



## Your Sport

Hockey is characterised by high intensity passages of play, mixed with low intensity activities, including standing, walking, jogging. Hockey players rely on instant sources of muscle fuel during short bursts of play. For longer phases of play, or “recovery” in between activities, your body will rely more on a mixture of fuels to support your ability to continue in the game, or practice session.

Nutrition can have a significant effect on your hockey performance. Your ability to run to a ball a number of times in short bursts, stick and ball control, decision making or shot stopping are all key performance tasks that nutrition has been shown to affect. Unlike conditioning there is no “nutritional age” as such, but there will be things that are important to support your phase of development growth, as well as boost performance.

## Training Diet

Traditionally many hockey players have focussed on improving their nutrition towards the weekend game. However, the daily demands of your busy lifestyle either from school, college or work as well, as training, will limit your hockey performance practice if you don't get your nutrition consistently right. Hockey players require a variety of foods and should aim to include:

Fruits and green vegetables every day in any form e.g. cooked separately or on pizza toppings

Breads and cereals – pasta, brown rice, oats, potatoes, noodles, lentils, couscous

Low fat dairy products – including milk, yogurt and cheese

Lean meat – chicken, game e.g. rabbit, pigeon, fish, eggs and other more vegetarian forms of protein such as pulses e.g. beans, lentils, chickpeas

Healthy fats – olive oils, nuts, seeds, avocado's, light coconut oil



### Carbohydrate

Carbohydrate is the fuel of choice for training. Hockey players should base their meals and snacks on healthy carbohydrate rich foods. This includes seeded or grainy breads, wholemeal crackers, brown pasta, rice, noodles and starchy vegetables such as sweet potato.

During and after matches or practice your body will more readily use the carbohydrate eaten and taken into muscles to recharge your system. In this 2 hour period additional carbohydrate drinks or snacks are useful especially if you don't feel like eating, which is often the case in hockey. Here bagels, wraps, bars e.g. Trek, Eat Natural varieties, Alpen style cereal bars, low fat Muller Rice pots or flavoured yogurts are all good choices. In very hot conditions sports drinks can be useful to top up energy levels, but in many cases the "light" options available today e.g. Lucozade "Light" or PowerAde Zero are more than adequate.

### Protein

(Chicken, Game, Fish, Eggs, nuts, seeds, tofu, beans, pulses, red meats, milk, peanut butter, cottage cheese, Edam cheese)

Protein requirements for hockey players are greater than those for people who are the same age not as active. As hockey involves physical contact and heavy workloads in training, it is important to include as many different sources of protein to encourage adaptations from training and recovery from games. Red meats and other more vegetarian sources of protein e.g. chick peas and beans are also great sources of iron which have been shown to be low in blood levels of elite hockey players. It is important to include sources of these across the training week due to the potential for blood loss from excessive bruising, muscle damage or, in the case of girls, the onset of the menstrual cycle.

*"For me it's peanut butter every time. I use this in many ways, either on seeded crispbreads such as Ryvita or in my home made blended shakes with milk, fruit and whey protein first thing in the morning. After training I prefer cottage cheese either in a wrap or bagel, but often find that I can only tolerate the non flavoured ones for some reason "*

England and GB Nutritionist Dan Kings



### Fat

Fats get a really bad press, but are vital for your sport's performance and physical development during periods of growth. As your brain is 60% fat, the type of fat you eat will go into replacing fat tissue in the brain every so often. So the general rule, "you think like you eat" is not a bad way to look at things. The more bad fats in your diet from chocolates, pastries, fatty red meats, takeaway foods, creamy sauces or frying with bad oils, the more difficult it will be to make that quick decision or quick movement which, in hockey, can determine winning or losing game.

*"Instead of cooking with oils, our nutritionist has shown us that adding olive oil after the foods are cooked is better for us. I also add my good fats into my snacks after lighter training sessions as I find these help fill me up. My favourites are tinned fish with salad, or a small 25g pack of a supermarket nuts and seeds"*

Charlotte Craddock, England and GB Forward

### Hydration

There are many reasons why we can get dehydrated in the UK. At school or college this can be through large class sizes in small warm rooms, or in offices, cars or trains (especially the undergrounds) through air conditioning or air circulation systems. Either way, playing hockey dehydrated will not only make our decision making and endurance worse, but could also end up in injury through muscle stress.

Dehydration can occur through not drinking enough, eating poorly but most importantly in hockey through sweating a great deal when playing the sport. Everyone will sweat at different rates so it is important to weigh before and after training to establish if you are a "heavy sweater" or not. Either way, after training, aim to replace 1 litre of fluid for every 1 Kg of body weight lost. Good fluid choices before training include low fat milk, water or, if required to encourage you to drink, a carbohydrate "Lite" sports drink. Poor choices of fluids include energy drinks and alcohol that only make you more dehydrated!



