# Utah State University DigitalCommons@USU

All Graduate Plan B and other Reports

Graduate Studies, School of

5-1-2011

# Nutrition and Fitness Guide for Graduating Student-Athletes

Anna Fukunaga Utah State University

# Recommended Citation

Fukunaga, Anna, "Nutrition and Fitness Guide for Graduating Student-Athletes" (2011). All Graduate Plan B and other Reports. Paper 17.

http://digitalcommons.usu.edu/gradreports/17

This Report is brought to you for free and open access by the Graduate Studies, School of at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Plan B and other Reports by an authorized administrator of DigitalCommons@USU. For more information, please contact becky.thoms@usu.edu.





# Nutrition and Fitness Guide for Graduating Student-Athletes

# **Utah State University**

By Anna Fukunaga Spring 2011

# **Table of Contents**

ntroduction/Purpose	. 2
New Goals	. 2
Nutrition	. 2
Body Mass Index	. 2
Body Fat Percentage	. 3
Daily Caloric Intake and Expenditure	. 4
Healthy Weight Gain	. 5
Healthy Weight Loss	. 5
Healthy Eating	. 7
Nutrition Facts Panels	. 8
Tips for Eating Out	. 9
Supplements1	L1
My Pyramid1	11
Tips to help you eat whole grains1	11
Tips to help you eat vegetables1	12
Tips to help you eat fruits1	12
Tips to help you eat dairy1	13
Tips to help you eat protein1	13
Volumetrics1	
Portion Sizes1	
Exercise	15
National Guidelines1	15
FITT1	15
Resistance Training1	16
Fime Management1	LE
Conclusion 1	15

# **Introduction/Purpose**

For the last four years of your life, you have been supported by strength coaches, academic advisors, athletic trainers, tutors, mentors, and coaches. Your life is dedicated to your sport, and your body is molded into the ideal build to compete at the highest level you can achieve. As soon as your competitive days are over, your life dramatically changes and the needs of your body change as well. Because you typically do not sustain the same level of activity, you do not have the same nutritional needs. The demands you place on your body for your sport are higher than what you will maintain after you complete your eligibility. It is important for you to learn how to implement a healthy lifestyle that is sustainable following graduation and into your adult years.

The transition from collegiate competition to normal adult life is a major transition that has thus far been neglected. Athletes often struggle going from college lifestyle and competition to a normal adult life in the work force. The daily structure of college life is gone and you are left on your own to build the life that suits you. Without nutritional and fitness guidance, it is easy to continue the eating habits you acquired while competing while significantly decreasing your activity levels. This can lead to rapid weight gain as well as a number of serious health issues as you age. The purpose of this project is to provide a "detraining guide" for graduating student-athletes regarding leading a healthy lifestyle after they conclude their collegiate careers. This includes nutrition, exercise, and lifestyle changes needed to successfully phase from a collegiate athlete to a healthy adult.

#### **New Goals**

After completing your collegiate eligibility, your goals and focus change dramatically. Instead of working toward being the best competitor for your sport, you can set new goals related to other

interests or personal desires that you may have. These should include new goals for healthy living including changes to your eating habits and level of physical activity.

Now is the time to try a new sport, learn a new hobby, or invest more time in an activity you've been too busy for in the past. For the last four years, you've been trained in power development and quick, high intensity exercises. Now, an impressive bench press is not as crucial for healthy living as having a well-conditioned cardiovascular system. It's important for you to make healthy living a priority in your life in this new real world scene. Currently, more than 60% of American adults are not regularly active. Make sure you're not part of that statistic!

Take some time to think about what is important to you now, and what goals you want to set in regards to physical activity and healthy eating. Like you did while competing in college, write down your new goals in visible place and use them to motivate you towards reaching them. Table of Contents

## **Nutrition**

Now that your main focus is not competing in your sport, you can find an appropriate body weight that is healthy and that you want to maintain through your adult years. Whether this means losing, gaining, or staying at your current weight, the following tools can be used as a guide to find a healthy weight range and direct your new goals. Body Mass Index (BMI) is a simple tool that can be used to determine that healthy weight range.

# **Body Mass Index**

It is important to know what your BMI does and does not indicate about your weight, health and lifestyle choices. It is a fairly reliable indicator of body fat for most adults, with athletes and the elderly being two exceptions. BMI is not a direct measure of body

fatness. It is calculated from an individual's height and weight which includes both muscle and fat. As a result, some individuals may have a high BMI but not have a high percentage of body fat. For example, highly trained athletes may have a high BMI because of increased muscularity rather than increased body fatness.

# **Calculating Your BMI**

You can calculate your BMI with this formula:

- [weight (in pounds) / height (in inches) x height (in inches)] x 703.
- Example: Weight = 150 lbs, Height = 5'5" (65")
- Calculation:  $[150 \div (65)^2] \times 703 = 24.96$

# The Centers for Disease Control and Prevention uses BMI to define terms like overweight and obese:

вмі	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 & Above	Obese

#### **BMI and Your Health**

People with very low or very high BMIs tend to have the greatest health risks. Even so, BMI is only one factor in your overall health.

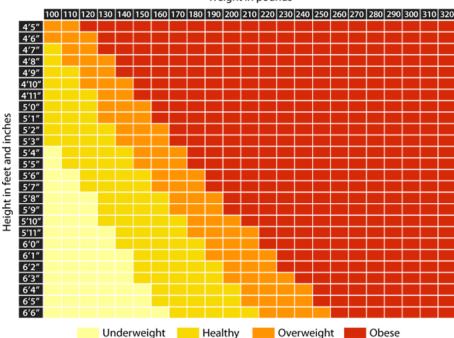
If your BMI is in the overweight category, you will have a lower overall health risk if you:

- Get regular physical activity
- Have blood pressure, blood sugar and cholesterol levels that are within normal limits.

