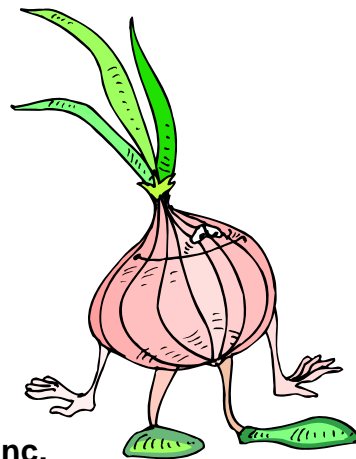
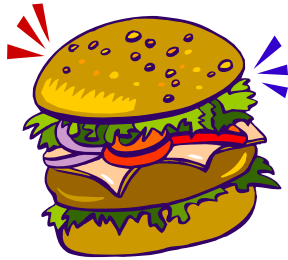


T Type I

D Diabetes



Diabetes- Type I



(IDDM)



What is it?

***Defect-** in the pancreatic beta cell (Islets of Langerhans)

***May be related to-** adrenal cortex, anterior pituitary gland, thyroid

Signs and Symptoms:

***Polyuria-** increased urination, **polydipsia-** increased thirst, **polyphagia-** increased hunger, fatigue, weakness, sudden weight loss, irritability



Facts:

***10% of all cases of diabetes-** Type I, insulin dependent, ketosis prone
-onset usually follows viral infection- mumps, autoimmunity, exposure to bovine serum albumin

***In US- Diabetes affects-** Native Americans, Blacks, Hispanics > other populations
***> 6.6 million Americans diagnosis with IDDM**

***50% of all people in US are undiagnosed with diabetes**

***Number 4 killer in US-** related to stroke/CHF (Congestive Heart Failure)

***Chief cause-** of blindness, amputations, renal failure, birth defects

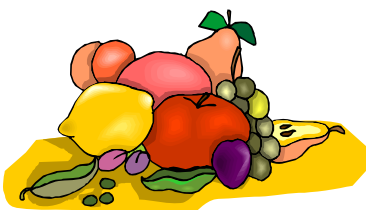
***15% of medical costs-** > \$100 billion dollars a year

What can I do?

***Control glucose/blood sugar level-** with diet, medication, exercise
-increases life expectancy, quality of life

-HbA1C- < 7%, FBS 80-120 mg./dL, 150-180 mg./dL 2 hours after meals,
100-140 mg./dL at bedtime

***Achieve and maintain-** healthy weight for height, improve glycemic control



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Diabetes- Type I (IDDM)



Types of Insulin:

*Dependent on Insulin for Life- monitor hypoglycemia, speed/absorption, peak/duration

*Immediate- Humalog- 5 minutes/onset, 15 minutes/peak, 60-90 minutes/duration

*Rapid-acting - (Regular)- 1/2-1 hour/onset, 4-6 hours/peak, 6-8 hours/duration
-(human/Regular)- 1/2-1 hour/onset, 2-3 hours/peak, 3-6 hours/duration

*Intermediate (lente/NPH)- 2-4 hours/onset, 4-12 hours/peak, 10-18 hours/duration

*Long-acting (ultralenta/PZI)- 6-10 hours/onset, 13-14 hours/peak, 18-20 hours/duration



Hyper/Hypoglycemia:

*Hyperglycemia- Polydipsia/phagia/uria, dehydration, muscle wasting, weight loss, weakness, hypovolemia, ketonuria, glycosuria, fatigue, dry mouth, recurrent/persistent infections, changed/blurred vision, muscle cramps
-glucose > 250 should be treated, if not can lead to DKA (Diabetic Ketoacidosis), coma, death

*Hypoglycemia- Headache, weakness, hunger, shakiness, confusion, diplopia, irritability, shallow/rapid breathing, numbness of lips/mouth/tongue, convulsions, normal/abnormal pulse, dizziness, lack of concentration, pallor, staggering gait, slurred speech, nausea, tingling, diaphoresis
-treat with 12-15 grams of CHO (1 Fruit/Bread/Starch/Milk) if glucose < 70 mg./dL
wait 15 minutes, retest, repeat if needed

What can I do?

*See your Physician

*See RD for help as needed See FFF RD on line for help

*RD to educate patient- on Artificial Sweeteners, Alcohol, Exercise/activity, Food Diary, Eating Out, Food Labels, Sick Day Management



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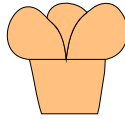


1800 Calorie Diet Plan Patient: _____

Bread or Starch Group:

Breakfast: Lunch: Supper: Snack:

2	3	3	1
---	---	---	---



1 sl. bread, roll, 1/2 bagel, English muffin, bun, pita, 2 rice cakes, bread sticks, 6 vanilla wafers/animal crackers, gingersnaps, 3 graham crackers, Melba toast, 1/2 c. pasta, rice, 3 c. popped popcorn,

Cereals: 3/4 c. Chex/Flakes, 1/4 c. Granola, Muesli, Grape-nuts, sherbet, pudding, 1 c. puffed/shredded cereals, 1/2 c. bran, grits, oatmeal,

Vegetables: 1/2 c. mixed vegetables, baked beans, lima beans, peas, potato, plantain, winter squash, corn, pumpkin, succotash, 1 1/2 inch cube Angel

Food Cake: **High Sodium:** 3/4 oz. chips/pretzels, tortilla, muffins, cornbread, biscuits, croutons, baked beans, Soft serve ice cream, soup, popcorn, salted crackers, self rising flour/meal

Fruit Group: Fresh Fruit is Best!!!

