

# Kosrae

## Food Choices for Healthful Living based on food group lists

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Anne Caprio Shovic, Ph.D., R.D.

# Acknowledgements

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## Nutrient analysis sources:

Nutritionist IV, "N" Squared Computing, 1994  
Exchanges for All Occasions, by M. Franz, MS, RD, 1993  
Food Processor, Esha Research Co., 1996  
Genesis R&D, Esha Research Co. 4.62, 1996  
Pacific Island Food Composition Tables, South Pacific Commission, 1994

The Food Group Lists are the basis of a meal planning system designed by the American Diabetes Association and The American Dietetic Association.

Disclaimer: The use of brand names does not imply endorsement. Nutrient value and exchange lists are based on current data and may be subject to change as new information becomes available.

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### **Kosrae Food Choices for Healthful Living Based on Food Group Lists**

ADAP Project, 99-1

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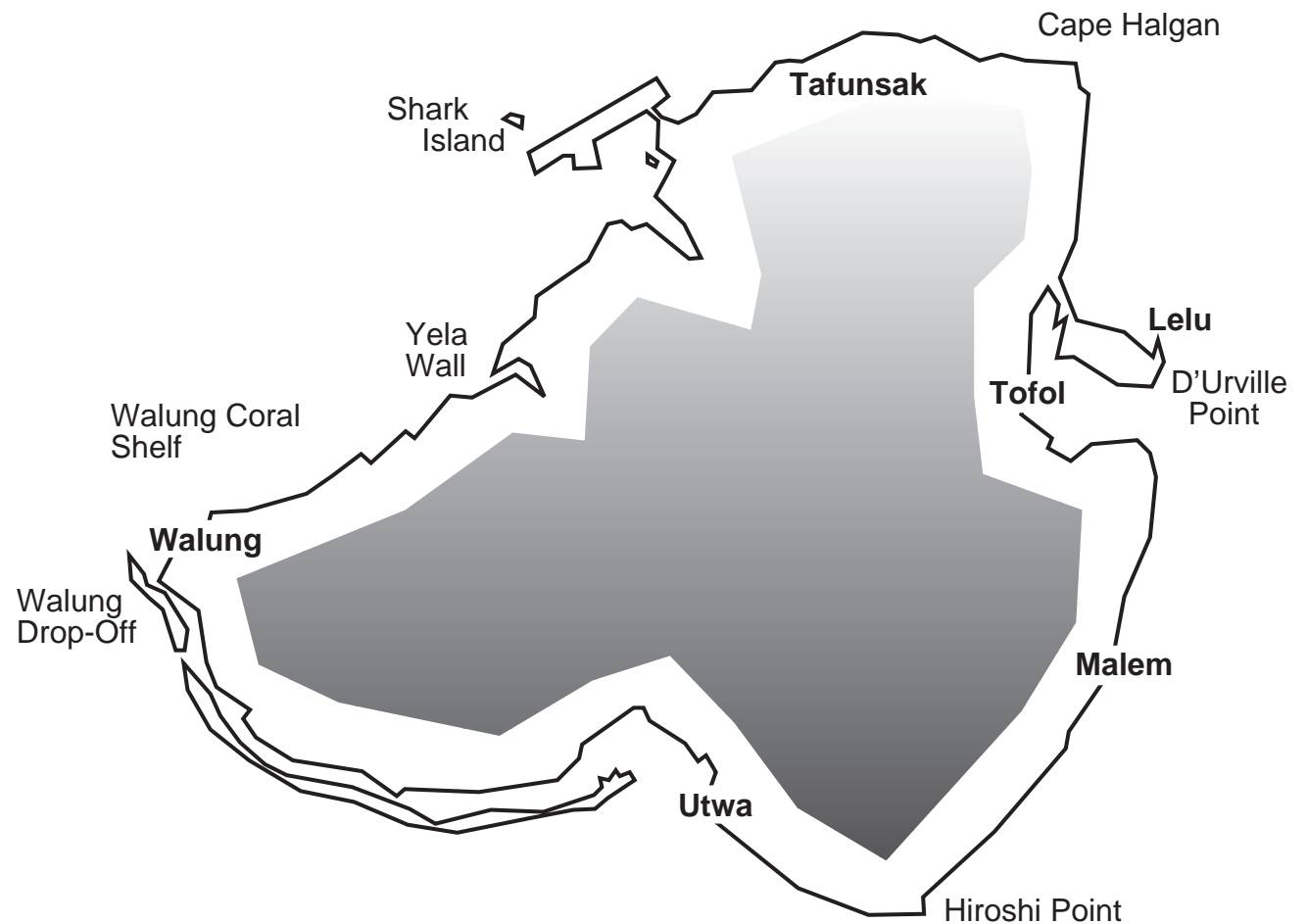
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# Introduction

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Diet is an important part of the treatment of many diseases including obesity, diabetes, heart disease and high blood pressure. The Kosrae Food Group Lists have been prepared to help you understand what food is made of so that a modified diet can be more easily followed.



# Principles of Good Nutrition

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- **Maintain a healthy weight.** Obesity increases your risk for diabetes, hypertension and coronary heart disease.
- **Eat a variety of foods.** Eating a variety of foods increase your chances of obtaining all the vitamins, minerals and nutrients your body needs.
- **Eat less fat.** Too much fat may cause heart and blood vessel disease. Avoid fried foods. Watch your portion sizes of all meat - it's easy to eat too much. Eat fewer high-fat foods such as canned meats, corned beef (from keg & can), coconut milk, gravy, salad dressing, chicken/turkey wings and tails.
- **Eat more starches, especially those high in fiber.** Starches are a good source of energy, vitamins, and minerals. Fiber in foods may help to lower blood-glucose and blood-fat levels. Most people should increase the amount of carbohydrate and fiber they eat. This can be done by eating more taro, yams, sweet potato, cassava, bananas, breadfruit, dried beans, and peas; more whole grain breads, cereals, and crackers; and more fruit and vegetables.
- **Eat less sugar.** Sugar has only calories (energy) and no vitamins or minerals, and it increases the risk of dental cavities. Foods high in added sugar include desserts such as cakes and pies, sugary breakfast foods (such as toaster pasteries and sugar coated cereals), cookies, candy, pastries,



table sugar, honey, sweet drinks, and syrup. People with diabetes need to avoid these foods.

