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ATHLETE AND NUTRITION

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Introduction

You work hard to develop your specific sport skills. You would not be a member of a Vanderbilt athletic team if you were not exceptional at your sport. You also spend time developing strength and cardiovascular conditioning. If you skipped your workouts and practice sessions, you would not stay a member of your team for very long. Nutrition is another part of your training. If you don't work at healthy eating, you are missing an opportunity to enhance and improve your performance. Do athletes need to follow a special diet? No, but they need to follow the basic guidelines for healthy eating with more discipline compared to a non-athlete. Proper nourishment everyday will provide adequate energy (carbohydrate and fat), protein, vitamins, minerals, and water; all of which are essential for good health and athletic performance.

The following tips are useful.

- Plan ahead by bringing small, non-perishable snacks to school in case there is a long time between lunch and the event. For example eat fruits, crackers, bagels, or carbohydrate-based energy bars instead of soda pop and chips.
- Dairy products and meats can be eaten daily for valuable nutrients. Meats are excellent sources of protein, iron, and zinc while low-fat dairy foods like skim milk, yogurts and cheeses provide much needed calcium, vitamin D, and protein. It is very important to have a good daily supply of calcium and vitamin D for bone health. Don't like milk? Try soymilk or a calcium supplement.
- How much should you eat? It depends on gender (male or female), height,weight, and the demands of your sport. Energy intake can ↑ a little or a lot. For example, a female golfer may only require a few hundred extra calories to compete (daily total ~ 1850 to 2150). However, a growing male hockey player under heavy training may require nearly a

thousand more calories per day (daily total ~ 3000 to 4000). Include a wide variety of foods in your meals and don't go hungry. Likewise, avoid bingeing on foods or constantly over-eating as this can lead to extra weight gain, which can hinder athletic performance.

How many calories do I need?

- You need sufficient calories to fuel your body in order to perform at your best.Most athletes under-estimate their calorie needs.
- Your body needs calories even when it's resting to keep you alive.
- Calories are needed for activities like walking to class and studying.
- You burn the most calories during and immediately after exercise.

Fuel your machine!

- The following is a formula that will help you estimate how many calories you might need each day.
- Multiply 23 calories per pound of your body weight. Ex. 150 x 23 = 3450

calories/day

* Your sport, gender, age, body composition, genetics, season, activity level, and length and type of workout influence your calorie needs. This calculation is based on vigorous workout of 90 minutes or more almost every day. If you workout less, use 18-20 calories/pound.

The next question is how much food equals how many calories?

Counting calories can be exhausting and may take some fun out of eating, so don't feel that you have to do it. However, reading food labels is about the only way to know how much you really eat. Let's try and put this all together. The following two menus are equivalent in calorie content yet are not the same regarding nutritional value. Look them over and see if you can tell which is better for you?

Meal	Menu A	Calories	Menu B	Calories
Breakfast	20 oz Cola	270	1 glass Milk	90
			1 cup Oatmeal	145
			Med Banana	70
			1 glass Orange Juice	110
Lunch	20 oz Cola	270	Turkey Sandwich	375
	French fries	515	Apple	80
	½ c Ketchup	100	2 oz Pretzels	210
			8 oz Skim Milk	90
			8 oz Yogurt	240
Snack	2 oz Doritos	280	Power Bar	240
Dinner	3 slices Pizza	685	3 oz Chicken Brst	150
	20 oz Cola	270	1 c Brown Rice	215
			½ c Vegetable	45
			Roll w/marg	130
			1 c Lite Ice Cr.	200

Table No 02

Which menu is better for you? What did you look for? The qualities of a healthy diet should include variety, balance, and adequacy. Which menu has more nutritious carbohydrates, fruits and vegetables, lean meats, and low-fat dairy products? Menu *B* is clearly of a higher nutritional value. Menu *A* has plenty of food-energy yet lacks the total nutrient value of menu *B*. Menu *A* has a lot of sugar and fat and is low in iron, protein, vitamin C, and other nutrients. The above menus will remind you of what a healthy food intake should look like

For Female Athletes

Athletic training can decrease an important part of your blood called hemoglobin, which helps carry oxygen to muscles. Iron is needed to bind oxygen to hemoglobin for transport to

muscles. Some iron is lost during your menstrual cycle each month, so it is crucial to eat iron-rich foods everyday to avoid iron deficiency anemia. Meat, fish, and poultry are good sources of iron. If you don't care for those foods eat iron-fortified cereals like cream of wheat or malt-o-meal and eat lots of green-leafy vegetables, dried fruits, and legumes. Do not take an iron supplement without asking a physician or dietitian. The recommended dietary allowance for females aged 14-18 years is 15 milligrams per day. Eat foods rich in vitamin C like citrus fruits and juices, broccoli, and green peppers with your iron-containing foods to aid absorption. Weakness, fatigue, and poor physical performance can result if iron is lacking in the diet.

Summery

It's important that athletes eat healthy, regular meals daily to maximize their training and competitive performance, and also to improve recovery. There are no special foods or c diets to follow, just be consistent with the basics of nutrition and plan ahead.

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