Sport Nutrition for Athletes and Coaches



Hockey Nutrition for Champions Profile on Hayley Wickenheiser

"Good nutrition accounts for 50% of my performance, with 40% being mental and 10% being physical." - Five-time Olympian Hayley Wickenheiser



Home Town: Shaunavon, Saskatchewan Resides: Calgary, Alberta Years Playing Hockey: 29 Years on the Canadian Women's National Hockey Team: 19 Olympic Participation: HOCKEY: Silver-1998, Gold-2002, 2006, 2010; SOFTBALL: 2000 Position: Forward Favourite Food: Eggs Favourite Drink: Cranberry with Soda Author: "Gold Medal Diary – Inside the World's Greatest Sports Events" (follows her 2010 Olympic Games & pre-Games preparations) History: Became the first female to score a goal in a professional men's league in Finland (2003)

Considered to be one of the best female hockey players of all time with four Olympic medals (including MVP honours in 2002 and 2006) Hayley Wickenheiser shares some of her eating habits with us to provide insight into high performance hockey nutrition.

Hayley's nutrition has evolved over her 19 years on the Canadian national team -- from being a regular ice cream and pizza lover, to now her current status of choosing raw, organic, wholesome, homemade meals. She attributes cooking in batches as the key to maintaining her nutrition while training full-time, attending university, and playing on the University of Calgary Dinos Hockey Team.

Since hockey is an anaerobic, power-based sport with high intensity, short shifts on the ice, the primary source of fuel for these efforts is carbohydrates. Hayley tends to get the bulk of her carbohydrates from foods such as: quinoa, sweet potatoes, vegetable juices, fresh fruit, and steel cut oats. At least 50% of her calories should come from carbohydrates (grains, vegetables, fruits) with 20-25% of fuel from protein and the remaining 25-30% from dietary fats. Most of the protein in Hayley's training diet is derived from Greek yogurt, chicken, fish, and lean meats, while she gets her dietary fats from healthy oils, nuts, hemp seeds, and fish. As with most high performance athletes, eating small frequent meals is the formula Hayley prefers to follow when she has busy training days with classes, fitness, hockey practices, and managing her family.

When it comes to game day, Hayley times her favourite pre-game meal of chicken, quinoa, and steamed vegetables for 3.5 hours before the puck drops. Most athletes will eat anywhere between 2 to 4 hours before their competitions to allow enough time to partially digest their meal, while some athletes may also reach for a pre-game top-up snack within the hour before their game or competition so that they are not distracted by hunger during an event.

Sport Nutrition for Athletes and Coaches

Canadian Women's National Hockey Team Pre-Game Meals

Salad and soup Sandwich buffet Whole wheat pasta / gluten free pasta, meat sauce Grilled chicken or fish Fresh fruit, assorted beverages

The purpose of the pre-event meal is to provide an easily digested, energizing meal to the extent that the athlete isn't feeling overly "full", but at the same time they are not distracted by hunger. Most players perform their best with a low-fat meal consisting of protein and carbohydrates providing approximately 500-750 calories. Conversely, if the athlete eats too much and/or too close to their game – they will potentially have to deal with the dreaded blood flow issue where energy and blood are drawn to the digestive system rather than to the exercising muscles. The consequence of this may be a side-stitch, stomach cramps, and/or skating with legs that feel sluggish.



In-between periods during a game, Hayley will often reach for a sport drink and organic, carbohydrate snacks to maintain her energy, hydrate, and restore electrolytes lost in sweat. Foods provided to the national team for flood breaks during games include:

- fresh fruit
- sport bars, protein bars
- granola bars, trail mix
- bagel sections or pieces
- sport drinks
- ample water

This assortment of high energy foods is necessary since players have unique food preferences.

Immediately after games, Hayley reaches for a power-shake with berries, almond milk, banana, and hemp seeds, followed by a healthy meal with fish or chicken, quinoa or rice, and of course, ample fresh vegetables. Most elite players realize that the timing of recovery nutrition is critical and must begin in the dressing room within 30 minutes after their game. Immediate recovery foods at this time can include:

- fresh fruit
- sport bars
- sport drinks and protein shakes
- flavoured milk, almond milk
- dry cereal, bagels
- dried fruit, trail mix, and cheese

Well-balanced recovery nutrition after games and practices enables players to effectively restore glycogen (muscle energy), repair muscle, rehydrate, and replenish micro-nutrients (sodium, potassium, etc.). An ideal 4:1 ratio of carbohydrates to protein is an appropriate recovery mix, which can be calculated as 1 to 1.5 grams of carbohydrates per kg body weight, 0.3 grams of protein per kg, with < 25% fat content.

Canadian Women's National Hockey Team Post-Game Meals

Assorted cereals, milk, yogurt, whole wheat bread, rice cakes, and peanut butter; Various hot entrées from beef fajitas and chicken kebabs, to pulled pork or grilled fish; Brown rice, roasted sweet potato wedges, quinoa, and/or whole wheat pasta; Soup, salads, fresh fruit, and assorted beverages.

Recovery nutrition is especially critical during tournaments since players need to have consistent energy for back-to-back games.



Hayley is convinced that good nutrition has given her the endurance to survive 29 years in the sport powering her to numerous accolades on the ice, and also receiving the Order of Canada in 2011.

Visit Hayley's website: <u>www.HayleyWickenheiser.com</u> to learn more about her, or consider attending the annual Wickenheiser International Hockey Festival that is held in British Columbia in the fall.

Written by: Kelly Anne Erdman, MSc, R.D.

This profile was brought to you by the Coaching Association of Canada, sponsored by:



Chunky[®] soup is a great option before or after games or even as a snack to give your hockey player energy. Try *Chunky* Beef, it's low in fat, has 1 full serving of vegetables in every serving, and is made with delicious pieces of tender lean beef. On the go? Grab a *Chunky* bowl. They are an easy portable option to take to the arena for an in-between game fuel up.