

## Diabetes- $\mathrm{T}_{\text {ype }}$ 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, $100-140 \mathrm{mg} . / \mathrm{dL}$ at bedtime
*Achieve and maintain- healthy weight for height, improve glycemic control

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## $D_{\text {ibbeces }}-T_{\text {ype }} I$ (IDDM)

## Types of Insulin:


*Dependent on Insulin for Life- monitor hypoglycemia, speed/absorption, peak/duration
*Immediate- Humulog- 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 < $70 \mathrm{mg} . / \mathrm{dL}$ 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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## Diabetes in Children

## What is it?

*Complete lack of insulin or body's misuse of insulin
*Changes in meal plan and insulin medication are needed- occur as the child grows and sexually matures

What increases my chances of having Type I or Type II Diabetes?

*Family history of diabetes
*Overweight/Obesity
*Environmental Factors


## What can I do for my child?

*Meals and snacks- on time, making sure family, school and friends are aware
*When child is not hungry- ask to eat small amounts; eat over a couple of hours *Drink liquids- if can't tolerate solid foods, use Apple Juice (1/3 cup=15 gm. CHO)
*Encourage good snacks- Parmesan popcorn, graham crackers with peanut butter, or fresh fruit dipped in Sugar Free Pudding, Vegetables with Low Calorie Dip *Talk with you child and let him know- you love him, that he is not being punished and always support and help him and help is needed *DO NOT DELAY A MEAL > 45 minutes
*Encourage extra feedings- of a free food or some extra protein foods *If child is hungry > 3 days may need an adjustment in calories per day

## How do I take care of my child?

*Checking blood sugar, medication or insulin as necessary and recommended *Test for ketones

* Meal Plan-consistent Carbohydrate Diet, see FFF MEAL PLAN
*Appropriate Exercises for child
$\underline{* R e m e m b e r ~ D i e t, ~ I n s u l i n ~ a n d ~ T e s t i n g-~ w e i g h t ~ l o s s ~ i f ~ n e e d e d ~}$
What should I do?
*See your Physician immediately
*See a Registered Dietitian for diet instructions immediately
*See FFF Meal Plan individualized for you
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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, Grapenuts, sherbet, pudding, 1 c. puffed/ shredded cereals, $1 / 2$ c. bran, grits, oatmeal,
Vegetables: $1 / 2 \mathrm{c}$. 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 |

| 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; $11 / 2$ 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 | 0 | 1 |
| :--- | :--- | :--- | :--- |



1 c. Skim/1/2 \%/1\%/Nonfat/LowFat Buttermilk, light soymilk, $1 / 3$ c. Drynonfat milk, $1 / 2$ c. Evaporated skim milk, $3 / 4$ c. plain nonfat yogurt/plain lowfat yogurtHigh 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
lan Patient:
Vegetable Group: Eat ALL You Want!!!


1/2c. artichoke, bamboo shoots, bean sprouts, asparagus, broccoli, beets, brussel sprouts, green beans, Kohlrabi, leeks, greens, okra, onion, carrots, eggplant, cucumbers, 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 Sodiumsauerkraut, V-8/Tomato Juice, canned tomatoes Products, Pickles, Soups, broth

## Meat Group:

Breakfast: Lunch: Supper: Snack:


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, 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:


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, 2 T. avocado, $\underline{\text { High }}$ 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
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## 2200 Calorie Week at a Glance

