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## Daily Specials

Coaches and athletes are realizing that a meal plan is as critical as a game plan. We asked five nutritionists to serve up five different menus for some very specific situations.

Your football athletes seem overly fatigued during preseason practice and the coach wants a better nutrition plan for them. Your wrestlers ask for a diet that will help them make weight. One of your basketball players is lactose intolerant. The soccer team needs on-the-go meal ideas. And your heptathlete wants a competition meal plan for her specialized event.

As athletes understand more about how diet affects performance, they are also realizing they sometimes have unique needs. The volleyball player knows her diet needs to be different than the football player's. The cross country runner knows he shouldn't be eating the same as the baseball player.

Then there are each athlete's individual weight goals to consider. Your basketball team may have one player who needs to gain weight and another who needs to lose weight. Add in athletes with allergies, picky eaters, and vegetarians, and the varying combinations of meal plans for athletes is endless.

For this article, we've asked five sports nutritionists to show us how they develop a meal plan for a specific athlete or team. From a football squad during two-a-days to a female soccer player who says she doesn't have time to eat, the menus are tailored for success.

### TWO-A-DAYS

By Amy Bragg

Eat, practice, eat, sleep, eat, meetings, practice, eat. Such is the typical preseason football camp schedule—those exhilarating, yet taxing days when the year's football team is formed.

Proper nutritional intake is extremely important at this time, and menu planning can be a complex task. Athletes need a lot of energy to endure the physical stress of practice and conditioning sessions combined with the mental demands of meetings and the limited recuperation time.

When planning menus for football camp, I focus on a few main goals:

- Hydration, hydration, hydration
- Timing meals to best utilize the energy and nutrients from food

- Matching athletes' tremendous energy expenditure
- Preserving weight, especially lean mass gains from the off-season.

The August heat imposes huge fluid and electrolyte demands on the athletes, so providing appealing drink choices at every meal is a priority. We also clearly identify high sodium foods during meals to help cramp-prone athletes make good decisions. Sprinkled throughout the menus are foods like olives, salsa, soups, lunchmeat sandwiches, pickle spears, trail mix, salted mixed nuts, pretzels, and baked chips. Other high sodium menu items include chicken noodle, chicken tortilla, and tomato soups, and grilled cheese sandwiches.

We also track each player's weight before and after practice to monitor both individual and team weight fluctuations. If the team's weight is moving down, this will be addressed in the following days' meal plans.

We pay close attention to the timing of meals, based on the workout plan for that particular day. For example, on Day 9 of preseason camp, athletes will be doing strength workouts at 9 a.m. with rest time in the middle of the day and practice at 4:30 p.m. Therefore, we plan a large breakfast at 7 a.m., recovery drinks after weightlifting, pre-practice lunch at 1:30 p.m., dinner immediately following practice, and a nighttime snack to boost the day's intake.

On Day 10, there is double practice, at 7:30 a.m. and in the afternoon, so we structure meals differently. Players are encouraged to eat a small pre-practice snack, and brunch is waiting for them as they finish their morning practice. We encourage them to take a short nap afterward, then provide them with a pre-practice lunch, which has to be appealing enough to pull them up from their naps, but also appropriate for pre-practice consumption. Dinner is served after the second practice of the day and is followed by a nighttime snack to cover the day's expenditure.

To replace all the calories lost during workouts and thus maintain weight, simply getting enough food into each player is another challenge. The schedule and fatigue that often define football camp can very easily turn eating into a chore. Working out in the heat can also zap appetites. Therefore, it's key to provide athletes with enticing foods that encourage them to eat.

We have found it works well to start meals with cool foods like fruit salad, Jell-O, chicken salad, deli sandwiches, yogurts, and frozen fruit bars. Athletes tend to eat more if they can start with a cold plate and work up to hot entrée foods.