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**■ Eat less salt and sodium.**

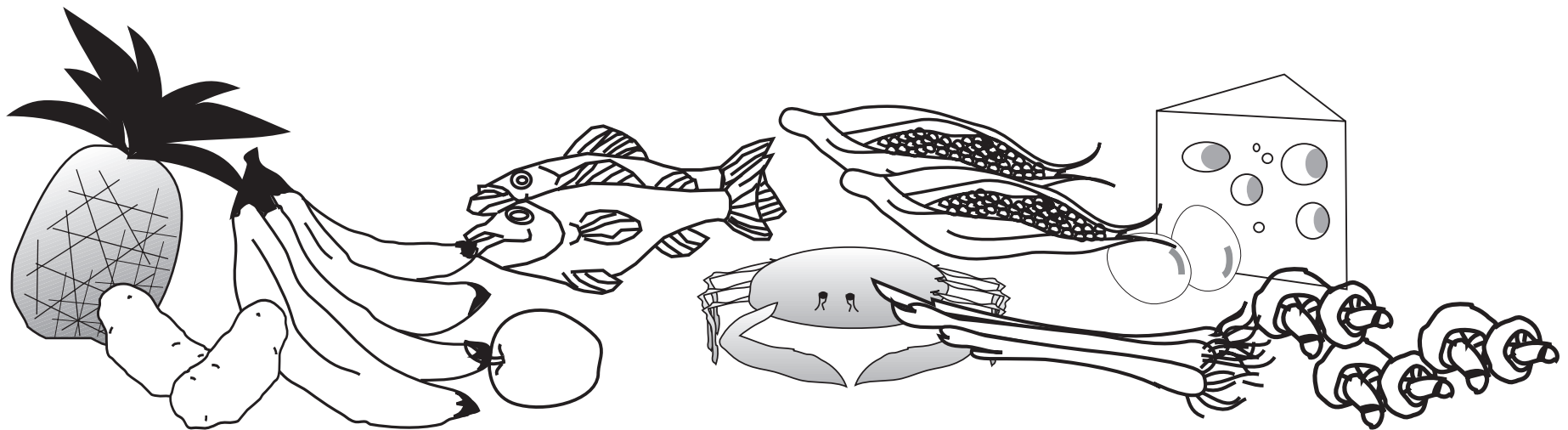
Many of us eat too much salt which consists of sodium and chloride. The sodium can cause the body to retain water, and in some people it may raise blood pressure. High blood pressure may be made worse by eating too much salt and sodium. Try to use less salt and soy sauce in cooking and at the table. Foods that are high in sodium, such as processed and convenience foods, are noted in this booklet with a special symbol ✧.

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**■ Limit alcohol intake.**

It is best to avoid alcohol altogether. If you like to have an alcoholic drink now and then, ask your physician or nutritionist how to work it into your meal plan.

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# The Food Groups

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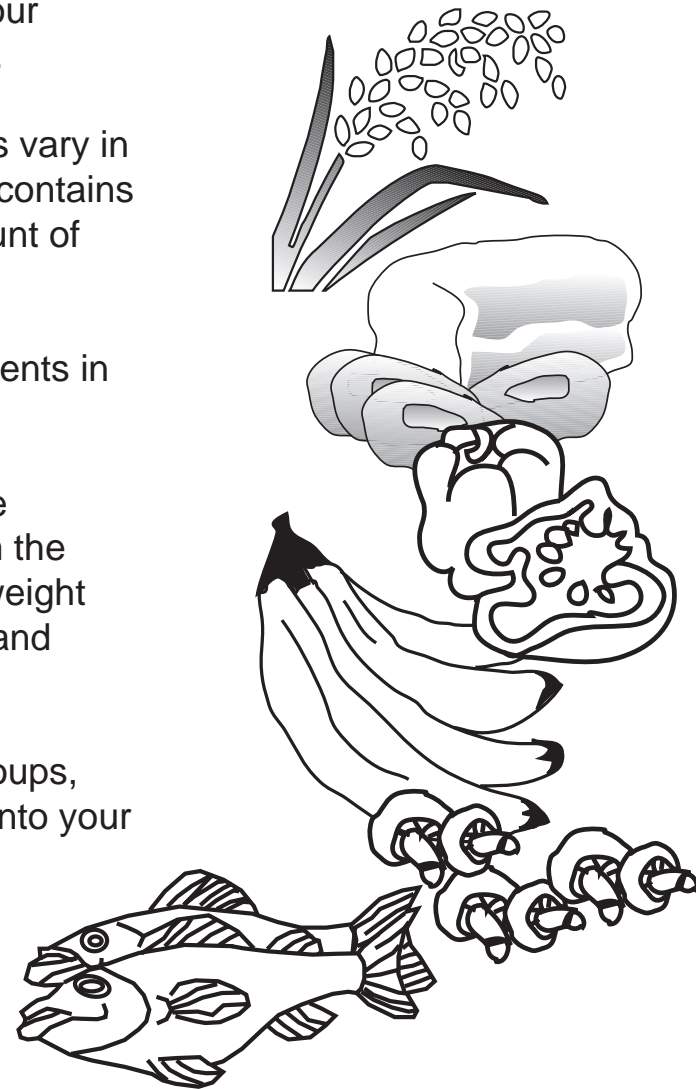
To make it easier for you to follow your meal plan and to meet your nutritional needs, foods have been divided into six Food Groups.

The reason for dividing food into six different groups is that foods vary in their carbohydrate, protein, fat, and calorie content. Each group contains foods that are alike - each choice contains about the same amount of carbohydrate, protein, fat, and calories (energy).

The chart on the following page shows the amount of these nutrients in one serving from each Food Group.

As you read over the Food Group Lists, you will notice that some choices are for a larger amount of food than another choice from the same list. Because foods are so different, the measurement or weight for each food is set so the amount of carbohydrate, protein, fat, and calories (energy) are the same for each choice.

If you have a favorite food that is not included in any of these groups, ask your nutritionist about it. That food can probably be worked into your meal plan.



# Nutrient Content by Food Group

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<b>Food Group</b>	<b>Carbohydrate (grams)</b>	<b>Protein (grams)</b>	<b>Fat (grams)</b>	<b>Calories (energy)</b>
<b>Starch</b>	15	3	trace	80
<b>Protein/Meat</b>				
Lean (Meat A)	—	7	3	55
Medium-fat (Meat B)	—	7	5	75
High-fat (Meat C)	—	7	8	100
<b>Vegetable</b>	5	2	—	25
<b>Fruit</b>	15	—	—	60
<b>Calcium/Milk</b>				
Skim	12	8	trace	90
Lowfat	12	8	5	120
Whole	12	8	8	150
<b>Fat</b>	—	—	5	45

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# Daily Meal Plan by Calorie Content

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Each calorie level can be divided into food groups to provide a well balanced meal plan. Calorie levels are based on individual needs and include specific number of servings from each of the food groups.

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	<b>1500 calories</b>	<b>2000 calories</b>	<b>2300 calories</b> (Pregnancy Exchanges)	<b>2600 calories</b>
<b>Protein/Meat Group</b>				
Lean (Meat A)	2	3	4	5
Medium-fat (Meat B)	2	3	3	3
High-fat (Meat C)	1	1	1	2
<b>Starch Group</b>	7	9	10	11
<b>Vegetable Group</b>	3	4	5	5
<b>Fat Group</b>	3	4	5	6
<b>Fruit Group</b>	3	5	5	6
<b>Calcium/Milk Group</b>	2	2	3	3
<b>Coffee or tea, plain</b>	Unlimited	Unlimited	Unlimited	Unlimited

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Explanation: Each calorie level can be divided into food groups to provide a well balanced meal plan. Calorie level is based on individual needs.

