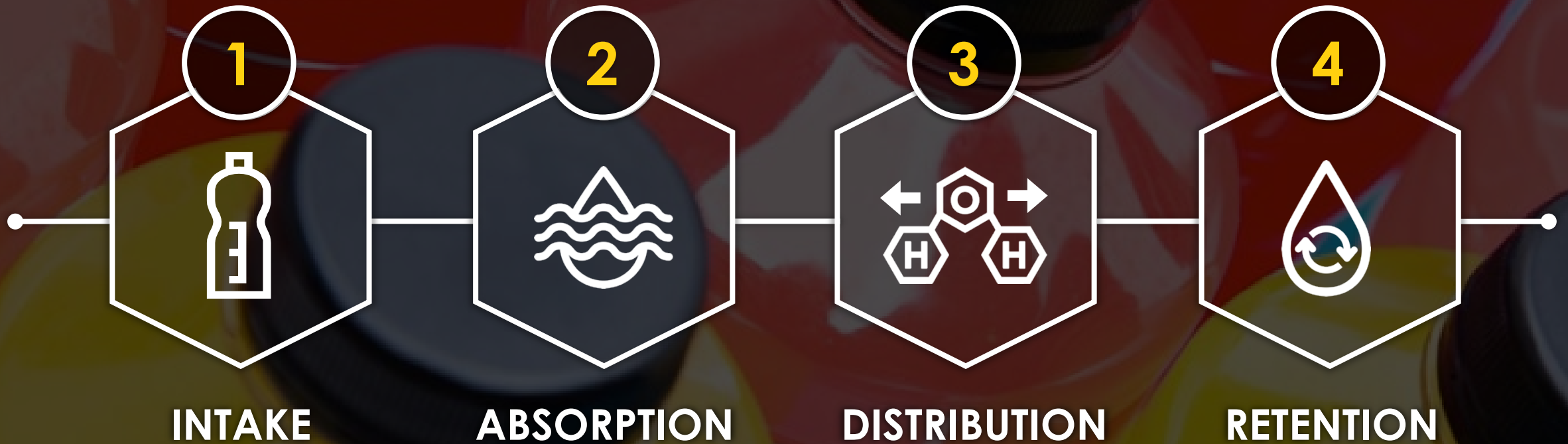


ENERGY



Summary

PHASES OF HYDRATION





Some factors influencing hydration



Training Status & Intensity



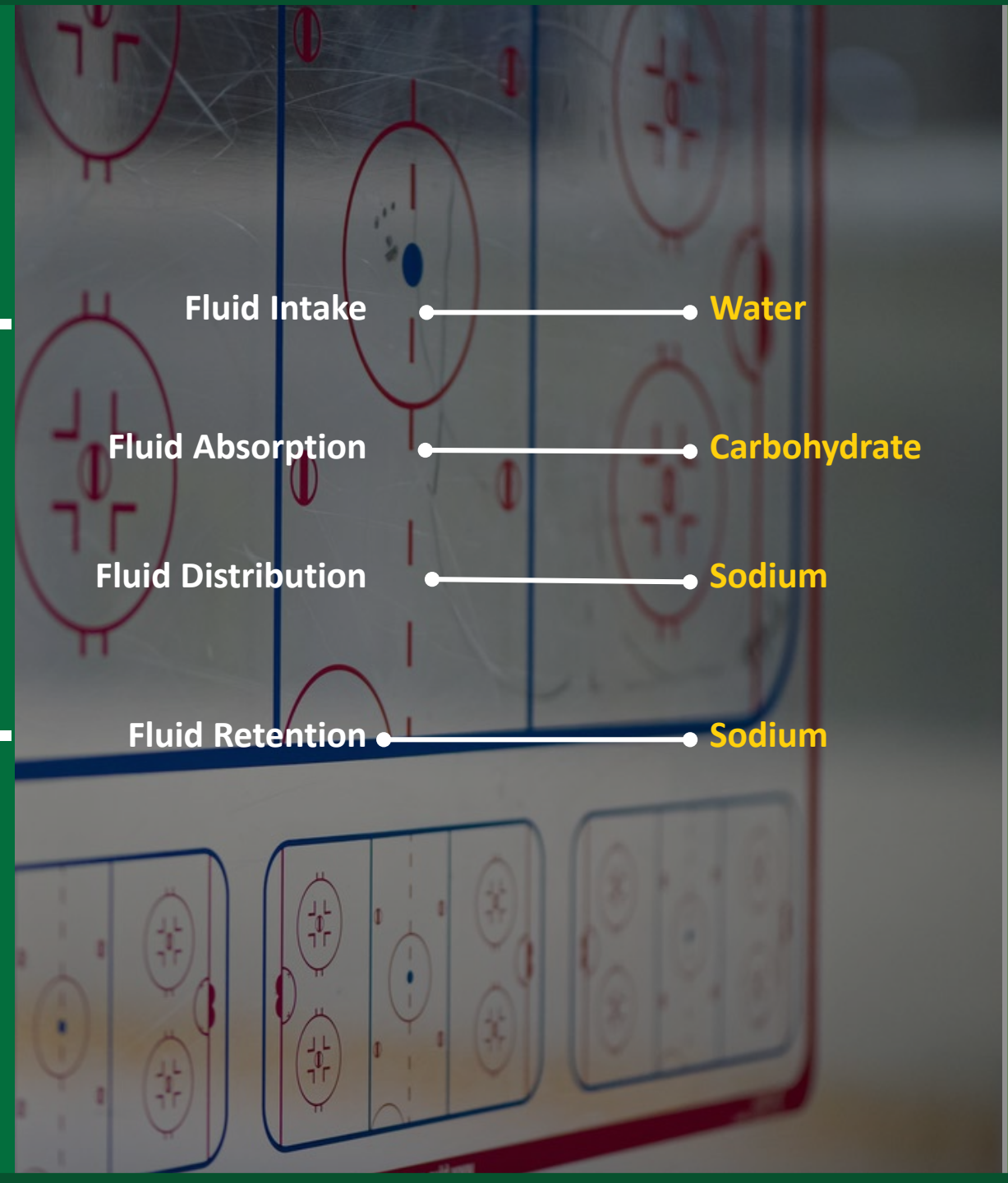
Humidity



Temperature



Environment & Equipment





Hydration and Performance



~60% of body weight

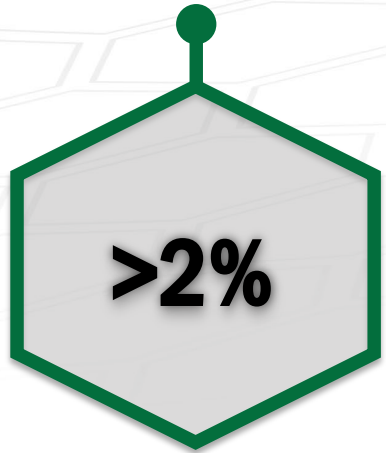


Sweat helps cool the body

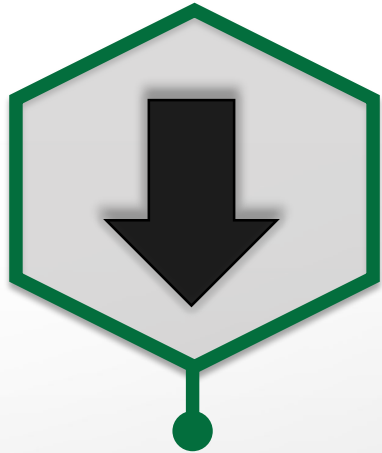
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Dehydration and Performance



**Endurance
Performance**



**High Intensity
Muscle Strength &
Power
Decision Making**



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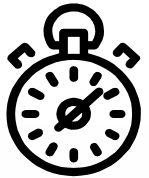


What About Hockey

~ 2% Dehydration vs. Fully Hydrated



Felt harder in the 3rd period



Decreased reaction time



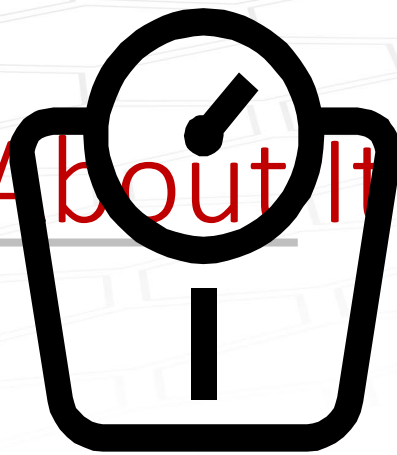
Decreased Number of targets hit



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What Do We Do About It



75 KG

2% of 75 KG

< 1.5 KGers



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How Do We Avoid Losing too Much Water

- How much do you sweat?