At times when practice and conditioning performance will not be affected, we also offer some indulgent foods, which contain a higher amount of fat and are energy dense. These foods act as "weight support" tools, and they really boost team morale. Comfort foods like King Ranch casserole, chicken and dumplings, macaroni and cheese, and fried foods with mashed potatoes and gravy can help maintain weight, especially for the

picky eater. However, we also remind athletes to put together well-rounded plates that include leaner protein entrees with fruit and vegetable sides.

And we don't forget dessert! Strawberry trifle, angel food cake with fruit, and cookies and milk are good choices for providing comfort and calories without too much fat. ("Football Camp" meal plan begins below.)

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## **MEAL PLAN: FOOTBALL CAMP**

### **Day 9**

#### Pre-Conditioning Breakfast:

Omelets  
Migas  
Turkey sausage  
Cinnamon and whole wheat toast  
Jelly, peanut butter  
Yogurt  
Cereal bars  
Whole bananas  
Fruit salad  
Deli sandwich bar  
Trail mix  
Gatorade bars  
Sport Beans  
1% and skim milk  
1% chocolate milk  
100% orange, cranberry, apple, and grape juices  
Cherry juice  
Water  
Sports drinks

#### Pre-Practice Lunch:

Beef, chicken, and shrimp fajita trio  
Sauteed onions and peppers  
Corn and flour tortillas  
Charro beans  
Mexican rice  
Chicken quesadillas  
with guacamole  
Mild salsa  
Cilantro lime chicken soup  
House salad  
Honey mustard and house dressings

Assorted whole fruit  
Trail mix  
Jamba juice smoothies  
Sport Beans  
Water, sports drinks

Dinner:

Boiled shrimp  
Strip steaks  
Chicken alfredo  
Baked potatoes with fixings  
Broccoli with parmesan cheese sauce  
Garlic toast  
Salad bar  
Tomato soup with croutons  
Cheesecake and assorted fruit desserts  
Water  
Sports drinks

Evening Snack:

Chicken fajita baked potato  
Chocolate chip cookie  
Water, 1% milk, cherry juice

**Day 10**

Post-Practice Brunch:

Omelets  
Strip steak  
Hash brown potatoes  
Quiche lorraine  
Yogurt parfait  
Waffles with sliced strawberries, blueberries, peaches, and slivered almonds  
Cereal bars  
Whole bananas  
Whole wheat and sourdough toast  
Assorted bagels  
Butter, jelly, peanut butter, cream cheese  
Fruit salad  
Deli sandwich bar  
1% and skim milk  
1% chocolate milk  
100% orange, cranberry, apple, and grape juices  
Cherry juice  
Water  
Sports drinks

Lunch:

House salad with Italian vinaigrette and ranch dressings  
Tuscan bean soup  
Bread with salted butter and olive oil  
Honey pecan salmon  
Spaghetti and meatballs  
Penne with meat sauce  
Parmesan cheese  
Steamed broccoli and cauliflower  
Deli sandwich bar  
Whole fruit  
Trail mix  
Water  
Sports drinks

Post-Practice Dinner:

Roasted turkey breast  
Sliced honey ham  
Cornbread stuffing with  
giblet gravy  
Cranberry sauce  
Deviled eggs  
Green beans  
Yams  
Mashed potatoes  
Cream corn  
Strawberry Jell-O salad  
Dinner rolls with salted butter  
Deli sandwich bar  
Chicken and rice soup  
Pumpkin pie with whipped topping  
1% and skim milk  
1% chocolate milk  
Water, sports drinks

Evening Snack:

Chicken pot pie soup with saltines  
Ham and cheese po'boy  
Water, sports drinks,  
cherry juice

**COURTSIDE CHALLENGE**

By Jennifer Ketterly

Basketball is a game of speed and agility as well as strength and stamina. Developing a nutrition plan for these athletes can help maximize physical and mental performance. But sometimes, athletes also have individual concerns to take into account. In this scenario, our athlete is a female basketball player who is lactose intolerant and very concerned about gaining weight.