BMI is one aspect of your health to discuss with your care provider. Together, you can decide if other assessments need to be done and whether lifestyle changes such as eating smarter and moving more will improve your health. <u>Table of Contents</u> <a href="http://www.eatright.org/Public/content.aspx?id=6844">http://www.eatright.org/Public/content.aspx?id=6844</a> <a href="http://www.cdc.gov/healthyweight/assessing/bmi/adult\_bmi/index.html-">http://www.cdc.gov/healthyweight/assessing/bmi/adult\_bmi/index.html-</a>

# The following chart is based on a healthy weight range as defined by BMI.





http://www.webmd.boots.com/diet/calc-bmi-plus-

# **Body Fat Percentage**

Body fat percentage is another method for measuring body composition. It attempts to determine the percentage of your total

weight that is fat mass, compared to the percentage that is lean mass (muscle, bone, internal organs, etc.). You are probably familiar with the caliper method of measuring body fat percentage where you are pinched in a number of locations, and plug those values into a formula to produce your results. There are a number of other methods for measuring this value; one of which is taking the circumference of different body parts to calculate the result. The calculation is complicated to do on your own, but the following link walks you through the process if you want to determine your body fat percentage by this method. Table of Contents

http://www.healthstatus.com/calculate/body-fat-percentage-calculator

# Daily Caloric Intake and Expenditure

Now that you know your healthy weight range, the next step is to determine how many calories you need daily to meet your goal of weight loss or gain. To determine your caloric needs, you add together your Basal Metabolic Rate (BMR) and approximate activity expenditure.

The BMR formula uses the variables of height, weight, age and gender to calculate the BMR. This is more accurate than calculating calorie needs based on body weight alone. The only factor it omits is lean body mass. More muscular bodies need more calories than less muscular ones. Therefore, this equation will be very accurate in all but the very muscular (will underestimate calorie needs) and the very fat (will over-estimate calorie needs). You use energy no matter what you're doing, even when sleeping. The BMR Calculator will calculate the number of calories you'd burn if you stayed in bed all day.

- Women: BMR = 655 + (4.35 x weight in pounds) + (4.7 x height in inches) (4.7 x age in years)
- Men: BMR = 66 + (6.23 x weight in pounds) + (12.7 x height in inches) (6.8 x age in years)

# Multiply your BMR number by the appropriate activity level listed below to obtain a target daily calorie intake.

If you are sedentary	Very little or no exercise	Calorie Calculation	BMR X 1.2	
If you are lightly active	Light exercise / Sport 2 - 3 time per week	Calorie Calculation	BMR X 1.375	
If you are moderatley active	Moderate exercise / Sports 3-5 days per week	Calorie Calculation	BMR X 1.55	
If you are very active	Hard exercise / Sports 6 - 7 days per week	Calorie Calculation	BMR X 1.725	
If you are extremely active	Very hard exercise / Sports eg training for Marathon or X2 per day	Calorie Calculation	BMR X 1.9	

http://www.articleslounge.com/medical/basal-resting-metabolic-rate-bmr-rmr-free-calculator/comment-page-3/

Reaching a healthier weight is a balancing act. The secret is learning how to balance your "energy in" and "energy out" over the long run. "Energy in" is the calories from the foods and beverages you have each day. "Energy out" is the calories you burn for basic body functions and physical activity.

# Look at this chart to find your energy balance:

Maintaining weight

Your weight will stay the same when the calories you eat and drink equal the calories you burn.

Losing weight	Energy In < Energy Out	You will lose weight when the calories you eat and drink are less than the calories you burn.
Gaining weight	Energy In > Energy Out	You will gain weight when the calories you eat and drink are greater than the calories you burn.

http://www.mypyramid.gov/STEPS/stepstoahealthierweight.html-Table of Contents

# Healthy Weight Gain

The following ideas are for those trying to gain healthy weight by adding muscle mass.

# **Strength Building and Muscle Mass**

Muscle is harder to build and maintain as you reach adulthood. Regular resistance training exercises are key to building and keeping muscle. Good nutrition supports strength building. A calorie-controlled meal plan of five to six small meals per day fuels muscle growth: fruits, vegetables, whole grains, lean protein, low-fat or fatfree dairy products, beans, nuts, fish, vegetable oils and plenty of water. Protein, carbohydrates and fat play a major role, as does getting enough calories throughout the day. http://www.eatright.org/Public/content.aspx?id=11633

# Be Realistic about Your Body Type

Genetics plays a major role in physical build and musculature. The human body can change to a limited extent through weight training and increased food intake, but you'll never be able to turn a runner's body into that of a linebacker.

#### Focus on Quality First, Quantity Second

The secret to healthy weight gain is to make all your calories as nutrient-rich as possible. Consuming more empty-calorie foods like soft drinks, candy and chips is not a successful way to build muscle. You need the nutrient power of all the food groups.

- If you have a small appetite, eat five to six times a day. Drink fluids before and after meals, but not with them.
- Top your usual foods with some concentrated calories, like grated cheese on a cup of chili. Spread peanut or almond butter on a whole-grain muffin.
- Prepare hot oatmeal with milk, not water. Add margarine, honey, dried fruits and/or nuts.
- Garnish salads with healthy oils such as olive oil, whole olives, avocados, nuts and sunflower seeds.
- Make an appointment with a dietitian to develop an eating plan that will help you gain weight in a healthy way.

http://www.eatright.org/Public/content.aspx?id=6852-Table of Contents

# **Healthy Weight Loss**

Now that you are less active, you need fewer calories to fuel your body. This may take some time to adjust your eating habits. While competing, you may have been able to eat anything and everything that you wanted to, but if you do the same now, you will gain weight over time. It can be OK to gain weight compared to your competition form, but it's important to change your eating habits to include more healthy choices and keep your weight under control.

Slow, steady weight loss is more likely to last than dramatic weight changes. Healthy plans aim for a loss of no more than ½ pound to 1 pound per week. If you lose weight quickly, you'll lose muscle, bone and water. You also will be more likely to regain the

pounds quickly afterwards. A 500 calorie/day deficit equals 1 lb weight loss/wk. 3,500 calories equals 1 lb.