Breakfast: Lunch: Supper: Snack:

1	2	1	1
---	---	---	---



1/2 c. applesauce, apricots, papaya, fruit cocktail, mango, pineapple, peaches, pears, plums, grapes, 1 small-kiwi, apple, banana, orange, peach, nectarine, 4 fresh apricots, 3/4 c. mandarin oranges, black/blueberries, grapefruit, pineapple, 2 tangerines, figs, plums, dates; 1 1/2 c.-strawberries, melons, raspberries, 3 kumquats, **Fruit Juices:** 1/2 c. apple, cider, grapefruit, orange, prune, pineapple, 1/3 c. grape, cranberry, fruit juice blends, 1 c. Reduced Calorie cranberry cocktail, 1/4 c. Nectar; **High Sodium:**

All Dried Fruits-raisins, currants, apricots

Milk Group:

Breakfast: Lunch: Supper: Snack:

1	1/2	0	1
---	-----	---	---



1 c. Skim/1/2 %/1%/Nonfat/LowFatButtermilk, light soymilk, 1/3 c. Drynonfat milk, 1/2 c. Evaporated skim milk, 3/4 c. plain nonfat yogurt/plain lowfat yogurt **High Sodium:** Buttermilk made from whole milk

Healthy Meal Plan: 3 Meals a Day, Bedtime Snack, AVOID SWEETS, Limit High Fat/High Sodium Foods, Used for Diabetes/Weight Reduction

Vegetable Group: Eat ALL You Want!!!

Breakfast: Lunch: Supper: Snack:

X	X	X	X
---	---	---	---



1/2c. artichoke, bamboo shoots, bean sprouts, asparagus, broccoli, beets, brussel sprouts, green beans, Kohlrabi, leeks, greens, okra, onion, carrots, cucumbers, eggplant, snow peas, pimento, rhubarb, rutubugas, tomato, turnips, 4 water chestnuts, (2 T.ketchup) 6 cherry tomatoes, 1 c.-alfalfa sprouts, cabbage, chicory, endive, escarole, fennel, green pepper, lettuce, mushrooms, radishes, spinach, cauliflower, celery, summer squash/zucchini **High Sodium-sauerkraut, V-8/Tomato Juice, canned tomatoes Products, Pickles, Soups, broth**

Meat Group:

Breakfast: Lunch: Supper: Snack:

1	2oz.	3 oz.	0
---	------	-------	---



1 oz. or as stated-Broil, Boil, Bake, Roast, Stew, Grill, Stir-Fry- Fish, Veal, Chicken (remove skin), Venison, Buffalo, Duck, Cornish Hen, Shellfish, Goose, Lamb, Rabbit, Fresh Pork, Turkey, 2 Egg Whites, 1/2c. dried peas, beans, lentils, Tofu, Soy Protein, Beef-trim fat-sirloin, round, flank, tenderloin, roast, Steaks-T-Bone, porterhouse, cubed, ground round

High Sodium: Cured/salted/smoked/canned/marinated meats, fish, poultry, corned beef, parmesan cheese, luncheon meats, hotdogs, sausage, cured ham, sardines, peanut butter, anchovies, creamed sauces, gravies, chili sauce, rock salt, Kosher salt, Sea Salt, MSG, Accent, Worcestershire Sauce, Soy/BBQ Sauce, Teriyaki sauce, mustard, salt, canned vegetables/vegetable juices, softened water

Fat Group:

Breakfast: Lunch: Supper: Snack:

1	1	1	1
---	---	---	---



Unsaturated-Good- 1t.Margarine, Mayo, Oil-(canola, corn, olive, soybean, safflower, peanut, sunflower), 2t.Low Calorie mayonnaise/diet margarine, 6 hickory/cashews, 10 almonds/peanuts, 5 pecan halves, 2 brazel, 3 macadamia/pistachio, 4 walnuts, 2T. avocado, **High Sodium: 2t. Tarter Sauce, 2 1/2 T. Low Calorie Dressing, 1 T. Salad Dressing; Saturated-Bad-1 t.-butter/solid shortening, 2 T. coconut, chitterlings, 1T. cream cheese, sour cream/coffee creamer, 1 sl. bacon**

Special Notes by: MD __, Nurse __,
RD __, Other: _____

1. _____

2. _____

3. _____

Free Vegetables: Alfalfa Sprouts,
Cabbage, Chicory, Cauliflower, Celery,
Endive, Escarole, Fennel, Green Peppers,
Lettuce, Mushrooms, Parsley, Radishes,
Spinach, Summer Squash, Watercress,
Zucchini, (*May use with a Low Calorie
Fat Free Salad Dressing.*)

Suggestions/**T**alk with your **MD:**

#Exercise 20-30 Minutes Per Day after 2
weeks use weights

#Avoid Fried Foods, Sweets and Colas

#Encourage High Fiber Foods as Whole
Grains, Potatoes with skin, Brown
Rice, Fresh Fruits & Vegetables

