

Yap

Food Choices for Healthful Living based on food group lists



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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., 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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Yap Food Choices for Healthy Living Based on Food Group Lists

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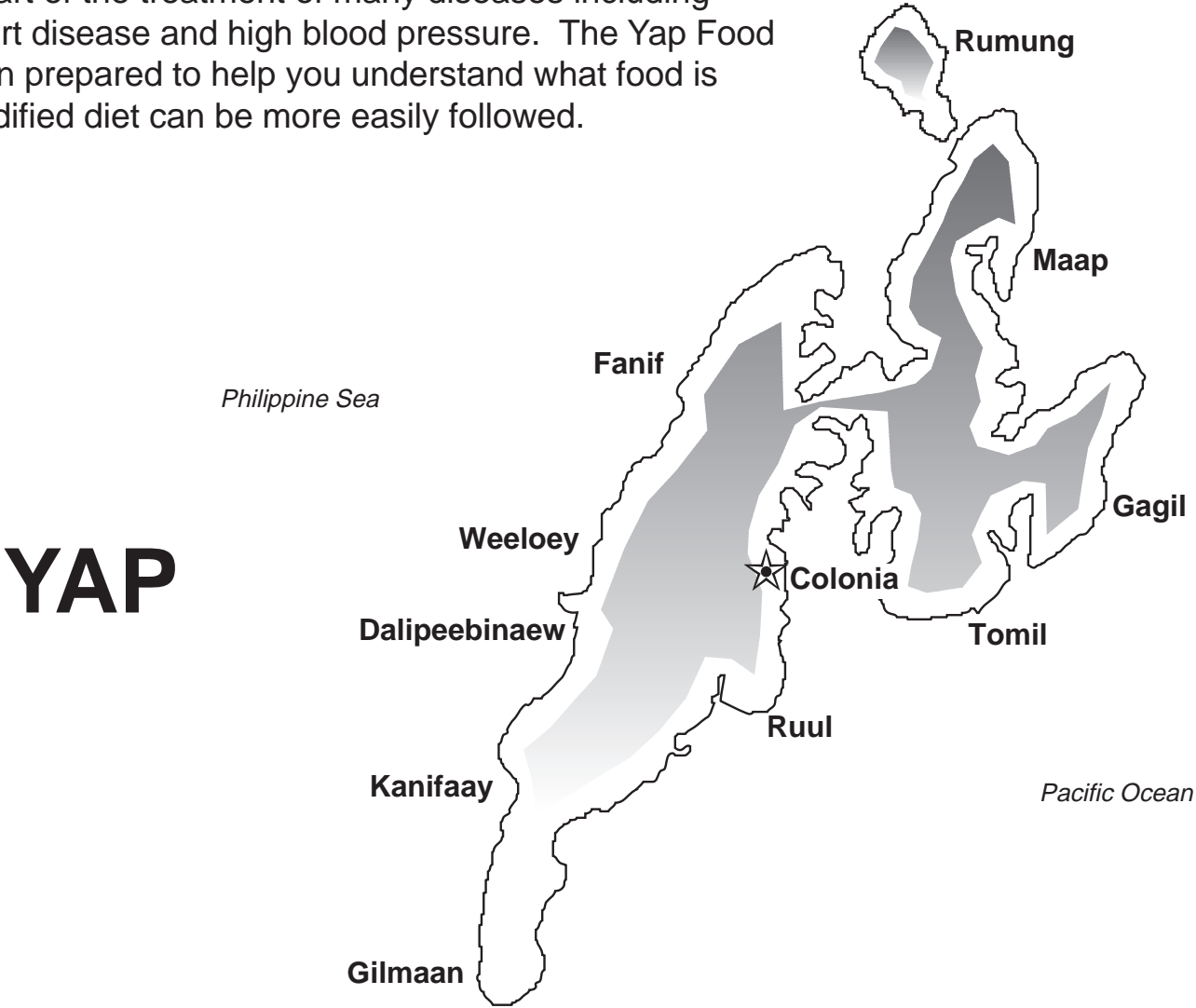
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Introduction

Diet is an important part of the treatment of many diseases including obesity, diabetes, heart disease and high blood pressure. The Yap 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

- **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. All people should increase the amount of carbohydrate and fiber they eat. This can be done by eating more suni 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,

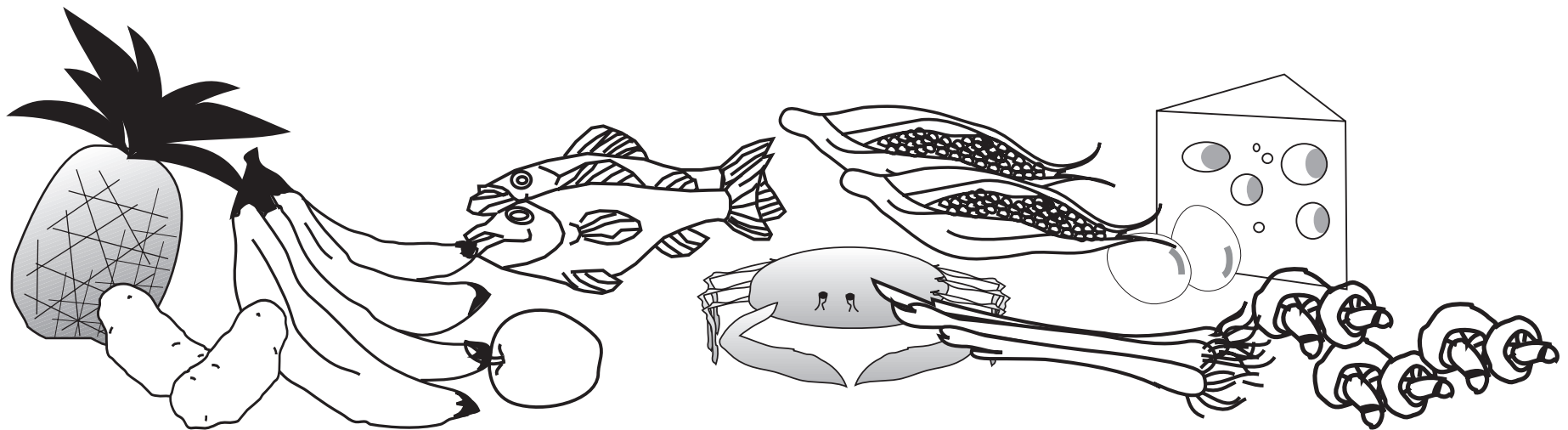
table sugar, honey, sweet drinks, and syrup. People with diabetes need to avoid these foods.

■ Eat less salt and sodium.

Many of us eat too much salt. The sodium in salt 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 ✦.

■ 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.



