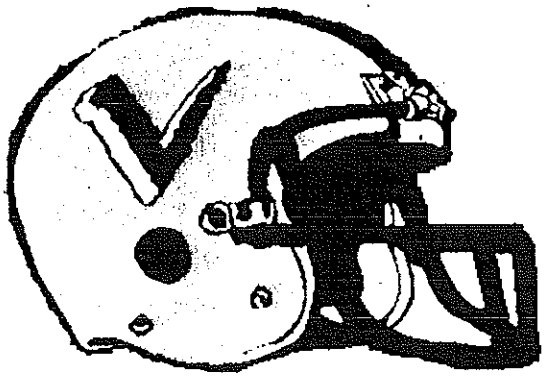
Spring Valley Football Strength & Conditioning Nutrition Handbook



"You are what you eat"

Compiled by Dr. M. Armstrong

PERFORMANCE FUEL GUIDE

Nutrition is a very weak, if not the missing link to optimal athletic performance. It has only been within the last century that the real understanding concerning nutritional effects on aging, general health, and athletic performance has emerged. Sports nutrition is now one of the most studied areas of nutrition, and many long-held concepts of good nutrition, particularly those relevant to athletes, are being challenged. What you eat, how it is eaten, and when it is eaten may play a critical part on health and athletic performance.

The Role of Carbohydrates

- Energy source (Carbs are fuel for your muscles)
- You must meet the athletic daily requirements of protein consumption, if there is a deficiency the body reduces glycogen reserves and the blood sugar causes it to start breaking down muscle.
- Glycogen – storage form of complex carbohydrate in muscle.
  - ✓ The average person can store 1500-2000 carbohydrate calories
  - ✓ It is important to have a diet based on high-carbohydrate foods to keep glycogen stores optimal for performance and competition.
- Carbohydrates help breakdown fat!
- Fuels the brain!
- The lack of sufficient Carbohydrates will impair athletic performance as well as mental alertness.

The Nature of Carbohydrates

- All simple, double and complex sugars are carbohydrates.
- Plants – main source in your diet.
  - ✓ Fruits, vegetables, grain (cereal, pasta, rice, breads).
- Starch – complex carbohydrates.
  - ✓ Found in seeds, corn, cereal, pasta, peas, beans and potatoes.
  - ✓ Should constitute - 50% of total carbs.
- Fiber – complex carbohydrates.
  - ✓ Found in oat bran, beans, brown rice, peas, carrots, wheat bran, and skins of fruits and vegetables.
  - ✓ Provides no calories, slows rate of digestion, and may decrease the total number of calories consumed in subsequent meals.
  - ✓ Consume 20-35 grams per day.
- Carbohydrate - should supply 60% of total daily calories.
  - ✓ Mainly from fiber rich fruits, grains, and vegetables.
  - ✓ 4 calories per 1 gram of carbohydrate (if there are 25 grams of carbs. Then 100 calories are derived from carbohydrates).

The Role of Protein

- Tissue synthesis and repair (muscle).
- Structure (hair, skin, nail, bones, tendons).
- Regulate the break down of carbohydrates, fat, and protein for energy.

The Nature of Protein

- Amino Acids are the building blocks of protein.
- 4 calories per 1 gram of protein (if there are 6 gram of protein then 24 calories are derived from protein,
- Complete protein: foods that contain all of the amino acids.
  - ✓ Eggs, milk, lean red meat, fish, and poultry.
- Incomplete protein: foods that do not contain all the amino acids. These foods are eaten to complement each other in order to get the full amino acids in the diet.
  - ✓ Beans, peas, nuts, cereals, whole grain bread, rice and pasta.
- Protein should constitute 12-15 % from your daily calories. You should consume 0.8 gram of protein per kg of body weight.

  Example: 225lb. Athlete.

  225 lb./ 2.2 = 102 kg

  102 kg x 0.8 = 81 grams of protein a day
- Excessive Protein Intake:
  - ✓ An intake of greater then three times the recommended level does not enhance work capacity during intense training.
  - ✓ Excess protein that the body does not use for repair or energy is converted into fat, not muscle.
- High Protein Diet: may inhibit performance.
  - ✓ May cause strain on the kidneys and liver function, followed by Dehydration.
  - ✓ Electrolyte imbalance.
  - ✓ Glycogen Depletion.
  - ✓ Loss of lean muscle mass.

The Role of Fats

- Energy reserve.
- Protects the vital organs.
- Transports fat-soluble vitamins (A, D, E, & K)

Nature of Fats

- Saturated Fats (solid):
  - ✓ Visible fat you may see on meats, chicken and pork. Dairy products such as sour cream, butter, cheese, whole milk.
  - ✓ Limit these in your diet.