Regular exercise; especially resistance training will help decrease lean tissue losses during weight loss, and can increase caloric expenditure based on muscle's property of burning more calories than fat; even at rest.

http://www.eatright.org/Public/content.aspx?id=6851-

# Your Health and Your Weight

Being overweight or obese has serious health consequences. If your BMI places you in the category of overweight or obese, you are at a higher risk for the following diseases and conditions:

- Coronary heart disease
- Stroke
- Type 2 diabetes
- Cancers (endometrial, breast and colon)
- Hypertension or high blood pressure
- Liver and gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis
- Gynecological problems for women (abnormal menstrual periods and infertility).

http://www.eatright.org/Public/content.aspx?id=6846-

Below is an example of a former Offensive Lineman's diet during competition, and then following the completion of his athletic eligibility. By following this eating plan, he lost 35 pounds in less than 5 months.

#### Then-versus-now for Jeff Kendall's diet

Time	Food	Calories	Time	Food	Calories
8 AM B-fast	Glass of OJ	(112x2)	8 AM Snack	Nancy's	150
		224		yogurt	
	Fruity Pebbles	(110x6)		Blueberries	83
		660			

	T	1		1	
	2-percent milk	(120x3) 360		Whole milk	150
			10 AM B-	Omelet: Elk	183
			fast	meat	(002)
				Three eggs	(90x3) 270
				Spinach, Mushroom, Onion	88
				Cheddar cheese	266
1 PM Lunch	Panda Express: Orange chicken	545	12 PM Lunch	Apple	65
	Sweet & sour pork	400		Mixed nuts	160
	White rice	430			
			3 PM Snack	Can of tuna	191
				Banana	200
6 PM Dinner	Glazed chicken	380	6 PM Dinner	Chicken breast	231
	White rice	205		Steamed vegetables	80
	Macaroni salad	(440x3) 1320		Spinach salad	278
10 PM	Education tales and	(FO)(O)	9 PM Snack	0	04
Snack	Frito Lay Jalapeno Cheddar Cheese Dip (whole tin)	(50X8) 400	9 PIVI SNACK	Orange	81
	Tortilla chips	(140x3) 420		Yoplait yogurt	170
	Prailines 'n Cream	(270x2) 540			
labba //aaaa		TOTAL: 5884			TOTAL: 2644

http://sportsillustrated.cnn.com/2009/writers/george\_dohrmann/06/03/shedding.pounds/index.html

A typical football player consumes 4,500 calories/day while in season. The same athlete would need approximately 2,500 calories/day if they were sedentary and had no daily activity. That 2,000 calorie/day difference is equal to the caloric content of 4 Big Macs a day or a weight gain of 17 lbs in a month. A typical female athlete consumes closer to 3,000 calories/day while in season.

## **Ways to Shave Calories**

When it comes to healthy weight management, small steps add up. Little changes in eating and activity level have a more positive impact on health than drastic ones. This is because you are more likely to stick with smaller changes over time. Extreme diets and intensive exercise regimens may work well at first, but they rarely last over the long term. Below are some simple tips that can make a big difference.

### **Small Changes Add Up**

- 1. **Downsize Your Dishes.** Use smaller plates and bowls to help you eat less. We tend to fill up the dish we're using and then eat it all. Our brains also think we are getting more when the same amount of food is placed in a smaller dish.
- 2. **Savor Your Meals.** Eating slowly helps you consume only what your body needs to feel satisfied. Eating too quickly leads to overeating and feeling uncomfortably full.
- 3. **Leave Some Food on Your Plate**. By leaving even a few bites, you can focus more on your internal signals of satisfaction and less on eating food just because it is there.
- 4. **Don't Eat Out of a Bag or Box.** When you eat out of a package, you are likely to keep eating until it's all gone no matter how many servings the package actually contains. Pour one serving into a small bowl.
- 5. *Choose Your Glass Wisely.* Here's another place where our eyes play tricks on us. When glasses are short and wide, we

- tend to fill them with more fluid and to drink more. Use a slender glass for any beverage except water.
- 6. Rethink Your Drinks. High-calorie beverages like soft drinks, juice drinks, energy drinks, specialty coffees and alcohol add calories just like solid foods. Whenever possible, replace these drinks with water. If you were to eliminate one regular soda from your daily consumption every day for a year, you would lose 15 pounds! <u>Table of Contents</u>
  http://www.eatright.org/Public/content.aspx?id=6849 –

# **Healthy Eating**

Learning how to incorporate healthy eating habits into your daily routine is one of the best things you can do for your health. Food is your source of energy, and it fuels your daily activities, ability to think and focus, and your ability to be active. Your food intake can affect your energy balance (gaining/losing/maintaining weight) even more than exercising, so it is crucial for reaching your healthy weight range.

The following information gives you ideas of how to eat healthy and make changes from your current habits to improve your well-being. There is much more detailed information in the websites listed as references. Feel free to explore the areas that are interesting or applicable to you. A registered dietitian is another resource to use. They are equipped to help you find a realistic, flexible eating style that helps you feel and be your best and can personalize a plan that is tailored to your lifestyle and food preferences.

# **Staying Away from Fad Diets**

With all the focus on weight in our society, it isn't surprising that millions of people fall prey to fad diets and bogus weight-loss products. Conflicting claims, testimonials and hype by so-called "experts" can confuse even the most informed consumers. The bottom line is simple: If a diet or product sounds too good to be

true, it probably is. There are no foods or pills that magically burn fat. No products will miraculously melt fat while you watch TV or sleep. Some ingredients in supplements and herbal products can be dangerous and even deadly for some people.

Steer clear of any diet plans, pills and products that make the following claims:

#### **Quantities and Limitations**

Ditch diets that allow unlimited quantities of any food, such as grapefruit and cabbage soup. It's boring to eat the same thing over and over and hard to stick with monotonous plans. Avoid any diet that eliminates or severely restricts entire food groups, such as carbohydrates.