# Meal Planning Using Food Groups

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Your Meal Plan should include foods from each Food Group. The number of foods in each group is planned to provide you with a balanced diet to fit your needs.

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## **Calcium/Milk Group**

The Calcium/Milk Group includes milk and milk products, tofu made with calcium, and fish with bones. These foods contain calories (energy), protein, calcium, vitamin A and several B vitamins.

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## **Vegetable Group**

The Vegetable Group includes some vegetables high in vitamin A, vitamin C and fiber which are important to health. High vitamin A sources will be indicated with a √ and high vitamin C sources will be indicated with a + symbol in this booklet. A food source is considered high if over 50% of the Recommended Daily Allowances.

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## **Fruit Group**

The Fruit Group includes all kinds of fruit. Some fruits contain small amounts of vitamin C; some are excellent sources of vitamin C. Orange colored fruits, such as mango and papaya, also contain vitamin A.

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## **Starch Group**

The Starch Group includes foods that provide carbohydrates in the form of starch. Rice, noodles, cereals, dried beans and peas, and local starchy vegetables such as taro, breadfruit, sweet potatoes and others are good sources of many B vitamins, and other vitamins and minerals. Whole grains are high in fiber.

# Meal Planning *(Continued)*

## Protein/Meat Group

The Protein/Meat Group includes foods which provide protein, some fat, minerals and vitamins. This list includes meats, fish, poultry, eggs, tofu, and cheese. Meat is a good source of iron.

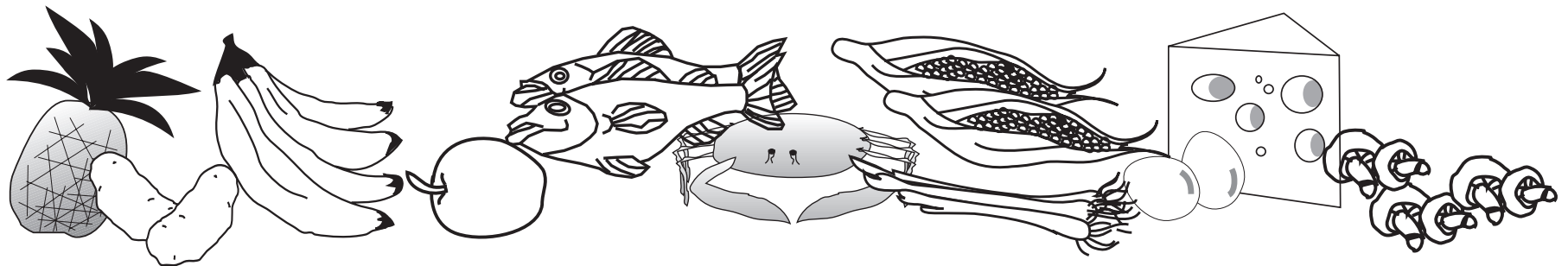
Most meats you eat should be lean since fat contributes twice as many calories as protein or carbohydrate. Cut off all the visible fat before cooking. When cooking chicken, make sure you remove the skin. Bake, broil, roast, stew or pan-fry without added fat. Discard the fat that comes out of the meat while cooking.

The **kind** of meat or other protein foods makes a difference. The Protein/Meat Group has been divided into three lists: low, medium and high fat Protein/Meat Groups.

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## Fat Group

The Fat Group include foods high in fats. There are two categories of fats: **1) Saturated Fats** such as fats from animals and coconut palm oils; **2) Unsaturated Fats** or liquid vegetable oils. Your doctor may want you to be on a “Fat Controlled” diet. This means that you control the kind of fat you use as well as the amount.



# Kosrae Sample Menu

The following sample menus have been worked out to show you how to use your Meal Plan. The fat content has been reduced to provide approximately 28% of the total energy intake (calories in one day). The protein content is about 15% and carbohydrate content is 56% of the total energy. These sample menus are planned to better meet the nutritional needs of adults and are not meant to be used for children.

## Typical Day's Menu

### Breakfast

- 2 each Banana, cooking, raw
- 1/3 cup Evaporated milk  
– Vitamin A added
- 2/3 cup All purpose white flour  
– enriched
- 12 fl oz Brewed coffee
- 2 tsp White granulated sugar

*Banana  
fritter*

### Lunch

- 1 cup Medium grain white rice  
– unenriched – cooked
- 6 oz-wt Yellowtail fish – baked/broiled
- 2 tbs Vegetable oil, polyunsaturated
- 1 each Whole cucumber, 8 inch long
- 2 tbs Fresh lime juice
- 12 fl oz Cola type soda pop

### Dinner

- 1 cup Breadfruit, baked
- 6 oz-wt Yellowtail fish – baked/broiled
- 1/2 cup Kosraen soup

### Analysis

Kcalories .....	2226
Percent carbohydrate .....	58%
Percent fat .....	19%
Percent protein .....	23%
Fiber .....	12.62 g
Calcium .....	478.6 mg
Iron .....	13.1 mg
Vitamin A .....	2313 iu
Vitamin C .....	105.5 mg
Folic acid .....	98.63 mcg

#### Exchanges:

Starch .....	14
Protein/meat .....	13.5
Vegetable .....	2
Fruit .....	3.5
Calcium/milk .....	.5
Fat .....	3

## Improved Day's Menu

### Breakfast

- 1 each Banana, common varieties
- 2 small Taro sandwiches

### Lunch

- 1 cup Medium grain white rice  
– unenriched – cooked
- 4 oz-wt Fresh yellowtail fish – baked/  
broiled
- 1/2 cup Edible hibiscus, leaves, boiled
- 1 each Whole mango

### Dinner

- 2 each Banana, cooking, boiled
- 6 oz-wt Chicken, roasted
- 1/4 cup Coconut cream – canned
- 1/2 cup Chili pepper, leaves, boiled

### Analysis

Kcalories .....	1991
Percent carbohydrate .....	56%
Percent fat .....	28%
Percent protein .....	15%
Fiber .....	23 g
Calcium .....	854 mg
Iron .....	17.4 mg
Vitamin A .....	20,156 iu
Vitamin C .....	288 mg
Folic acid .....	624 mcg

#### Exchanges:

Starch .....	9
Protein/meat .....	13
Vegetable .....	2
Fruit .....	4
Calcium/milk .....	0
Fat .....	10

# Meal Plan Form

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You may want to divide your food for the day this way:

Meal Plan	Number of Servings	Food	Amount
<b>Breakfast:</b>			
Fruit Group	_____	_____	_____
Protein/Meat Group (A, B, or C)	_____	_____	_____
Vegetable Group	_____	_____	_____
Starch Group	_____	_____	_____
Fat Group	_____	_____	_____
Calcium/Milk Group	_____	_____	_____
Coffee or tea, plain	_____	_____	_____
<b>Lunch:</b>			
Protein/Meat Group _____	_____	_____	_____
Starch Group	_____	_____	_____
Vegetable Group	_____	_____	_____
Fat Group	_____	_____	_____
Fruit Group	_____	_____	_____
Calcium/Milk Group	_____	_____	_____
Coffee or tea, plain	_____	_____	_____
<b>Dinner:</b>			
Protein/Meat Group _____	_____	_____	_____
Starch Group	_____	_____	_____
Vegetable Group	_____	_____	_____
Fat Group	_____	_____	_____
Fruit Group	_____	_____	_____
Calcium/Milk Group	_____	_____	_____
Coffee or tea, plain	_____	_____	_____
<b>Snack:</b>			
Protein/Meat Group _____	_____	_____	_____
Starch Group	_____	_____	_____
Fat Group	_____	_____	_____
Calcium/Milk Group	_____	_____	_____

# Measuring Your Foods

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Measuring is a key to knowing how much food you eat. The measurement in ounces, inches, spoons, or cups is indicated for each food in the Food Groups.