- Unsaturated Fats (liquid):
  - ✓ Plant derived fat (monounsaturated and polyunsaturated fat). Most of the cooking oils, peanuts, almonds, pecans.
  - ✓ You want most of your fat to come from these sources.
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- Energy: Fat is nutrient dense.
  - ✓ 9 calories per 1 gram of fat (if there are 5gm of fat per serving 45 calories are derived from fat).
- Fat should constitute 30% of your daily calories
  - ✓ You want to limit saturated fat to 10% of daily calories
  - ✓ Try to get most of your fat calories from unsaturated fats.
- Fat does not make you fat.
  - ✓ Eating more calories than your body burns for energy is what makes you gain body fat.
  - ✓ These calories can come from any source Carbohydrate, Protein and fats.
  - ✓ There are many benefits in eating a low-fat diet (30% of daily calories), But extremely low-fat diets can actually impair athletic performance.

Viking Nutrition

Step #1- Incorporate Fruits, Vegetables, Nuts and Seeds with your Meal.

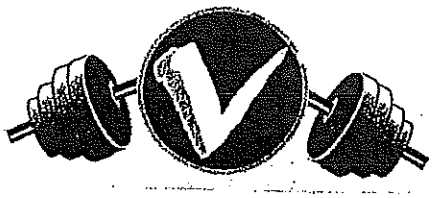
1. Natural Sources of anti-oxidant vitamins and minerals.
2. Vitamin E sources also provide essential oils (good fat).
3. Vitamin C sources are typically citrus fruits.
4. Vitamin A sources are typically red, orange, and green vegetables.
5. High Priority List give you A & C in one food.

Step #2- Alter your Carbohydrate intake relative to your activity level.

1. Carbohydrate is preferred energy source for fast twitch muscle fibers (*60-65%* of total caloric intake).
2. Carbs are rapidly depleted from fast twitch fibers when doing quick burst activities with short rest intervals.
3. Low carbohydrate intake on training days can leave you fatiguing early, leading to pulls & cramps.
4. You need to more carbs at meals before (1 1/2-2 hours) or after activity where this type of work will be performed. Figure about half the food on your plate or tray.
5. A good mix between slow, medium and fast digesting carbs is best at meals before and after activity (Best, Second, & Third Choice Carbohydrates).
6. HOWEVER, if you continue to eat half the food on your plate or tray from carbs on your off-days then you will minimize fat use and actually increase fat storage, leaving you exercise dependent to keep fat off.
7. You need to reduce your intake from Third Choice Carbohydrates on off-days, this will result in greater use of fat on off-days when fat can adequately meet your energy requirements.

Step #3- Select a Lean Protein Source.

1. Heart Disease, Cancer, and Obesity are just a few of the problems with high fat protein consumption.
2. "Best Choice Protein" has less then 10 grams of fat per serving.
3. "Second Choice Protein" has 11-20 grams of fat per serving.
4. "Third Choice Protein" has over 20 grams of fat per serving.
5. Need to diversify protein intake and base daily consumption on body weight (0.8-1.2 grams of protein/pound of body weight).
6. Breaking up protein intake with meals, snacks, and supplements throughout the day will enhance recovery, lessen muscle soreness, and help you avoid over eating.
7. Proteins should make up *~20%* of your total caloric intake.



Viking Nutrition

3 Winning Steps Shopping Lists

Step #1- Incorporate Fruits, Vegetables, Seeds and Nuts with your Meal.

Step #1	Vitamin E	High Priority List- Vitamins A & C	Vitamin A	Vitamin C
Almonds	Broccoli	Brussels Sprouts	Apricots	Cauliflower
Avacado or Guacamole	Cantaloupe	Dark Salad Greens	Carrots	Green Beans
Corn Oil	Dried Papaya	Grapefruit	Cheese	Kiwi
Mayonaise	Red Peppers	Guavas	Green Peas	New Potatoes w/ Skin
Olive Oil	Red Marinara	Mandarin Oranges	Peaches	Oranges
Peanut Butter	Tomato Juice	Mangos	Pumpkin	Pineapple
Peanuts	Tomato Sauce	Sweet Potatoes	Skim Milk	Raisins
Salmon	Tomatoes	Tangerines	Yogurt	Strawberries
Soybean Oil	V8 (Vegetable Drink)	Watermelon	Chili Powder	Pea Pods
Sunflower Seeds or Oil	Salsa	Yams	Tomato Catsup or BBQ	
Walnuts	Winter Squash	Egg Yolk	Green/Yellow Pepper	

Step #2- Alter Your Carbohydrate Intake Relative To Your Activity Level.