## **Specific Food Combinations**

There is no evidence that combining certain foods or eating foods at specific times of day will help with weight loss. Eating the "wrong" combinations of food doesn't cause them to turn to fat immediately or to produce toxins in your intestines, as some plans claim.

#### **Rigid Menus**

Life is already complicated enough. Limiting food choices or following rigid meal plans can be an overwhelming task. With any new diet, always ask yourself: "Can I eat this way for the rest of my life?" If the answer is no, the plan is not for you.

#### No Need to Exercise

Regular physical activity is essential for good health and healthy weight management. The key to success is to find physical activities that you enjoy and then to aim for 30 to 60 minutes of activity on most days of the week. <u>Table of Contents</u> http://www.eatright.org/Public/content.aspx?id=6851

# **Nutrition Facts Panels**

An important step in healthy eating is knowing how to make wise choices in the grocery store.

### **Start with the Serving Size**

- Look here for both the serving size (the amount for one serving) and the number of servings in the package.
- Compare your *portion* size (the amount you actually eat) to the *serving* size listed on the panel. If the serving size is one cup and you eat two cups, you are getting twice the calories, fat and other nutrients listed on the label.

# Check Out the Total Calories and Fat

Find out how many calories are in a single serving and the number of calories from fat. It's smart to cut back on calories and fat if you are watching your weight.

#### **General Guide to Calories**

- 40 Calories is low
- 100 Calories is moderate
- 400 Calories is high

# Let the Percent Daily Values Be Your Guide

Use percent Daily Values (DV) to help evaluate how a particular food fits into your daily meal plan:

 Daily Values are average levels of nutrients for a person eating 2,000 calories a day. A food item with a 5% DV of fat provides 5% of the total fat that a person consuming

Nutri Serving Size 1 Servings Per C	cup (228	3g)	ac	cts	
Amount Per Serving					
Calories 250	(	Calorie	s from	Fat 110	
			% Daily	/ Value*	
Total Fat 12g				18%	
Saturated Fa Trans Fat 1.5				15%	
Cholesterol 30r	ng			10%	
Sodium 470mg				20%	
Total Carbohyd	rate 31g			10%	
Dietary Fiber	r 0g			0%	
Sugars 5g					
Protein 5g					
Vitamin A 4%					
Vitamin C				2%	
Calcium				20%	
Iron 4%					
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:  Calories: 2,000 2,500					
Total Fat	Calories: Less than	-,		2,500 80g	
Sat Fat	Less than			25g	
Cholesterol	Less than		9 Omg	300mg	
Sodium	Less than		400mg	2,400mg	
Total Carbohydrate 300g 375g					
Dietary Fiber		25	g	30g	

- 2,000 calories a day should eat.
- Percent DV are for the entire day, not just one meal.
- You may need more or less than 2,000 calories per day.
   Tailor this according to your individual caloric need as previously calculated.

## The High and Low of Daily Values

- 5% or less is low. Aim low in total fat, saturated fat, trans fat, cholesterol and sodium.
- 20% or more is high. Aim high in *vitamins, minerals and fiber*.

#### Limit Trans and Saturated Fat, Cholesterol and Sodium

Eating less fat, cholesterol and sodium may help reduce your risk for heart disease, high blood pressure and cancer.

- Total fat includes saturated, polyunsaturated, monounsaturated and trans fat. Limit to 100% DV or less per day.
- Saturated fat and trans fat are linked to an increased risk of heart disease.
- High levels of sodium can add up to high blood pressure.
- Remember to aim for low percentage DV of these nutrients.

## Get Enough Vitamins, Minerals and Fiber

- Eat more fiber, vitamins A and C, calcium and iron to maintain good health and help reduce your risk of certain health problems such as osteoporosis and anemia.
- Choose more fruits and vegetables to get more of these nutrients.
- Remember to aim high for percentage DV of these nutrients.

#### **Additional Nutrients**

You know about fat and calories, but it is important to also know the additional nutrients on the Nutrition Facts Panel.

#### Protein

Most Americans eat more protein than they need, so a percentage Daily Value is not required on the label. Eat

moderate portions of lean meat, poultry, fish, eggs, low-fat milk, yogurt and cheese, plus beans, peanut butter and nuts.

#### Carbohydrates

There are three types of carbohydrates: sugars, starches and fiber. Eat whole-grain breads, cereals, rice and pasta plus fruits and vegetables.

#### Sugars

Simple carbohydrates or sugars occur naturally in foods such as fruit juice (fructose) or come from refined sources such as table sugar (sucrose) or corn syrup. Calories from simple sugars such as soda add up quickly and add little nutritional value.

#### **Check the Ingredient List**

Foods with more than one ingredient must have an ingredient list on the label. Ingredients are listed in descending order by weight. Those in the largest amounts are listed first. Table of Contents <a href="http://www.eatright.org/Public/content.aspx?id=10935">http://www.eatright.org/Public/content.aspx?id=10935</a>

# Tips for Eating Out

Eating at a restaurant does not have to sabotage a healthy diet. Use smart-eating strategies: plan ahead, consider the menu and choose foods carefully to keep you on your plan.

# **Right-Size Your Serving Sizes**

- Instead of a large entrée, order an appetizer and a leafy green salad or choose two appetizers for a meal.
- Ask for a to-go box as soon as your meal is served. Put half your food into the container for a second meal.
- Share an entrée. You can ask your server to split the meal in the kitchen or divide it up yourselves at the table.

http://www.eatright.org/Public/content.aspx?id=6850

# Preparation

- Have a plan. Eat a light dinner if you ate a big lunch that day. Or if you know ahead of time that you're going to a restaurant, cut back on calories during other meals that day.
- Eat something 30 minutes before your meal to be in better control of your choices. Eat a piece of fruit or have a glass of water with lemon.

#### Ordering

- Have the waiter remove the bowl of chips, peanuts, or basket of bread, after you've had a small portion. Calories from mindless nibbling can add up before you know it.
- Substitute. Ask for a side salad with low-fat dressing to replace fries in a combination meal.
- Ask for extra vegetables to replace the meat on pizza. You can request ½ of the cheese as well.
- Have it your way. Restaurants are in the business of serving customers. Don't be afraid to ask for items specially prepared the way you want them.
- Limit alcohol. Its high calorie, has few nutrients, and can weaken your will power.