You need a set of measuring cups which include a full 8-ounce cup, a half cup, a third of a cup and a quarter cup. You also need a teaspoon, a tablespoon, and a ruler to measure your meats.

All measurements are level. Do not heap or pack your cups or bowls. For example, to measure a level spoonful, fill your spoon, then run a knife edge across the spoon pushing off all the extra food. Measuring a level cupful would involve the same process.

A small food scale is also very helpful especially for measuring meats. Make sure the scale measures ounces accurately.

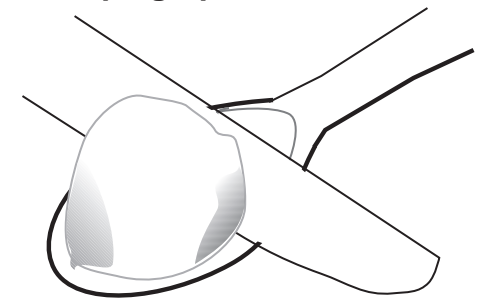
Measure your foods until you can train your eye to be accurate. Check all your measurements every once in a while to be sure you are correct.

Foods which are eaten cooked should be measured after they are cooked. Fat that is used in cooking must be counted as a fat serving. Frying adds a great deal of fat. For example, a breast of chicken which has been rolled in flour and fried may add 1 starch serving and 2 or more fat servings.

## Measuring Technique for All Foods Requiring Utensils



**Heaping Spoonful**



**Leveling Spoonful**



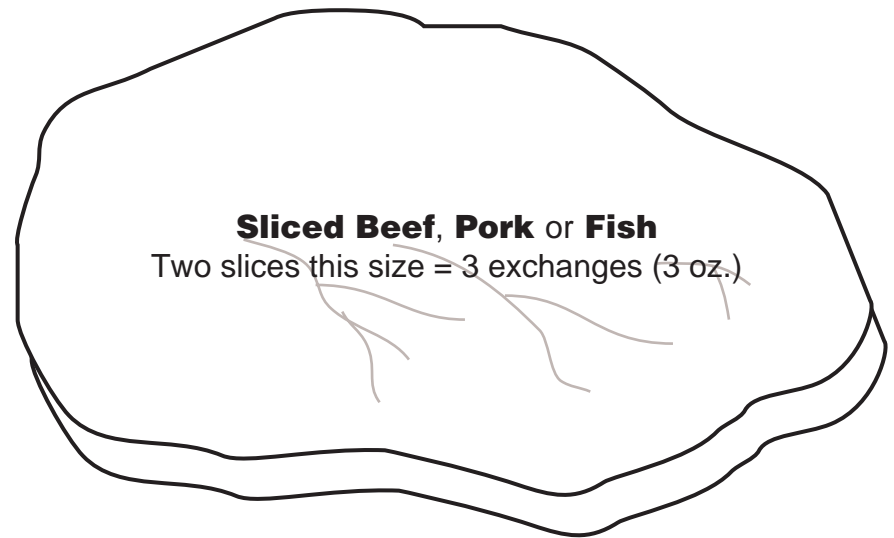
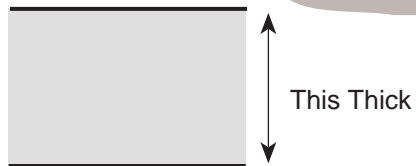
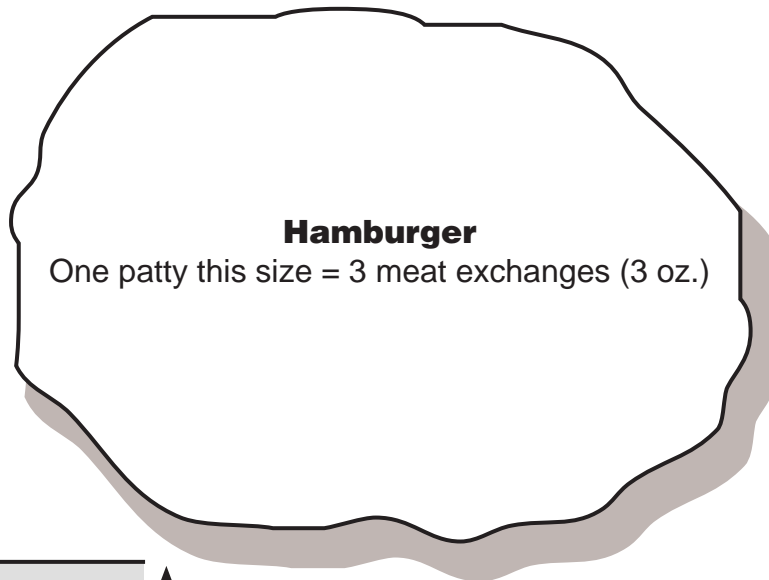
**Level Spoonful**



# Meat Portion Guide

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Study these sketches to help you estimate ounces of meat. They represent the actual size of a 3 ounce portion of cooked lean meat without bone. It is about the size of a deck of cards. If you are eating only 2 ounces (2 meat servings) decrease the portion size of meat accordingly.



4 ounces raw meat without bone	=	about 3 ounces cooked
5 ounces raw meat with bone	=	about 3 ounces cooked
1 small chicken leg and thigh or 1/2 breast	=	about 3 ounces cooked

# Calcium/Milk Group

One nonfat calcium/milk serving contains approximately 90 calories, 12 grams carbohydrates, 8 grams protein and a trace of fat.

<i>Food</i>	<i>Measure</i>
<b>Cheese</b> (add 1 fat)	
Parmesan	2 tablespoons
Ricotta	1-1/2 ounce
<b>Cheese</b> (add 2 fat)	
American	1-1/2 ounce
Cheddar	1-1/2 ounce
Mozzarella	1-1/2 ounce
Swiss	1-1/2 ounce
<b>Dark green leafy vegetables*</b>	
Bele leaves, raw	3 cups
Spinach, raw	5 cups
Tapioca leaves, raw	3 cup
Taro leaves, raw	4 cups
<b>Nonfat Milk</b>	
Nonfat dry milk powder	1/3 cup
Evaporated skim milk	1/2 cup
<b>Low Fat Milk</b> (add 1 fat)	
2% milk	1 cup
Evaporated 2% milk	1/2 cup

<i>Food</i>	<i>Measure</i>
<b>Fish, sardines, mackerel, salmon; canned with bones</b> (add 2 fat)	3-4 ounces
<b>Tofu made with calcium</b> (add 1 fat)	1/2 cup
<b>Whole milk</b> (add 2 fat groups)	
Whole milk	1 cup
Evaporated milk	1/2 cup



1 Cup Skim Milk



1/3 Cup Nonfat Dry Milk Powder



1/2 Cup Evaporated Milk  
Add 2 Fat Exchanges

\*Calcium may not be well absorbed.

