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Guide to Calorie Control
Michigan State University
Cooperative Extension Service
Anita Dean, Extension Specialist in Food and Nutrition
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A Scientific Guide For Daily Planning of Food Choices For Weight Control Without Counting Calories or Grams of Carbohydrate, Protein, and Fat.

By Anita Dean, Extension Specialist in Foods and Nutrition

The system described in this bulletin divides food into six groups which are similar in amounts of calories, carbohydrate, protein and fat. Within each group, one food can substitute for another to furnish the same amount of these nutrients. Recommended serving size is given.

The food groups include simply prepared foods. Foods are grouped on the basis of the food itself and do not include any additions such as sugar, butter, or sauces. Fruits listed with high sugar-content are unsweetened.

Certain foods which are high in sugar have been omitted. Beer, wine, and alcoholic beverages are not listed.

It is assumed that a variety of foods within each group will be used and that in combination the food groups will meet the nutrient needs of each person. It should be easy to plan varied, appetizing meals suited to your preferences and pocketbook, that will help you attain a desirable weight.

FOOD GROUP Each Choice Contains About:

Milk | Carbohydrate | -12 grams |
| :--- | :--- |
| Protein | -8 grams |
| Fat | -10 grams |
|  | Calories |
|  | -170 |

Vegetable A -
Free Choice Carbohydrate - 4 grams*
Vegetable B Carbohydrate - 7 grams
Protein - 2 grams
Calories - 35
Fruit Carbohydrate - 10 grams
Calories - 40

* Contains little carbohydrate, protein or calories.

FOOD GROUP Each Choice Contains About
Bread, Cereal Carbohydrate - 15 grams
Protein - 2 grams Calories - 70

Meat, Egg,

| Cheese | Protein | -7 grams |
| :---: | :--- | :--- |
|  | Fat | -5 grams |
|  | Calories | -75 |
| Fat | Fat | -5 grams |
|  | Calories | -45 grams |

Free Choice (Insignificant carbohydrate and calories)

## Seven Food Lists



## VEGETABLES GROUP

(negligible calories)
You may eat any amount of these vegetables, if they are uncooked. But if cooked, only a single cupful is permitted.

## Serving Choices:

Asparagus
Bamboo shoots
Bean sprouts
Broccoli*
Brussels sprouts*
Cabbage
Chinese cabbage
Cauliflower
Celery
Chicory*
Cucumber
Eggplant
Endive
Escarole*
Greens*
Serving Choices:
Milk, whole,
Milk, evaporated
Milk, powdered, whole,
Milk, skim*
Buttermilk*
Yogurt
*Add 2 servings from list 6 (fats)
if milk is fat free.

Beet greens
Chard
Collards
$1 / 2$ cup Dandelion
$1 / 4$ cup Kale
1 cup Mustard
1 cup Poke
1 cup Spinach Turnip greens

## Lettuce

Mushrooms
Okra
Parsley*

Peppers, Chillies
Pimento
Radishes
Romaine
Rhubarb (without sugar)
Sauerkraut
String beans, green or yellow
Squash, summer
Tomatoes*
Tomato juice ( $1 / 2$ cup)
Vegetable juice cocktail
Water cress
Zucchini


## VEGETABLES GROUP

(35 calories per serving)
Serving Choices:
One serving equals $1 / 2$ cup
Beets
Carrots*
Onions
Parsnips ( $2 / 3$ cup)
Peas, green
Pea pods
Pumpkin* ( $3 / 4$ cup)
Rutabagas
Squash, winter*
Turnips
Tomato puree, canned
Vegetables, frozen, mixed
Catsup (2 tablespoons only)

* These vegetables have a high vitamin A content; at least one serving a day should be used.