## Special issues & requirements for Hockey Players

### Vegetarian

Being a vegetarian in hockey need be no different to players who eat meat. The only difference is that you need to be well organised with your dietary choices. Vegetarian ingredients generally tend to be higher in fibre. This is healthy but can cause problems, as fibre can reduce absorption of key nutrients such as iron, so it is essential that steps are taken to maximise the absorption of each meal. Using fruit juices at every meal, adding dried fruit, such as chopped up apricots to cereals, while avoiding tea and coffee at main meals, will boost your iron stores

### Off Season or injury

Periods of inactivity can quickly lead to unwanted gains in weight or body fat. Players should try to restrict “empty” or added calories rather than forgoing more substantial and nutrient based foods, such as meal based carbohydrates or proteins. Other key areas to target are reducing alcohol intake, high fat or high sugar treats such as those found in biscuits or cakes and non diet soft drinks. In some cases it may be necessary to reduce the size of meals or at least reduce the portions of higher energy starchy carbohydrates such as potatoes and rice, and swap for more filling green vegetables.

### Alcohol

As players get older, alcohol can play a part in post game activities. Drinking excessive alcohol can compromise recovery resulting in slow repair of damaged muscles and contribute to excessive weight over a season. Players should concentrate on refuelling with foods and fluids before drinking any alcohol. As a rule alcohol should be avoided in the 24-48 hours post-exercise, particularly if any injuries or bruising have occurred.



## NUTRITION PROFILE:

### ALEX DANSON

**Key Focus Points:** Vegetarian  
Eating for performance, Competition  
Eating



#### **Why do you think nutrition is important for your sport?**

*“Without proper nutrition there is no possible way we would be able to maintain the intensity required both in training and international matches. Improving our nutrition both on and off the field has become our goal, as, being more energised, we are able to get an edge over our opposition”*

#### **What is your favourite food, and what foods would you recommend?**

*“As a vegetarian I love beans and chickpeas, either as part of a meal or added into them. My favourite simple quick dish would have to be beans on toast with a twist. Here I add 1 small tin of healthy eating baked beans with a small can of kidney beans and have over a seeded toasted bagel. Our nutritionist has told us that this dish gives a slow release of energy and boosts our iron levels so, for taste and functionality, I would recommend this to everyone”*

## **BREAKFAST (options)**

- Pancakes with natural yogurt and honey
- Porridge with added fruits and honey
- For early push backs poached eggs on seeded toast

## **Pre match Meal Options (3 hours before push back)**

- Jacket potato with low fat cottage cheese
- Beans on toast with a twist
- Brown pasta with a grilled aubergine slices and a light mild curry sauce

## **Changing Rooms (1 hour before)**

- 1 Trek Bar (chocolate and peanut)

## **Half time**

Either a sports specific gel such as SIS or PowerBar + water (I can't tolerate isotonic drinks at this time so I get my carbohydrates from the gel and use water for hydration)

## **Immediately Post Game**

- Recovery shake + 2 Eat Natural Bars and water to help start rehydrate me + Sushi

## **Post game Meal (2-3 hours after final whistle)**

- 3 Bean filled wraps
- Jacket potato filled with ratatouille
- Grilled teriaki salmon with homemade sweet potato wedges

## **Supper Options**

- Sultana Bran with semi skimmed milk and apricots
- Home made blended shake with frozen berries, banana, yogurt or milk, whey protein powder
- Peanut butter on Ryvita



## Top 5 Tips

1. Always take a full drinks bottle to training
2. Use your car journeys as a time to prime for performance with your pre training snack
3. When travelling, take extra drinks with you as air conditioning in cars, coaches, and planes will dehydrate you
4. Aim to drink your recovery shake or eat your snacks within 30 minutes of finishing your training session.
5. Choose drinks that you like. Ice cold drinks are better for performance and taste better too!

## Alex Danson Top Iron Boosting dietary Tips

- Add spinach to scrambled eggs, fish pies or salads
- Use beans more in your meals
- Add almonds to your normal breakfast cereal
- Drink 150ml of fruit juice at each meal time
- Try chick peas if having curry at home instead of rice
- Add chopped up apricots to porridge or cottage cheese as your snack before your got to bed.
- Use wholemeal bread rather than white bread

## NUTRITION PROFILE:

### CRISTA CULLEN

**Key Focus Points:** Eating with a busy lifestyle, recovery and hydration

**What's the hardest thing you find about playing hockey?**

*"Hockey is everything to me but I also have other commitments outside the sport to ensure that when I retire I have another career. As a result, my life is very busy juggling work and hockey so being organised is a real challenge for me"*



**How do you get yourself organised with nutrition?**

*"I use my car as a mobile food larder. Every week I shop using a list and then fill part of the boot with simple recovery snacks and drinks that I can use as I travel around. To help, I have a small cool box hooked up to the car power supply which keeps everything cool and more importantly at the right temperature so I don't get ill!"*