#Drink plenty of fluids-Water, Diet Colas,
unsweet beverages, **Salt, Pepper**

#When Hungry eat vegetables or a large
lettuce/vegetable salad with **low
calorie fat free dressing**

1800 Calorie Diet Plan:

Breakfast:

1/2 cup Applesauce, unsweet

1 cup Skim Milk/1/2 cup Oatmeal

1 slice WW Bread/1 t. Margarine

1/2 c. **V-8 Juice**/1 Scrambled Egg

Lunch: 1/2 c. Fat Free Potato Salad

2 oz. Baked Chicken/1 cup Green Beans

1 Bun/2 cups Salad/**Low Calorie Dressing**

1 Banana/1 t. Margarine/1/2 c. Skim Milk

Supper:

1/2 cup Peaches/**6 Saltines**/1t. Marg.

1/2 c. Broccoli/1/2c. Onions/1/2c. Carrots

3 oz. Tuna/1 cup Fat Free Pasta Salad

Bedtime Snack: 1c. Skim Milk/1 Fat/
5 Vanilla Wafers/1 Fresh Fruit

1800 Calorie Diet Plan

Patient: _____

Healthy Meal Plan:

1-Eat 3 Meals a Day.

2-Do Not Skip Meals!

3-Avoid Sweets

4-Limit High Sodium &
High Fat Foods

5-Used for Diabetics or
Weight Reduction

6-X = Eat all You Want!

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Breakfast: Lunch: Supper: Snack:

1 2 1 1

Fruit Group: *Fresh Fruit is Best*

1/2 c. Apple, Applesauce, Apricots, Cherries, Fruit Cocktail, Mango, Pineapple, Peaches, Papaya, Pears, Plums, Grapes, 1 small-Kiwi, Apple, Banana, Orange, Peach, Nectarine, 4 Fresh Apricots, 3/4 c. Mandarin Oranges, Black/Blueberries, Grapefruit, Pineapple, 1 c.-Cantaloupe, Honeydew, Raspberries, 1 1/2 c.-Strawberries, Watermelon, 2 small Tangerines, Plums, Figs, Dates, 3 Kumquats, Fruit Juices: 1/2 c. Apple, Cider, Grapefruit, Orange, Prune, Pineapple, 1/3 c. Grape, Cranberry, Fruit Juice Blends, 1 c. Reduced Calorie Cranberry Cocktail, 1/4 c. Nectar

High Sodium: *Dried- 4 Apple Rings, 2 T. Raisins, 8 Apricot Halves, 1 T. Currants*

Breakfast: Lunch: Supper: Snack:

1 1/2 0 1

Milk Group: 1 c. Skim, 1/2 %, 1%, Nonfat/ Low-Fat Buttermilk, light soymilk, Alba 66/77, Vegelicious, 1/2 c. Evaporated Skim milk, 1/3 c. Dry nonfat milk, 3/4 c. plain nonfat yogurt, 1 c. Lowfat milk, Sweet Acidophilus, 3/4 c. plain lowfat yogurt, 1 c. Whole milk, Goat's, Kefir, 1/2 c. Evaporated Whole Milk, Buttermilk made from whole milk

High Sodium: *Buttermilk made from whole milk, any food made with baking powder, soda, self rising flour or meal, foods in a brine, bacon fat, salt pork, horseradish, 4 olives*

Breakfast: Lunch: Supper: Snack:

2 3 3 1

Bread or Starch Group: 1 sl. Bread, Roll, 1/2 Bagel, English Muffin, Bun, Pita, 2 Rice Cakes, 2 Holland Rusk, Bread Sticks, 6 vanilla wafers, animal, gingersnaps, 3 Graham Crackers, Melba toast, 3 T. Miso, Grapenuts, wheat germ flour, dry tapioca, cornstarch, 3 c. popped popcorn, **Cereals:** 3/4 c. Chex/Flakes, 1/4 c. Granola, Muesli, Grapenuts, sherbet, pudding, 1 c. puffed/shredded cereals, 1/2 c. bran, grits, corn, oatmeal, mixed vegetables, baked beans, lima beans, peas, potato, plantain, winter squash, gelatin, pasta, rice, pumpkin, succotash, 1 1/2 inch cube Angel Food Cake: **High Sodium:** 3/4 oz.

Chips, pretzels, tortilla, muffins, cornbread, meal, flour, biscuits, croutons, baked beans, Soft serve ice cream, salted crackers, popcorn, soup, broth, bouillon, bread with salted tops, pork rinds

Breakfast: Lunch: Supper: Snack:

1 1 1 1

Fat Group: Unsaturated-Good- 1 t. -Margarine, Mayonnaise, Oil- (canola, corn, olive, peanut, safflower, soybean, sunflower), **2t.-**Low Calorie mayonnaise, 10 almonds/peanuts, halves: 5 pecan, 4 walnuts, 6 hickory/cashews, hazel, 2 brazel, 3 macadamia, pistachio, 2 t. diet margarine, 2 T. avocado, **High Sodium: 2t. Tarter Sauce, Low Calorie Dressing, 1 1/2 T. Salad Dressing**
Saturated-Bad- 1 t.-Butter/Solid Shortening, 2 T. Coconut, chitterlings, 1 T. cream cheese, sour cream/coffee creamer, 1 sl. bacon