The Food Groups

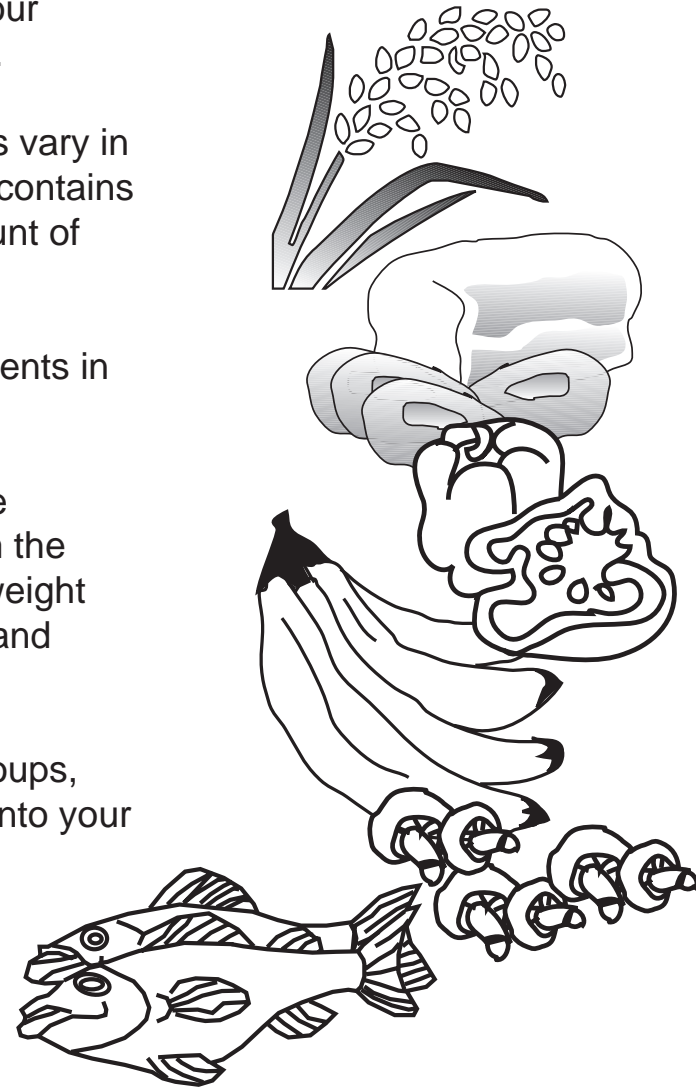
To make it easier for you to follow your meal plan and to meet your nutritional needs, foods have been divided into six Food Groups.

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

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

Meal Plan by Calorie Content

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.

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

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

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.

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.

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.

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.

Starch Group

The Starch Group includes foods that provide carbohydrates in the form of starch. Rice, noodles, cereals, dried beans and peas, and 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

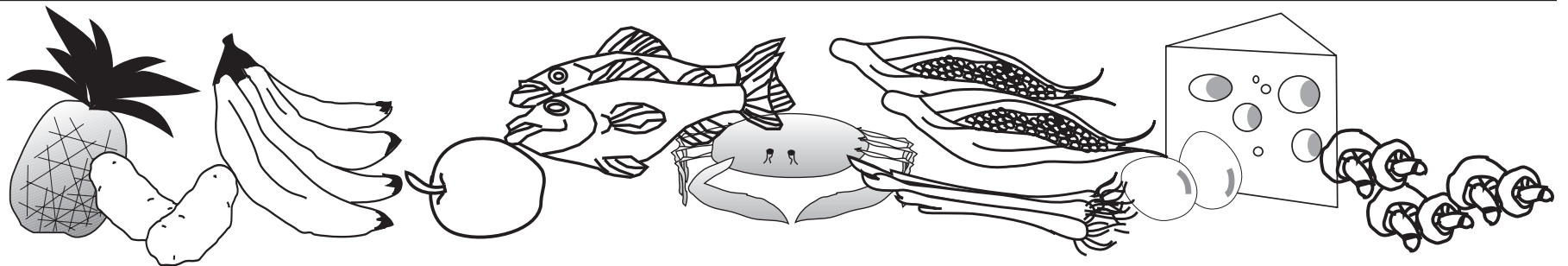
The Protein/Meat Group includes foods which provide protein, some fat, minerals and vitamins. This list includes meats, fish, poultry, eggs, tofu, and cheese.

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.

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.



Yap 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 25% of the total energy intake (calories in one day). The protein content is about 20% and carbohydrate content is 55% of the total energy. These sample menus are planned to meet the nutritional needs of adults and are not meant to be used for children.

Sample Menu (1500+ calories)

Daily Servings:	Calcium/Milk	Vegetables	Fruit	Starch	Protein/Meat A	Protein/Meat B	Protein/Meat C	Fat
	2	4	3	7	2	2	1	3

Breakfast

- 1 cup + 1 teaspoon breadfruit w/coconut cream
- 2 ounces fish, reef; broil
- 2 cups taro leaves

Snack

- 1-1/2 banana
- 2/3 cup rice
- 1 ounce corned beef
- 3 ounces sardines

Dinner

- 1-1/2 cup taro, boiled
- 2 ounces chicken
- 1 cup giliy leaves

Meal Plan Form

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

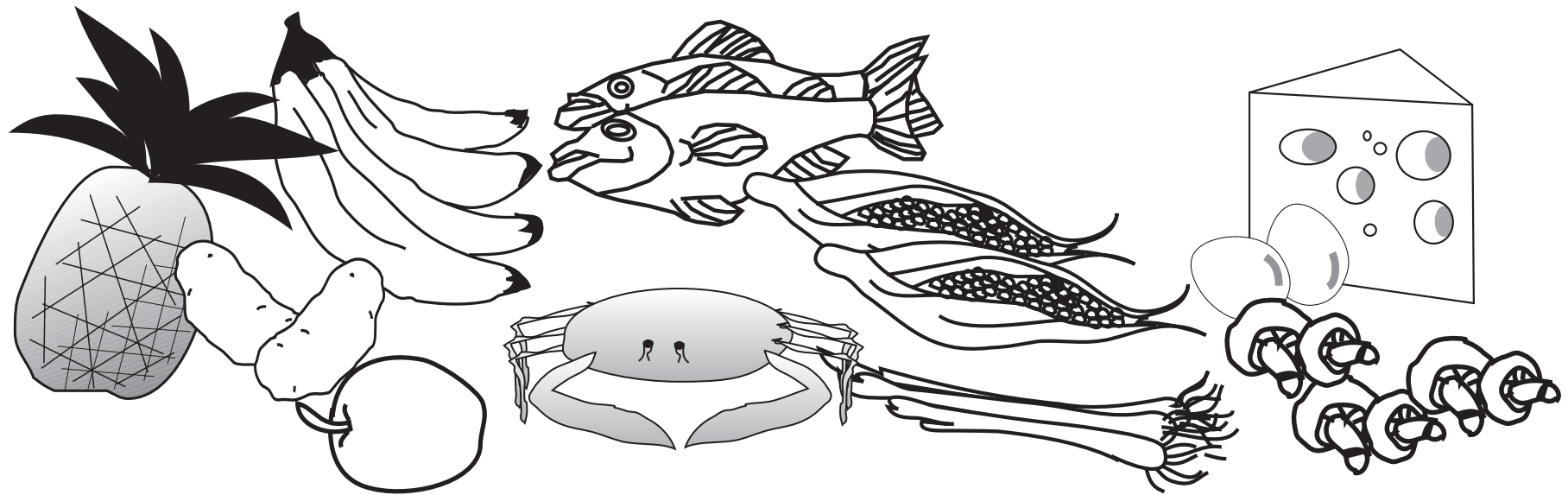
Meal Plan	Number of Servings	Food	Amount
Breakfast:			
Protein/Meat Group (A, B, or C)	_____	_____	_____
Starch Group	_____	_____	_____
Fat Group	_____	_____	_____
Fruit Group	_____	_____	_____
Calcium/Milk Group	_____	_____	_____
Coffee or tea, plain	_____	_____	_____
Lunch:			
Protein/Meat Group (A,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