Step #2	Best Choice Carbs	Second Choice Carbs	Third Choice Carbs
Acorn Squash	All Bran Cereal	Apples	Baked Russet Potatoes
Black Beans	Baked Beans	Banana Cake	Candy
Butter Beans	Bran Chex	Bananas	Cartoon Character Cereals
Cherries	Brown or Wild Rice	Cornmeal	Doughnut
Cucumbers or Pickles	Cherrios	Grapes	French Bread
Egg Noodles	Cream of Wheat	Green Peas	French Fries
Egg Plant	Lima Beans	Macaroni	Golden Grahams
Fettucini	Mini or Shreaded Wheat	Oatmeal Cookies	Grapenuts
Green Beans	Multi Grain Bread	Popcorn	Hashbrowns
Kidney Beans	New Boiled Pot. w/ Skin	Pound Cake	Mashed Potatoes
Lentils	Oat Bran	Raisins	Melba Toast
Mushrooms	Oatmeal	Ravioli	Puffed Rice
Nectarines	Pita Bread	Spaghetti	Refried Beans
Onions	Rye Bread	Sweet Corn	Sweetened Drinks
Pears	Special K Cereal	Sweet Potatoes	Total Cereal
Plums	Tortillas	Water Crackers	White Bread
Split Peas	Unsweetened Fruit Juice	Wheat Crackers	White Flour
Summer Squash	Whole Grain Bread	Whole Wheat Flour	White Rice

***Remember to reduce your total carbohydrate intake on days your not active, especially third choice carbohydrates!**

Step #3- Select a Lean Protein Source

Step #3	Best Choice Protein	Second Choice Protein	Third Choice Protein
95% Lean Ground Beef	2% Milk	Baked Chix. Strips or Nuggets	75% Lean Ground Beef
95% Lean Ground Turkey	85% Lean Ground Beef	Chicken- Dark Meat Skinless	75% Lean Ground Turkey
95% Lean Ham	85% Lean Ground Turkey	Dark Meat Tuna in Water	Bacon
Beans & Peas	85% Lean Ham	Frozen Ice Milk	Beef or Pork Ribs
Chicken- White Meat Skinless	85% Lean Encased Meats	Low Fat Pudding	Chicken- With Skin
Fat Free Ice Milk	Low Fat Cheese	Nuts or Seeds	Fried Chicken
Low Fat Cottage Cheese	Low Fat Yogurt	Peanut Butter	Fried Fish or Seafood
Non Fried Fish or Seafood	Regular Cottage Cheese	Ricotta Cheese	Ham on Bone
Skim Milk	Regular Yogurt	Skim Mozzarella Cheese	Ice Cream
Trimmed Beef or Poark Roast	Trimmed Lamb	Trimmed Choice Steaks	Regular Cheese
Turkey- White Meat Skinless	Trimmed Beef Brisket	Trimmed Pork Chops	Regular Encased Meats
White Meat Tuna in Water	Turkey Bacon or Sausage	Turkey- Dark Meat Skinless	Whole Meats
Whole Grains	Whole Milk		
Yogurt from Skim Milk			

***Concentrate on best choice items as your protein source.**

Nutrition

Fast Food Facts

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Burger King					
Hamburger	1 (3.6 oz)	260	28	14	10
Cheeseburger	1 (4 oz)	300	28	16	14
Whopper	1 (9.5 oz)	570	46	27	31
Whopper Jr	1 (4.7 oz)	300	29	14	15
Whopper Jr w/ cheese	1 (5 oz)	350	30	16	19
Double Whopper	1(12.3 oz)	800	46	46	48
Double Whopper W/ cheese	1(13.2 oz)	890	48	51	55
Bacon Double Cheeseburger	1(5.3 oz)	470	26	30	28
Bacon Double Chees. Deluxe	1(6.5 oz)	530	28	30	33
Double Cheeseburger	1(5.6 oz)	450	29	27	25
BK Broiler Chicken Sandwich	1 (5.4 oz)	280	29	20	10
Chicken Sandwich	1 (8 oz)	620	57	26	32
Chicken Tenders	(6 pieces)	236	14	16	13
Ocean Catch Fish Filet	1 (5.8 oz)	450	33	16	28
Breakfast Items					
Bacon, Egg, Cheese Croissanwich	1 (4 oz)	353	19	16	23
Sausage, Egg, Cheese Croissanwich	1 (5.6 oz)	534	22	21	40
Ham, Egg, Cheese Croissanwich	1 (5 oz)	351	20	19	22
Breakfast Buddy w/ Sausage, Egg, Cheese	1 (3 oz)	255	15	11	16
French Toast Sticks	1 (5 oz)	440	60	4	27
Hash Browns	1 (2.5 oz)	213	25	2	12
Blueberry Mini Muffins	1 (3.3 oz)	292	37	4	14
Orange Juice	1 (6.5 oz)	82	20	1	0