LOW
0.65 L/h

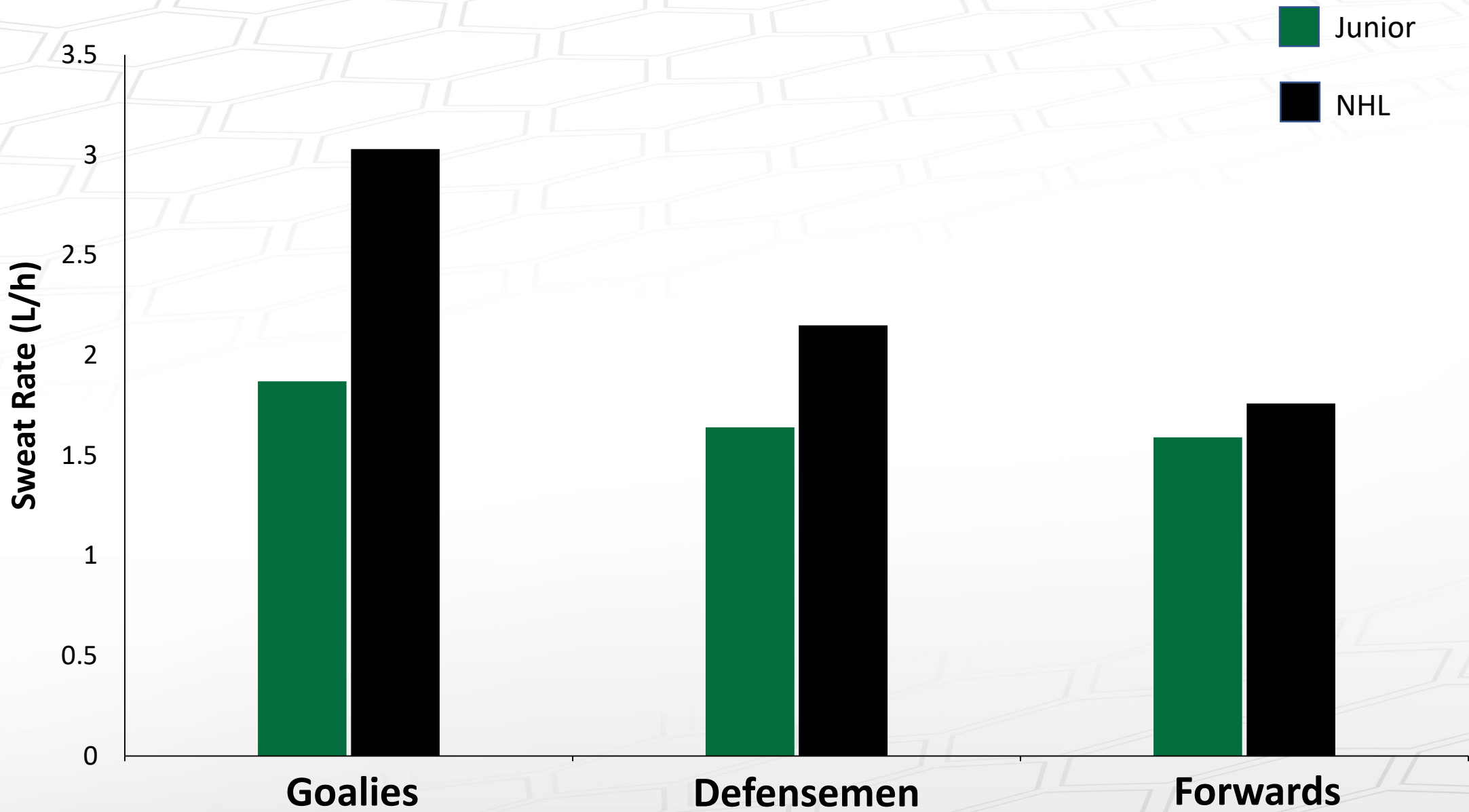
VERY HIGH
3.5 L/h



That's up to 3.5 bottles of fluid!

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Junior
NHL



Sodium & Fluid



Sodium & Fluid



Better maintenance of blood sodium concentration



Better maintenance of plasma volume



Decrease in urine volume meaning fluid retention has increased



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Rehydration after exercise



Replace 150% of fluid lost

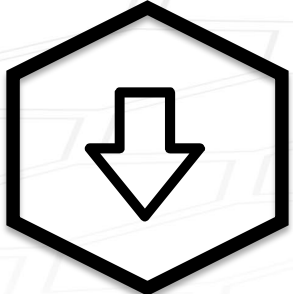


Sodium is critical for complete rehydration

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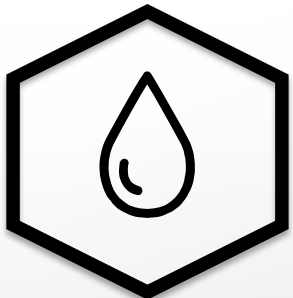
Summary: Hydration



Dehydration can decrease performance



Avoid losing $\geq 2\%$ of body mass



Sweat rates vary

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HYDRATION


ENERGY


Summary




Carbohydrates and Performance

 Carbohydrates = 

 Reduce how hard exercise feels

 Increase how long we can exercise

 Slow the start of fatigue

 Prevent low blood sugar

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Compared to not having any, ingesting carbs during Hockey resulted in...