Dinner:

Protein/Meat Group (A, B, or C)	_____	_____	_____
Starch Group	_____	_____	_____
Vegetable Group	_____	_____	_____
Fat Group	_____	_____	_____
Fruit Group	_____	_____	_____
Calcium/Milk Group	_____	_____	_____
Coffee or tea, plain	_____	_____	_____

Snack:

Protein/Meat Group (A, B, or C)	_____	_____	_____
Starch Group	_____	_____	_____
Vegetable Group	_____	_____	_____
Fat Group	_____	_____	_____
Fruit Group	_____	_____	_____
Calcium/Milk Group	_____	_____	_____
Coffee or tea, plain	_____	_____	_____



Measuring Your Foods

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.

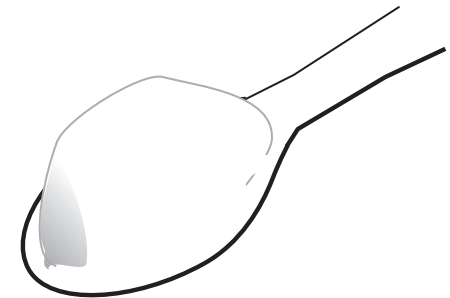
All measurements are level. Do not heap or pack your cups or bowls. For example, to measure a level spoonful, fill your spoon, then run a knife edge across the spoon pushing off all the extra food. Measuring a level cupful would involve the same process.

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

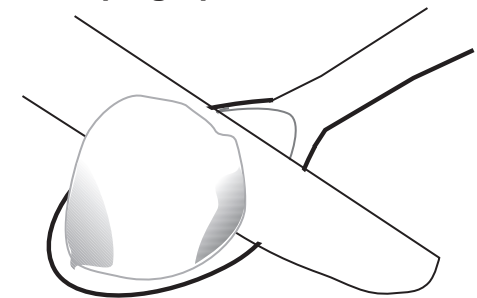
Measure your foods until you can train your eye to be accurate. Check all your measurements every once in a while to be sure you are correct.

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



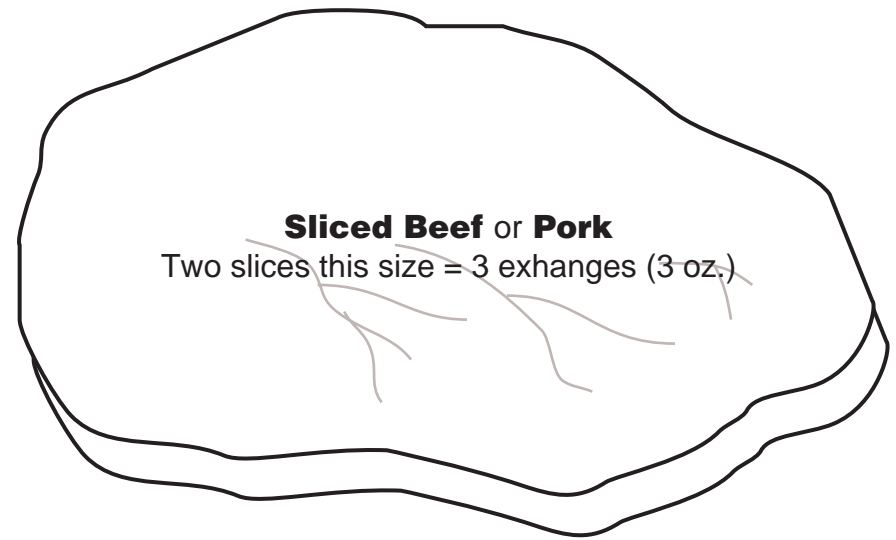
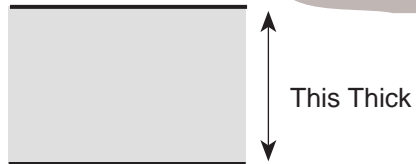
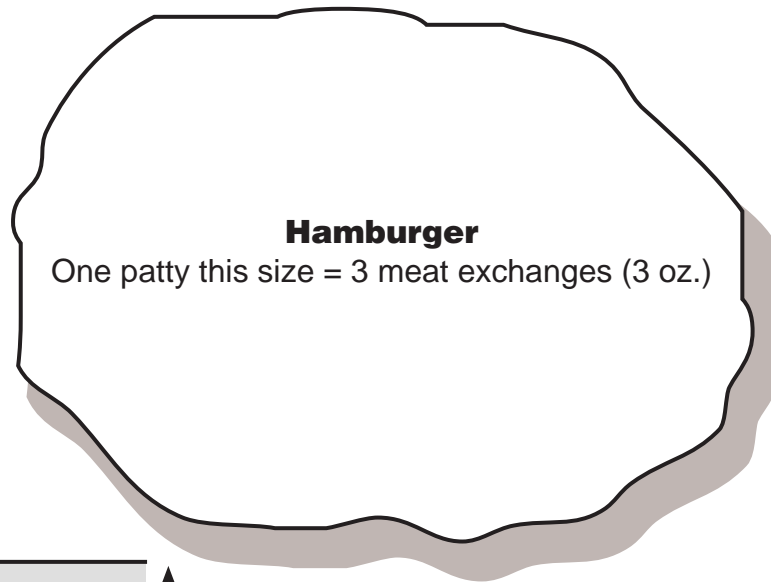
Leveling Spoonful



