DIET AND NUTRITION

Why do we even consider diet/nutirion? Many coaches are beginning to realize the importance of diet and its effetcs on levels of performance. It directly affects percentage of body fat, which affects levels of performance and endurance in sports. It ensures higher energy levels and quicker, more efficent recovery in excercise bouts. It ensures proper growth of muscle, bone and supportive tissue (also important in the injury recovery process). It enhances mental awareness, keeping athletes mentally sharp.

All aspects of sports conditioning are important for maximum physical development. NUTRITION is one component most programs overlook. The following sections will provide information to help change dietary habits. The diet provides sufficent nutrients and energy for intense physical activity. APPLIED NUTIRITON is the key. This process has a positive effect on body composition and maximizes the benefits of physical training.

During training, the chemcial and structural changes in the body are associared with diet. The body must recuperate between workouts to reach higher levels of fitness. Often, the lack of progress or "staleness" during training can be realted to poor nutritional life-style, not the training program.

As stated previously, a balanced diet is achieved by modifying curret eating habits. The diet should approximate 60% complex carbohydrtates, 20-25% fat and 12-15% protien. The following are guidelines to achieve this combination. After each guideline there is an explanation of why it is important.

DIETARY GUIDELINES

A. Daily servings from the four major food groups

FOOD GROUPS	GRAIN PRODUCTS	FRUITS VEGETABLES	DAIRY PRODUCTS	MEAT, POULTRY, FISH
Recommended Servinings	6-11	3-5	2	2

This legal apporach is to achieve variety in the diet. Variety will allow for th eintake of 6 nutrients (carbohydrtares, protien, fats, vitamins, minerals and water). It is interesting to note a total of 8 servings should come from grain products, fruits and vegetabels. This allows for a high percentage of caloric intake to be from carbohydrates. Carbohydrtates in the form of "hollow calories" usually lack nutrional values required for a training athlete and are never filling. "Hollow calories" incude items such as candies, desserts, cakes pies, etc.

B. Eat 3 meals per day. When wieght gian is desired there should be an addition of 2 to 3 snacks.

Physical Factors:

1. Helps to maintain muscle tissue.
2. Promotes body fat reduction.
3. Reduces sluggishness and the onset of fatigue.

It is important to keep food intake at a constant levbel throughout the day. Skipping meals will not replace all the energy stored in muscle. At the same time, there may be less muscle growth. Thus, the meal skipping triggers the body to conserve fat and use energy stored, even metabolize muscle for energy. An evenly distributed caloric intake through the day keeps the body's ability to burn calories elevated. Skipping meals to lose weight is counter productive and will not allow for prgoress in the training program.

C. Cut down on the foods that are high in FAT:

1. Red meats (steak, hamburger, franks, luncheon meats, etc.)
2. Pork products (bacon and sausage).
3. Whole milk, ice cream, cream and cream sauce.
4. Cheese and cheese sauce.
5. Butter or margarine.
6. Mayonnaise or Miracle Whip.
7. Oils of all kinds (used in cooking or salads).
8. Salad dressing.
9. French fries or other forms of fried potatoes, such as chips.
10. Nuts and peanut butter.

A diet high in fat can lead to:

1. Chronic Exhaustion.
2. Irritability.
3. Restlessness.
4. % fat increases.
5. Muscle tissue decreases.

A diet which is highin fat and low in carbohydrates slows the process of energy storage in the muscle. If this contiunes there will be less fuel for high intensity activity.

D. **EATING HABITS TO LOWER FAT INTAKE**

1. Buy lean cuts of meat and trim all excess fat.

2. Keep meats to moderate serving; when possible substitute fish and poultry for meat.
3. Don't fry foods: bake, broil, poach, steam, barbecue.
4. Use all fats sparingly (oil, butter, margrine, mayonnaise and Miracle Whip).
5. Use sparingly all dairy products made with whole milk (milk, cram, chocolate, cheese, yogurt, etc.)
6. Avoid the use of products in packed oil.