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Domino's Pizza					
Cheese Pizza 16" (large)	(2 slices)	376	56	22	10
Pepperoni Pizza	(2 slices)	460	56	24	18
Sausage/Mushroom	(2 slices)	430	55	24	16
Veggie Pizza	(2 slices)	498	60	31	19
Deluxe Pizza	(2 slices)	498	59	27	20
Double Cheese	(2 slices)	545	55	32	25
Ham Pizza	(2 slices)	417	58	23	11
Kentucky Fried Chicken					
Original Recipe					
Wing	1 (1.9 oz)	172	5	12	11
Side Breast	1 (2.9 oz)	245	9	18	15
Center Breast	1 (3.6 oz)	260	8	25	14
Drumstick	1 (2 oz)	162	3	14	9
Thigh	1 (3.4 oz)	287	8	18	21
Extra Crispy					
Wing	1 (2 oz)	231	8	11	17
Side Breast	1 (3.7 oz)	379	16	19	27
Center Breast	1 (3.9 oz)	344	15	23	21
Drumstick	1 (2.4 oz)	205	7	14	14
Thigh	1 (4.2 oz)	414	14	20	31
Hot & Spicy					
Wing	1 (2.2 oz)	244	9	12	18
Side Breast	1 (4.1 oz)	398	18	21	27
Center Breast	1 (4.3 oz)	382	16	24	25
Drumstick	1 (2.5 oz)	207	10	11	14
Thigh	1 (4.2 oz)	412	16	19	30
KFC Skinfree Crispy Chicken					
Center Breast	1 (4 oz)	296	11	24	16
Drumstick	1 (2 oz)	166	8	13	9
Side Breast	1 (3.6)	293	11	22	17
Thigh	1 (3 oz)	256	9	17	17

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Side Orders					
Chicken Little's Sandwich	1 (1.7 oz)	169	14	6	10
Colonel's Chicken Sandwich	1 (5.9 oz)	482	39	21	27
Hot Wings	6 (4.8 oz)	471	18	27	33
Buttermilk Biscuits	1 (2.3 oz)	235	28	5	12
Mashed Potatoes W/ Gravy	1 (3.5 oz)	71	12	3	2
French Fries	1 (2.7 oz)	244	31	3	12
Crispy Fries	1 (3.1 oz)	294	33	4	17
Potato Salad	1 (3 oz)	141	13	2	9
Baked Beans	1 (3 oz)	105	18	5	1
Corn-on-Cob	1 (2.6 oz)	90	16	3	2
Cole Slaw	1 (3.2 oz)	114	13	1	6
McDonalds					
Sandwiches					
Hamburger	1 (3.6 oz)	255	30	12	9
Cheeseburger	1 (4 oz)	305	30	15	13
Quarter Pounder	1 (5.9 oz)	410	34	23	20
Quarter Pounder W/ Cheese	1 (6.8 oz)	510	34	28	28
Big Mac	1 (7.6 oz)	500	42	25	26
Filet-O-Fish	1 (5 oz)	370	38	14	18
McLean Deluxe	1 (7.3 oz)	320	35	22	10
McLean Deluxe W/ Cheese	1 (7.7 oz)	370	35	24	14
McChicken	1 (6.5 oz)	415	39	19	20
Chicken Fajitas	1 (2.9 oz)	190	20	11	8
Chicken McNuggets					
Chicken Nuggets	(4 Pieces)	180	11	13	10
Chicken Nuggets	(6 Pieces)	270	17	20	15
Chicken Nuggets	(9 Pieces)	405	25	30	22
French Fries					
French Fries	small	220	26	3	12
French Fries	medium	320	36	4	17

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
French Fries	large	400	46	6	22
Breakfast					
Egg McMuffin	1 (4.8 oz)	280	28	18	11
Sausage McMuffin	1(4.8 oz)	345	27	15	20
Sausage McMuffin W/ Egg	1 (5.6 oz)	430	27	21	25
Scrambled Eggs	2 (3.5 oz)	140	1	12	10
Sausage	1 (1.5 oz)	160	0	7	15
English Muffin W/ Spread	1 (2 oz)	170	26	5	4
Hash Browns	1 (1.9 oz)	130	15	1	7
Biscuit w/ Biscuit Spread	1 (2.6 oz)	260	32	5	13
Sausage Biscuit	1 (4.2 oz)	420	32	12	28
Sausage Biscuit W/ Egg	1 (6.2 oz)	505	33	19	33
Bacon, Egg, And Cheese Biscuit	1 (5.4 oz)	440	33	15	26
Hot Cakes	1 order	250	44	3	2

Pizza Hut

Thin –n- Crispy					
Cheese	1 slice	223	19	13	10
Beef	1 slice	231	20	13	11
Pepperoni	1 slice	230	20	12	11
Italian Sausage	1 slice	282	20	14	17
Pork	1 slice	240	20	13	12
Meat Lovers	1 slice	297	20	14	16
Veggie Lovers	1 slice	192	20	11	8
Pepperoni Lovers	1 slice	320	20	18	19
Supreme	1 slice	262	20	15	14
Super Supreme	1 slice	253	20	16	12
Hand Tossed					
Cheese	1 slice	253	27	15	9
Beef	1 slice	261	28	15	10
Pepperoni	1 slice	283	28	20	10