RED = Foods High in SODIUM

Breakfast: Lunch: Supper: Snack:

X X X X

Vegetable Group: 1/2c. artichoke, asparagus, bamboo shoots, bean sprouts, beets, broccoli, brussel sprouts, green beans, Kohlrabi, leeks, greens, okra, onion, carrots, cucumbers, eggplant, snow peas, pimento, rhubarb, rutubugas, tomato, turnips, 4 water chestnuts, (2 T.ketchup) 6 cherry tomatoes, 1 cup-alfalfa sprouts, cabbage, chicory, endive, escarole, fennel, green pepper, lettuce, mushrooms, parsley, radishes, spinach, watercress, cauliflower, celery, summer squash, zucchini; **High Sodium-Sauerkraut, V-8 or Tomato Juice, canned tomatoes Products, Pickles, Soups, broth**

Breakfast: Lunch: Supper: Snack:

1 2oz. 3oz. 0

Meat Group: 1 oz. or as stated-Broil, Boil, Bake, Roast, Stew, Grill, Stir-Fry- Fish, Veal, Chicken (remove skin), Venison, Buffalo, Duck, Cornish Hen, Shellfish, Goose, Lamb, Rabbit, Fresh Pork, Turkey, 2 Egg Whites, 1/2 c. dried peas, beans, lentils, Tofu, Soy Protein, **High Sodium:** *Cured/salted/smoked/canned/ marinated meats, fish, poultry, corned beef, parmesan cheese, luncheon meats, hotdogs, sausage, cured ham, sardines, peanut butter, anchovies, creamed sauces, gravies, chili sauce, rock salt, Kosher salt, Sea Salt, MSG, Accent, Worcestershire Sauce, Soy/BBQ Sauce, Teriyaki sauce, mustard, salt, canned vegetables/vegetable juices, softened water*

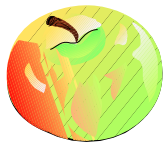
1800 Calorie Week at a Glance

<u>Monday:</u>	<u>Tuesday:</u>	<u>Wednesday:</u>	<u>Thursday:</u>	<u>Friday:</u>	<u>Saturday:</u>	<u>Sunday:</u>
1 Orange	1 Apple	1/2c. Applesauce	1/2 Grapefruit	1/2 Banana	2 Prunes	1 Mand. Oranges
1 cup Skim Milk	1 cup Skim Milk	1 cup Skim Milk	1 cup Skim Milk	1 cup Skim Milk	1 cup Skim Milk	1 cup Skim Milk
1/2 c. Bran Cereal	1 cup Oatmeal	1 1/2 WW Bagel	3 Pancakes	1 c. Grits	1 English Muffin	1/2 c. Bran Cereal
2 sl. WW Toast	1 sl. WW Toast	1T. Cream Cheese	2-3T. Unsweet Syrup	1 sl. WW Toast	1/2c. Hash Browns	2 sl. WW Toast
1 t. Margarine	1 strip Bacon	1 Omelet with	1 t. Margarine	1 t. Margarine	1 t. Margarine	1 t. Margarine
1 oz. Cheese	1 Poached Egg	Onions/Peppers	1 oz. Sausage	1 Scrambled Egg	1 Poached Egg	1 oz. Cheese
1 c. Coffee	1 c. Coffee	1 c. Coffee	1 c. Coffee	1 c. Coffee	1 c. Coffee	1 c. Coffee
2 oz. Hamburger	2 oz. Pork Chop	2 oz. Steak	2 oz. Ham	2 oz. Beef Stew	2oz. Chicken Salad	2 oz. Pork Loin
1 c. Sauteed	2 cups Salad w/	2 cups Salad w/	1 c. Lettuce/Tom.	1 c. Carrots,	1 c. Fresh Veggies	1 c. Sauteed
Peppers & Onions	Low Calorie Drg.	Low Calorie Drg.	Onion/Pickles-Dill	Peppers & Onions	Marinated Low Cal. Drg.	Squash & Onions
1/2 c. Lett/ Tomato	1/2 c. Cabbage	1/2 c. Green Beans	1/2c. Cucumbers	1/2 c. Lett/ Tomato	1/2 c. Lett/ Tomato	1/2 c. Greens
2-3 Carrot Sticks	2-3 Celery Stalks	2-3 Sl. Tomato	2-3 Radishes	2-3 Mushrooms	1 Dill Pickle	1/4c. Alfalfa Sprouts
1/2 c. Potatoes w/	1 c. Blackeye Peas	1 small Baked	7 Baked Fries	1/2 c. Potatoes w/	1/2 c. Macaroni	1/2 c. Baked
Skin/2 Rolls	w/ Onions	Potato w/ Chives	2 sl. Pineapple	Skin in Stew	Salad	Beans/ Onions
1/2 c. Fruit Cup	1/2 c. Fresh Fruit	1 Peach/2 Rolls	Water/2 Rolls	1 cup Grapes	2 T. Raisins	2-3 Plums
Water, Unsweet	Water, 1 Roll	Water, Unsweet	Drink/Beverage	Water/2 Rolls	Water/2 Rolls	Water/2 Rolls
Drink/Beverage	Drink/Beverage	Drink/Beverage	1 t. Mayo	Drink/Beverage	Drink/Beverage	Drink/Beverage
2 oz. Fish/1 Bun	2 oz. Chicken/1 Bun	2 oz. Salmon	2 oz. Tuna/10 Crax	2oz. Polish Sausage	2 oz. Venison	2 oz. Salmon
2 c. Salad w/ Low	2 c. Salad w/ Low	1 c. Mushrooms	2 c. Salad w/ Low	2 c. Salad w/ LCD	2 c. Salad w/ LCD	2 c. Salad w/ LCD
Calorie Dressing	Calorie Dressing	1/2 c. Broccoli	Calorie Dressing	1 c. Sauerkraut	1c. Okra/ Tom's/ On	1 c. Asparagus
1 c. Cole Slaw	1/2 c. Cauliflower	2 t. Marg./1 small	1 c. Cole Slaw	1 t. Mustard/1 Bun	1/2 c. Lima Beans	10 Almonds/1 Bun
2 t. Mayo	2 t. Marg	Baked Potato	1 Pickle/2t. Mayo	1 Dill Pickle/2 Fats	w/ Peppers/2 Fats	1 Bk. Apple/2 Fats
1 c. Melon	1 1/4 c. Berries	1 Pear/1 Roll-WW	1 Nectarine	1/2c. Mango	2 Kiwi/1 WW Roll	1/3c. Wild Rice
1 c. 2 % Milk	1 c. Yogurt	1 c. 2% Milk	1 c. Yogurt	1 c. 2 % Milk	1 c. 2 % Milk	1 c. 2 % Milk
4 Graham Crax	12 Vanilla Wafers	2 c. Puffed Cereal	6 c. Popcorn	12- 3 Ring Pretzels	12 Saltines	60 Goldfish