Substitute foods that will help to lower your fat intake:

A. Low-cal salad dressing, No oil salad dressing.
B. Low-cal mayonnaise.
C. Low-cal margarine.
D. Skim or low-fat milk products (ice milk, yogurt, etc.)
E. Tuna packed in water.

E. INCREASE INTAKE OF COMPLEX CARBOHYDRATES AND GRAIN PRODUCTS:

1. Whole wheat breads.
2. Whole wheat rolls.
3. Ceareals, low sugar (brans & Grape Nuts)
4. Pancakes
5. French Toast
6. Waffles
7. Pasta
8. Rice

Vegetables (potatoes, sweet potatoes, lima beans, peas, corn, winter squash)
Fruit and fruit juices (banana, apple, orange, etc.)
Jellies and jams (simple sugars).

F. REFINED SUGARS, SHOULD NOT REPLACE BALANCEDMEALS (SWEETS, SODA, CANDIES, CAKES, ETC.).

DIETARY FACTORS:

1. Foods that are high in refined sugar have a lower vitamin and mineral content.
2. Many sweets are also high in fat (chocolate candies, pies, cakes).

Sweets that are high in fat are not good sources of carbohydrates for replenishing muscle energy stores.

G. INCREASED CONSUMPTION OF FRUITS, VEGETABLES AND JUICES

Dietary Factors:

1. High in vitamins and minerals.
2. High water contnet,
3. Good source of carbohydrates.

H. WATER INTAKE SHOULD BE A MINIMUM OF 2-4 QUARTS A DAY

Effects of dehydration:

1. Fatigue
2. Deterioration in performance.
3. An increase in body temperature.
4. Increased resting pulse.
5. Irritability
6. Loss of appetite.

Thirst is a reliable guide to the need for water. But, because of tension and anxiety and because of large sweat losses, thirst is an inaccurate indicator of water used during competition. Athletes should be encouraged to weight themselves before and after training to determine the amount of fluid that needs to be replaced.

Some forced drinking of fluid is essential. A 3% loss leads to impaired performance, a 5% loss can result in some signs of heat exhaustion, a 7% loss may produce hallucinations and put the individual in the danger zone.

Fluid taken before and during the event will not fully replace fluid losses, but partial replacement reduces the risk of overheating, After the event, teh athlete should continue to drink at frequent intervals until the wieght has been regained.

1. ARE LARGE AMOUNTS OF PROTEIN ESSENTIAL TO AN ATHLETE WHO IS INVOLVED IN VIGOROUS TRAINING?

For athletes who want to gain muscle mass there is no evidence that protein supplementation of the diet is necessary. WHEN THE DIET IS BALANCED THER EIS ENOUGH ENERGY FOR INTENSE TRAINING AND PROTEIN FOR GROWTH AND REPAIR. The National Research COuncil on Nutrition has stated that 1 gm/day of protein per 2.2 lbs. of body weight is suffcient for both athletes and non-athletes.

High levels of dietary protein may increase the tendency to acccumlate body fat. Also, the breakdown of excess dietary protein produces increased body heat, which is detrimental to athletes. There is an increased urinary water loss to remove excess waste products. This can cause a severe water imbalance and can promote muscle cramping.

2. ARE VITAMIN AND MINERAL SUPPLEMENTS NECESSARY?

Increase food consumption ensures adequate intake of those vitamins and minerals that are depleted during strenuous excrecise. Again, food intake is the important factor. If the food intake is not adequate, energy storage in the muscle will not be 100%. Regardless of excess vitamins, there first must be FUEL to start the process of enrgy relesase for excercise.

Usually there isn not need for mineral supplements. An adequate supply of minerals apparentley is present in a well balanced diet, but if the diet is not balanced, then mineral supplementation might prove beneficial. Heavy excercise causes sweating, which can deplete the body's stores of sodium, potassium, and other minerals. Potassuim deficiency can result in muscle cramping. This can be avoided by incluidng potassium rich foods in the diet such as bananas and oranges.