| Monday: | Tuesday: | Wednesday: | Thursday: | Friday: | Saturday: | Sunday: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | 11/2 WW Bagel | 3 Pancakes | 1 c . Grits | 1EnglishMuffin | 1/2 c. Bran Cereal |
| 2 sl. WW Toast | 1 sl . WW Toast | 17.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 | MarinatedLowCal.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 c.Potatoes w/ | 1 c .Blackeye Peas | 1 large Baked | 14 Baked Fries | 1 c .Potatoes w/ | 1 c .Macaroni | 1 c. Baked |
| Skin/2Rolls | 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 | 2T. Raisins | 2-3 Plums |
| Water, Unsweet | Water, 2 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 |
| 3 oz . Fish/1 Bun | 3ozChicken/1Bun | 3 oz . Salmon | 3 oz. Tuna/10Crax | 3oz.Polish Sausage | 3 oz . Venison | 3 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 large | 1 c . Cole Slaw | 1 t . Mustard/1Bun | $1 \mathrm{c} . L i m a$ Beans w/ | 10 Almonds/1Bun |
| 2 t.Mayo/1cGrits | 2tMarg/1cBkBeans | Baked Potato | 1 Pickle/2t.Mayo | 1 Dill Pickle/2Fats | Peppers/2Fats | 1 Bk. Apple/2Fats |
| 1 c . Melon | 11/4 c. Berries | 1Pear/2 Roll-WW | 1Nectarine/20Chips | 1/2c. Mango <br> 1c. Pot w/ Skins | 2 Kiwi/2WWRoll | 1c. 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 | 12-3Ring Pretzels | 12 Saltines | 60 Goldfish |
| 1 Apple | 1 Orange | 2 Kiwi | 1 Peach | 20 Grapes | 1 c. Fresh Fruit | 11/2 c. Berries |
| $\begin{aligned} & \text { LCD= Low } \\ & \text { Calorie Dressing } \end{aligned}$ | © 2004 Food Fitness First, Inc. www.foodfitnessfirst.com |  |  |  |  |  |



| 2200 Calorie <br> (Sick Day Management) |  |
| :---: | :---: |
| Lunch: CHO Gms. | Supper: $\quad$ сHO Gms. |
| 2c. Chicken Noodle Soup 30 | 2 cups Cream Soup 30 |
| 3.5 ounce Cheese 0 | 1 toasted Bagel 30 |
| 9 Saltine Crackers 22.5 | 1 c. unsweet Applesauce 30 |
| 1/2c. Sugar Free Pudding 15 | 1 cup Gingerale 20 |
| 1 Popsicle Twin Bar 20 | Unsweet Tea, Lemon Slice 0 |
| Unsweet Tea, Lemon Slice 0 | Salt, Pepper 0 |
| Salt, Pepper 0 |  |
|  | Food: CHO Gms: |
| Food: CHO Gms: | 1 Pillsbury Cresent Roll 15 |
| 1c. Whole Milk 12 | 3/4 c. Cherrios 15 |
| Low Fat/Skim 12 | 1 c. Plain Yogurt 12-15 |
| 1/3 c.Regular Jello 15 | 1 c. Sugar Free Yogurt 12-15 |
| 1t. Margarine/Fat 0 | $\begin{array}{ll}1 \text { Diet Soda } & 0 \\ 5 \text { Ritz Crackers } & 15\end{array}$ |
| 1/2 c.Vegetable 5 | 1 oz . Cheese |
| 10z. Meat | 1/2 c. Sweet Applesauce 30 |
| 10z. Meat | 1/2 cup Diet Gelatin/Jello |
| 1/2 cup Fruit/Juice 15 | 1/3 cup Grape Juice 15 |
| 1/4 c. Sherbet 15 | 3/4 cup Sprite/Gingerale 15 |
| 1/2 c. Custard 15 | 1 cup Gatorade 15 |

## Complex Carbodydrates (whole grains, starches)



## What are complex carbohydrates?

*Make you feel full and you can eat more
*1 complex and 1 simple carbohydrate- have 15 grams of carbohydrates
*Are high in Fibber, vitamins and minerals
*Carbohydrates- body's principal source of energy, fueling body functions
*Calorie Free < 5 calories per serving

*Low Calorie 40 calories or less per serving

## Facts:

*Sugar Free foods are not always low in calories

*Sugar-free foods- have < 1/2 gram sugars per serving
*Reduced-sugar foods have $25 \%$ less sugar than the original food
*Foods with no added sugar do not have sugar added

## What are some complex carbohydrates?

*1 6 inch tortilla, 3 cups of popcorn, $11 / 2$ cups broccoli, $1 / 2$ cup dried peas or beans, $1 / 3$ cup wild rice, 1 slice whole wheat breads or $1 / 2$ cup whole wheat cereals, $1 / 2$ cup potatoes with skin, 1 apple, 1 pear, 1 peach


## What do I need to do?

*See a Physician
*See FFF Diabetic diet plan
*See a Registered Dietitian for help with meal planning
*Read labels there are many forms of sugar as- corn syrup, dextrose, honey, fructose, high-fructose corn syrup, glucose, lactose, maltose, sucrose, raw sugar, molasses, maple syrup, fruit juice concentrate

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## Facts:

*Obesity- can lead to Diabetes, high Cholesterol/LDL/Triglycerides, High Blood Pressure, Gallbladder Disease, Heart Disease, Kidney Damage, Cancer

## What can I do?

*See your Physician- he will refer you to a special trained therapist to address eating behavior, habits, programs
*See RD for help as needed *See FFF RD on line for help *Team of Professional- to help with emotions, dieting and overeating *Exercise- daily for 15 to 20 minutes
*Weight- weekly and not daily, keeping a record of weight and measurements
*Increase- Foods High in Fiber as Fresh Fruits and Vegetables
-Fresh apples, pears, peaches, strawberries, blueberries, blackberries, kiwi, melons, lettuce, tomato, celery, radishes, cucumbers, Vidalia Onions, salad greens, cauliflower, broccoli
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## 



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?<br>*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 ( $\mathrm{K}+$ ) 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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## $L_{\text {ow }}$ Blood $^{\text {Sugar }}$ (Hypoglycemia)

## What is it?

*Hypoglycemia- abnormally low blood sugar, watch for excessive sweating, faintness, headache, hunger, pounding of heat, trembling, impaired vision, not able to awaken, irritability, personality change
*Blood Sugar- usually $\leq 70 \mathrm{mg} . / \mathrm{dL}$

## 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

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# $\mathrm{H}_{\text {igh }}$ 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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## 2200 Calorie Diabetic Snack

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

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

| e <br> $S_{\text {NACKS }}$ (< 100 CALORIES, * HIGH SODIUM) |  |
| :---: | :---: |
| No Concentrated Sweets/Diabetic |  |
| *5 WHOLE WHAT CRACKERS | 3 GRAHAM CRACKERS |
| 6 ANIMAL CRACKERS | CUP PRETZELS |
| *2-3 BREAD STICKS | AGEL |
| 1 ENGLISH MUFFIN | RICE CAKE |
| 3 CUPS POPPED POPCORN | 3/4C. DRY UNSWEET CEREAL |
| 1 SLICE WW OR WHITE BREAD | 1 PIECE FRESH FRUIT |
| 1/2 CUP CANNED UNSWEET FRU | 3-4 SMALL PIECES OF DRIED FRUIT |
| 2 CUPS VEGETABLES, RAW WITH *LOW CALORIE DRESSING |  |
| 1CUP V-8, TOMATO JUICE, OR VEGETABLE JUICE, BROTH |  |
| SUGAR FREE POPSICLES | SUGARLESS DRINK MIX |
| CRYSTAL LITE BARS | *PICKLES |
| SUGARLESS DRINK MIXES | DIET SOFT DRINKS |
| COFFEE/TEA | GINGERSNAPS |
| LOW-CALORIE HOT CHOCOLATE MIX SUGAR FREE JELLO/GELATIN |  |
| $11 / 2$ CUP FRESH STRAWBERRIES DIPPED IN 1 T. LOW FAT YOGURT |  |
| $1 / 2$ CUP PAPAYA TOPPED WITH 1/4 CUP RAINBOW SHERBET |  |
| 1 MEDIUM ORANGE SCOOP OUT WITH 1 T. COCONUT, TOASTED 1 SMALL BANANA WRAPPED IN ALUMINUM AND FROZEN ON STICK |  |
|  |  |
| 1/3 CUP LEMON SHERBET TOPPED WITH 3T. SLICED STRAWBERRIES |  |
| 1 FRESH PEAR |  |
| 2 CUPS BROCCOLI AND CAULIFLOWER FLOWERETTES DRIZZLED WITH 1 T. RANCH LOW CALORIE DRESSING* |  |
|  |  |
| 10 SLICES CUCUMBER TOPPED WITH TRIANGLES OF CHEESE(1/2OZ.)* |  |
| 1 SLICE RAISIN BREAD SPREAD WITH 2T. CREAM CHEESE (LIGHT) |  |
| 3 LARGE CELERY STICKS STUFFED WITH 2T. LIGHT CREAM CHEESE |  |
| 3 LARGE CELERY STICKS STUFFED WITH PIMENTO CHEESE* |  |
| 25 THIN PRETZELS (80 IF DESIRED) $21 / 4$ INCHES LONG |  |
| 1/2 CUP WHITE OR RED WINE WITH 1/2 CUP CLUB SODA |  |

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## Artificial Sweeteners

## What are they?

*Non Nutritive- saccharin, sucrolose, 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 rasies 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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