# Starch Group

---

One starch serving contains approximately 80 calories, 15 grams of carbohydrate and 3 grams of protein.

<i>Food</i>	<i>Measure</i>
<b>Bread</b>	
Biscuit (add 1 fat)	1 (2" diameter)
Bread (white, whole wheat, rye, raisin, French)	1 slice
Bread crumbs, dry	3 tablespoons
Bun, hamburger	1/2 bun (4" diameter)
Bun, hot dog	1/2 bun
Cornbread (add 1 fat)	1 (2" x 2" x 1")
English muffin	1/2
Muffin, plain, small (add 1 fat)	1
Noodles, chowmein (add 1 fat)	1/2 cup
Pancake (add 1 fat)	1 (4" diameter)
Roll, plain	1 (2" diameter)
Waffle (add 1 fat)	1 (4-1/2" diameter)
<b>Cereals</b>	
All cooked	1/2 cup
#Bran Flakes, All Bran, Raisin Bran	1/2 cup
#Bran (coarse texture)	1/2 cup
Cornmeal, dry	1/3 cup
Dry, puffed or flaked (not sugared)	3/4 cup
Granola	1/4 cup
Grape Nuts	1/4 cup
Honey Bunch of Oats	1/2 cup
Shredded wheat	1/2 cup
<b>Coconut</b>	
Immature meat (sponge) (add 1 fat)	1-3/4 cups
Water	2 cups
<b>Crackers</b>	
Crepe Pilot	1-1/2
Graham	3 (2-1/2" square)
Melba toast	4 (3-3/4" x 2")
Ritz, plain	4
Ry Krisp, double square wafer	3-1/2
Saloon pilot	1
Saltines	6 (2" square)
Soda	3 (2-1/2" square)
Wheat Thins (add 1 fat)	14

## Flour Products

Flour	2-1/2 tablespoons
Noodles; cellophane	3/4 cup
Noodles; macaroni, spaghetti	1/2 cup cooked
Saimin	1/2 cup
Stuffing	1/4 cup

## Rice

Long rice, cooked	1/2 cup
Mochi	1 (2" x-1/2")
Rice, cooked	
Brown	1/3 cup
Instant	1/3 cup
White, enriched	1/3 cup

## \*Soup

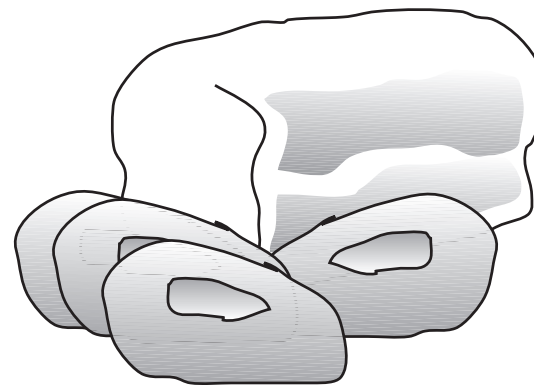
Miso paste	1 ounce
Noodle/rice base	1 cup
Cream base (add 1 fat)	1 cup

## Starch

Corn starch	2 tablespoons
Potato starch	2 tablespoons

## Starchy Vegetables

Banana, cooking	1/2 or 2 ounces
Beans, azuki	1/4 cup
Beans, baked	1/4 cup
Beans and peas; dried, cooked	1/3 cup
Breadfruit, cooked	1/3 cup
Cassava	1/3 cup
Corn	1/2 cup
Corn on the cob	1 (6" long)
Lima beans	1/2 cup
Mixed vegetables	2/3 cups
Peas, green	1/2 cup
Plantain (green banana)	1/2 small or 1/3 cup
Popcorn (without butter)	3 cups
Potatoes	
White, whole	1 (" diameter)
White, mashed, plain	1/2 cup
√Sweet potato or orange colored yams	1/3 cup
Pretzels	3/4 ounce
√Pumpkin	3/4 cup
Squash, winter, yellow	3/4 cup
Tapioca	2 tablespoons
Taro (raw and cooked)	1/4 cup
Vegetables, pickled	1/2 cup



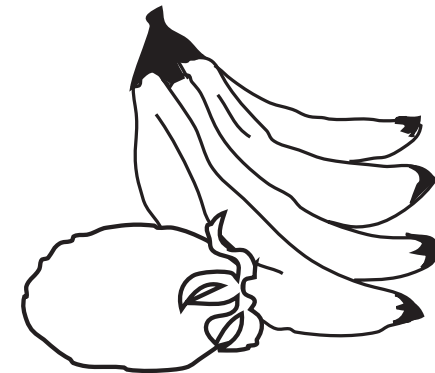
√Good source of Vitamin A  
#High in fiber

# Fruit Group

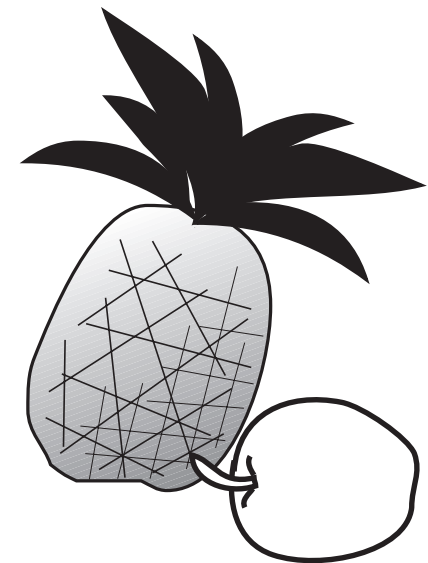
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One fruit serving contains approximately 60 calories and 15 grams of carbohydrate. These fruit may be fresh, cooked, or frozen **without sugar**. If fruit is canned in syrup, cut the portion in half. Choose juice that is 100% fruit.