Lactose intolerance occurs in individuals who cannot produce lactase, the enzyme that breaks down lactose, a sugar naturally found in dairy products. Symptoms can easily be controlled by modifying one's diet. The resulting challenge, however, is ensuring adequate calcium intake. Poor calcium intake over time can result in a weakened bone structure and leave the athlete at high risk for fractures and breaks. Here was our advice to help minimize symptoms and maintain adequate calcium intake:

**Read** label ingredients to identify milk and lactose. Ingredients such as whey, dry milk solids, non-fat dry milk powder, milk by-products, and curds are present in many sports foods. And lactose is often added to many prepared foods such as pancake, bread, and cookie mixes; instant soups and potatoes; margarines and salad dressings; and powdered meal replacements.

**Experiment** with consuming small amounts of lactose. Some dairy products, such as hard cheeses, have less lactose than a glass of milk. Spreading lactose foods throughout the day can also help. And some individuals can tolerate active culture yogurts, which contain lactase.

**Increase** high calcium foods. For example, pinto beans, broccoli, oranges, almonds, and fortified soy milk are good examples of dietary calcium sources.

**Consider** supplements. Lactase enzyme supplements exist in tablet and liquid forms and are available over the counter. If calcium requirements just aren't being met through foods, a calcium supplement with vitamin D may be appropriate.

Another factor influencing our athlete's plan was her request to "not gain even one pound." First, we sat down with her to have an open discussion about her optimal body weight range and any fears or concerns that may be misguided. We evaluated her for any signs of an eating disorder and the female athlete triad (inadequate energy balance, amenorrhea, and low bone mineral density). It is especially important to consider this syndrome in the lactose intolerant female athlete since dietary calcium intake may not be consistently sufficient.

Next, we explained to her the importance of adequate energy balance for the in-season basketball player. Consuming fewer calories than required to meet daily demands (for fear of gaining weight) would mean not having the energy to practice and compete at 100 percent. Practicing and competing in such a state can lead to slowed recovery, mental and physical fatigue, poor performance, and an increased risk of injury.

From there, we coached her on choosing a diet that would provide enough calories but not more than she needed to achieve energy balance. We calculated 2,800 calories as her daily target and offered this advice:

**Do not skip meals.** Eating three meals and one or two snacks provides steady availability of energy throughout the day to fuel typical afternoon practices. Adopting a consistent pattern of eating every three to four hours also helps maintain lean body mass and controls hunger. This aids in optimizing body composition and prevents overeating at any one meal, especially end-of-the-day meals.

**Choose beverages wisely.** Recent research has shown that significant declines in basketball-specific performance occur at a dehydration level of just two percent, so being hydrated is of utmost importance. But some beverages also add unnecessary calories. We advised her to choose sports drinks during practices and immediately afterward, and low-calorie (or calorie-free) non-carbonated beverages throughout the rest of the day.

**Emphasize recovery nutrition.** In the 30 to 40 minutes following a workout, athletes should always consume a post-workout snack, no matter what their weight goals are. This snack should consist primarily of carbohydrate for energy repletion and some protein for muscle synthesis and repair. The goal should be to consume approximately half her body weight in grams of carbohydrate (a 140-pound player should aim for 70g of carbohydrate) and 20g of protein post-workout to refuel for the next practice session.

A lactose intolerant player will need to choose post-workout foods and products carefully by limiting the ingredients discussed above. Nutritional shakes and bars are often formulated with milk products, so we reminded her to read labels and choose soy based supplement products as an advisable alternative. (“Basketball Player” meal plan begins below.)