Ingestion of salt tablets to replace sodium losses is seldom necessary and may be dangerous. Only in prolonged activity associated with intense sweating

lasting more than a week is additional salt needed. It is recommended that any supplememtntation of the diet be preceded by a computer analysis so the nutrients in question can be evaluated.

3. PRE-WORKOUT MEALS AND SNACKS

Regardless of whethter you are trying to change your body composisiton, here is a useful technique which will boost your blood sugar and help your work quality: eat a meal 2 1/2-3 hours, and/or a light carb snack ar least one hour, before workout or competition. One or two pieces of fresh fruit are an excellent power snack, as are a couple of handfuls of raisins or figs. However, avoid the following:

1. Eating immediately before a workout or contest.

2. High-protein or high-fat foods (which stay in the gut longer, shunting blood away from the muscles and inhibiting energy metabolism).

3. Sweets, candies, or other foods with a high "glycemic index" (a ratio which measures the increase in blood sugar as compared with that resulting from pure glucose ingestion). Foods with a high G.I. dump sugar into the bloodstream too rapidly, causing an insulin response which inhibits energy metabolism.

High G.I. (Low Quality)	Low G.I. (High Quality)
processed (cold) breakfast cereals	most fruits
commercial breads	most avegetables
root vegetables (yams, sweet potatoes, potatoes, carrots)	dark whole-grain breads
commercially processed (canned foods)	legumes
	pasta (esp. whole-wheat & vegetable)

4. WHAT ABOUT THE PRE-GAME MEAL?

The main objective of the pre-game meal is to allow time for food digestion. Traditionally, steak has been the main food. Most steaks and other meats are 50-70% fat. Fat is digested slowly. For this reason the pre-game meal should be LOW IN FAT. This is not to say that steak should be avoided. But, the serving should be reduced to 3-4 ounces. The DIETARY GUIDELINES that were presented earlies should be used to plan the pre-game meal.

The pre-game meal does litttle to improve performance. THE PLAYERS' EATING HABITS THE WEEK BEFORE THE FAME HAVE A GREATER EFFECT ON ENERGY STORAGE AND RECOVERY. Breakfast the day of the

game should never be missed. (Check the 4 meals in the breakfast menu section).

The last food intake shuld be 3 hours before game time. Many athletes will eat candy bars, honey or other sweets inhopes of quick energy. This can hinder performance and should be avoided.

5. WHAT IS THE BEST WAY TO GAIN BODY WIEGHT?

First, eating habits must change to meet the dietary guidelines. There must be a sound nutritional base. Once this is accomplsihed the addition of liquid supplements such as Ensure Plus, Nutrament, or Polycose can be used to elevate calories to the desried level. This is the correct way to gain muscle tissue and not fat. An alternative to these supplements is yogurt shakes. Mix fat-free plain or fruit yogurt with skim milk. You may also add any fruit to get extra calories. The shakes provide approximately 250-300 fat free calories. Drink 2-3 a day.

6. HOW DO I REDUCE BODY WEIGHT?

Again follow the dietary guidelines to the balanced diet. To estimate your daily caloric intake refer to the chart below:

ESTIMATED DAILY CALORIC INTAKE IN RELATION TO CURRENT BODY WEIGHT

	WEIGHT OBJECTIVE		
	CALORIC INTAKE		
Weight (lbs)	Reduce Wt.	Maintain Wt.	Increase Wt.
160	2290	3040	3790
170	2480	3230	3980
180	2670	3420	4170
190	2860	3610	4360
200	3050	3800	4550
210	3240	3990	4740
220	3430	4180	4930
230	3620	4370	5120
240	3810	4560	5310
250	4000	4750	5500
260	4190	4940	5690
270	4380	5130	5880
280	4570	5320	6070
290	4760	5510	6260
300	4950	5700	6450

NOTE: % of macronutrients should be 60% complex carbohydrates, 15-20% fat, 10-15% protein.