<i>Food</i>	<i>Measure</i>
Apple, fresh	1/2 medium or 1 small (2" diameter)
Apple, mountain	2 medium
Applesauce	1/2 cup
Apple juice	1/2 cup
Apricots, fresh	4 medium
Apricots, dried	7 halves
Apricots, canned	4 halves
Banana	1/2 medium or 1/2 cup
√+Cantalope	1/3 of 5" diameter fruit (1 cup)
Cherries, fresh	12 pieces
Cherries, canned	1/2 cup
Coconut water	1 cup
Cranberry juice cocktail	1/4 cup
Dates	2-1/2
Figs, fresh	2 medium
Figs, canned	2
Fruit cocktail	1/2 cup
Fruit, dried	2 tablespoons
Grapes, fresh	10 grapes, large or 15 small
Grape juice, canned	1/3 cup
Grape juice, frozen	1/3 cup
+Grapefruit, fresh	1/2 medium (3-1/2" diameter)
+Grapefruit, canned sections	3/4 cup
+Grapefruit, juice	1/2 cup
+Guava, fresh	1 medium (2-1/2" diameter)



+Honeydew melon	1/8 medium (1 cup)
Jack fruit	1/2 medium
Juice (other)	1/2 cup
+Kiwi	1 large
+Longans	1/2 cup
+Lychees	10 fruits or 1/2 cup
+Mandarin orange	3/4 cup
√+Mango	1/2 cup or 1/2 small
√Mango, dried	1 ounce
Nectarine	1 (1-1/2" diameter)
+Orange, fresh	1/2 large or 1 small
+Orange juice	1/2 cup
Pandanas	1/4 cup (add 1 fat)
√+Papaya	1 cup cubed
+Passion fruit juice	1/2 cup
Peach, fresh	1 medium
Peach, canned	1/2 cup or 2 halves
Pear, fresh	1/2 large or 1 small
Pear, dried	1
Pear, canned	2 small halves or 1/2 cup
Persimmon, Japanese	1/2 medium
Persimmon, native	1 medium
+Pineapple, fresh,	3/4 cup
+Pineapple, canned in own juice	3/4 cup
+Pineapple juice	1/2 cup
Plums, fresh	2 medium
Plums, canned	4
Pomegranate	1/2 medium
+Pomelo (Pommalo)	1 cup sections
Prunes, dried	3 medium
Prunes, juice	1/3 cup
Raisins	2 tablespoons
Soursop, pulp	1/3 cup
+Starfruit	1-1/2 cups, cubed
+Strawberries	1-1/4 cups
+Tangerine	2 medium
Watermelon	1-1/4 cup cubed



+Good source of vitamin C  
 √Good source of vitamin A



# Vegetable Group

---

One vegetable serving contains about 25 calories, 5 grams of carbohydrate and 2 grams of protein.  
One exchange is 1/2 cup.

Artichoke	Leeks
+Asparagus	
	Mushrooms
Bamboo shoot	Okra
Banana bud	Onion, round
Bean sprouts	
Beans, goa (winged)	√Papaya green
Beans, green	Pea pods
Beets	+Pepper, green or bell
Beet greens	√Pumpkin leaves
√+Bele	
Bittermelon, fruit	√Spinach
√+Broccoli	√Squash, leaf tips
+Brussel sprouts	√Sweet potato leaves/shoots
√Carrots	+Taro leaves
+Cauliflower	+Tomato, canned or fresh
Celery	+Tomato juice
√Chili pepper leaves	Tomato paste
Collards	Turnip
Cucumber	√Turnip greens
Daikon, pickled radish	√+Vegetable juice
√Dandelion greens	
Eggplant	Water chestnuts
Gourd, white flowered	Zucchini
+Green pepper	
√Kale	
√Kang Kong	
★Kim Chee	

★Food high in salt  
+Good source of vitamin C  
√Good source of vitamin A

These vegetables may be used as desired, raw or up to one cup cooked.

Cabbage - all kinds  
Celery

√Fern leaves and stems

Green Onions

Lettuce

Parsley

+Radishes (includes Daikon)

√Radish leaves

+Good source of vitamin C  
√Good source of vitamin A

Seaweed

Watercress



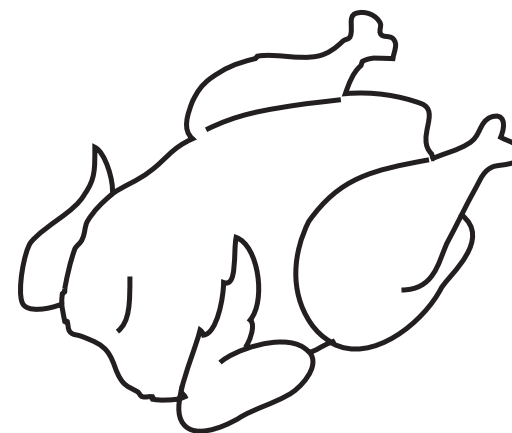
# Protein/Meat Group A (Lean)

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The protein/meat groups have been divided into three groups according to the fat content.

**Protein/Meat Group A** (lean). One protein/meat serving contains approximately 55 calories, 7 grams protein, and 3 grams fat.

<i>Food</i>	<i>Measure</i>
<b>Beef</b>	
★Chipped beef	1 ounce or 1 slice (3" x 2" x 1/4")
Lean chuck, flank steak, ground beef (less than 10% fat), porterhouse, T-bone, sirloin, tenderloin steaks, round, rump	1 ounce or 1 slice (3" x 2" x 1/4")
★ <b>Beef jerky</b>	3/4 ounce
★ <b>Broth</b> , Chicken	3/4 cup
<b>Cheese</b>	
Cheese containing less than 5% fat	1 ounce or 1" cube
Cottage, dry or 2% butterfat	1/4 cup
Parmesan	2 tablespoons
<b>Chicken</b> (skin removed)	
Breast	1 ounce or 1 slice (3" x 3" x 1/4") (5 pieces to one pound)
Drumstick	1 ounce or 1 slice (3" x 3" x 1/4")
Thigh	1/2 piece (4 pieces to one pound)
Roasted	1 ounce or slice (3" x 3" x 1/4")
<b>Egg</b>	
Egg substitute	1/4 cup
Whites, large	3
<b>Fish, canned</b>	1/4 cup



★Food high in salt

**Fish**

Abalone, crab, dolphin fish, lobster	1/3 cup or 1-1/2 ounces
Clams, cuttlefish, scallops, shrimp, squid, yellow tail	1/3 cup or 1-1/2 ounces
Cod, opakapaka, mullet, red snapper, sole	1/3 cup or 1-1/2 ounces
Eel, mackerel, mussels, octopus	1 ounce
Fish cake paste	1/4 cup
Reef fish – red snapper, rabbit fish, parrot fish sword fish	2 ounces
★Salmon, canned, drained	1/4 cup
★Sardines, canned in oil, drained	2 ounces
Sea cucumber	2 ounces
★Tuna, canned in water	2 ounces

**Pork**

Lean leg	1 ounce or 1 slice (3" x 3" x 1/4")
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**Quail**

1 ounce

**Soybeans**

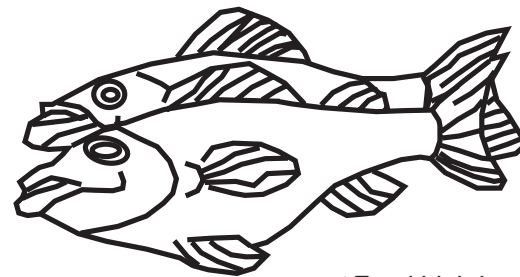
1/3 cup

**Turkey** (skin removed)

★White and dark meat, roasted	1 ounce or 1 slice (3" x 3" x 1/4")
★Turkey ham, turkey pastrami, turkey breast	1 ounce or 1 slice (3" x 3" x 1/4")