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Italian Sausage	1 slice	313	27	16	15
Pork	1 slice	270	28	15	11
Meat Lovers	1 slice	321	28	16	15
Veggie Lovers	1 slice	222	28	13	7
Pepperoni Lovers	1 slice	335	28	19	16
Supreme	1 slice	289	28	17	12
Super Supreme	1 slice	276	28	17	10
Pan					
Cheese	1 slice	279	26	14	13
Beef	1 slice	288	27	10	18
Pepperoni	1 slice	280	26	8	18
Italian Sausage	1 slice	399	26	15	24
Pork	1 slice	296	27	10	19
Meat Lovers	1 slice	347	27	15	23
Veggie Lovers	1 slice	249	27	7	15
Pepperoni Lovers	1 slice	362	27	14	25
Supreme	1 slice	315	27	16	16
Super Supreme	1 slice	302	27	12	19
Bigfoot					
Cheese	1 slice	179	24	9	5
Pepperoni	1 slice	195	24	10	7
Pepperoni, Italian Sausage, Mushroom	1 slice	213	25	10	8
Personal Pan Pizza					
Pepperoni	1 whole	675	76	36	29
Supreme	1 whole	647	76	37	28

Taco Bell

Specialties					
Bean burrito	1 (6.7 oz)	359	54	13	11
Beef Burrito	1 (6.7 oz)	402	38	22	17
Double Beef Burrito Supreme	1 (9 oz)	451	40	23	22

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Tostada	1 (5.5 oz)	243	28	10	11
Beefy Tostada	1 (7 oz)	322	22	15	20
Beef Maximelt	1 (3.7 oz)	266	19	13	15
Chicken Maximelt	1 (3.8 oz)	257	19	14	15
Bellbeefer	1 (6.2 oz)	312	32	16	13
Chicken Burrito	1 (6 oz)	334	38	17	12
Burrito Supreme	1 (8.7 oz)	422	46	17	19
Combination Burrito	1 (6.7 oz)	380	46	17	14
Enchirito	1 (7.5 oz)	382	30	21	20
Taco	1 (2.75 oz)	184	11	10	11
Chicken Soft Taco	1 (3.7 oz)	213	19	14	10
Taco Light Platter	1 (17 oz)	1062	97	38	58
Burrito Supreme Platter	1 (16 oz)	774	76	35	37
Cheesarito	1 (4 oz)	312	37	12	13
Mexican Pizza	1 (9.5 oz)	714	43	28	48
Taco Bellgrande Platter	1 (17 oz)	1002	99	37	51
Pintos and Cheese	1 (4.5 oz)	194	19	9	10
Nachos	1 order (3.7 oz)	346	37	7	18
Nachos Bellgrande	1 (10 oz)	649	61	22	35
Taco Bellgrande	1 (6 oz)	351	20	18	22
Taco Light	1 (6 oz)	411	18	19	29
Soft Taco	1 (3.25 oz)	228	18	12	12
Fajita Steak Taco	1 (5 oz)	235	20	15	11
Fajita Steak Taco W/ Sour Cream	1 (5.75 oz)	281	21	15	15
Fajita Steak Taco W/ Guacamole	1 (5.75 oz)	269	23	15	13
Chicken Fajita	1 (4.75 oz)	226	20	14	10
Cinnamon Crisps	1 order	266	20	3	16
Salads					
Taco salad W/out Beans	1 (18 oz)	822	47	31	57
Taco Salad W/out salsa	1 (18 oz)	931	60	35	62

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Taco Salad W/ Ranch dressing	1 (20 oz)	1167	61	37	87
Seafood Salad W/ Ranch dressing	1 (15 oz)	884	49	25	66
Seafood Salad W/out dressing/ shell	1 (10 oz)	217	12	18	11
Seafood Salad W/ out dressing	1 (13 oz)	648	47	24	42
Taco Salad W/ Salsa	1 (21 oz)	949	63	36	62
Taco Salad W/out Shell	1 (18.7 oz)	502	26	29	31
Taco Salad W/ Salsa W/out Shell	1 (18.7 oz)	520	30	31	31

Wendy's

Sandwiches

Single Hamburger On Bun	1 (4.7 oz)	350	31	25	15
Single w/ Everything	1 (7.7 oz)	440	36	26	23
Double Hamburg On Bun	1 (7 oz)	560	26	44	30
Big Classic on Kaiser Bun	1 (8.9 oz)	480	44	27	23
Double w/ Cheese	1 (7.8 oz)	620	26	48	36
Bacon Cheeseburger	1 (5.3 oz)	440	26	30	24
Country Fried Steak	1 (5.4 oz)	460	45	15	26
Fish Sandwich	1 (6.4 oz)	460	42	18	25
Grilled Chicken Sandwich	1 (6.25 oz)	290	35	24	7
Breaded Chicken Sandwich	1 (7.3 oz)	450	44	26	20
Chicken Club Sandwich	1 (7.75 oz)	520	44	30	25
Jr. Hamburger	(4 oz)	270	34	15	9