A ~1,000 calorie/day deficit below your stable weight diet should fuel an optimal rate of training-induced fat loss: increase your (aerobic) activity level; eat smart by cutting out high-fat calorie sources at each meal (e.g., grease, oil, salad dressing, whole and 2% milk, butter, mayonnaise, sour cream, cheese, red meats, gravy, etc.). Do not skip meals, starve or dehydrate yourself, or try any "fat burners" or fad diets.

The problem with skipping meals is that even though it theoretically cuts calorie intake, your metabolism adjusts by triggering a fat storage mechanism. This "starvation response" which negatively affects body composition and performance, and has the opposite of the desired effect.

Body fat loss is a slow process. Fats are extremely energy dense (1lb. of fat = 3500 calories), and thus can metabolize 11/2 - 2lbs. of fat per week regardless of how much exercise or how little you eat. More rapid weight loss can only be achieved through starvation and dehydration, both of which are temporary and unhealthy. There is a sensible way to use fat directly as a fuel without sacrificing strength, but you must be patient because it takes time. The following are tips to sensible weight loss:

- intensity... maintain submaximal aerobic workloads continously
- duration & frequncy... 20-60 minutes, 3-5 times/week
- mode... activities that include large muscle groups that are rhythmic and aerobic in nature

Will resistance training burn off fat? The answer is yes and no. Weight training, like any exercise, raises your resting metabolic rate resulting in more calories being burned around-the-clock; and also spares your lean mass from being metabolized. However, carbs are the preferred fuel over fats during high-intensity excercises, and thus lifting is not the most direct or efficent means of losing body fat. Aerobic excercise is the best form of exercise to burn fat, however, even if you "jog" at such a pace that your muscles burn, you lose your breath or can not continue, you are using carbs more so than fats and are not getting the desired weight-loss effect.

You also need to know that spot reduction (e.g., training triceps to burn"flab" off the arms) is a myth. Celluler fuels are delivered via the bloodstream, not from the subcutaneous fat over the active muscles. The body deposits fat in its adipose stores in certain patterns and in turn draws on them in the same order. Thus, males tend to gain/lose fat primarily at the waist; and females primarily at the hips and thighs.

TIPS WHEN DINING OUT

Low-Fat Menu Selections	High Fat Menu Selections
*broasted	*au gratin
* broiled	*breaded
*poached	*buttery
*roasted	*creamed
*steamed	*crispy
*"in it's own juice"	*fried
	*scampi
	*special sauces

Here's the bottom line on losing weight: it is impossible (and undesireable) to totally eliminate fats from your body or diet. Fats serve vital functions: energy storage; temperature insulation; cell structure; nutrient uptake and transport; nerve impulse transmission and insulation; and shock absorption (e.g., in the feet, hands, joints and around vital organs). Obesity obviously isn't the answer, but you can perform optimally when well-nourished and hydrated. Attempting to " get ripped " by decreasing dietary or body fat storage below a certain threshold is unnatural and unhealthy.

7. HOW IMPORTANT IS REST OR SLEEP ?

Sleep and nutrition are almost always taken for granted, but together are an athletes two most fundamentally important recovery modalities. In addition to giving the skeletal system a chance to decompress, sleep serves two basic functions:

1. Replenishment of brain neurotransmitters, especially in the aminoergic pathways crucial for alertness and attentiveness, learning, memory, and overall information management and cerebral (including motor) function.
2. Tissue restitution and homeostatic function, especially by restoring the systems which regulate energy metabolism. In addition to the changes in brain chemistry, there is a -25% drop in metabolism rate during which plasma growth hormone and cortisol concentrations stimulate metabolic synthesis, cell division and possibly immune fuction.