#### **Good Menu Choices**

- Look for entrée salads that give you "balance in a bowl." For example, entrée salads with chicken, cheese or almonds provide protein along with fiber and vitamins.
- Use low-fat dressing or skip some of the extras, like croutons, bacon bits, croutons, cheese, and mayonnaisebased items like macaroni salad or tuna salad.
- Choose items with large portions of vegetables.
- Breaded, batter-dipped, and tempura all mean fried food, which is heavy in fat. Look for lower fat, grilled, broiled, and flame-cooked. Other good choices include entrees that are steamed, poached, roasted, or baked in their own juices.
- Avoid cream sauces such as Alfredo or butter sauce as well as parmigiana, beef lasagna, cheese sauce or filling, pesto, carbonara, sausage dishes and garlic bread.

- Vegetable pizzas can have half the calories of the "works".
- Sandwiches on whole wheat or multigrain breads; with lowfat deli meats and cheeses; mustard, relish, ketchup, or lowfat mayonnaise. Add flavor and vitamins with roasted sweet peppers, lettuce, tomato, jalapenos, and olives.
- Round out your meal by ordering healthy side dishes, such as a side salad with low-fat or fat-free dressing, baked potato or fruit.

http://www.uhs.wisc.edu/docs/uwhealth\_eating\_out\_203.pdf http://www.eatright.org/Public/content.aspx?id=5671 http://www.cancer.org/Healthy/EatHealthyGetActive/TakeControlofYourWeight/restaurant-eating-tips

# **Eating Fast Food**

- Find out the nutritional content to help identify the healthiest choices. Visit the chain's website or look for this information near the counter or in pamphlet form.
- Pass on "value-size" servings. "Super-sizing" a food item increases the fat, sugar, sodium and calories you consume.
- Skip the sides, which are usually deep-fried. For a healthier side dish, order a side salad or fruit cup.
- Choose a baked potato over French fries, but have it with vegetables, salsa, or chili instead of butter, sour cream or cheese.
- Choose grilled chicken sandwiches they're a healthier option than breaded, fried-chicken sandwiches and usually leaner than the meats used in burgers.
- Choose BBQ or broiled and grilled chicken sandwiches or roast beef sandwich instead of jumbo burgers and fried sandwiches.
- Steer clear of fried fish sandwiches. Choose sandwiches where the fish is baked, broiled or grilled.
- Try asking for a wheat or whole-grain bun.
- Hold the mayonnaise and other calorie-laden sandwich sauces (e.g., "special sauce").

• Drink water, diet soda or skim or low-fat milk. <a href="http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/DiningOut/Eating-Fast-Food">http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/DiningOut/Eating-Fast-Food UCM 301473 Article.jsp</a>

#### **Healthy Eating Tips**

- Establish regular meal times. Try not to skip any meals because it leads to overeating later in the day. If you don't have time for a full meal, try to eat a healthy snack or meal replacement bar.
- Read food labels when you are purchasing food items.
- Drink water, diet soda, or unsweetened iced tea instead of highcalorie drinks. Choose low-calorie and low-fat versions of salad dressing, cheese, sour cream, and mayonnaise.
- Identify "guilty pleasures" such as ice cream, cookies, or potato chips. Continue to enjoy them by trying the low-calorie versions or eating less of the regular versions.
- Pre-plan meals and snacks, and make sure you have the food on hand. This makes it easier to resist trips to the vending machine and unhealthy, unplanned snacking.
- Replace the candy on your desk with fruit.
- Avoid eating while watching television, reading, or driving. Many people do not recall what they've eaten while doing other things. <a href="http://www.ama-assn.org/ama1/pub/upload/mm/433/weight.pdf">http://www.ama-assn.org/ama1/pub/upload/mm/433/weight.pdf</a>
   Table of Contents

# Supplements

Food should be your first source of nutrients, including fruits, vegetables, whole grains, lean protein, dairy products, nuts, seeds, beans and healthy fats. Eating a balanced diet is the best way to get the vitamins and minerals your body needs. A balanced diet rich in fruits and vegetables may be safer than taking vitamin supplements. Daily vitamins are generally unnecessary unless you are on a diet that restricts certain food groups or total number of calories.

If you are not eating a balanced diet, getting enough sleep or exercising regularly, you may not have good energy levels. Your body also may have trouble fending off illness. Dietary supplements may be necessary for an additional nutrient boost. But before taking a supplement, talk with your health-care provider. It's important to know about safety and usefulness of supplements before you begin taking them.

## **Safety of Dietary Supplements**

Be careful when choosing supplements. While dietary supplements are under the purview of the Food and Drug Administration, they are regulated differently than conventional foods and drugs. Manufacturers do not have to prove a supplement is safe or even that it works before it is sold. <a href="Table of Contents">Table of Contents</a> <a href="http://www.eatright.org/Public/content.aspx?id=11632">http://www.eatright.org/Public/content.aspx?id=11632</a>

# My Pyramid

Mypyramid.gov is a website by the United States Department of Agriculture that has valuable information about each of the food groups and the physical activity needed for healthy living. For more details, visit the website, but below is a snapshot of the resources available.



There is a section detailing each different group: grains, vegetables, fruit, milk, and proteins. It talks about what is in the food group, how much is needed, what counts as a serving, health benefits and nutrients, and tips for how to eat the items in each group.

# Tips to help you eat whole grains

 Substitute a whole-grain product for a refined product – whole-wheat bread instead of white bread, brown rice instead of white rice, or whole-wheat pasta.

- Snack on whole grain cereals such as toasted oat cereal.
- Substitute whole-wheat flour or oatmeal for up to half of the flour when making cookies or other baked treats.
- Try a whole-grain snack chip, such as baked tortilla chips.