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Jr. Cheeseburger	1 (4.5 oz)	320	34	18	13
Jr. Bacon Cheeseburger	1 (6 oz)	440	33	22	25
Jr. Cheeseburger Deluxe	1 (6.3 oz)	390	36	18	20
Hamburger Kid's Meal	1 (4 oz)	270	33	15	9
Cheeseburger Kid's Meal	1 (4.3 oz)	310	33	18	13
Baked Potato					
Plain	1 (10 oz)	300	69	6	tr
Bacon & Cheese	1 (13.4 oz)	510	75	17	17
Broccoli & Cheese	1 (14.5 oz)	450	77	9	14
Cheese	1 (13.5 oz)	550	74	14	24
Chili and Cheese	1 (15.5 oz)	600	80	21	25
Sour Cream & Chives	1 (11 oz)	370	71	8	6
Sour Cream	1 pkt.	60	1	1	6
French Fries, Nuggets, and Chili					
Small	3.2 oz	240	33	3	12
Medium	4.8 oz	360	50	5	17
Biggie	6 oz	450	62	6	22
Chicken Nuggets	6 pieces	280	12	14	20
Barbecue Sauce	1 pkt.	50	11	1	0
Sweet & Sour Sauce	1 pkt.	45	11	1	tr
Sweet Mustard	1 pkt.	50	9	1	1
Chili	Small	190	21	19	6
Chili	Large	290	31	28	9
Cheddar Cheese	2 Tbsp	70	1	4	6
Saltine Crackers	6	75	12	2	3
Salads					
Caesar Side Salad	1 (4.5 oz)	160	18	10	6

Nutrition

Product	Serving Size	Calories	CHO(gm)	Protein(gm)	Fat(gm)
Deluxe Garden Salad	1 (9.6 oz)	110	9	7	5
Taco Salad	1 (18 oz)	640	70	34	30
Taco Sauce	1 pkg	10	tr	tr	tr
Grilled Chicken Salad	1 (12 oz)	200	9	25	8
Side Salad	1 (6.6 oz)	60	4	3	tr
Breadstick	1 (1.5 oz)	130	24	4	3

HOW TO GAIN WEIGHT

BASIC CONCEPTS

1. There are two ways to gain body weight:
   a. Consume more calories than you burn off (diet).
   b. Burn off less calories than you consume or take in (exercise).

2. To gain weight, you have to take in more calories than your body burns up during exercise.

3. A pound of body weight equals 3500 calories. So, in order to gain a pound, you need to eat 3500 calories more than your body uses.

4. Realistically, you can gain about one or two pounds in a week if you consume 500 to 1000 calories extra every day.

5. Eat at least three balanced meals a day, preferably five meals a day.

6. Eat daily servings from the four basic food groups:
   a. Grain products - 4 servings.
   b. Fruit and vegetables - 4 servings.
   c. Dairy products - 3 servings.
   d. Meat, poultry, and fish - 2 servings.

   * Notice that with 8 servings coming from grain products and fruits and vegetables allows for most of the increased calorie intake to come from carbohydrates.

7. Eat larger portions at meals.

8. Have snacks between meals that are high calorie, and also rich in nutrients such as:
   a. Nuts.
   b. Dried fruits
   c. Shakes and Malts
   d. Cheese
   e. Sandwiches
   f. Pizza

9. Avoid snacks between meals that are high in calories, but low in nutrients. If you do eat them, do not substitute them for nutrient rich foods. Some high calorie, low-nutrient foods are:
   a. Soft drinks
   b. Cakes, pies, cookies
   c. Salty snacks foods
   d. Jams, jellies, syrups
   e. Doughnuts, sweet rolls

10. Eat a quality breakfast.

11. Keep regular hours with plenty of rest.

12. Eat a sandwich before going to bed, or leftovers from supper.

13. Never miss a weight training workout, because the weight you do gain needs to be lean muscle mass.

GAINING MUSCLE INSTEAD OF FAT

To put on muscle, you need to eat extra calories. But common sense tells us that if you take in extra calories and don't exercise, you will gain fat. Strength training will use the extra calories to stimulate muscle cells to grow.

To find out which you've gained, measure your body fat before you start your weight gain program. If you've gained fat, you'll see an increase in body fat percent. If you've gained muscle, you will see either a decrease in percent body fat or no change. Remember, the lower percent of body fat an athlete has, the more efficiently they will perform.

HOW TO LOSE WEIGHT

BASIC CONCEPTS:

1. There are two ways to lose body fat
   A. Burn off more calories than you take in (exercise).
   B. Consume fewer calories than you burn off (diet).

2. It is possible to safely lose one to two pounds of body fat a week. If you lose weight any faster than that, you may begin to lose muscle as well as strength too.

3. For each pound of fat you want to lose, you have to eliminate 3500 calories. You should do this with a combination of diet and exercise.

4. For an athlete, diet alone is not a good way to take off pounds. Cutting your calorie intake below 2000 calories means you won't get the energy you need for training and competition. In short, your performance may suffer.

5. Losing weight through exercise alone involves increasing your activity level considerably.

6. The fastest and perhaps the easiest way to lose weight is with a combination of diet and exercise. If you eat 500 calories less and exercise 500 calories more, you could burn up 1000 calories a day. At this rate, you could lose two pounds in a week.