These mechanisms are not seperate and apart from one another. Hopefully the one underlying theme you have picked up from this manual is that emotional, intellectual and motor behavior are co-operative functions of your central nervous system which interact during all aspects of training and adaptation.

The total amount of sleep needed is determined more so by the length of time previously spent awake than by daily physical or mental activity. However, the time spent in respective sleep stages does vary. For example, strenuous activity tends to increase the need for "deep" slow-wave sleep.

GOOD SLEEP THROUGH SLEEP HABITS

*go to bed about the same time every night

*sleep on a firm mattress in a quiet, dark, well-ventilated room

*get enough sleep to feel rested and refreshed in the morning (usually 7-9 hrs, but this varies from person to person)

*occasional sleep disorders (e.g., difficulty falling asleep, restlessness frequent wakings or waking up to early) happens to everyone and are no cause for concern; if cannot sleep, get up and do something until you are tired.

SHOPPING FOR STRENGTH

The following shopping list is intended for the use by athletes living on their own and selecting their own food. By following this list you will be providing yourself with a low cost, high quality diet, that will involve minimal preparation.

Please note: it will cost you much less for food if you shop than if you eat out every meal. The cost will be 3 to 4 times greater if you eat out consistently and the quality will be lower.

This list will often recommend low fat alternatives to some foods. Please follow these recommendations even if you are attempting to gain weight. Fat makes you fat, reduce it whenever possible.

Shopping List

Cereal- 2 large (20 oz) boxes per person per week. Get a big bowl and fill up on this high quality, low cost item. In tight financial situations cereal for lunch or dinner.

Raisin Brain
Honey Nut Cheerios
Total
Product 19
Nutri Grain
Grape Nuts

Note: Don't buy junk cereal

Breads etc.- No white bread, whole grains only

Branola
Rye 1 loaf per person per week
Wheat
Pumpernickel

Bagels(Lenders frozen) 1 bag per person per week
English Muffins 1 bag per person per week

Dairy Products

Skim milk or 1- one gallon per person per week minimum
Chocolate lowfat milk- one gallon per person per week
Lowfat yogurt
Lowfat cheese
Reduced calorie Mayonaisse- Hellmans Light, Weight Watchers
Lowfat ice cream- Hendries Light etc.
Lowfat frozen yogurt
Sherbert

Fruit and Vegetables

Orange juice - 1/2 gallon per person per week.
Apple juice - 1/2 gallon per person per week
Apples - 7 per person per week
Bananas - 7 per person per week
Lettuce
Tomatoes
Cucumbers
Baked Beans
Potatoes - One large bag per week. These can be microwaved to provide an excellent carb source. Don't smother them with butter. Instead add lowfat milk to moisten and butter for taste.
Canned corn, stringbeans, etc.
Applesauce

Please note: The fruit and Vegetable group is the most important group on this list.

Fish, Poultry, Meat

Tuna fish - packed in water only, mix with reduced calorie mayo
Sliced turkey breast
Ground turkey - use in place of hambuger

Any other meat as per your preference- please remember that meat will be the most expensive item on your list and the most difficult to prepare

Pasta

Spaghetti, ziti, etc. 2lbs per week per person
Louises Frozen Ravioli
Louises Frozen Manicotti
Macaroni and Cheese dinner high calorie/ low fat

Misc.

Nutri grain waffles
Spaghetti sauce - Ragu Homestyle
Peanut butter - high in fat but, provides calories in a hurry
Grape jelly - use on toast, muffins, bagels, instead of butter
Animal crackers
Graham crackers
Ginger snaps

Also substitute lowfat or non fat dairy products for those made with whole milk.

The following foods are high in complex carbohydrates and should be included in the diet as often as possible.