#### What to Look for on the Food Label:

- Choose foods that name one of the following wholegrain ingredients first on the label's ingredient list:
  - "brown rice"
  - "oatmeal"
  - "whole oats"
  - "whole wheat"
  - "wild rice"

http://www.mypyramid.gov/pyramid/grains\_tips.html Table of Contents

# Tips to help you eat vegetables

- Buy fresh vegetables in season. They cost less and are likely to be at their peak flavor.
- Stock up on frozen vegetables for quick microwaving.
- Buy vegetables that are easy to prepare. Pick up prewashed bags of salad greens and add baby carrots or grape tomatoes for a salad in minutes.
- Buy packages of veggies such as baby carrots or celery sticks for quick snacks.
- Vary your veggie choices to keep meals interesting.
- Try crunchy vegetables, raw or lightly steamed.
- Plan some meals around a vegetable main dish, such as a vegetable stir-fry or soup. Then add other foods to complement it.
- Try a main dish salad for lunch. Go light on the dressing.
- Include a green salad with your dinner every night.
- Include chopped vegetables in pasta sauce or lasagna.
- Order a veggie pizza with toppings like mushrooms, green peppers, and onions, and ask for extra veggies.

- Grill vegetable kabobs as part of a barbecue meal. Try tomatoes, mushrooms, green peppers, and onions.
- Many vegetables taste great with a dip or dressing. Try a low-fat salad dressing with raw broccoli, red and green peppers, celery sticks or cauliflower.
- Add color to salads by adding baby carrots, shredded red cabbage, or spinach leaves.

http://www.mypyramid.gov/pyramid/vegetables\_tips.html Table of Contents

## Tips to help you eat fruits

- Keep a bowl of whole fruit on the table, counter, or in the refrigerator.
- Buy fresh fruits in season when they may be less expensive and at their peak flavor.
- At breakfast, top your cereal with bananas or peaches; add blueberries to pancakes; drink 100% orange or grapefruit juice.
- Try fruit mixed with low-fat or fat-free yogurt.
- At lunch, pack a tangerine, banana, or grapes to eat, or choose fruits from a salad bar. Individual containers of fruits like peaches or applesauce are convenient.
- Make a Waldorf salad, with apples, celery, walnuts, and dressing.
- Grill fruit like pineapple or peaches as part of kabobs.
- For dessert, have baked apples, pears, or a fruit salad.
- Fruit makes a great snack. Cut them yourself, buy pre-cut packages of fruit, or try berries or grapes.
- Dried fruits also make a great snack. They are easy to carry and store well.
- As a snack, spread peanut butter on apple slices or top frozen yogurt with berries or slices of kiwi fruit.
- Frozen juice bars (100% juice) make healthy alternatives to high-fat snacks.

 Make a fruit smoothie by blending fat-free or low-fat milk or yogurt with fresh or frozen fruit. Try bananas, peaches, strawberries, or other berries.

http://www.mypyramid.gov/pyramid/fruits\_tips.html Table of Contents

## Tips to help you eat dairy

- Include milk as a beverage at meals. Choose fat-free or low-fat.
- When you order coffee drinks, ask for fat-free (skim) milk.
- Add fat-free or low-fat milk instead of water to oatmeal.
- Have fat-free or low-fat yogurt as a snack.
- Top cut-up fruit with flavored yogurt for a quick dessert.
- Top casseroles, soups, stews, or vegetables with shredded low-fat cheese.

# For those who choose not to consume milk products

- Calcium choices for those who do not consume milk products include
  - Calcium fortified juices, cereals, breads, soy beverages, or rice beverages
  - Canned fish (sardines, salmon) soybeans and other soy products (soy-based beverages, soy yogurt, tempeh), some other dried beans, and some leafy greens (collard and turnip greens, kale, bok choy).

http://www.mypyramid.gov/pyramid/milk\_tips.html
Table of Contents

# Tips to help you eat protein

- Start with a lean choice:
  - The leanest beef cuts include round steaks and roasts (round eye, top round, bottom round, round tip), top loin, top sirloin, and chuck shoulder and arm roasts.

- The leanest pork choices include pork loin, tenderloin, center loin, and ham.
- Choose extra lean ground beef. The label should say at least "90% lean".
- Buy skinless chicken or take off the skin before cooking.
- Boneless skinless chicken breasts and turkey cutlets are the leanest poultry choices.
- Choose lean turkey, roast beef, ham, or lowfat lunch meats instead of lunch meats with more fat, such as bologna or salami.

## Keep it lean:

- Trim away all of the visible fat before cooking.
- Broil, grill, roast, poach, or boil meat instead of frying.
- Drain off any fat that appears during cooking.
- Skip/limit the breading. It causes the food to soak up more fat while frying, adding calories.
- Choose and prepare foods without high fat sauces or gravies.

# Vary your protein choices:

- Choose fish more often. Look for fish rich in omega-3 fatty acids, such as salmon, trout, and herring.
- Choose dry beans or peas as a main dish or part of a meal. Some choices are:
  - Chili with kidney or pinto beans
  - Stir- fried tofu
  - Split pea, lentil, minestrone, or white bean soups
  - Baked beans
  - Black bean enchiladas
  - Rice and beans
  - Veggie burgers or garden burgers
  - Hummus (chickpeas) spread on pita bread

 Choose nuts as a snack, on salads, or in main dishes. <a href="http://www.mypyramid.gov/pyramid/meat\_tips.html">http://www.mypyramid.gov/pyramid/meat\_tips.html</a>

 Table of Contents

#### **Volumetrics**

Volumetrics is a set of techniques for feeling full on fewer calories. Research shows that, on average, a person will eat about the same amount (or volume) of food every day regardless of caloric value. So, if you choose foods that provide more volume per calorie and you eat roughly the same volume of food, you will feel satisfied on fewer calories! The trick is to choose foods that provide a lot of volume for few calories. This allows you to fill your plate and satisfy your hunger, while keeping your calorie intake under control. <a href="http://www.volumetricsmenu.com/what-is-volumetrics/">http://www.volumetricsmenu.com/what-is-volumetrics/</a>

Energy density is the number of calories in a specified amount of food. Some foods - especially fats - are very energy dense. They have a lot of calories packed into a small size. Water is the opposite, since it has an energy density of zero. If you eat foods with high energy density, you rack up calories quickly. If you go with less energy dense foods, you can eat more and get fewer calories. The bottom line is, you can still fill your plate, but fill it with low-density foods like vegetables, fruits, and lean proteins.