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## **MEAL PLAN: BASKETBALL PLAYER**

### Breakfast:

2 slices whole grain bread  
2 Tbsp. peanut butter  
1 Tbsp. jelly  
1 banana  
1 cup calcium fortified orange juice

### Lunch:

2 fajitas (2 medium size flour tortillas, 1 cup sautéed vegetables, 4 ounces chicken, 1/4 cup salsa)

Shredded lettuce salad  
1 Tbsp. guacamole  
1/2 cup pinto beans  
1 1/2 cups strawberries

Pre-Practice Snack:

1 orange  
15 almonds

Basketball Practice:

32 ounces sports drink  
Water

Recovery Snack:

6 ounces low fat, active culture, fruited yogurt  
1/4 cup granola cereal with fruit and nuts

Dinner:

4 ounce sirloin steak, trimmed  
1 medium red potato roasted with 1 tsp. olive oil  
1 cup cooked carrots  
Mixed green salad with 2 Tbsp. Italian dressing

## **ALL-DAY EVENT**

By Dr. Jackie Maurer Abbot

Pregame meals should be a big part of any nutritional gameplan. But how about when an athlete has several competitions in a day? This is the challenge of devising a meal plan for a heptathlete.

In this particular case, our athlete is a 23-year-old female who was experiencing fatigue during her competition days, but does not like to consume sports drinks and bars. She wanted a meal plan for the U.S. Nationals, when she would be competing in seven events over two days.

With multi-event competition, there is downtime both during events (when she waits her turn in field events) and between events. In addition, there is no big break between events for a full meal. And the competition usually takes place in a stadium unprotected from the sun.

The four goals I kept in mind for this multi-event athlete were:

- Meeting energy needs
- Timing consumption of adequate fluid and electrolyte intake before, during, and after exercise to promote adequate hydration
- Timing consumption of carbohydrate intake to provide adequate fuel for energy demands and to spare protein for muscle repair, growth, and maintenance
- Timing consumption of adequate protein intake to meet protein synthesis and turnover needs.

Based on height, weight, and activity level, we estimated her needs as follows:

- Calories: 3,000
- Protein: 89-118g
- Carbohydrates: 518-740g
- Fluids: 32 ounces per hour during competition.

We also had to work around her dislike of sports drinks and bars. I started by asking her to tell me about the foods she liked, focusing on fluids, carbohydrates, and high quality proteins. She reported liking water, bananas, oranges, milk, yogurt, peanut butter, pretzels, turkey, and of course, chocolate.

Our meal plan called for the athlete to graze on foods and fluids throughout the competition day in order to stay hydrated and energized without the feeling of fullness. Her two main snack foods were oranges and pretzels. Oranges would help keep her hydrated and provide a good source of carbohydrate (and they pack well). Pretzels would supply salt, as well as another low-fat carbohydrate.

We gave her a precise schedule for drinking water. Then, we added shelf-stable chocolate milk to her menu, which would support muscle repair and maintenance, help restock glycogen stores and prevent dehydration, and allow a treat.

Another key was devising pre-competition and post-competition meals that would provide a full complement of nutrients, but not be too filling. And we added an evening snack, since her post-competition meal served as an early dinner. (“Heptathlete” meal plan begins below.)

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## **MEAL PLAN: HEPTATHLETE**

### 6 a.m. Pre-Competition Meal:

- 1 cup oatmeal made with low-fat milk and pinch of salt
- 1 cup sliced banana

1 Tbsp. brown sugar  
1 Whole wheat English  
muffin  
2 Tbsp. smooth, natural  
peanut butter  
16 ounces cool water

8 a.m.

17-20 ounces cool water

9 a.m.

1 cup low-fat pretzels  
7-10 ounces cool water

*9:45 a.m. 100-meter hurdles*

10 a.m.

8 ounces cool water

*10:30 a.m. High jump*

10:30 a.m. to 1:00 p.m.

1 cup low-fat pretzels  
8 ounces low-fat chocolate milk  
16-32 ounces cool water

*1 p.m. Shotput*

1 p.m. to 1:30 p.m.

Sips of cool water

*2:15 p.m. 200 meters*

2:30 p.m.