LCD = Low
Calorie Dressing

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Red = Low Sodium
Use Unsalted Nuts



<u>Breakfast:</u>	<u>CHO Gms.</u>
1/2 c. Apple Juice	15
2 slices Toast	30
1 cup Grits	30
1 c. Whole Milk	30
Coffee, Salt, Pepper	0
Artificial Sweetener	0



<u>Bedtime Snack:</u>	
1 cup Whole Milk	
6 Graham Cracker Squares	

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1800 Calorie (Sick Day Management)

<u>Lunch:</u>	<u>CHO Gms.</u>
1c. Chicken Noodle Soup	15
2 ounce Cheese	0
6 Saltine Crackers	15
1/2c. Sugar Free Pudding	15
1 Popsicle Twin Bar	20
Unsweet Tea, Lemon Slice	0
Salt, Pepper	0

<u>Food:</u>	<u>CHO Gms:</u>
1c. Whole Milk	15
Low Fat/Skim	12
1/3 c. Regular Jello	15
1t. Margarine/Fat	0
1/2 c. Vegetable	5
1oz. Meat	0
1/2 cup Fruit/Juice	15
1/4 c. Sherbet	15
1/2 c. Custard	15



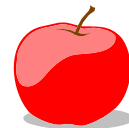
<u>Supper:</u>	<u>CHO Gms.</u>
2 cups Cream Soup	30
1 toasted Bagel	30
1 c. unsweet Applesauce	30
1/2 cup Gingerale	10
Unsweet Tea, Lemon Slice	0
Salt, Pepper	0

<u>Food:</u>	<u>CHO Gms:</u>
1 Pillsbury Crescent Roll	15
3/4 c. Cherrios	15
1 c. Plain Yogurt	12-15
1 cup Sugar Free Yogurt	12-15
1 Diet Soda	0
5 Ritz Crackers	15
1 oz. Cheese	0
1/2 c. Sweet Applesauce	30
1/2 cup Diet Gelatin/Jello	0
1/3 cup Grape Juice	15
3/4 cup Sprite/Gingerale	15
1 cup Gatorade	15

Diabetic Ketoacidosis/Diabetic Coma

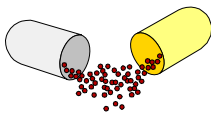


What is it?



***DKA-** Diabetic Ketoacidosis- medical emergency, mortality 5 to 15%

***Alkaline reserves are depleted by-** insulin resistance, inactivity, too much food, infection, fever, stress, trauma, pregnancy



Signs and Symptoms:

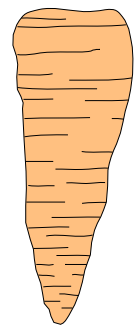


***Preceding Diabetic Coma-** dim vision, nausea, vomiting, polyuria, pruritus, labored/sweet acetone breath, intense thirst, hot/dry/flushed skin, drowsiness, seizures, cramping



Facts:

***Hyperketonemia from DKA-** metabolic acidosis, high ketones in the blood



What can I do?