# Very low-density foods include:

- · Non-starchy vegetables
  - Tomatoes
  - Broccoli
  - Greens
- Nonfat milk
- Soup broths

# Very high-density foods include:

- Crackers
- Chips
- Cookies
- Chocolate/Candies

- Nuts
- Butter
- Oils

http://www.webmd.com/diet/volumetrics-what-it-is Table of Contents

#### **Portion Sizes**

One of the key ways to lose weight and maintain a healthy weight is through portion control. Research has shown that Americans often underestimate how many calories they are consuming each day by as much as 25%.

The best way to determine the amount of food in a given serving is to look at the Nutrition Facts label and measure it out. Although this may not be practical or fun, if you are able to take the time, you will soon be able to "eyeball" the amount of food and know

Hand Symbol	Equivalent	Foods
9	Fist 1 cup	Rice, pasta Fruit Veggies
0	Palm 3 ounces	Meat Fish Poultry
	Handful 1ounce	Nuts Raisins
	2 Handfuls 1 ounce	Chips Popcorn Pretzels
	Thumb 1ounce	Peanut butter Hard cheese
19	Thumb tip 1teaspoon	Cooking oil Mayonnaise, butter Sugar

whether there is too much or too little.

For example, filling a measuring cup with the proper sized portion of vegetables, rice, etc. and then emptying it onto a plate will help you learn what these serving sizes look like. Take note of how much of the plate is covered; this will help you in the future, even if you only do it once. Simply by having and implementing this knowledge, you will have taken a big step in managing your weight. <a href="http://www.prevention.com/health/weight-loss/weight-loss-tips/calories-and-portion-sizes/article/ccd688dc78803110VgnVCM10000013281eac">http://www.prevention.com/health/weight-loss/weight-loss-tips/calories-and-portion-sizes/article/ccd688dc78803110VgnVCM10000013281eac</a>

# Other ways of developing proper portion control include:

- Use smaller dishes at meals.
- Serve food in appropriate portions and don't go back for seconds.
- Put away any leftovers in separate, portion-controlled amounts.
- Never eat out of the bag or carton.
- Don't keep platters of food on the table; you are more likely to "pick" at it or have a second serving without realizing it.

http://www.webmd.com/diet/control-portion-size
Table of Contents

#### **Exercise**

Being physically active is nothing new to you. You already know many of the benefits of regular exercise have enjoyed them for the past number of years in a structured sports environment. Now is your opportunity to explore other options for staying active. Depending on what sport you competed in while in college, you may or may not be able to easily continue that activity. If so, that's great, but if not, take this opportunity to try new activities like martial arts, running, biking, swimming, racquet sports, local adult league sports, or group exercise classes.

#### **Benefits of Exercise**

- Reduces your risk of heart disease, high blood pressure, osteoporosis, diabetes and obesity
- Keeps joints, tendons and ligaments flexible, which makes it easier to move around
- Boosts your confidence, self-esteem, and helps treat depression
- Helps relieve stress and anxiety
- Increases your energy and endurance
- Helps you sleep better
- Helps you maintain a normal weight by increasing your metabolism (the rate you burn calories)

http://familydoctor.org/online/famdocen/home/healthy/physical/basics/059.html

#### **National Guidelines**

 Do moderately intense cardio 30 minutes a day, 5 days a week (for examples, see following activity pyramid)

#### OR

 Do vigorously intense cardio 20 minutes a day, 3 days a week (for examples, see following activity pyramid)

#### AND

 Do 8-10 strength-training exercises, 8-12 repetitions of each exercise 2x/wk

Moderate-intensity physical activity means working hard enough to raise your heart rate and break a sweat, yet still being able to carry on a conversation. It should be noted that to lose weight or maintain weight loss, 60 to 90 minutes of physical activity may be necessary. The 30-minute recommendation is for the average healthy adult to maintain health and reduce the risk for chronic disease. Table of Contents

http://www.acsm.org/AM/Template.cfm?Section=Home Page&TEMPLATE=/CM/H TMLDisplay.cfm&CONTENTID=7764

#### FITT

# The FITT Principle: Frequency, Intensity, Time, Type

Frequency

 Exercise 3 to 5 times per week or daily as prescribed by your physician.

#### Intensity

Recommended—an intensity level of 4 to 7 on the RPE chart.

	PE Chart Rate of Perceived Exertion
10	Max Effort Activity Feels almost impossible to keep going Completely out of breathe, unable to talk
9	Very Hard Activity  Very difficult to maintain exercise intensity  Can barely breath & speak a single word
7-8	Vigorous Activity On the verge of becoming uncomfortable Short of breath, can speak a sentence
4-6	Moderate Activity  Feels like you can exercise for hours  Breathing heavily, can hold short conversation
2-3	Light Activity Feels like you can maintain for hours Easy to breathe & carry a conversation
1	Very Light Activity  Anything other than sleeping  Watching TV, riding in a car, etc.

- <u>Time</u>
  - 30 to 60 minutes per workout or two to four 15minute workout sessions daily.
- Type
  - o Participate in health and skill conditioning activities.
  - Cardiovascular workouts
  - Muscular Strength Exercises

- Flexibility Training
- Agility
- Balance
- Coordination

http://www.trainingzonetucson.com/fitt.htm

http://meganbrame.blogspot.com/2011/01/to-make-time-fly-by-on-treadmill.html
Table of Contents



"Activity Pyramid" as published in ACSM's Guidelines for Exercise Testing and Prescription. http://www.wellspan.org/body.cfm?id=112

# **Resistance Training**

You already know your way around a weight room so you should be familiar with basic strength training exercises and

principles. Now that you are done competing in the collegiate setting, your resistance training needs may be different than they have been before. The chart listed below gives you guidelines for sets, reps, rest etc. based on what goals you have for weight training. National guidelines suggest resistance training 2x/wk.