If you wish you may have an additional cupful of Group A in exchange for your Group B serving.
(40 calories per serving)

| Apple | 1 small |
| :---: | :---: |
| Applesauce, unsweetened | $1 / 2$ cup |
| Apricots, fresh | 2 med. |
| Apricots, dried | 4 halves |
| Banana | $1 / 2$ small |
| Berries (blackberries, rasp berries, blueberries) | 1/2 cup |
| Strawberries | $3 / 4$ cup |
| Cantaloupe* (6 in. diam.) | $1 / 4$ |
| Cherries | 10 large |
| Cider or apple juice | $1 / 3$ cup |
| Dates |  |
| Figs, fresh or dried |  |
| Grapefruit* | 1/2 |
| Grapefruit juice | 1/2 cup |
| Grapes | 12 |
| Grape juice | $1 / 4$ cup |
| Guava | 1 small |
| Honeydew melon (7in. diam.) | 1/8 |
| Mango | $1 / 2$ small |
| Nectarine | 1 small |
| Orange* | 1 small |
| Orange juice* | $1 / 2$ cup |
| Papaya | $1 / 3 \mathrm{med}$. |
| Peach | 1 med. |
| Pear | 1 small |
| Persimmon, native | 1 med . |
| Pineapple | $1 / 2$ cup |
| Pineapple juice | 1/3 cup |
| Plums | 2 med . |
| Prunes | 2 med . |
| Raisins | 2 Tbs. |
| Relish | 2 Tbs. |
| Tangerine* | 1 med . |
| Watermelon $\quad 1 \begin{aligned} & 1 \text { cup or } \\ & \\ & \\ & \text { (3 in. } \mathrm{x}\end{aligned}$ | or 1 slice $\text { x } 1_{1 / 2 \mathrm{in} .)}$ |

*These fruits are rich sources of vitamin $C$; one serving a day should be used


## BREAD-CEREAL GROUP <br> (70 calories per serving)

Serving Choices:
Bread 1 slice
Bagel - small 1/2

+ Biscuit (2 in diam.) 1
Bread crumbs, dried 3 Tbs.
+ Cornbread (2"x2"x1") 1 Cornmeal (dry) 2 Tbs. English Muffin, small ½ Hamburger/Frankfurter
bun
Matzoth (4"x6") 1/2
+ Muffin, plain, small $\quad 1$
+ Pizza ( $1 / 8$ of small
pie)
1 piece
Roll, plain bread $\quad 1$
Tortilla, 6 in. 1
Cereal (cooked)
Grits, rice, barley $\quad 1 / 2$ cup
Cereal (unfrosted)
Bran flakes $\quad 1 / 2$ cup
Puffed 1 cup
Wheat Germ $\quad 1 / 4$ cup
Crachers
Graham, $2^{1 ⁄ 2}$ in.sq. $\quad 2$
Oyster 20
+Round, butter type 5
Rye wafers 2 " $\times 3^{11 / 2 " ~} 3$
Saltines 6
Soda, $2^{1 / 2}$ in. sq. 4
Flour $2^{1 / 2}$ Tbs.
++ Ice Cream, vanilla $1 / 2$ cup
Pasta (cooked)
Spaghetti, macaroni,
noodles $\quad 1 / 2$ cup

Poi $\quad 1 / 2$ cup
Pretzels, 3 1/8 in. x $1 / 8$ in. 25 or ring, medium 6
Starchy vegetables
Baked beans, no pork $\quad+$ Omit 1 fat choice.
(canned) 1/4 cup

Beans, Peas, Lentils
(dried and cooked) 1/2 cup
Beans, Lima 1/2cup
Corn $\quad 1 / 3$ cup or 1 small ear
Popcorn (popped, no fat added)

3 cups
Parsnips $\quad 2 / 3$ cup
Peas (blackeyed, split, etc.) dry, cooked 1⁄2 cup
Potatoes, white, baked or boiled, (small)
Potatoes. white, mashed $1 / 2$ cup

+ Potatoes, French fried 2 in to $31 / 2$ in.
++ Potato or corn chips $\quad 15$
Sweet potatoes or yams $1 / 4$ cup
+ Stuffing, bread $1 / 2$ cup
+ Pancake, 5 in. $x^{1 / 2}$ in. or waffle

1

Cranberries may be used as desired if no sugar is added.