Level Spoonful

Meat Portion Guide

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>	<i>Food</i>	<i>Measure</i>	<i>Food</i>	<i>Measure</i>
Low Fat		Medium Fat (add 1 fat)		High Fat (add 2 fats)	
Nonfat dry milk powder	1/3 cup	2% milk	1 cup	Whole milk	1 cup
Evaporated skim milk	1/2 cup	2% yogurt	1 cup	Evaporated milk	1 cup
		Fruit flavored 2% milk (add 1 starch)	1 cup		



1 Cup Skim Milk



1/2 Cup Evaporated Milk
Add 2 Fat Exchanges

<i>Food</i>	<i>Measure</i>	<i>Food</i>	<i>Measure</i>	<i>Food</i>	<i>Measure</i>
Seafood		Seafood (add 1 fat)		Seafood (Canned fish with bones) (add 2 fats)	
Sardines, canned in Tomato sauce	2 ounces	Sardines, canned in oil, drained	2 ounces	Salmon	3 ounces
		Mackerel	3 ounces	Mackerel, drained	3 ounces
		Salmon, fresh	3 ounces		

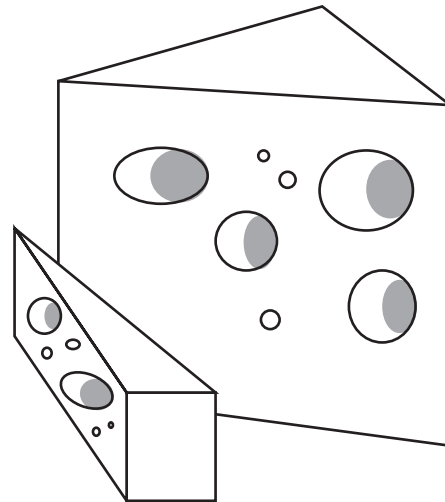
<i>Food</i>	<i>Measure</i>
Cheese	
Swiss	1 ounce
Parmesan	1-1/2 ounces

<i>Food</i>	<i>Measure</i>
Cheese (add 1 fat)	
Parmesan	1 ounce

<i>Food</i>	<i>Measure</i>
Cheese (add 2 fats)	
Cheddar	1-1/2 ounces
American	1-1/2 ounces

<i>Food</i>	<i>Measure</i>
Others	
Dark green leafy vegetables (raw or cooked) such as Kang Kong, spinach, or broccoli	2 cups
Giliy leaves	1 cup

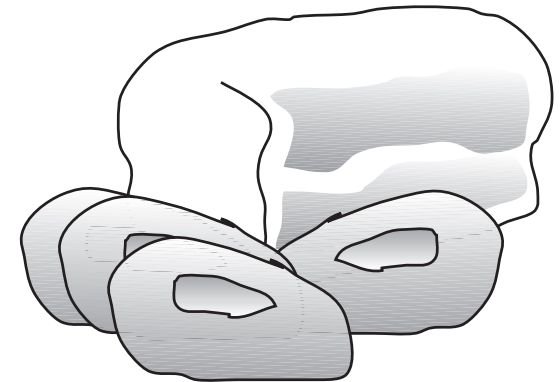
<i>Food</i>	<i>Measure</i>
Others (add 2 fats)	
Tofu (made with calcium)	8 ounces



Starch Group

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

<i>Food</i>	<i>Measure</i>
Bread	
Bagel	1/2
Bread (white, whole wheat, rye, raisin, French)	1 slice (2-1/2" diameter)
Bread crumbs	3 tablespoons
Bun, hamburger	1/2 bun (4" diameter)
Bun, hot dog	1/2 bun
English muffin	1/2
Roll, plain	1 (2" diameter)
Cereals	
All cooked cereals	1/2 cup
#Bran Flakes, All Bran, Raisin Bran	1/2 cup
#Bran (coarse texture)	1/2 cup
Cornmeal, dry	2-1/2 tablespoons
Dry cereals (not sugared)	3/4 cup
Dry cereals (sugared)	1/2 cup
Granola	1/4 cup
Shredded wheat	1/2 cup
#Wheat germ	3 tablespoons
Coconut water	
	1-1/2 cup
Crackers/Snacks	
Bread stick	3/4 ounce
Cabin or Fiji biscuit	1
Cream cracker	1-1/2
Graham	3 (2-1/2" square)
Navy biscuit	1
Popcorn (without butter)	3 cups
Pretzels	3/4 ounce
#Ry Krisp (triple square wafer)	3
Saltines	6 (2" square)
Soda	3 (2-1/2" square)
Whole wheat crackers (Finn, Kavli, Wasa)	2-4 slices (3/4 ounce)



Flour Products

Cornstarch	2 tablespoons
Flour	3 tablespoons
Noodles, beanthread (long rice)	1/2 cup
Noodles, rice (somen)	3/4 cup
Noodles; macaroni, spaghetti, egg, ramen	1/2 cup cooked
Saimin noodles	1/2 cup
Tapioca, dry	2 tablespoons

Rice

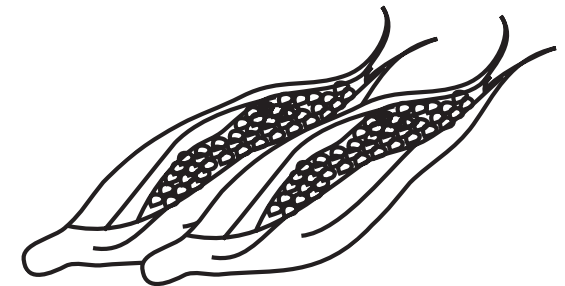
Rice, cooked	
Calrose	1/3 cup
Brown	1/3 cup
Instant	1/3 cup
White, enriched	1/3 cup
Wild	1/3 cup

★Soup

Noodle/rice broth base	1 cup
------------------------	-------

Starchy Vegetables

Arrowroot	1 tablespoon
Banana (cooking)	1/2 cup
#Beans and peas; dried, cooked	1/3 cup
#Beans, baked	1/4 cup
#Beans, butter	1/3 cup
Breadfruit, cooked	1/3 cup
Breadfruit, fermented	1/4 cup
Cassava	1/2 cup
#Corn	1/2 cup
#Corn, cream style	1/3 cup
#Corn on the cob	1 (6" long)
Lima beans	1/2 cup
Mixed vegetables (frozen corn, peas, carrots, lima beans)	1/2 cup
Parsnips	1/2 cup
#Peas, green	1/2 cup
#Plantain (green banana)	1/2 medium or 1/2 cup
Potatoes	
White, whole	1/2 (3 ounces)
White, mashed, plain	1/2 cup
√Sweet potato	1/3 cup
#Squash, winter, yellow	3/4 cup
Taro, swamp	1/2 cup (or 1/2" slice)
Yams, white or yellow	1/2 cup



★Food high in salt
√Good source of Vitamin A
#High in fiber

Starch Group (Add one fat)

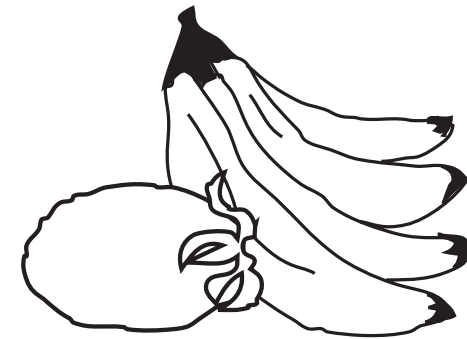
One starch contains 125 calories, 15 grams of carbohydrate, 3 grams of protein, and 5 grams of fat.