**Veal** Chop or roast

1 ounce or 1 slice (3" x 2" x 1/4")

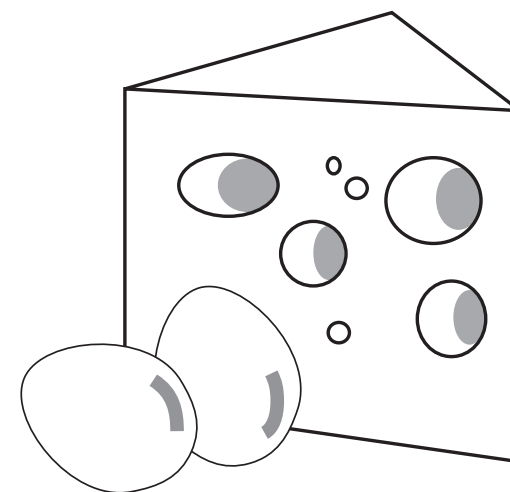


★Food high in salt

# Protein/Meat Group B (medium fat)

**Protein/Meat Group B** (medium fat). One protein/meat serving contains approximately 75 calories, 7 grams protein, and 5 grams fat.

<i>Food</i>	<i>Measure</i>
<b>Beef</b> ★Corned beef	1 oz. or 1 slice (3" x 2" x 1/4")
Ground beef (15% fat)	1 oz.
Rib eye	1 oz. or 1 slice (3" x 2" x 1/4")
<b>Cheese</b> Cottage, creamed	1/4 cup
Mozzarella	1 oz.
<b>Chicken</b> (with skin)	1 wing (6 pieces to one pound)
<b>Chicken &amp; turkey frankfurter</b>	1 oz.
<b>Cornish game hen</b>	1 oz.
<b>Dog</b>	1 oz.
<b>Duck</b> (skin and fat removed)	1 oz.
<b>Egg</b> , chicken whole (high in cholesterol)	1 large
<b>Heart, kidney, or gizzards</b> (high in cholesterol)	1 oz.
<b>Lamb</b> Lean leg, loin, rib, shank, shoulder, sirloin	1 oz. or 1 slice (3" x 2" x 1/4")
<b>Liver</b> (high in cholesterol)	1 oz.
<b>Luncheon meat</b> (86-94% fat free)	1 oz.
<b>Pork</b> ★Ham, butt, loin, shoulder, arm, picnic	1 oz. or 1 slice (3" x 2" x 1/4")
Shoulder blade, ★Canadian bacon	1 oz. or 1 slice (3" x 2" x 1/4")
<b>Quail eggs</b>	2 oz.
<b>Tofu</b>	1/3 cup or 3 oz. (1/6 of a block)
<b>Turkey</b> , ground	1 oz.



★Food high in salt

# Protein/Meat Group C (high in fat)

**Protein/Meat Group C** (high in fat). One protein/meat serving contains approximately 100 calories, 7 grams protein, and 8 grams fat.

<i>Food</i>	<i>Measure</i>
<b>Beef</b> Bacon (Sizzlean)	1 ounce
Brisket	1 ounce
Ground beef (20% or more fat)	1 ounce
Lean short ribs	1 ounce
Rib roast, club and rib steak	1 ounce or 1 slice (3" x 2" x 1/4")
Spare ribs (meat, without bone)	1 ounce
<b>Cheese</b> Cheddar, American, Monterey, Swiss, Provolone, Blue	1 ounce or 1" cube
★ <b>Cold cuts</b> Bologna, salami	1 slice
★ <b>Frankfurter</b>	1 (10 to a pound)
<b>Lamb</b>	1 ounce or 1 slice (3" x 2" x 1/4")
<b>Liverwurst, pork</b>	1 ounce
★ <b>Luncheon meat</b>	1 ounce
<b>Peanut butter</b>	1 tablespoon
<b>Pig ears</b>	1/2 ear
<b>Pork</b> Spareribs, loins (back ribs), ground pork, country style ham	1 ounce or 1 slice (3" x 2" x 1/4")
★ <b>Sausage</b> Portugese, Vienna	1 ounce, link or pattie
★ <b>Spam</b> (canned luncheon meat)	1 ounce
Spam Lite	2 ounces
<b>Tail</b> Chicken	1/2 ounce
Turkey	1/2 ounce
<b>Wings</b> Chicken	1 (6 pieces per pound)
Turkey	1/4



★Food high in salt



# Fat Group A (high in unsaturated fats)

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The fat group have been divided into two sections, those which are high in unsaturated fats and those which are high in saturated fat.

**Fat Group A - high in unsaturated fats.** One fat serving contains approximately 45 calories and 5 grams of fat.

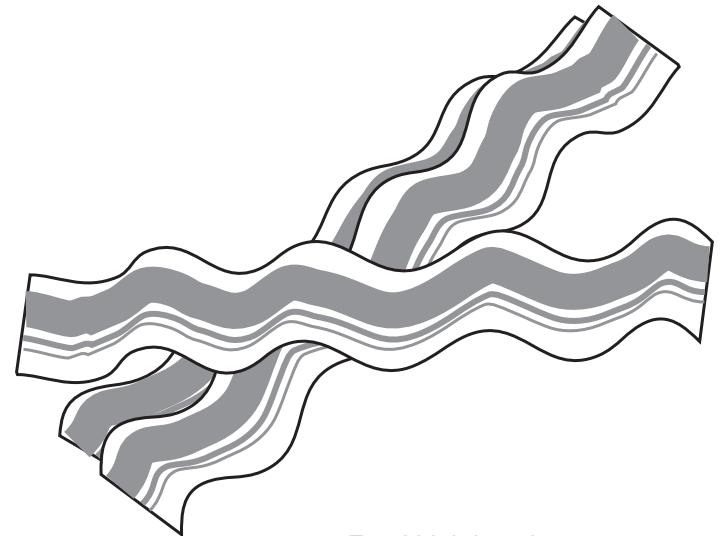
<i>Food</i>	<i>Measure</i>
<b>Avocado</b>	1/8 of 4" diameter
<b>Dressings, Salad</b>	
All varieties	1 tablespoon
Reduced calorie	2 tablespoons
Mayonnaise	1 teaspoon
Mayonnaise, reduced calorie	1 tablespoon
<b>Margarine</b> (first ingredient, liquid oil)	1 teaspoon
<b>Nuts</b>	
Almonds	6
Cashews	1 tablespoon
Macadamia	1 tablespoon
Peanuts	1 tablespoon
Pecans	1 tablespoon
Pistachio	1 tablespoon
Walnuts	4 halves (1 tablespoon)
Other nuts	1 tablespoon
<b>Oil</b> cottonseed, corn safflower, sesame, soybean and sunflower, coconut	1 teaspoon
<b>Olives</b> , ripe	10 small or 5 large
<b>Sesame seeds</b>	1 tablespoon
<b>Sunflower seeds</b> , unshelled	1/4 cup
shelled	1 tablespoon
<b>Tartar sauce</b>	2 teaspoons
Tartar sauce, low calorie	1-1/2 tablespoons