## MEAT-FISH-

EGG-CHEESE GROUP
(75 calories per serving)
Serving Choices:
Meat and poultry (lean), beef, lamb, pork, veal, liver, chicken, ham, etc. (Cooked size

3 in. $x 2$ in. $x^{1 / 2}$ )
Cold cuts, $41 / 2 \mathrm{in}$. round, $1 / 8$ in. thick
Frankfurter (small)
Fish (flounder, halibut, lox, trout, whitefish, etc.) ( $2 \mathrm{in} . \mathrm{x} 2 \mathrm{in} . \mathrm{x} 1 \mathrm{in}$.)
Salmon, tuna, crab, lobster
Sausage ( 3 in x $1 / 8$ in.)
Scallops ( 12 per lb.)
Chitlins ( $2^{1 / 2}$ in. sq.)
Tripe ( $2^{1} / 2 \mathrm{in}$. sq.)
Oysters, shrimp, clams
Sardines
Soybeans
Soybeans $\quad 1 / 4$ cup

Cheese, cheddar. American,
Swiss ( $3^{1 / 2}$ in. $x 1^{1 / 2}$ in. $x$ $1 / 4$ in) $\quad 1$ slice
Cheese, cottage, parmesan, roquefort $\quad 1 / 4 \mathrm{cup}$

## Egg

Peanut butter*
1 Tbsp.

* Limit peanut butter to 1 serving per day.
$1 / 4$ cup

3 med
$1 / 4$ cup
1 slice

Pecans
Peanuts, Spanish Peanuts, Virginia
Oil or cooking fat
1 Olives, green/ripe

| Pigs feet | 1 |
| :--- | ---: |
| Salt pork | $3 / 4 \mathrm{in}$. cube |

Shortening, vegetable $\quad 1$ tsp. Tartar sauce 2 large whole

20 whole
10 whole
1 tsp .


## FAT GROUP

(45 calories per serving)
Each serving provides:
Fat -5 Gm .
Calories - 45
Serving Choices:
1 oz. Avocado (4 in. diam.)
Bacon, crisp
1 slice Bacon fat
1 Butter or margarine (soft, tub stick)

1 tsp .
Chocolate, unsweetened, melted
Cream, light, sweet
or sour
2 Cream, heavy
1 Drippings, lard
1 French dressing
1 Mayonnaise
5 small Salad dressing, mayonnaise type Walnuts. other nuts
$\%$

## FREE CHOICE GROUP

(insignificant calories)

## Unlimited Choices:

All raw vegetables from List 2-A
Coffee
Tea
Tea
1/8 Clear broth (no fat)
1 slice Bouillon (fat free)
1 tsp. Lemon
Gelatin (unsweetened)
Rennet tablets
Cranberries (unsweetened)
2 tsp. Mustard (dry)
Pickle (unsweetened)
2 Tbsp. Pepper and other spices
1 Tbsp. Vinegar
1 tsp. Seasonings
1 Tbsp. Soft drinks without sugar
1 tsp. Horseradish
2 tsp. At each meal you may have as 6 small many servings as you wish from 10 whole this list of foods since these foods contain an insignificant number of calories.

[^0]HOW TO USE
If your physician recommends that you lose weight and prescribes a 1200 calorie diet, you would select the number of servings listed under the 1200 calorie pattern. This easy to follow diet allows you to select a wide variety of foods from each group. For example, instead of one serving of bread, you may select one serving of any other food shown in the Bread List. Eat the exact amounts and kinds of foods suggested in order to supply the proper amount of essential proteins, carbohydrates, fats, vitamins and minerals. It is essential to weigh or measure foods until portions can be estimated accurately. Do not skip meals.