7. Estimated Daily Calorie Intake in Relation to Current Body Weight:

Weight Objectives

Weight	Reduce	Maintain	Increase
160	2,290	3,040	3,790
170	2,480	3,230	3,980
180	2,670	3,420	4,170
190	2,860	3,610	4,360
200	3,050	3,800	4,550
210	3,240	3,990	4,740
220	3,430	4,180	4,930
230	3,620	4,370	5,120
240	3,810	4,560	5,310
250	4,000	4,750	5,500
260	4,190	4,940	5,690
270	4,380	5,130	5,880
280	4,570	5,320	6,070
290	4,760	5,510	6,260
300	4,950	5,700	6,450

Tips for Bulking Up

1. EAT BIG- Eat every two hours. If you are serious about putting on size, you have to be serious about getting a continuous supply of nutrients into your body.

2. TAKE IN PLENTY OF HIGH QUALITY PROTEINS AND CARBS- Don't mistake bulking up for an excuse to eat all kinds of junk. It is fine if you have a treat everyday or two, but the majority of your food should be high- quality proteins like poultry, fish, eggs and lean red meat; complex carbohydrates like potatoes, yams, rice and oatmeal; and fibrous carbs, which are raw vegetables.

3. HAVE A SHAKE AFTER EVERY TRAINING SESSION- Training depletes your body of protein and glycogen, so the perfect time to put nutrients back and speed up your recovery is immediately after training.

4. EAT LEAN RED MEAT AT LEAST ONCE A DAY- Even back in the old days the strength building benefits or red meat were well known.

5. TRAIN BIG: USE THE BASIC EXERCISES- Movements like the Squat, Bench, Clean, deadlift, barbell row and military press will pack insane amounts of muscle on anyone who has the guts and discipline to stick with them and work up to very heavy poundages.

6. TRAIN WITH A PARTNER- Not only can partners spot you and help you get forced reps, that the rivalry between training partners can make for better gains than you can imagine.

7. REST BIG- GET PLENTY OF SLEEP- The added stress of heavy training along with the pressures of school and family can tax your recovery abilities. Eight hours is a good rule of thumb.

8. GIVE YOURSELF TIME TO GAIN WEIGHT- Gaining Muscular Weight is a slow process. Five pounds a month is a reasonable amount of weight gain when you are in full- blown bulk-up phase. Little gains quickly add up to huge gains. Body weight 225- 3 months 240 with minimum gain in % body fat.

Homemade Weight- Gainer

3 CUPS WHOLE MILK	450 CALORIES
1 CUP VANILLA ICE CREAM	270 CALORIES
2 BANANAS	210 CALORIES
1 CUP NONFAT POWDERED MILK	430 CALORIES

*May add Hersey's Syrup for flavor

THIS MAKES A HIGH-POWERED PROTEIN DRINK THAT PACKS A GOOD 1360 CALORIES. IF YOU WERE TO DRINK TWO OF THESE A DAY IN COMBINATION WITH THE THREE WHOLESOME MEALS, YOU COULD REALLY ADD SOME DECENT SIZE.

*** The advantage to purchasing and consuming a quality supplement is that these products contain the essential amino acids that enable the body to utilize the added protein more efficiently.*

Hydration and Physical Fitness

It's no sweat that an athlete will perform better when he or she is well hydrated. This is mainly because muscle contractions are initiated by electrical impulses that are carried through water. Therefore, well-hydrated muscles can achieve more intense contractions over longer periods of time.

In the long term, the importance of deep cellular hydration cannot be emphasized enough. To optimize your physical performance, you must keep your body functioning efficiently at all times. To do this, your body must maintain high levels of deep cellular hydration so that the delivery of nutrients and oxygen, the removal of toxins and wastes (lactic acid), the functioning of metabolic enzymes, and the electrical properties of the cells and cell systems are optimized. This will improve your body's ability to repair itself, reduce your recovery times, and allow your body to CONSISTENTLY perform at higher levels.

Tips for Proper Hydration

1. Cut out sodas or soft drinks
2. Milk, sports drinks and juice are great, but water is essential.
3. The average person needs between 8-10 eight ounce glasses of water a day. If you are an athlete, you need more.
4. Hydrate before, during, and after exercise.
5. Water intake and cramping are often linked. If cramping is a problem, simply increase potassium levels. One great source for this- bananas.

Hydration Research

1. 75% of Americans are chronically dehydrated.
2. In 37% of Americans, the thirst mechanism is so weak that it is mistaken for hunger.
3. Even mild dehydration will slow one's metabolism as 3%.
4. Lack of water is the #1 trigger of daytime fatigue.
5. Preliminary research indicates that 8-10 glasses of water a day could significantly ease back and joint pain for up to 80% of sufferers.
6. Drinking 5 glasses of water daily decreases the risk of colon cancer by 45%, plus it can reduce breast cancer risk by 79% and bladder cancer by 50%.