*See your Physician

-frequent monitoring of glucose, prevent shock, replace fluids/electrolytes

-IDDM- notify Physician if glucose does not return to normal, insulin adjustment

-5% glucose solution as hyperglycemia/glucosuria subside

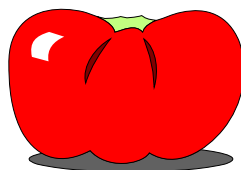
-if don't decrease add salty broth, tea,

-later add fruit juices, high potassium (K+) foods- oranges, bananas, broccoli

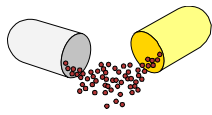
*See RD for help as needed

*See FFF RD on line for help

*Food, insulin, exercise, fiber, fluid, electrolytes, stress, meals, snacks, high fat meals, over eating, timing meals and snacks



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Low Blood Sugar (Hypoglycemia)



What is it?

*Hypoglycemia- abnormally low blood sugar, watch for excessive sweating, faintness, headache, hunger, pounding of heart, trembling, impaired vision, not able to awaken, irritability, personality change

*Blood Sugar- usually ≤ 70 mg./dL

What causes it?

*Too much insulin

*Not eating enough food

*Exercising too much

*Delayed meal

*Excessive drinking of alcohol and denial of food

Is it Serious? YES

*Symptoms- Blurred Vision, Confusion, Dizziness, Drowsiness, Fast Heartbeat, Fatigue, Headache, Hunger, Irritability, Nervous, Trembling, Sleepiness, Personality Change, Shaking, Skin pale and moist, Sweating, Tingling

What can I do?

*Take Glucose Tablets or 1 small piece of fruit, 1/2 cup fruit juice or cola, 1 cup milk, 2 large sugar cubes, 6 Lifesavers, 2 t. honey or corn syrup

*Rest 15 minutes after taking and repeat if not feeling normal

*Eat 3 meals per day and 3 snacks that are higher in protein and lower in carbohydrates, **see a Registered Dietitian for a meal plan**

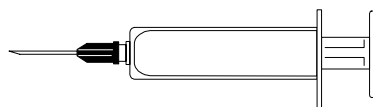
Checkups:

*See Physician as needed, if unconscious see immediately

-Contact Physician when low Blood Sugar at home

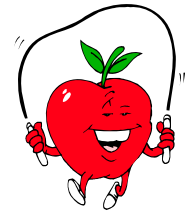
*Measure of blood sugar by Physician/Home Blood Sugar Tests

*Medical History, Physical Examination, Blood Tests by Physician





High Blood Sugar (Hyperglycemia)



What is it?

*Impaired glucose tolerance or high levels of blood glucose- resulting from defects in insulin secretion, insulin action, or both

*Type 1 – IDDM, include autoimmune, genetic, and environmental factors, usually children or young adults

*Type 2 – NIDDM, usually include older age, obesity, family history, prior history of gestational *diabetes*, physical inactivity, impaired glucose tolerance, race/ethnicity-African Americans, Hispanic/Latino Americans, American Indians, some Asian Americans and Pacific Islanders

*Gestational – develops in 2 to 5% of all pregnancies but disappears when the pregnancy is over, higher risk include obesity and family history

Pre-Diabetes (maternal/age)- Impaired Glucose Tolerance



What Causes it?

*Obesity, family history, age, decreased exercise, race, gestational diabetes, etc...



Is it Serious?

*Diabetes- can be associated with serious complications and premature death

*Complications of diabetes: -heart disease, stroke, high blood pressure, blindness, amputations, kidney disease, dental disease, nervous system disease, and pregnancy complications

*More likely to die of pneumonia and influenza

*Normal Blood Sugar- Fasting-80-120 mg./dL/before meals

-After Meals- 150-180 mg./dL

What can I do?

*Diet- increase fresh fruits and fresh vegetables, *limit meat*-choose lean meats as chicken and fish: Broil, boil, bake, roast, stew, grill or stir fry *-Eat Whole Grains-* increased fiber; avoid sweets, desserts and replace with artificial sweeteners

-Choose low fat cheeses, milk, dairy, Speak with RD

*Exercise- 15 to 20 minutes per day, monitor blood sugars, take medications.

Checkups:

*See MD at least 1 time per year-dilated eye exam, kidney function test, cholesterol panel, blood sugar and Hemoglobin A1C, Foot Exams



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Snacks



Why is it important to SNACK?

***Snacks**- small, frequent meals

-stimulate the metabolism, easy to digest, may help to decrease weight by decreasing intake at mealtime if make good food choices as fresh fruits and vegetables with low calorie/low fat dips, cheeses, dressings

***Snack Ideas**- air-popped popcorn, lowfat or nonfat cheeses, string cheese sticks

-Lowfat or a lower fat- granola bars, peanut butter, whole grains, cereals, cocoa, milk, sour cream, crackers, cookies, hotdogs, veggie or turkey burgers

-Baked- chips, pretzels, pita chips, tortilla chips



***Extreme Hunger-** we eat high fat, high calorie meals or snacks

-choose lowfat or nonfat yogurt, ice cream or puddings



Suggestions:

***Meals**- never go more than 3-4 hours between eating snacks or a meal

-Graze throughout the day eating high fiber with small amounts of food, or even large amounts if needed at the beginning

-Eat Slow- trying to make the most of every bite, taste your food

-1 Bite at the time, chew your food thoroughly

-Long periods of time- without food slows our metabolism

***Juices**- choose low sodium V-8 or Tomato Juice



What can I do?