Post-Competition Recovery Snack:

1 orange  
16 ounces low-fat  
chocolate milk  
24 ounces cool water

4:30 p.m.

Post-Competition Meal:

Turkey breast sub on whole wheat bread with cheese, lettuce, tomato, and 1 Tbsp.  
mayonnaise  
1 cup tomato basil soup  
1 cup baby carrot sticks

2 medium sized low-fat oatmeal raisin cookies  
16 ounces unsweetened  
iced tea

7:00 p.m.

1 cup low-fat vanilla yogurt with 1/2 cup sliced strawberries  
Oats & honey granola bar  
8 ounces cool water

## **MAKING WEIGHT**

By Leslie Bonci

In the sport of wrestling, one of the greatest challenges is making weight without compromising performance. Wrestlers have always focused on reducing calories to remain in the lowest weight class possible. But they now also realize that having a calorie deficit can limit their ability to train or perform at their best.

My recommendations for a wrestler trying to lose or maintain weight during preseason workouts include:

- Getting adequate protein
- Eating more fiber
- Consuming many small meals throughout the day.

His meal plan also needs to include a variety of foods so he can get a full spectrum of nutrients. And I would suggest foods that require chewing and utensils so he doesn't overeat without realizing it.

As a starting point, getting adequate protein can help the body to utilize calories more efficiently and add to the fill factor. I would recommend at least .6g of protein per pound of body weight. For example, a 140-pound wrestler would require 89g of protein per day. That might include a six-ounce piece of chicken, fish, or lean meat (42g of protein); two eight-ounce glasses of skim milk (16g of protein); two scrambled eggs (14g); and a sandwich with three slices of turkey (21g of protein).

Fiber adds "chew" to meals, takes longer to eat, and requires more calories to break it down than other types of carbohydrate-containing foods. So I would include fruits, vegetables, cereal with bran, oatmeal, brown rice, barley, and beans on his menu.

I also think it is important to aim for five small meals during the day, to ward off hunger between meals. It is possible to keep the calorie count down by filling one-third of the plate with protein, one-half with fruits or vegetables, and the remainder with a whole

grain item such as brown rice or a small baked potato. Limiting the amount of fat in salad dressing, mayonnaise, or oil will also help.

Breakfast is key, and I stress that it must be eaten within the first hour of waking to help rev the metabolism from the beginning of the day. Eating a meal soon after getting up—and adding some fat such as nuts, peanut butter, or a little butter—will limit hunger throughout the day.

A good place to decrease calories is through beverages. I would rather the calories come from food than drinks, so I include unsweetened or sugar-free products or a tomato or vegetable juice in addition to water. (“Wrestler” meal plan begins below.)

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## **MEAL PLAN: WRESTLER**

### Breakfast:

Oatmeal (1/2 cup made with 4 ounces skim milk, cinnamon, 1 Tbsp. each of raisins and nuts, 1 Tbsp. of maple syrup)  
One hard boiled egg

### Lunch:

Turkey wrap (3 ounces smoked turkey breast, tomato, cucumber, lettuce, thinly spread hummus in a whole wheat tortilla)  
1 cup vegetable soup

### Pre-Practice Snack:

100 calorie yogurt and a piece of fruit

### Post-Practice Snack:

8 ounces skim chocolate milk and a piece of fruit

### Dinner:

Stir-fry (6 ounces lean beef and two cups of mixed vegetables sautéed in 1 Tbsp. oil, garlic, ginger)  
1/2 cup brown rice  
Soy sauce

### Evening Snack:

Sugar-free gelatin with fruit added or 100 calorie bag of microwave popcorn

## ON THE RUN

By Randy Bird

Soccer is a sport where proper nutrition greatly affects performance. During a game, the average player will cover five to seven miles and needs to be energized for both endurance and repeated energy bursts. Games last 90 minutes with few opportunities to refuel. And college players typically compete in two games over a three-day period, further emphasizing their nutritional needs.