<i>Food</i>	<i>Measure</i>
Bread	
Biscuit	1 (2-1/2" diameter)
Cornbread	1 (2" cube)
Chowmein noodles	1/2 cup
Pancake (4" across)	2
Coconut	
Immature meat (sponge)	1-1/2 cups
Crackers/Snacks	
Popcorn	
Microwave - light	3 cups
Microwave - regular (add an extra fat to total)	3 cups
Ritz	6
Wheat thins	14
Cheez-Its	16
Flour Products	
Stuffing	1/4 cup
Rice	1/3 cup

Fruit Group

One fruit serving contains approximately 60 calories and 15 grams of carbohydrate. These fruit may be fresh, cooked, dried, 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>
+Abiyuch	1/2 cup
Apple, fresh	1/2 medium or 1 small (2" diameter)
Apple, mountain	3 medium
Apple, water	3 medium
Applesauce, unsweetened	1/2 cup
Apple juice	1/2 cup
√Apricots, canned	4 halves
Banana	4 inches or 1/2 small or 1 local size
Blueberries	3/4 cup
√+Cantalope	1/3 of 5" diameter fruit (1 cup)
Cherries, canned	1/2 cup
Cranberry juice cocktail	1/3 cup
Figs, fresh or canned	2 medium
Fruit cocktail	1/2 cup
Fruit, dried	2 tablespoons
Grapes, fresh	10 grapes, large or 15 small
Grape juice	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)



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

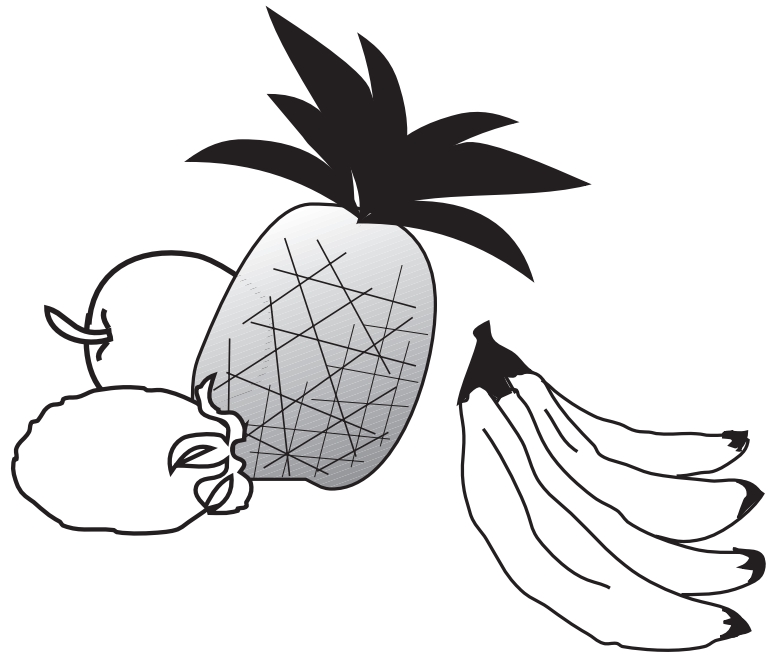
Fruit Group *(Continued)*

<i>Food</i>	<i>Measure</i>
+Honeydew melon	1/8 medium (1 cup)
+Jack fruit	1/3 cup
Juice (other)	1/2 cup
+Kiwi	1 large
+Lychees	10 fruits or 1/2 cup
+Mandarin orange	3/4 cup
√+Mango, ripe	1/2 cup or 1/2 small
Mango (green)	1/2 cup or 1/2 small
√Nectarine	1 (1-1/2" diameter)
Nectars, all kinds	1/2 cup
+Orange, fresh	1/2 large or 1 small (2-1/2" across)
+Orange juice	1/2 cup
√Pandanus fruit	1/4 cup (add 1 fat)
√+Papaya, ripe	1/2 medium or 1 cup cubed
Papaya (green)	1/2 medium or 1 cup cubed
+Passion fruit juice	1/2 cup
√Peach, fresh	1 medium
Peach, canned	1/2 cup or 2 halves
Pear, dried	1
Pear, canned	2 small halves or 1/2 cup
+Pineapple, fresh,	3/4 cup or 1/8 medium
+Pineapple, canned in own juice	1/3 cup
+Pineapple juice	1/2 cup

Plums, fresh	2 medium
Plums, canned	4
+Pomelo (Pommalo)	1 cup sections
#Prunes, dried	3 medium
Prunes, juice	1/3 cup
Raisins	2 tablespoons
+Rambutan	1/2 cup
Rowal (football fruit)	1/3 cup
Soursop, pulp	1/3 cup
+Starfruit	1/2 cup
#+Strawberries	1-1/4 cups
+Tangerine	2 medium
Watermelon	1-1/4 cup cubed

+Good source of vitamin C
 ✓Good source of vitamin A
 #High in fiber

1



Vegetable Group

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

Bamboo shoot
Banana bud/flower
Beans, goa (winged)
Beans, green
√+Bele leaves
Bilimbi
Bittermelon, fruit
√+Broccoli
+Brussel sprouts

√+Cabbage, Chinese
Cabbage, head
√Carrots
√+Cassava leaves (1/4 cup is
equivalent to 1 serving)
+Cauliflower
Celery
Cucumber

Eggplant

√Fern leaves, stems & tips

√Giliy leaves
Gourd
+Green pepper

Kangkong (Seri)

Mushrooms

Okra
Onion, round

√Papaya, green
Pea pods
+Pepper, green or bell
√Pumpkin
Pumpkin leaves
Pumpkin flowers

√Spinach
√Squash, leaf tips
√Sweet potato leaves/shoots (1/4 cup is
equivalent to 1 serving)

√+Taro leaves
+Tomato, canned or fresh
+Tomato juice
Tomato paste

√+Vegetable juice

Zucchini

+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

Green onions

√Kang kong (Seri)

Lettuce

√Purslane

+Radishes (includes daikon)