*See your Physician for ideas

*See RD for help as needed *See FFF RD on line for help

***Choose-** Calcium or Vitamin enriched or fortified snack foods, lower sodium/fat, high fiber

***Eat lots of-** FRESH FRUITS and VEGETABLES

-AVOID FRUIT JUICES

-DRINK WATER or CAFFEINE SUGAR FREE COLAS

-Add- purple or red grapes as a daily snack, 1 ounce of nuts or flaxseeds,

-Increase- Salads with lettuce, spinach, salad greens, radishes, cucumbers, tomatoes, bell peppers, mushrooms, Vidalia Onions, celery, pickles, broccoli, cauliflower, carrots, squash, *Pickles are High In Sodium



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1800 Calorie Diabetic Snack

**H.S. Snack = 1 Milk Exchange
1 Bread Exchange**

**1 Fruit
1 Fat**



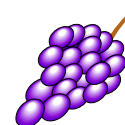
1 Milk Exchange is:

**1 c. Skim Milk or 1 % Milk
1 envelope Alba 66 or Alba 77
1 c. Low Fat Buttermilk
3/4 c. Plain Nonfat Yogurt
1 c. 2 % Milk (1 Milk, ! Fat)**



1 Fruit is:

**1 Apple, Orange, Peach
1/2 c. Stewed Apples
1/2 c. Applesauce
1/2 c. Fresh Fruit Cup
3/4 c. Blue or Blackberries
1 cup Cantaloupe
1 1/2 c. Strawberries
2 small Tangerines
1 cup Raspberries
1/2 cup Grapes
2 small Plums**



1 Bread Exchange is:

**1/2 c. Bran Cereals
3/4 c. Ready to eat-unsweet cereals
1/2 c. Oatmeal
1 1/2 c. Puffed Cereal
1/2 c. Shredded Wheat
1/2 Bagel
5 Vanilla Wafers
2 Bread Sticks
1/2 English Muffin
8 Animal Crackers
3 Graham Crackers
4 slices Melba Toast
24 Oyster Crackers
3/4 oz. Pretzels
6 Saltine-type Crackers
3 c. Popcorn, popped, no fat added
2-5 slices Whole Wheat Crackers, no fat added (crisp
breads, such as Finn, Kavli, Wasa)**



1 Fat Exchange is:

**10 Peanuts
5 Pecan Halves
1 T. Cream Cheese
1 T. Sour Cream
1 slice Bacon
1 t. Mayonnaise
5 small Olives, 3 large
2 T. Avocado
1 t. Butter or Margarine**



**1/2 c. Sherbet/Ice Cream
1/2 c. Frozen Yogurt
1/2 c. Sugar-free Pudding (made with skim milk)**



“CARB” Counting Food List



1 Carb Exchange = 15 grams of Carbohydrate

Breads:

½ (1 oz.) bagel/ bun/
croissant, medium/
English muffin/
½ pita 6”/6” taco shell
2.5 “biscuit-omit 1 Fat
1 slice bread
2 bread sticks-4” x ½”
2” cube cornbread-Omit 1 Fat
1 small muffin-omit 1 Fat
4” pancake-omit 1 Fat
4.5” waffle-omit 1 Fat



Cereals:

1/2c. Bran, sugar-
frosted flakes, or
cooked cereal
¼ c. granola
1 ½ c Puffed cereal
¾ c. ready to eat
cereal, unsweet



Crackers/Snacks:

8 animal crackers
3 graham crackers 2.5” sq.
3 c. popped popcorn
¾ oz, Pretzels, Chips, Matzoh
2-4” rice cakes
6 saltines or butter type
cracker, 3 Gingersnaps
5 whole wheat crackers
6 Vanilla Wafers
1/2c.Corn Chips (omit 2 Fats)
1c.Cheese Puffs (omit 1 Fat)
6 -3 Ring Pretzels, 25 Sticks
7 Ritz Crackers (omit 1 Fat)

Pasta/Grains:

1/2c. Chow Mein Noodles
3 T. Cornflake Crumbs
1 cup Croutons
1/2c. Chow Mein Noodles-
omit 1 Fat, hominy, pasta,
macaroni, noodles
1/3 c. rice- white, wild

Vegetables/Beans/Rice:

1/3 c. baked beans, humus,
rice
½ c. beans, peas, corn, grits,
lentils, potatoes, pasta,
grains-oatmeal, hominy, yam
16-25 Freedom Fries
1 Corn on Cob
2/3 c. lima beans



Fruits/Juices:

1 Apple, Peach, Pear, Plum,
Orange, Kiwi, Nectarine, Fig
1/2 Banana, Grapefruit, Nec-
tarine, Papaya, Ugli, 1 Guava
1/2 c. Applesauce, Pineapple
3 Apricots, 1/3 Pomegranate
3/4 c. Berries, Mandarin
Oranges, Pineapple, Melon
Grapes-20 small, 10 large
2 Plums, Tangerines, Dates
3 Prunes, dried, Kumquats
2 T. Raisins, 1/4 Mango
1 T. Currants, 1 Tangelo
4 Maraschino Cherries
1/2c. Sour Red Cherries
1/4c.MealReplacement, 1/2c.FruitSmoothie/Carbloader,3/4c.Soda,
1c.SportsDrink