-All breads, perferably whole grains over white breads or rolls.
-Rice
-All types of pasta
-Any fruit
-Any vegetable
-Cereals, (perferably low sugar)
-Muffins, bagels (these do not have to be eaten exclusively at breakfest)

The following meal sustitution patterns are provided to help you chose appropriate high carb, low fat foods at each meal. For each meal of the day you are provided with a list of recommended choices and a list of nonrecommended foods. The recommended foods will provide a diet higher in carbs and lower in fat. This substitution list can be used by parents purchasing foods for their young athlete, by living on their own, and by athletes eating in cafeterias or fast food restaurants.

Recommended Foods	Nonrecommended Foods
Breakfest	
Cereal (Total, Raisin Bran)	Cereal(Captain Crunch)
Pancakes	Eggs
French Toast	Bacon
Waffles	Sausage
Muffins	Home Fries
Whole Grain Toast	White Toast
Bagels	Butter
Oranges	
Bananas	
Grapefruit	
Skim milk	Whole milk
Fruit juice	
Water	
Lunch	
Soups (excluding cream base)	Steak and Cheese
Salads-dressing on side	Anything fried
Pasta	Anything with mayo
Pizza-onions, peppers	Pizza-hamburger, sausage
Turkey-mustard, no mayo	Fast food chicken, fish
Fish-baked,broiled	
Chicken-baked, broiled	Chicken cutlet, deep fried
Roast Beef - no mayo	
Fruit - any type	
Vegetables - any type	
Skim milk	Whole milk
Chocolate milk - low fat	
Fruit juice	
Water	

Note: When eating in fast food restaurants the lowest fat food is usually the regular hamburger. Fried chicken and fish have more fat due to frying than the broiled hamburger.

Dinner

Same Recommendations as lunch.

LOSING WEIGHT

These are only recommendations. Moderation is the key unless you are overweight. If you are attempting to lose weight, follow these guidelines very strictly. **DO NOT SKIP MEALS**. This is nutritional suicide. Missing meals will cause you to lose muscle weight not fat weight.

Overweight athletes should not snack and should not eat after nine p.m.. Calories eaten late at night have a higher tendency to be stored as fat. Attempt to lose no more than two pounds per week. Crash diets only cause the body to eventually rebound. Learn to eat correctly and take weight off gradually.

GAINING WEIGHT

Athletes desiring additional weight should still strive for a diet high in complex carbs and low in fat, because this type of diet will aid in improving performance. However, the athlete trying to gain weight should take in two to three snacks per-day from the recommended food column. Fruits make excellent, portable snacks.

One of the best snacks for the athlete trying to gain weight is lowfat chocolate milk. One pint of lowfat chocolate milk provides 50 grams of carbohydrates and 320 calories with only 2 grams of fat. This is probably one of the best high carb, lowfat snacks available. The more times you eat in a day the better.

SUMMARY

The two most critical variables for improving athletic performance do not involve excercise. The keys to improving strength and conditioning are rest and nutrition. No amount of hard work can offset a poor lifestyle. Your lifestyle will be the main determining factor in your success as an athlete.

Poor quality of food, inadequate rest, and any overuse of alcohol will lead to fatigue and reduce performance. Nothing will effect your performance more than your lifestyle.

Take a look at some of the new information in nutritional research:

---Studies have shown that an athlete cannot consume a balanced diet or enough total calories in two meals per day. A minimum of three meals is required for an athlete.

---Research has shown that moderate alcohol use can cause inflamation of muscle tissue with corresponding losses in strength. Amounts as little as two ounces of alcohol (or two 12oz beers) have been shown to decrease strength up to six percent. That accounts for 18 lbs. off a 300 lb. bench.

---60% of and athletes total calories should come from complex carbohydrates. Complex carbs are found primarily in the fruit, vegetable, and bread and cereal food groups. This means two thirds of what you eat in one day should come from these three food groups.

---Reviews of the diets of numerous university varsity athletes has shown that athletes do not consume enough fruit, vegetables or bread. Athletes should be eating a minimum of one serving from each of these groups at each meal and should try to eat four servings per day from each group. Instead athletes mistakenly overeat from the meat and dairy groups.