√Radish leaves

Seaweed
Sprouts

Watercress

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

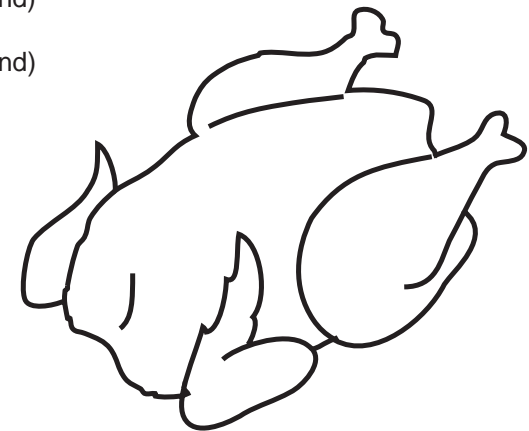


Protein/Meat Group A (Lean)

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>
Beef	
★Chipped beef	1 ounce or 1 slice (3" x 2" x 1/4")
Lean flank steak, sirloin, tenderloin steaks, round	1 ounce or 1 slice (3" x 2" x 1/4")
★ Beef jerky	1/2 ounce
Cheese	
Cheese containing less than 5% fat	1 ounce or 1" cube
Cottage, any type	1/4 cup
Chicken (skin removed)	
Breast	1 ounce or 1 slice (3" x 3" x 1/4")
Drumstick	1 ounce or 1/3 piece (3 pieces to one pound)
Thigh	1 ounce or 2/3 piece
Roasted	1 ounce or 1/2 piece (4 pieces to one pound)
Chicken , ground	1 ounce
Egg	
Whites, large	3



★Food high in salt

Fish, fresh

Abalone, catfish, cuttlefish, eel, jack, lobster, mackerel (opelu)	1 ounce
Cod, herring, mahimahi, mullet, parrot, red snapper, reef fish, sashimi, shark, sole, stingray, sturgeon, tuna	1 ounce or 1 slice (3" x 3" x 1/4")
Clams, crab, cuttlefish, lobster, opihi, scallops, shrimp, squid, octopus	2 ounces
Fish cake paste	1/4 cup
Oysters	6 medium
★Sardines, canned in oil, drained	2 ounces
Sea cucumber, intestines	1-1/2 cup
★Tuna, canned in water	1/4 cup

Pork

Lean ham, tenderloin, ★Canadian bacon	1 ounce or 1 slice (3" x 3" x 1/4")
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Tripe

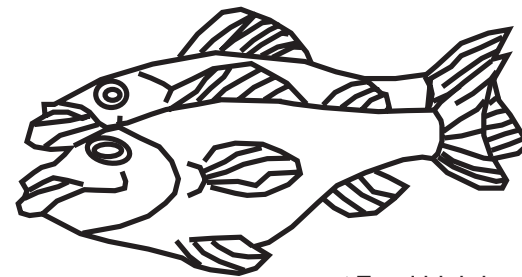
1 ounce

Turkey (skin removed)

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

Turtle

2 ounces

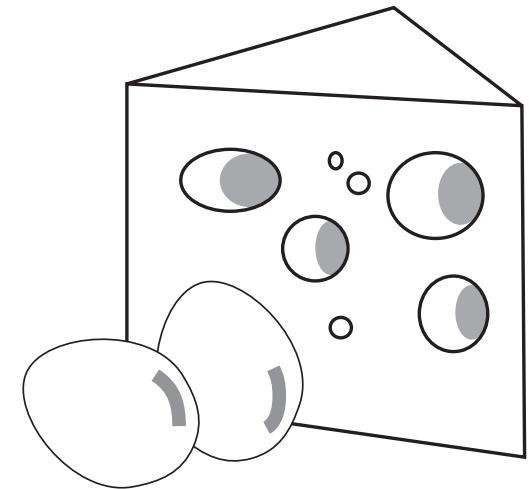


★Food high in salt

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>
Beef (most types fall into this category, fat trimmed)) Roast (rib, chuck, rump) ★Ground beef (15% fat), meatloaf Steak (cubed, porterhouse, T-bone)	1 ounce or 1 slice (3" x 2" x 1/4") 1 ounce 1 ounce or 1 slice (3" x 2" x 1/4")
Chicken (with skin)	1 ounce
Dog	1 ounce
Duck, Goose (skin and fat removed)	1 ounce
Egg , whole (high in cholesterol; limit to 3 per week) Egg substitutes (with 56-80 calories per 1/4 cup)	1 large 1/4 cup
Lamb (most lamb products fall into this category, fat trimmed)) Chops, lean leg, loin, rib, shank, shoulder, sirloin	1 ounce or 1 slice (3" x 2" x 1/4")
Liver, heart, kidney, or gizzards (high in cholesterol)	1 ounce
Luncheon meat (86-94% fat free)	1 ounce
Pigeon	1 ounce
Pork (most pork products fall into this category, fat trimmed) ★Ham, butt, loin, shoulder, arm, picnic Pig's feet Shoulder blade	1 ounce or 1 slice (3" x 2" x 1/4") 1 ounce 1 ounce or 1 slice (3" x 2" x 1/4")
Salmon , canned	1/4 cup
Tofu	1/3 cup or 3 ounces (1/6 of a block)
Turtle eggs	1 egg
Tuna , canned in oil, drained	1/4 cup



★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>
Beef	
Brisket	1 ounce
Corned beef	1 ounce
Ground beef (20% or more fat)	1 ounce
Lean short ribs	1 ounce
Rib eye	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
Cheese (all regular cheeses)	
Cheddar, American, Swiss	1 ounce or 1" cube
★ Cold cuts	1 slice
Fish (any fried fish product)	1 ounce
★ Frankfurter	
Turkey or chicken	1 (10 to a pound)
Beef or pork (add 1 fat)	1 (10 to a pound)
Lamb	1 ounce or 1 slice (3" x 2" x 1/4")
★ Luncheon meat (such as bologna, salami)	1 ounce
Peanut butter	1 tablespoon
Pig ear	1/2 ear
Pork	
Spareribs, chops, loin (back ribs), ground pork, country style ham	1 oz or 1 slice (3" x 2" x 1/4")
★ Sausage	
Portugese, Vienna	1 ounce, link or pattie
★ Spam (canned luncheon meat)	1 ounce
Tails	
Chicken	1/2 ounce
Turkey	1/2 ounce
Wings	
Chicken	1 (6 pieces per pound)
Turkey	1/4



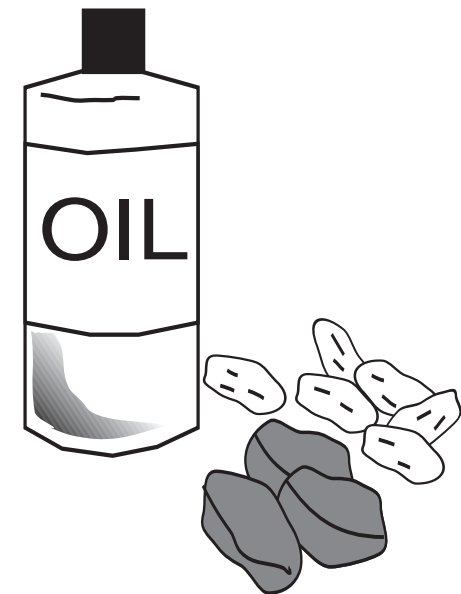
★Food high in salt

Fat Group A (high in unsaturated fats)

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.