******Soft Drink Alert******

Soft drinks such as Coke contain the active ingredient phosphoric acid. This acid leaches away calcium from bones and is the major contributor to the rising increase in osteoporosis. One needs to remember that Coke is used to clean battery terminals, remove grease and blood and clean toilets. Do you really want this in your stomach?

Creatine Monohydrate

(From an article)

When you tense a muscle, force is produced. That force is translated into muscle contraction, but in order for the muscle to function properly, it requires energy. That energy comes from several different sources, but the primary supply is through the nutrients that you consume in your diet. These nutrients are broken down by the stomach and absorbed into the blood-stream where they undergo further alterations. One of the compounds that is formed after many complicated processes and reactions is called adenosine triphosphate (ATP). ATP is the bridge between the energy in the food we eat and actual chemical energy which enables us to lift a weight. When muscle contraction is required, stored ATP is broken down even further to another chemical known as adenosine diphosphate (ADP). When ATP is broken down to ADP, energy is released and used by the contracting muscle cell. ATP is your body's immediate source of energy.

Now, when you have used up your muscle cells' immediate source of ATP, your body tries to resupply itself by "borrowing" a high energy phosphate from a chemical called creatine phosphate (CP). (Muscle cells store CP in the same way they store ATP).

(Simplified wording:)

Basically, this means that during intense exercise, your source of energy, ATP is broken down to ADP, and so, your muscles need some recuperation time for the CP + ADP —> ATP + C reation to occur. Once ATP levels are restored you once again have more energy to put the muscle through intense exercise again. This process generally takes a few minutes, which disturbs the less rest time ideology - your muscles need 3-5 minutes rest time between sets if you are to put them through the same intense exercise again. Otherwise that energy source ATP just isn't available to the same degree.

It has been shown in various studies that supplementing with creatine monohydrate can increase the levels of CP in the muscle cells, and thus significantly decrease the time in which ATP levels are restored. This means extra energy during each set as well - creatine levels are normally diminished during the first few reps of each set, but by supplementing creatine, this can be extended, meaning more reps with a given weight, or the same number with a heavier weight.

(back to the article:)

You might ask, "Why not take a supplemental form of CP or ATP instead of creatine?" Well, as with many nutritional supplements, CP and ATP are destroyed by the gut. In fact, there are CP and ATP supplements on the market, but they go unnoticed because, quite frankly, they don't work. Not only that, consuming CP or ATP is more expensive than supplementing creatine.

Frequently Asked Questions

How does creatine help muscle grow?

Intensity is necessary to achieve natural strength gains and muscle growth. Muscle growth takes place when the muscle has been overloaded. Without heavy sets, your muscle will remain small. Creatine promotes intense lifting by recycling the necessary energy molecule ATP. Creatine also buffers the development of lactic acid allowing for a more enduring workout. As you know, lactic acid build-up is one of the main causes of exercise-related muscle fatigue.

How does creatine work?

In the body, creatine is combined with phosphorus to form creatine phosphate (phosphocreatine). The high energy phosphates stored in creatine phosphate are then used to rapidly convert ADP back to ATP. When muscles are used to lift weight, run or perform any type of work, ATP is broken down to ADP (adenosine diphosphate) and energy is released. The amount of ATP stored in the muscle will only fuel a maximum effort such as lifting a weight for 10 to 15 seconds. After that, the muscle must rely on creatine phosphate to restock its supply of ATP.

Increasing the muscle's supply of creatine phosphate helps increase the rate in which the body can supply ATP. This increases the muscles capacity to do work and improves the energy efficiency of the muscle.

Is Creatine safe?

Yes, Creatine is a natural amino acid present in the body of humans and animals. The human body has 100-115 grams of creatine in the form of creatinephosphate or phosphocreatine. No negative side effects have been noted in the research with the recommended levels of supplementation.

Does creatine make you retain water?

No. Creatine draws water from the body to do its work. There is a difference between cell volumization and water retention. Cell volumization leads to more water inside the cells, making muscle bigger and firmer. Water retention, the process that makes t he muscles look smooth, happens outside the muscle cells.

Are the benefits of creatine backed by scientific proof?

Yes! Research studies published in Britain's prestigious Clinical Science Journal clearly showed that athletes who took Creatine Monohydrate and exercised were able to increase the available muscle Creatine dramatically. What is even more important, is that 20-30% of the increased Creatine found in the muscle was in the form of high energy Creatine Phosphate.

How does creatine enhance athletic performance?

The key benefits of creatine supplementation are:

- Promotes muscular growth
- Increases storage of "instant" anaerobic energy
- Increases muscle strength
- Improves endurance by delaying fatigue

SPRING VALLEY NUTRITION CHART

"Eat to Compete"

Name _____ Date _____

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Break-fast										
Snack										
Lunch										
Snack										
Dinner										
Snack										

Make sure you list everything you eat and drink, including water. The average person needs 8-10 (64-80 ounces) glasses a day to maintain an efficient working body.

Remember, you are an athlete – **HYDRATE PROPERLY!**