OUR NUTRITIONAL GOALS

1) Think of eating as a way to improve performance. This applies particlary to strength workouts

2) When eating, think complex carbs first. This means fruit, vegetables, and whole grain breads at each meal.

3) Decrease the consumption of unhealthy high fat foods such as fried foods, red meat, eggs, oils, mayo, and salad dressing.

BREAKFAST MENUS

BREAKFAST I	CAL.	CHO.	FAT	PRO.
1 cup Shredded Wheat	110	102	0	8
1 whole Banana	127	123	0	0
1 cup Skim Milk	86	47	8	31
1 cup Orange Juice	112	93	8	7
1 cup Grape Juice	167	165	0	2
1 Poached Egg	82	2	53	27
1 slice Cheese	107	2	79	26
1 slice Whole Wheat	55	41	7	7
1 slice Whole Wheat/Jam	109	95	7	7
	955 Cal.	668 Cal.	161 Cal.	118 Cal.
		70% CHO.	17% FAT	13% PRO.

BREAKFAST II				
4 plain Pancakes (4" diam.)	248	144	72	32
4 tblsp Maple Syrup	200	200	0	0
1 Egg (scrambled)	111	8	0	34
1 cup Tomato Juice	46	40	69	34
2 cups Skim Milk	172	94	6	62
1 whole Banana	127	122	0	0
1 Whole Wheat Toast	55	45	1	3
1 tblsp. Jam	54	54	0	0
	1013 Cal.	707 Cal.	152 Cal.	144 Cal.
		71% CHO.	15% FAT	14% PRO.

BREAKFAST III				
4 pcs. French Toast w/				
Whole Wheat Bread & 2 eggs	422	185	144	93
4 tblsp. Maple Syrup	200	200	0	0
2 cups Skim Milk	172	95	9	68
1 whole Grapefruit	82	81	0	1
1 whole Banana	127	123	0	4
	1003 Cal.	684 Cal.	153 Cal.	166 Cal.
		70% CHO.	14% FAT	16% PRO.

BREAKFAST IV McDONALDS				
Hotcakes with Butter & Syrup	472	359	81	32
1 carton 2% Milk	125	44	45	36
1 Orange Juice	112	104	2	6
1 Grapefruit juice	101	98	0	3
	810 Cal.	605 Cal.	128 Cal.	77 Cal.
		74% CHO.	16% FAT	10% PRO.

Sample Diets
3000 Calories

	CAL.	CHO. (CAL)	FAT (CAL)	PRO. (CAL)
BREAKFAST				
1 cup Raisin Bran	144	135	5	4
1 cup Skim Milk	88	52	0	36
1 Poached Egg/Whl.Wht. Toast	133	47	52	34
1 Whole Wheat Toast/Jam	110	93	8	9
1 Grapefruit	80	76	0	4
1 Banana	101	97	0	4
1 Cup Orange Juice	112	97	8	7
	768	597	73	102
LUNCH				
1 Turkey Sandwhich/Lettuce/ Cheese/Mayo/Whl. Wht. Bread	430	97	213	120
1 Cup of Vegeatable Soup	78	40	18	20
12 oz. Skim Milk	132	78	0	54
1 Apple	96	89	7	0
3 Chocolate Chip Cookies	150	84	54	12
	886	388	292	206
DINNER				
4 oz. Cod	168	0	45	123
1 Baked Potato	145	130	0	15
2 tsp. Butter	68	0	68	0
1 cup Corn	139	121	7	11
2 slices Whl.Wht Bread	122	96	14	18
12 oz. Lemonade	161	161	0	0
1 pc. Angel Food Cake	161	145	0	16
1/2 cup Strawberries	139	128	7	4
	1103	782	141	187
SNACKS				
1 cup Vanilla Ice Cream	290	122	144	24
DAILY TOTALS	3057	1889	650	519
	CAL.	CHO	FAT	PRO
		67%	20%	18%

