Nutrition For Female Hockey Players

Note: The following information is not intended as a substitute for appropriate physician, and nutritionist guidance.

Below we will give you some guidelines on what to eat during the camp which would be considered preseason and also guidelines to use during the season.

The typical sports year is comprised of three parts: preseason, competition, and offseason Nutrition can make or break performance. Preseason is the phase that you will be in during our camp. Nutrition for preseason training should vary based on your goals. Typical preseason goals include weight gain or loss, muscle building, developing endurance and speed, and perfecting skills. We will be working on all of these elements during the camp and it is important that you eat and hydrate appropriately in order to get maximum benefits from the camp.

Perfect your diet to thrive during the preseason.

General guidelines for nutrition during the camp:

Pre-workout meal:

You must eat breakfast before our sessions. Ideally you want to eat a combination of complex carbohydrates that will give you sustained energy for a long period of time as it absorbs into your body and simple carbohydrates that will give you that quick burst of energy. You want to avoid high fat and high fiber foods before training. If time permits, you want to eat 2 - 4 hours before a workout. Since our sessions will start early in the morning it is more realistic that you should eat a light breakfast or a snack 1 - 2 hours before the camp.

Simple Carbohydrates

Simple carbohydrates are made up of two sugars and have a basic chemical structure. This makes them easy to break down, giving your body short energy boosts. Eating simple carbs right before a workout could give you extra energy. But, be careful which types of simple carbs you are eating:

- Fruits contain healthy, simple sugars. They give you quick boosts of energy and can even provide antioxidants for your body. Incorporating a banana or berries into your meal before the workout is a great, healthy choice.
- Sweets are an example of simple sugars that can lead to fat production. These give you a quick energy increase, as well, but will leave you feeling sluggish after they burn out. Some simple sugars to avoid include soda, candy, and cakes.

Complex Carbohydrates

Complex carbohydrates are often referred to as starches. Complex carbs provide you with long-term energy. They are made up of complex sugars, which takes your body longer to breakdown and digest. The sugars enter your blood stream much slower, causing a steady flow of energy throughout the day. As an athlete, you need to constantly tap into your supply to maintain the energy needed for long-term endurance. Just make sure you are taking in the right starches:

- Some healthy complex carbohydrate choices include wholegrain breads, pasta, oatmeal, brown rice, and potatoes.
- •
- The unhealthy complex carbs to avoid are crackers, biscuits, cookies, cakes, and most other foods made with flour.

As sample breakfast 1 hour before your workout:

A bowl of cereal or oatmeal, fruit, toast and peanut butter.

Hydrate... hydrate...hydrate

You must get into the habit of drinking water all day long. Tests have shown that losing only 2% of your water during a workout can decrease your performance by 10%. The goal is to replace 100% of your water lost through sweating by drinking water on a consistent schedule. Perspiration and exertion deplete the body of fluids necessary for an optimal performance and lead to dehydration and hypothermia (over heating). It is important to drink plenty of cool water. Try to drink at least 16 oz of water before our sessions and drink at least a half a cup of water every 20 minutes during the sessions. Adding a teaspoon of sugar, a little fruit juice or a small amount of powdered drink mix flavors to plain water may encourage fluid intake.

Post- workout

Following the workout you should consume some sort of sports drink or protein, fat and carbohydrate mixture. This will help replace the lost fluids along with helping to speed up the muscle rebuilding process. It also helps your body recover quicker and helps in you becoming stronger.

A sample post-workout drink:

Low fat chocolate milk is the perfect drink. It has the exact combination of proteins, fats and carbohydrates. Bring a bottle to the camp and drink it immediately following your workout. You can also drink a protein shake or a sports drink such as Gatorade.

For the rest of the day you want to maintain a high protein diet with lots of fruits and

vegetables. Try to avoid sweets and sugars.

Get lots of rest and get a full nights sleep every night. This will help in the recovery process. Sleep is your best friend.

If any athlete needs other diet suggestions we would recommend on an individual type of program, weight loss or weight gain.

Below is a guideline of foods to eat and avoid along with a nutrition guideline to follow during the the 48 hours leading up to game days.

Nutrition

Note: The following information is not intended as a substitute for appropriate physician, and nutritionist guidance.