| Your Daily Total |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Carbohydrate | (grams) | 85 | 91 | 116 | 131 | 131 | 136 | 146 | 161 | 167 | 174 |
| Protein | (grams) | 53 | 57 | 59 | 61 | 61 | 70 | 70 | 72 | 76 | 85 |
| Fat | (grams) | $\frac{40}{90}$ | $\frac{45}{1000}$ | $\frac{45}{1100}$ | $\frac{50}{1200}$ | $\frac{60}{1300}$ | $\frac{65}{1400}$ | $\frac{70}{1500}$ | $\frac{75}{1600}$ | $\frac{80}{1700}$ | $\frac{85}{1800}$ |


| BREAKFAST |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| List 5 Meats, Egg, Cheese | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| List 2 Vegetables | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| List 3 Fruits | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| List 4 Bread, Cereal | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| List 1 Milk | $\frac{1}{2}$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| List 6 Fats | -- | -- | -- | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| LUNCH |  |  |  |  |  |  |  |  |  |  |
| List 5 Meats, Egg, Cheese | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| List 2 Vegetables | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| List 3 Fruits | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 |
| List 4 Bread, Cereal | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| List 1 Milk | 1/2 | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | 1/2 | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ |
| List 6 Fats | -- | -- | -- | -- | 1 | 1 | 1 | 2 | 2 | 2 |
| DINNER |  |  |  |  |  |  |  |  |  |  |
| List 5 Meats, Egg, Cheese | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| List 2 Vegetables | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| List 3 Fruits | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| List 4 Bread, Cereal | -- | -- | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| List 1 Milk | 1/2 | 1/2 | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | 1 | 1 |
| List 6 Fats | -- | -- | -- | -- | 1 | 1 | 2 | 2 | 2 | 2 |

Ask your physician to prescribe a meal plan which meets your own individual requirements. The following example of a 1, 200-calorie plan shows how a meal plan works.

BREAKFAST

Servings:
1 of fruit (List 3). . orange juice, $1 / 2$ cup
1 of meat (List 5). . Egg, 1
1 of bread (List 4). . Toast, 1 slice
1 of milk (List 1) . . Skim milk, 1 cup (plus
2 fat exchanges at lunch)
1 of fat (List 6) .. Butter or margarine, 1 tsp.
Nonmeasured
foods (List 7). . Coffee or tea (any amount)
LUNCH
Servings:
2 of meat (List 5). . Cold cut, 1 slice and cheddar cheese, 1 slice
Vegetables
as desired (List 2-A). . Salad of lettuce, radishes, tomatoes (any amount)
2 of bread (List 4). . Bread, 2 slices
2 of fat (List 6). . Mayonnaise, 1 tsp.; Margarine, 1 tsp.
$\frac{1}{2}$ of milk (List 1). . Skim milk $\frac{1}{2}$ cup (plus 1 fat exchange at dinner)
2 of fruit (List 3). . Banana, 1
Nonmeasured
foods (List 7) . . Coffee or tea (any amount)

## DINNER

Servings:
2 of meat (List 5). . Chicken, 2 ounces or 2 slices ( $3^{\prime \prime} \times 2^{\prime \prime} \times \frac{1^{\prime \prime}}{2}$ )
1 of vegetables(List 2-B). . Carrots, $\frac{1}{2}$ cup
1 of vegetables(List 2-A). . String beans, 1 cup
1 of bread (List 4) . . Biscuit, 1
2 of fat (List 6). . Butter or margarine, 2 tsp.
$\frac{1}{2}$ of milk (List 1).. Skim milk, $\frac{1}{2}$ cup (plus 1 fat exchange at dinner)
1 of fruit (List 3). . Cantaloupe $\frac{1}{4}$
Nonmeasured
foods (List 7). . Coffee or tea (any amount)

## YOUR EATING PLAN

| Name |  |  |  |  |  | Calories |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Servings | Milk <br> List 1 | Vegetables List 2 | Fruit <br> List 3 | Breads <br> List 4 | Meat <br> List 5 | Fats <br> List 6 | Free <br> List 7 |
| Breakfast |  |  |  |  |  |  | Free |
| Lunch |  |  |  |  |  |  | Free |
| Dinner |  |  |  |  |  |  | Free |

Adapted from the "Exchange Lists for Meal Planning" prepared by American Diabetes Association, Inc., American Dietetic Association, 1976 and from materials developed by the Upjohn Co., Kalamazoo, Michigan.


[^0]:    Cooperative Extension Service Programs are open to all without regard to race, color, or national origin. Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, East Lansing, Michigan 48824. Price 10 cents. Single copy free to Michigan residents. 3R-10M-2:79-St.