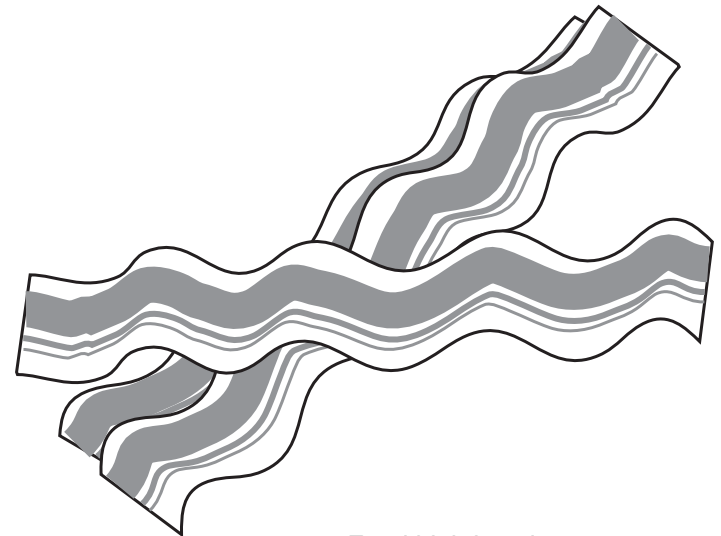
<i>Food</i>	<i>Measure</i>
Avocado	1/6 or 2 tablespoons mashed
Dressings, Salad	
All varieties	1 tablespoon
Reduced calorie	2 tablespoons
Mayonnaise	1 teaspoon
Mayonnaise, reduced calorie	1 tablespoon
Margarine (first ingredient, liquid oil)	1 teaspoon
Nuts	
Almonds	6
Cashews	1 tablespoon
Chestnuts	1-1/2 tablespoons
Macadamia	1 tablespoon
Peanuts	1 tablespoon (20 small or 10 large)
Pecans	1 tablespoon
Pistachio	1 tablespoon
Walnuts	4 halves (1 tablespoon)
Other nuts	1 tablespoon
Oil	
Canola, cottonseed, corn safflower, peanut, sesame, soybean, sunflower and vegetable	1 teaspoon
Olives , ripe	10 small or 5 large
Peanut butter	1/2 tablespoon
Sunflower seed	
unshelled	1/4 cup
shelled	1 tablespoon
Tartar sauce	2 teaspoons



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>
Butter	1 teaspoon
★ Bacon , crisp	1 slice
Cheese, cream	1 tablespoon
Coconut	
Embryo	1 cup (add 1-1/2 starch)
Immature meat	1-3/4 cup (add 1 starch)
Mature meat	1 piece (1" x 1" x 3/8")
Cream, no water added	1 tablespoon
Milk (1 tablespoon water to 1 tablespoon cream)	1 tablespoons
Coconut, grated	2 tablespoons
Coconut oil	1 teaspoon
Coffee creamer	
Liquid	2 tablespoons
Powder	4 tablespoons or 1/4 cup
Cream	
Table	2 tablespoons
Whipped	2 tablespoons
Whipping, heavy	1 tablespoon
Margarine (first ingredient hydrogenated or hardened oil)	1 teaspoon
★ Salt pork	1/4 ounce
Solid cooking fats , lard, shortening	1 teaspoon
Sour cream	2 tablespoons



★Food high in salt.

Note: A medium **turkey tail** contains 12 fat servings which equals 60 grams of fat.

Foods that Do Not Need to be Measured

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
- Coffee, plain
- Soft drinks, artificially sweetened
- Sugar free drink mixes
- Tea, plain
- Water

Desserts

- Gelatin desserts, artificially sweetened
- Sugar substitutes

Miscellaneous

- ★Finedene
- Non stick pan spray
- Pickles, unsweetened
- Seaweeds
- Taco sauce

★Soups

- Bouillon, without fat
- Clear broth

Seasonings

- Chives
- ★Fish sauce
- Garlic
- Ginger
- Lemon juice
- Lemon grass
- Lime juice
- Molly McButter*
- ★MSG (Ajinomoto)
- Mustard, dry or prepared
- Parsley
- Pepper
- Purslane
- ★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 ounce, can	3-1/2 fat
Wine	4 ounce, 1/2 cup	2 fat
Wine cooler	12 ounce bottle	1 starch, 2-1/2 fat
Whiskey, gin, rum, vodka (100 proof)	1-1/2 ounce or 1 shot	3 fat
Animal crackers	8 crackers	1 starch
Bar-b-que sauce	4 tablespoons	1/2 starch
Brownie, no frosting	1 (3" x1-1/2" x 7/8")	1 starch, 1 fat
Cake, angel food or sponge	1/12 cake	2 starch
Cake, no icing	cupcake size, flat top	1 starch, 1 fat
Cake, with icing	cupcake size, flat top	1 starch, 2 fat
Candy bar (Snickers)	1 (2 ounces)	2 starch, 1 fat
Cheese cake	3 ounces	2 starch, 3 fat
Chips - Cheese puffs	1 ounce	1 starch, 2 fat
Corn chips	1 ounce	1 starch, 2 fat
Onion rings (Funyun)	1 ounce	1 starch, 1 fat
Potato chips	1 ounce	1 starch, 2 fat
Tortilla chips	1 ounce	1 starch, 1-1/2 fat
Cocoa powder, sweetened	1 ounce	1 starch, 1 fat
Cookies	2 small (1-3/4" across)	1 starch, 1 fat
Cupcake, chocolate with icing	1 small	1-1/2 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

*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>
Granola bars	1 small	1 starch, 1 fat
Ice cream, any flavor	1/2 cup	1 starch, 2 fat
Ice cream bar with nuts	1 bar (4 ounces)	2 starch, 4 fat
Ice cream bar fudgsicle	1 bar	1 starch
Ice milk	1/2 cup	1 starch, 1 fat
Jam, jelly, honey, syrup	1 tablespoon	1 fruit
Jello	1/2 cup	1 fruit
Juice drinks (Koolaid, Tang)	12 ounce can/1-1/2 cup	2-1/2 fruit
Ketchup	3 tablespoons	1/2 starch
Macaroni or Potato Salad	1/2 cup	1 starch, 3 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
Pudding	1/2 cup	2 starch, 1 fat
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
Spaghetti with tomato sauce, canned	1 cup	2 starch
Stew, beef	1 cup	1 starch, 2 medium fat
Sugar	1 tablespoon	1 fruit
Sugar cane, stalk, peeled	4 ounce	1 fruit
Syrup	1 tablespoon	1 fruit
Tea, sweetened	12 ounce can	2-1/2 fruit
Vanilla wafers	6 small	1 starch
Yogurt with fruit	1 cup	1 milk, 1 fruit, 1 fat