The rule of thumb for eating before exercise is to allow 4 hours for a big meal (about 1,200 calories), 2 hours for a light meal (about 600 calories), and an hour or less for a snack (about 300 calories). Sample carbohydrate-rich menus:

Large Meal	Light Meal	Snack
2 large bagels	2 c spaghetti	1 medium banana
2 tbsp peanut butter	1/2 c tomato sauce	1 pkg instant oatmeal
2 tbsp jam	8 oz low-fat milk	8 oz low-fat milk
8 oz fruit yogurt		
16 oz orange juice		

Carbohydrates

- One of the main sources of energy for working muscles
- 60-70% of your calories should come from carbohydrates

Foods to be eaten before exercise:

Low Carbohydrate foods	Moderate Carbohydrate foods	High Carbohydrate foods
Apples Pears Power bars Fruit yogurt Chocolate milk Lima Beans	Bran muffin Bran chex Pasta Potato, boiled Rice Popcorn	Gatorade Baked potato Rice cakes Vanilla wafers Cheerios Graham crackers Honey

Skim milk Apricots Green Beans Lentils Kidney beans Barley Grapefruit		Aas, overripe I beans White bread Shredded wheat Grape nuts cereal Wheat Thins	
Protein 15-20% of your Good sources of protein: • Fish-baked, broiled • Turkey or chicken w • Lean red meat	or grilled	Tofu a	and other soy products or egg whites
Fat•Source of stored en and long term activ ••No more than 20-50•No more than 20-50Avoid saturated fats such a•Butter ••Butter ••Whole milk ••Fatty types of beef	ity 0% of your ca	lories should c	during low level activity come from fat fat cheeses foods prepared with oil
<u>Foods_to_Us</u> Dining out:	e <u>l</u>		
• Choose high			 Lunch/ Dinner: Avoid the high fat foods such as: Burgers Fries Go for: Deli sandwiches with lean meats such as turkey, chicken or low fat ham with lots of vegetables and low fat toppings such as:

carbohydrate foods Pancakes Bagels Cereals Juices Waffles Bran muffins Fresh fruits	 Mustard Pickles Mozzarella cheese made with skim milk Other low fat choices: Thick crust pizza Chili Spaghetti with marinara sauce Soups Grilled chicken with baked potato Rice Steamed vegetables Salad with kidney beans, chick peas or fresh bread
	d_attack! g the fast food restaurants
McDonalds:	Wendy's:
 Cheerios Wheaties English muffins Pancakes with syrup Low fat milk (1%) Low fat shakes Chunky chicken salad with low fat or fat free dressing Hamburger (NOT a cheeseburger) 	 Apple Danish Chili Plain Baked potato Caesar side salad Grilled chicken sandwich Junior hamburger (NOT a cheeseburger) Small frosty dessert
Burger King:	Subway:
 Bagel with jelly Broiled chicken sandwich Chunky chicken salad (no dressing) 	 Turkey (hold the mayo) Tuna Low fat chicken salad Lean roast beef Grilled chicken sandwiches Salads with low fat dressings
Arby's:	Taco Bell:
 Chicken fajita pizza Grilled chicken barbeque Lite chicken deluxe Lite ham deluxe Lite roast turkey deluxe 	 Bean burrito Chicken burrito Combination burrito Spanish rice

Frency dip roast beef

• Tortilla chips/salsa

Be sure to limit fried and high-fat foods like burgers, fried chicken, french fries, and nachos. These and similar fast foods take a long time to digest.

Packable Snacks:

So you won't go hungry if you're traveling to a game, stash 1,000 calories of triedand-true food in your bag. (Never try new foods before an important event.) You might even pack extra snacks for underfed teammates. On game day you can add perishable items such as yogurt, bagels, apples or other fresh fruit, or even a sandwich or two. Some possibilities:

- Granola bars or energy bars (about 200 calories each)
- Trail mix (about 200 calories per 1/2 cup)
- Toaster pastries (about 200 calories each)
- Dried fruit (150 calories per 1.5-ounce box of raisins)
- Animal crackers (about 140 calories per 12 pieces)
- Juice boxes (100 to 150 calories per 8 ounces)

Candy? Research suggests that candy doesn't hurt most people's sports performance. In one study, reported in the March 1987 *Journal of Applied Physiology*, athletes who ate a big breakfast 4 hours before and a candy bar 5 minutes before hard exercise improved 20% during the exercise test compared with when they ate nothing. The results of the study also suggest that just candy and no breakfast before exercise improved performance 10% in comparison with eating nothing. **Snickers Bars** are a good choice.

Some people are sensitive to pre-exercise sugar, however, and have a rebound blood-sugar low that makes them feel weak. Hence, the safest bet is to eat the candy within 5 to 10 minutes of starting activity. This span is too short for the body to respond. (Or, eat the candy more than 45 minutes before exercise to allow insulin levels to drop.)