The key fueling source for a high intensity, maximal-outburst activity such as soccer is carbohydrates. More precisely, carbohydrates should represent at least 55 percent of calories eaten. Consuming adequate amounts of carbohydrate maintains training intensity and promotes rapid recovery.

However, many soccer athletes simply don't consume enough carbohydrates, which can lead to early fatigue and decreased performance. Studies have shown that the diets of soccer players are not much different from the general public. And when college athletes are balancing sport with study and social activities, they sometimes say they just don't have time to eat enough high-quality carbs.

The sample diet in this section is for a female college soccer player who is also a pre-med major and involved in many extracurricular activities. "I really don't have time to stop and think about what I'm eating," she says. "I need to grab something on the run."

For her, we started with a little education. We explained that carbohydrate-containing foods should be eaten at each meal and also before, during, and after exercise.

- At meals, carbohydrates should take up about two-thirds of the plate.
- Pre-game carbohydrates should be consumed to help delay fatigue.
- Sports drinks should be consumed during competition to help the body maintain energy late in the contest.
- Carbohydrates should also be eaten within the first 30 minutes after games and practices to improve muscle glycogen storage, which will ensure adequate energy for the next practice or competition.

While focusing on carbohydrates, soccer players still need to consume adequate protein and fat. Protein has a role in muscle growth and repair and in boosting the immune system. The main sources should be low-fat dairy, chicken, fish, and lean cuts of beef and pork.

Fat has a bad reputation for increasing weight and disease risks, but eating too little may impair performance. Fat is the primary energy source for low- and moderate-

intensity exercise. A diet high in animal fats is not the goal. Athletes should strive to include healthy fats from nuts, seeds, and fatty fish such as salmon every day.

Hydration is another important goal for our busy soccer athlete. Here are the tips we provide for proper hydration:

**Pre-hydrate:** Drink 16 to 20 ounces of water two to three hours before practice or competition. Drink eight ounces of water or sports drink 10 to 20 minutes before practice or competition.

**Hydrate:** Drink sports drinks during practice or competition, and don't wait until you're thirsty.

**Re-hydrate:** Drink 20 to 24 ounces of water or sports drink for every pound of weight lost.

Athletes' bodies function best when fueled throughout the day, so we advised this athlete to eat a meal or snack every two to four hours. We also told her that a little pre-planning can help her reach these nutritional goals, without taking up much time at all:

- Bowls of cereal are quick and nutritious.
- Fruits such as bananas take no preparation time and are easy to pack. Grapes and apples are another good suggestion as all they need are a quick rinse in the sink.
- Taking five minutes in the morning to pack some snacks and lunch for later in the day is key. Investing in an insulated lunch pack and a small freezer bag ensures that foods needing refrigeration can also be included.
- A nutritious dinner can also be prepared quickly. Boiling some spaghetti, heating up prepared sauce and a chicken breast, and adding a prepackaged salad to the plate is quick, easy, and healthy. ("Soccer" meal plan begins below.)

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## **MEAL PLAN: SOCCER**

### Breakfast:

1 1/2 cups raisin bran  
8 ounces skim milk or soy milk  
1/2 cup grapes

### Morning Snack:

1 chewy granola bar  
1 medium banana  
1/4 cup dry roasted peanuts

Lunch:

2 slices whole wheat bread  
2 Tbsp. peanut butter  
1 Tbsp. jelly  
1 medium apple  
8 ounces sports drink

Pre-Practice Snack:

1 1/2 ounces pretzels

Post-Practice Recovery Snack:

20 ounces sports drink  
1 piece light string cheese

Dinner:

2 cups spaghetti noodles  
1/2 cup marinara sauce  
3 ounce chicken breast  
2 cups salad  
2 Tbsp. Italian dressing  
8 ounces skim milk or soy milk

Late Night Snack:

3/4 cup frosted mini wheats  
8 ounces skim milk or soy milk  
1 medium banana