# Fat Group B (high in saturated fats)

**Fat Group B - high in saturated fats.** One fat serving contains approximately 45 calories and 5 grams of fat.

<i>Food</i>	<i>Measure</i>
<b>Butter</b>	1 teaspoon
✱ <b>Bacon</b> , crisp	1 slice
Bacon bits	1-1/2 tablespoons
<b>Cheese, cream</b>	1 tablespoon
<b>Coconut</b>	
Immature meat (sponge)	1-3/4 cup (add 1 bread)
Mature meat	1 piece (1" x 1" x 3/8")
Cream, no water added	1 tablespoon
Milk (1 cup water to 1 cup cream)	2 tablespoons
Coconut, grated	2 tablespoons
<b>Coffee whitener</b>	
Liquid	2 tablespoons
Powder	1-1/2 tablespoons
<b>Cream</b>	
Whipped	2 tablespoons
Whipping, heavy	1 tablespoon
<b>Margarine</b> (first ingredient hydrogenated or hardened oil)	1 teaspoon
✱ <b>Salt pork</b>	1/4 oz.
<b>Solid cooking fats</b> , lard, shortening	1 teaspoon
<b>Sour cream</b>	2 tablespoons



✱Food high in salt.

# Foods that Do Not Need to be Measured

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Some foods and condiments have very little carbohydrate, protein or fat and can be used without measuring and with a few exceptions, as often as you like.

## **Beverages**

- Carbonated water, club soda
- Coconut water
- Coffee, plain
- Soft drinks, artificially sweetened
- Sugar free drink mixes
- Tea, plain
- Water

## **Desserts**

- Equal
- Sugar substitutes
- Sweet and Low

## **Miscellaneous**

- Non stick pan spray
- Pickles, unsweetened
- ★Plums, pickled (umeboshi)
- Seaweeds
- Taco sauce (1 tablespoon)

## **★Soups**

- Bouillon, without fat
- Clear broth

## **Seasonings**

- Chives
- ★Crab extract
- Fish sauce
- Garlic
- Ginger
- Mustard, dry or prepared
- Parsley
- Pepper
- ★Salt (in moderation)
- ★Soy Sauce (in moderation)
- Spices and herbs
- Tabasco sauce
- Vinegar



★Food high in salt

# Other Foods for Occasional Use

Moderate amounts of some foods can be used in your meal plan, in spite of their sugar or fat content. The following list includes food group serving values for some of these foods. Because they are concentrated sources of carbohydrate, you will notice that the portion sizes are very small. Check with your nutritionist for advice on how often and when you can eat them.

<i>Food</i>	<i>Measure</i>	<i>Food Group</i>
*Alcohol - Beer	12 oz., can	3-1/2 fat
Wine	4 oz.,-1/2 cup	2 fat
Whiskey, gin, rum, vodka (100 proof)	1-1/2 oz. or 1 shot	3 fat
Animal crackers	8 crackers	1 starch
Brownie, no frosting	1 (3" x1-1/2" x 7/8")	1 starch, 1 fat
Cake, angel food or sponge	cupcake size, flat top	1 starch, 1/2 fat
Cake, no icing	cupcake size, flat top	1 starch, 1 fat
Cake, with icing	cupcake size, flat top	1 starch, 2 fat
Coconut candy	1 oz.	1 starch, 1/2 fat
Cookies	2 small (1-3/4" across)	1 starch, 1 fat
Donut, cake	1	1 starch, 1 fat
French fried potatoes	10	1 starch, 1 fat
Frozen fruit yogurt	1/3 cup	1 starch
Gatorade	1 cup	1 fruit
Granola bars	1	1 starch, 1 fat
Ice cream, any flavor	1/2 cup	1 starch, 2 fat
Ice milk	1/2 cup	1 starch, 1 fat
Jam, jelly, honey	1 tablespoon	1 fruit
Jello	1/2 cup	1 fruit
Juice drinks	12 oz. can	2-1/2 fruit

\*Because of minimal nutrient value, fat is used as the equivalent exchange

## Other Foods for Occasional Use *(Continued)*

<i>Food</i>	<i>Measure</i>	<i>Food Group</i>
Macaroni or Potato Salad	1/2 cup	1 starch, 3 fat
Milo	3 tablespoons	1 starch, 1/2 fat
Muffin	2" diameter	1 starch, 1 fat
Pie, fruit	1/8 pie	2 starch, 1 fruit, 3 fat
Popsicle	1/2 twin pop	1 fruit
Sherbert, any flavor	1/4 cup	1 starch
Soda, sweetened	12 ounce can	2-1/2 fruits
Snack chips, all varieties	1 ounce	1 starch, 2 fat
Sugar	1 tablespoon	1 fruit
Sugar cane, stalk, peeled	4 ounce	1 fruit
Vanilla wafers	6 small	1 starch
Yogurt with fruit	1 cup	1 calcium/milk, 1 fruit, 1 fat

# Local Recipes

<i>Food</i>	<i>Serving size</i>	<i>Exchanges</i>
<b>Soups</b>		
Kosraen soup with coconut cream	1-1/4 cup	1/2 starch, 1 lean meat, 1-1/2 fat
Kosraen soup with grated coconut	1 cup	1-1/2 starch, 1/2 lean meat
<b>Vegetables</b>		
Kang Kong pickles		Free food
<b>Starch</b>		
Ainpot mos	3/4 cup	1 starch, 4 fat
Breadfruit and coconut milk	3/4 cup	1 starch, 4 fat
Fried breadfruit	1 cup	2 starch, 3 fat
Taro in coconut cream	1-1/4 cup	4 starch, 4 fat
Rice with banana	1-1/2 cup	2 starch, 1/2 fruit, 1 fat
<b>Main Dishes</b>		
Fish in coconut milk	3/4 cup	1/2 vegetable, 1-1/2 lean meat, 4 fat
Kosrae fried rice	1/2 cup	1-1/2 starch, 1 medium meat, 1 fat
Kosrae sukiyaki	1/2 papaya w/filling	1-1/2 fruit, 3 medium meat, 3 fat
Mackeral and banana flower	1 cup	3 vegetable, 2 lean meat, 1-1/2 fat
Taro sandwich	1 sandwich	3 starch, 1 lean meat, 1 fat
<b>Dessert</b>		
Banana bread	1 slice (1 ounce)	1 starch, 1 fat
Banana fritter with milk	2 fritters	2 starch, 2 fruit, 4-1/2 fat
Banana fritter without milk	2 fritters	2 starch, 2 fruit, 4-1/2 fat
Breadfruit fritter	4 fritters	4 starch, 1 medium meat, 7 fat
Soursop punch	1-1/2 cup	3 fruit, 1/2 calcium/milk, 1 fat