Fruits/Juices:

1/2 c. apple, pineapple,
grapefruit, orange
1/3 c. cranberry juice cocktail,
fruit blend, grape, prune



Milk/Yogurt:

1 c. Fat Free Milk, 1%, 2%,
Buttermilk, Yogurt sugar free
fat free, plain yogurt
1/2 c. chocolate milk, evapo-
rated skim milk



Soups:

1 c. broth, chicken noodle
bean, cream with water
1/2 c. split pea soup



Sweets:

1 1/4 inch square Angel Food
Cake or Sponge Cake
3 Lorna Doones (omit 1 Fat)
4 Social Tea Biscuits
1 Plain Doughnut (omit 1 Fat)
1 Frozen Yogurt on a Stick
1/2 c. Vanilla Frozen Yogurt
1/2 c. Vanilla Ice Cream (omit
2 Fats)
1 Dairy Queen small ice
cream cone- (omit 1 Fat)
1/4 c. Sherbet
2 Lady Fingers
2 T. Malted Powder
1/4 c. Regular Pudding
3 Brown Edged Wafers





Artificial Sweeteners



What are they?

***Non Nutritive**- saccharin, sucralose, acesulfame K, aspartame-
-safe for daibetics or weight reduction

***Saccharin** - 350 times sweetener than sugar
sugar is sucrose (sucrose-16 calories per teaspoon/4 gm.CHO (carbohydrate))
***Sucralose**/Splenda- made from sugar, 600 times sweeter than sugar; used like sugar
-used in baked goods, mixes, beverages, chewing gum, dairy, frosting, jams,
confections, beverages,
salad dressings, and most any way imaginable

-potential side effect- may pose cancer or neurological risk, enlarged liver/kidney

***Acesulfame K (Sunett)**- 200 times sweeter than sucrose/sugar, best for baking

***Aspartame**/NutraSweet- 180 times sweeter than sucrose (contains phenylalanine),
4 calories per t. (teapsoon)

-Potential Side Effects- headache, seizures, nervousness, dizziness, memory
impairment, nausea, depression, temper outbursts

***Nutritive**- no evidence that nutritive sweeteners such as corn syrup, honey,
molasses, and dextrose have an advantage over sucrose in improving blood sugar

-Sugar Alcohols- mannitol, sorbitol, xylitol seem to lower blood sugar more than
sucrose, if too much, acts as a laxative

- natural sugars with calories, slow absorption, < 60 gms./day, excess is converted
to glucose, simple sugar rases blood sugar, limits fat release

-Sorbitol- 50 times as sweet as sugar

-Xylitol- 16 Calories per teaspoon/4 grams CHO (Carbohydrate), sugarless gum and
candy

***Tagatose**- levo-sugar, tastes like regular sugar, can't be used as energy, large
amounts cause GI distress with nausea, diarrhea, flatulence

Why choose an artificial sweeteners?

****Helps reduce calories, glycemic index***- reduces tooth decay, used in Diabetic diets

****Tastes sweet and clean without the calories***

What can I do?

****See a Physician***

****See a Registered Dietitian or a FFF Registered Dietitian on line***



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Alcoholic Beverages for Diabetics



Information:

- *Alcohol- 7 calories per gram, calculated as a Fat
- *Obese patients should limit
- *Alcohol inhibits gluconeogenesis
- can cause Hypoglycemia (Low Blood Sugar)



What can I do to avoid Hypoglycemia?

- *Consume alcohol with a meal or snack; never delay regular meal or snack time
- *If meal plan delayed, add a snack to accommodate for alcoholic beverage
- *Avoid- liqueurs, sweet wines, mixed drinks, high sugar content=hyperglycemia
- *May add small amounts of alcohol, dry wine in cooking, alcohol evaporates, flavor remains



Amount/Alcohol/Equivalent/Exchange:



*8 oz. Ale, Mild = 1/2 Bread/1 1/2 Fat
-12 oz. Light Beer = 2 Fat

*12 oz. Beer/3 1/2 oz. Port or Muscatelle Wine = 1 Bread, 2 Fats

*1 oz. Brandy, Cognac, 6 oz. Fermented Cider = 1 1/2 Fats

*2/3 oz. Curacao, Cordials, Anisette, Apricot brandy, Creme de Menthe, Benedictine =
1/2 Bread, 1 Fat

*3 1/2 oz. Daiquiri = 1/2 Bread, 2 Fats

*1 1/2 oz. Liquor (80% Proof)-gin, scotch, rum, whiskey, vodka = 3 Fats

*3 1/2 oz. Manhattan = 1/2 Bread, 3 Fats

*3 1/2 oz. Martini = 3 Fats

*4 oz. Old Fashioned = 3 Fats

*10 oz. Tom Collins, Regular Mixer = 1/2 Bread, 3 Fats

*10 oz. Tom Collins, Artificially Sweetened = 3 1/2 Fats

*2 oz. Dry Sherry = 1 1/2 Fats

*5 oz. Wines, dry table-12% Alcohol, Champagne, Sauterne, Claret, Chablis =
2 Fats



What do I need to do?

- *See your Physician
- *See a Registered Dietitian, see FFF RD on line
- *If a problem seek help or AA