Program Goal	Sets	Reps	Resistance	Rest between Sets
Endurance	3	15-25	50-65% of 1 Rep. Max	30 to 60 sec
Health/Fitness	1-3	10-15	60-80% of 1 Rep. Max	30 to 60 sec
Strength	3-6	5-6	80-88% of 1 Rep. Max	3 to 5 min
Size	3-6	8-12	80-85% of 1 Rep. Max	30 to 60 sec
Power	3-6	2-4	80-90% of 1 Rep. Max	Max 3 to 4 min

http://www.mckinley.illinois.edu/handouts/resistance training program.htm

#### **Every workout should share these elements:**

- Warm-up: Examples- running, cycling, mobility exercises.
- Abdominal and low back strengthening
- Post -exercise stretching: 1-2 min/muscle group
- Order of Exercises: Start with large or multiple muscle groups (chest press, lat pull down, leg press and squats), followed by small muscle group (biceps, triceps, deltoids and calves).
- **Rest:** 48-72 hrs between workouts for each muscle group <a href="http://www.mckinley.illinois.edu/handouts/pdfs/resistance">http://www.mckinley.illinois.edu/handouts/pdfs/resistance</a> training program.pdf

# Tips to help you stick with an exercise program:

• Choose something you like to do. Make sure it suits you physically, too.

- **Get a partner.** Exercising with a friend or relative can make it more fun.
- Vary your routine. You may be less likely to get bored or injured if you change your exercise routine. Walk one day. Bicycle the next. Consider activities like dancing and racquet sports, and even chores like vacuuming or mowing the lawn.
- Choose a comfortable time of day. Don't work out too soon after eating or when it's too hot or cold outside. Wait until later in the day if you're too stiff in the morning.
- Make exercise fun. Read, listen to music or watch TV while riding a stationary bicycle, for example. Find fun things to do, like taking a walk through the zoo. Go dancing. Learn how to play a sport you enjoy, such as tennis.

http://familydoctor.org/online/famdocen/home/healthy/physical/basics/059.html

# Tips for increasing physical activity At Home:

- Walk the dog—don't just watch the dog walk.
- Clean the house or wash the car.
- Walk, skate, or cycle more, and drive less.
- Do stretches, exercises, or pedal a stationary bike while watching television.
- Mow the lawn with a push mower.
- Plant and care for a vegetable or flower garden

#### At work:

- Replace a coffee break with a brisk 10-minute walk. Ask a friend to go with you.
- Take part in an exercise program at work or nearby gym.
- Join the office softball or bowling team.

# At play:

- Walk, jog, skate, or cycle.
- Swim or do water aerobics.
- Take a class in martial arts, dance, or yoga.
- Golf (pull cart or carry clubs).

- Canoe, row, or kayak.
- Play racket ball, tennis, or squash.
- Ski cross-country or downhill.
- Play basketball, softball, or soccer.
- Hand cycle or play wheelchair sports.
- Take a nature walk.
- Most important have fun while being active!

http://www.mypyramid.gov/pyramid/physical\_activity\_tips.html Table of Contents

# **Time Management**

Following retirement from collegiate sports, you immediately have a large chunk of free time every afternoon in which you used to have practice, meetings, lifting, and film sessions. Now that this phase of your life is completed, you have the freedom to fill that time with whatever activities or other commitments you like.

Use the included daily schedules to plot your time as you would have spent a typical day while in season, and use the second half of the sheet to plot the typical day you would like to have free from your sport commitments. Whether you are still in school, or have begun to work already, the following time management tips can be useful for helping you make the most of your days.

- Plan each day. This can help you accomplish more and feel more in control. Make a to-do list, putting the most important tasks at the top. Keep a schedule of your daily activities to minimize conflicts.
- Prioritize your tasks. Time-consuming but unimportant tasks can consume a lot of time. Prioritizing tasks will ensure that you spend your time and energy on those that are truly important.
- Say no to nonessential tasks. Consider your goals and schedule before agreeing to take on additional work.

- Take the time you need to do a quality job. Doing work right the first time may take more time upfront, but errors result in time spent making corrections, which takes more time overall.
- Break large, time-consuming tasks into smaller tasks. Work on them a few minutes at a time until you get them all done.
- Practice the 10-minute rule. Work on a dreaded task for 10 minutes each day. Once you get started, you may find you can finish it.
- Evaluate how you're spending your time. Keep a diary of everything you do for three days to determine how you're spending your time. Look for time that can be used more wisely.
- Limit distractions. Block out time on your calendar for big projects. Close your door and turn off your phone and email.
- Get enough sleep, eat healthy, and exercise regularly. A healthy lifestyle can improve your focus and concentration, which will help improve your efficiency.
- Take a break when needed. Too much stress can derail your attempts at getting organized. When you need a break, take one. Take a walk. Do some quick stretches at your workstation. Table of Contents

http://www.mayoclinic.com/health/time-management/wl00048

# **Conclusion**

Following completion of your athletic eligibility, there are a number of psychological issues that arise regarding your life transition. It is normal to feel confused, lost, and unsure of what to do next. Other athletes in the same situation as you are dealing with the same feelings, and athletes who have gone before you have gone through this process as well. There are people available at the

counseling center on campus that are available to help you through the psychological changes that you are dealing with in this life transition.

This new stage of life is exciting and holds unlimited options for you. While you may temporarily miss your old life, there are new adventures ahead. You now have the opportunity to expand your horizons and discover other skills you have and other aspects of who you are. Enjoy this new stage of life!

#### Links to:

- Student Health Center: <a href="http://www.usu.edu/health/">http://www.usu.edu/health/</a>
- Counseling and Psychological Services http://www.usu.edu/counseling/