**What would be your best time saving tips?**

*"Take 5 minutes before you go to bed to get your packed lunch ready for the next day. An extra 15 minutes in bed is better for your recovery, so being organised the night before when I'm already awake makes a big difference especially on long days when training is hard"*





### 5.00am **Wake up**

### 5.45am **Breakfast**

- Muller Rice, 1 Banana + Glass fruit juice

### 6.30am **Weights or Gym conditioning work**

### 7.45am **Post Training session Breakfast**

- Promax milk shake
- Natural muesli with natural yogurt + glass of fruit juice

### 11.00am **Snack (Depends on time if working)**

- Total Yogurt, Bag of chopped up apricots with almonds or
- 1 Small pot of flavoured cottage cheese on Oat cakes

### 1.00pm **Pre pitch training snack**

- 1 Eat Natural bar + 500mls skimmed milk

### 3.00pm **Post Pitch Session Recovery**

- For goodness Shake Milkshake

### 4.15pm **Hour after training session (Main meal)**

- Healthy eating baked beans on 3 slices of seeded toast
- 1 banana

### 7.00pm **Evening Meal**

- Sweet potato wedges with poached eggs and purple sprouting broccoli or
- Home made lasagne with vegetables
- Fruit salad with crushed up Maltesas for dessert



## **Crista Cullen's Top Energy Snacks for 2 hours before or 1 hour after training**

- Peanut butter on toast
- Toasted cinnamon bagel with mashed banana
- Beans on toast
- Tinned fruit mixed with Muller rice
- 3 homemade pancakes with natural yogurt and honey
- Mashed banana with honey and dried raisins on toast
- Fruit and a glass of skimmed or chocolate milk

## **“A recovery shopping list”**

- Either Daioni, Yazoo or For Goodness Shakes
- Eat Natural or Nutrgrain bars
- Skimmed milk
- Tins of fruit
- Breakfast cereal
- Fruit bread
- Muller Rice
- Total Yogurts with plain or flavoured

## **“Crista Cullen's Strategies for Recovery”**

1. Never rely on foods being provided for you, always take your own to meet your tastes and needs.
2. Hydration is key and should be a priority in your recovery.
3. Stagger your snacks over 2-3 hours after you finish your training.
4. Prioritise pitch sessions for higher calorie recovery than gym sessions.
5. Try to use more fluid based nutritional shakes as soon as you finish training as these get digested more quickly for your muscles to use.
6. Only try things out in training, never try new foods or quantities on a competition day.

## NUTRITION PROFILE:

### BETH STORREY

**Key Focus points;** Managing weight for performance, concentration, top 8 essential tips for performance nutrition



#### **How does your position affect what you eat?**

*“As a keeper its often the case that pitch sessions are the least demanding, which is the opposite to the outfield girls. As a result, I have to eat more protein foods after pitch sessions and more carbohydrates after my gym sessions which are by far the most difficult part of my training”*

#### **How can nutrition affect your performance?**

*“In the gym, getting the right combinations of foods in my recovery is essential to help my muscles grow and reduce my muscle soreness. To perform on the pitch requires including foods in my diet that help my concentration, these include eating good fats, fruits and vegetables and keeping hydrated”*

#### **What is the hardest part of being a goalkeeper?**

*“Being able to move quickly to recover for a save is essential. To do this requires managing my body weight. So, whilst after games the outfield girls can enjoy refuelling on fruit crumbles, pasta and noodles, I have to be disciplined and choose my moments for those foods otherwise I won’t be able to move!”*



## **Beth Storrey's Top tips to boost concentration and reactions.**

- Add olive oil to your vegetables after they have been cooked
- Cut down on takeaways, crisps and pastry foods; all of which have bad fats that slow your thought processes down and ruin your reactions.
- Include fish in your diet, whether it is tinned or fresh fish, doesn't matter
- Use organic milk that has higher amounts of a nutrient called CLA that boosts memory function
- Always have a supply of drinks close by as dehydration slows your reactions down

## **Top habits of Elite Hockey players**

1. Don't miss meals
2. Breakfast is the most important performance meal of the day and should be varied across the week to include cereals, pancakes, toast or egg dishes
3. Fruits or vegetables should be eaten with every meal
4. Eat or drink carbohydrates in the first hour after you finish training.
5. Eat tinned fish or fresh fish as often as you can in the week. If you don't like fish, add olive oils to vegetables or use more nuts like almonds or cashews in your snacks
6. Eat a bed time snack to grow your muscles. Cottage cheese, porridge, peanut butter or yoghurts are great options
7. Try different foods, the more varied your diet, the better your performance will be and reduce your muscle soreness
8. Eat food rather than drinking calories. Do this by swapping sugary drinks for more food snacks or bigger main meals.