Candy is better than nothing, but it's not premium fuel. It's better to eat a more wholesome snack like cereal, a banana or apple, yogurt, or pretzels and juice. The urge for a quick energy fix is a sign you've eaten too little food earlier in the day. To prevent cravings, eat a hearty breakfast and lunch.

Energy Bar Comparison Chart:

(You should drink at least 8 to 16 ounces of water with an Energy Bar)

BTU Stoker	252	73%	11%	16%
Clif Bar	250	83%	7%	8%
Edgebar	240	77%	8%	17%
Exceed	280	76%	6%	17%
Gatorbar	220	89%	8%	5%
PowerBar	225	75%	8%	18%

· •		- · -			
%	31%	30%	47%	180	PR Bar
%	18%	8%	80%	220	Thunder Bar
%	19%	18%	70%	230	Tiger Sport
%	12%	6%	81%	490	Ultra Fuel
				-	

48 hrs before the game

The 2 days before a game are the most critical for stocking the muscle with adequate fuel. The most important fuel for a hockey player is carbohydrate which is stored in the muscle as Glycogen. Glycogen takes 24-48 hrs to recover to full stores. This explains why the 2 days pre-game is so important for consuming carbohydrates. Glycogen is the fuel burned in anaerobic situations. In other words, any time you are out of breath on the field you are relying on Glycogen as your fuel. If your stores begin to run out during a game, you?ll ? hit the wall? or run out of energy.

Tips for maximizing glycogen stores:

Rest. A hard workout even 2 days before a game will deplete your glycogen stores. Take it easy, stretch and avoid any high intensity work.

Consume High Carbohydrate Foods: At each meal be sure to include foods such as breads, bagels, rice, pasta, fruit, juice, vegetables?

Eat Often: every 2-4 hours

24 hours before the game

The day before a game often includes travel. Even with the best intentions, many athletes fall short on their nutrition when trying to eat ?on the road?. Some of the challenges of eating on the road are: high fat foods, unfamiliar foods, bizarre eating times, jet lag, motion sickness etc? Here are some guidelines to follow when eating on the road the day before a game:

Carry your own food: so you have the flexibility to eat the right foods at the right time Avoid unfamiliar foods: You don?t know how they will affect your stomach Avoid spicy or high fat foods: They can cause stomach irritation and slow digestion Graze: Frequent small meals and snacks (every 2-4 hours) help to load the muscle with energy

Game day nutrition

Game times will vary but your meals should always stay consistent. The purpose of game day nutrition is to keep blood sugars stable, stay hydrated and avoid any unnecessary stomach upset or depletion of muscle glycogen. In other words, all of your energy for your game should ALREADY be stored in your muscle if you ate properly the 2 days prior. Large meals are unnecessary game day because if you recall from above, the energy won?t even reach your muscle for 24-48 hours. The best plan is to eat frequent small meals that are easy to digest and that provide enough carbohydrate and protein to keep blood sugars steady. Here are some examples of foods to choose and foods to avoid:

Foods to choose on game day

Easy to digest foods are those that are high in carbohydrate, moderate fat, low in fiber. (This is not a complete list, use foods that you enjoy as long as they meet the criteria listed above)

Fruit: note bananas should have no traces of green on the peel. If they are not completely ripe they may cause gas. Bagels Fig Newton's Trail mix Yogurt Sandwiches: peanut butter, turkey, lean ham? Sport bars Sport drinks Pasta?.

Foods to avoid

Anything that you?ve never tried before Chocolate bars High sugar cookies or candy High fiber muffins Beans or legumes Spicy foods Caffeine: some athletes are accustomed to drinking coffee on game day. There is no problem with this practice as long as adequate fluids are consumed AND caffeine does not upset their stomach.

A pre-game meal should be eaten 2-4 hours before your warm-up. If your warm-up starts at 2:30pm you should be eating a meal or snack every 2-4 hours prior. For example:

Breakfast between 8 and 9am: Bowl of cereal, fruit, toast and peanut butter, 500ml of juice

Lunch between 11-12:00noon: Submarine sandwich (hold the onions, hot peppers and mayo) with lean meat and mustard. Fruit and granola bar for dessert. 500ml of water or juice.

Snack 1-2:30 Sport Drink (1-2 liters) to keep blood sugars stable.

2:30pm WARM-UP starts: GOOD LUCK!

Remember: this plan is only an example. You should come up with your own plan and practice your eating plan before your actual game day to see what works best for you. Every athlete is different. The most important component of game day nutrition is that your plan is familiar to you and that you know it works in practice.