4000 CALORIES

BREAKFAST				
4 Buttermilk Panckaes	656	390	177	77
3 tblsp. Maple Syrup	150	150	0	0
2 tsp. Butter	68	0	68	0
16 oz. Orange Juice	224	208	14	12
1 Banana	101	100	0	3
1 Apple	96	90	6	0
1 cup Skim Milk	88	52	0	36
1 cup Water	0	0	0	0
	1383	990	265	126
LUNCH				
1 Tuna Sandwhich/Whl.Wht. Bread Lettuce/Light Mayo.	291	106	117	68
16 oz. Apple Juice	234	234	0	0
1 cup Lowfat Yogurt	231	167	25	39
1 cup 2% Milk	125	46	44	35
1 Orange	64	62	0	2
DINNER				
2 Fried Chicken Breasts	320	10	93	217
2 cups Rice	320	294	0	26
2 tsp. Butter	68	0	68	0
1 cup corn	130	114	3	13
1 slice Whole Wheat Bread	66	53	9	4
2 cups 2% Milk	250	92	88	70
1 pc Angel Food Cake/ Strawberries	300	277	6	17
	1454	840	267	347
SNCAKS				
1 oz. Raisins	80	78	0	2
DAILY TOTALS	3862	2523	718	631

FAST FOODS

An OCCASIONAL meal at a fast food restaurant will not destroy the balance of the diet. Fast food are high in fat and calories. This will raise the percentage of fat in the diet. A player on a 4,000 calorie diet should take in 90 grams of fat daily (810 Cal.). At McDonalds a Big Mac, French Fries, and Apple Pie contain 61 grams of fat (549 Cal.). The other meals of the day should be lower in fat to offset teh intake of fat at McDonalds. It is beneficial to learn which foods are high in fat so that meals can be adjusted.

The following will give the recommended intake of fat based on calorie intake and also the fat analysis of various fast food restaurants:

Daily Caloric Intake	Daily Fat Intake (Cal.) or Less
6,000	1,200
5,000	1,000
4,000	800
3,000	600
2,000	400

FAT ANALYSIS

	Calories	Fat Calories	Fat Percentage
McDONALDS			
Apple Pie	300	171	57%
Big Mac	543	279	52%
Cherry Pie	298	162	54%
Egg McMuffin	352	180	51%
Fillet of Fish	402	207	51%
French Fries	211	99	47%
Hamburger	257	81	31%
Quarter Pounder/Cheese	519	261	50%
BURGER KING			
Whopper	607	288	48%
DAIRY QUEEN			
Big Brazier Deluxe	407	261	46%
Brazier Onion Rings	300	153	51%
Buster Bar	390	198	51%
Fish Sandwhich	400	153	38%
KENTUCKY FRIED CHICKEN			
Extra Crispy Dinner	951	486	51%
Original Recipe Dinner	831	414	50%

TACO BELL			
Bean Burrito	343	108	31%
Beef Tostada	291	135	46%
Burrito Supreme	457	198	43%
Combination Burrito	404	144	36%
Taco	186	72	39%

FOODS	CALORIES	FROM FAT
Pizza Hut 10 in. pizza w/ sausage,mushrooms, pepperoni & green peppers	1035	43%
Arthur Treachers Fish & Chip	900	42%
Derweinerschnitzel chili -cheese dog	311	54%
All meat weiner on bun with mustard & relish	285	49%
Health Food Sandwich	285	53%
8 oz. T-Bone Steak	184	42%
Baked Potato	147	1%
Baked Potato w/ butter & sour cream	444	67%
Large Salad (No cheese, eggs, or meat)	80	1%
Large Salad w/ Blue Cheese Dressing	380	76%
Large Salad w/ Italian Dressing	142	57%