27%

Better
Pass completion

63%

Fewer
turnovers / min

2%

Faster



Decreased
fatigue

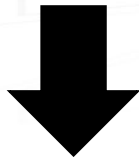
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Goalies

5.5%

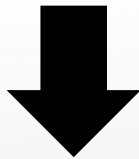
Better
Save percentage



Decreased
Fatigue

22%

Faster
reaction



Decreased
heart rate



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Carbohydrate Recommendations for Team Sport Performance

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1-4 Hours Before



1 g/kg

Before

30g

400 mL Bottle of
Gatorade
(21 g)

During

0-30 min



< 60 min duration
Performance goal

Medium sized
Banana
(~27 g)

1 g/kg



/kg

< ~ 60 min duration or

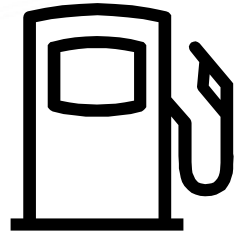
900 mL Bottle of
G2
(19 g)



Summary: Carbohydrate Energy



Improve aspects of Hockey performance



Top off fuel supply for best results



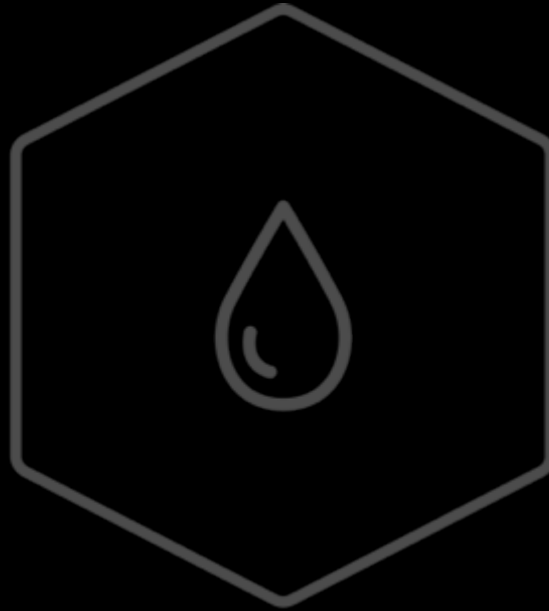
Personalize carb habits

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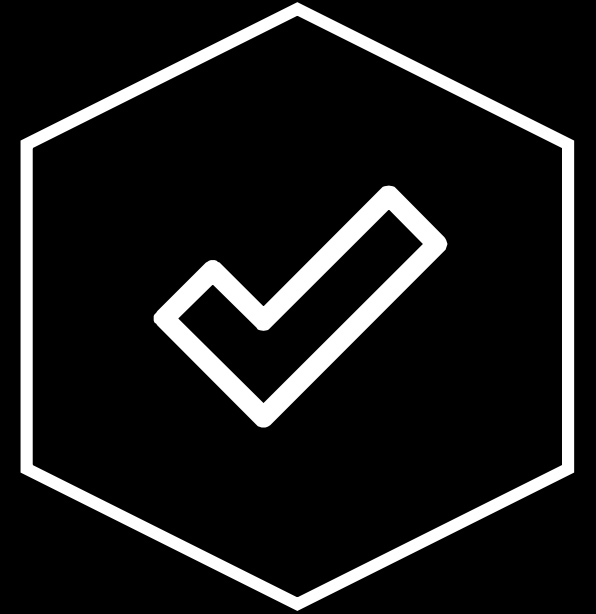




ENERGY



HYDRATION



Summary

GI issues with carb/fluid intake

- Train your stomach
- Gradually increase carbohydrates
- ‘Sloshy’ Stomach

Train your gut



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Putting it all together



Proper hydration can help us maximize our performance on the ice



Sodium and carbohydrate are important to retain and distribute fluid



Hydration away from the rink



Everyone has different needs



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