Common Recipes

<i>Recipe</i>	<i>Measure</i>	<i>Food Group</i>
+Athukuy Waamngin E Gak'ik (Fruit Salad)	1/2 cup	1 fruit
√Banana Flower Salad	1/2 cup	1/2 lean meat, 1 vegetable
Banana Jam	1 tablespoon	1 fruit
Chicken Adobo	4 ounces	4 lean meat
Fish Stew	1/2 cup	1/2 starch, 1 lean meat, 1 vegetable
+√Fried Fish with Bele (Spinach) Leaves	4 ounces or 1/2 cup	3 lean meat, 1/2 vegetable
Guava Jam	1 tablespoon	1 fruit
Hash	4 ounces or 1/2 cup	1 starch, 1 high fat meat, 1 fat
Lu-Pulu	6 ounces or 3/4 cup	1-1/2 starch, 1-1/2 high fat meat, 1 vegetable, 2 fat
Mango Bread	1 slice or 2 ounces	1 starch, 1 fat
Meatless Burger	4 ounces	1 medium fat meat, 2 vegetable, 1 fruit, 1 fat
Mongo Lon Sak	8 ounces or 1 cup	2 starch, 1 lean meat, 5 fat
+√Ngongor - Kamot Dish	6 ounces or 3/4 cup	1 starch, 1 fruit, 1-1/2 fat
+√Ngongor-Nig	8 ounces or 1 cup	4 lean meat, 1 vegetable, 1/2 fruit
Ngongor-Nimen	8 ounces or 1 cup	4 medium fat, 1 vegetable, 1/2 fruit, 1 fat
Nig Ni Cholgoy	4 ounces or 1/2 cup	1 starch, 1 lean meat, 1 vegetable, 1 fat
Nig Ni Yuim	8 ounces or 1 cup	1 lean meat, 1 vegetable, 5 fat
√Noodle Dinner	8 ounces or 1 cup	3 starch, 1 lean meat, 1 vegetable
Papaya Ice Cream	4 ounces or 1/2 cup	2 fruit
Pilolo	8 ounces or 1 cup	5 fruit, 1-1/2 fat
Pineapple Jam	1 tablespoon	1 fruit
Pineapple Turnover	1 turnover	1 starch, 1 fruit, 1 fat
√Pumpkin with Filling	4 ounces or 1/2 cup	1 medium fat meat, 1-1/2 vegetable, 3 fat
√Pumpkin Scones	1 scone	3 starch, 1-1/2 fruit, 1 vegetable, 1/2 fat

+Good source of vitamin C

√Good source of vitamin A

Common Recipes *(Continued)*

<i>Recipe</i>	<i>Measure</i>	<i>Food Group</i>
Rice Curry	6 ounces or 2/3 cup	1-1/2 starch, 2 fat
√Rice Florentine	1 cup	2 starch, 1 vegetable, 1 fat
Rice Picante	1 cup	4 starch, 1 fruit, 1 fat
Ripe Breadfruit Bread	1 slice or 2 ounces	2 starch, 1 fat
√Roast Chicken and Breadfruit Stuffing	8 ounces or 1 cup	1 low fat meat, 2 medium fat meat, 2 vegetable
Scalloped Fish	4 ounces	2 low fat meat, 1 starch, 3 fats
Spanish Rice	1 cup	3 starch, 1 vegetable, 1 fat
√Sweet Potato Pancakes	4 ounces or 2 small pancakes	1-1/2 starch, 1/2 medium fat meat
Tapioca Bibinga	1/2 cup	1 medium fat meat, 1-1/2 fruit, 1/2 milk, 5 fat
√Taro Leaves with Chicken	1 cup	2-1/2 medium fat meat, 1 vegetable, 1 fat
Taro Stem Salad	1/2 cup	1 vegetable, 2 fat
Tuna Burger	1 patty	3 medium fat meat, 2 fat
White Sauce	1/2 cup	1/2 milk, 1 fat
Yam Tempura	1/2 cup	1-1/2 starch, 3 fat

+Good source of vitamin C

√Good source of vitamin A

Edible Plants of Yap

<i>Species Name</i>	<i>English Name</i>	<i>Sp. No.</i> ¹	<i>Yapese Name</i>
FRUITS			
Ananas comosus	pineapple	E086	ngongor, giyoer
Annona muricata	soursop	E101	saw'saw'
Averrhoa carambola	starfruit	E018	arfathnstar, "starfruit"
Carica papaya	papaya, pawpaw	E078	babay
Citrus aurantifolia	lime	E052	remong
Citrus grandis	pommelo	E090	gurgur
Citrus cf. hystrix	Yapese lemon	—	remong
Citrus cf. mitis	kalamansi	—	ginggang
Citrus reticulata	mandarin	E061	gologaw
Citrus sinensis	orange	E070	gurgur
Citrullus lanatus	watermelon	E095	mayis
Cucumis melo	cantelope	E097	merong
Ficus senftiana	wild fig	—	wuchee
Ficus tinctoria	dyer's fig	—	wachgey
Mangifera indica	mango	E064	mangga
Muntingia calabura	Panama cherry	—	budo
Musa x paradisiaca	banana	E012	p'aw
Musa troglodytarum	mountain plantain	—	aray
Pangium edule	football fruit	—	rowal
Passiflora edulis	passionfruit	E076	tumatis, lelbuy, lolboy
Psidium guajava	guava	E042	abas
Syzygium malaccense ³	Malay apple	E111	arfaz
VEGETABLE-LIKE FRUITS			
Averrhoa bilimbi	averrhoa	—	kumin, uler
Benincasa hispida	wax gourd	—	zalrus
Capsicum annum	green pepper	D096*	taabil
Craveta speciosa	craveta	—	abiyuch
Cucumis sativa	cucumber	D039*	kyuri
Cucurbita pepo	pumpkin	D087*	galbas, p'aw ni gamanman
Cucurbita pepo	squash	D094	galbas
Hibiscus esculenta	okra	D072*	"okra"
Lycopersicon esculentum	tomato	D118*	"tomato"
Momordica charantia	bitter melon	—	amargoso
Persea americana	avocado	E121	"avocado"
Solanum melongena	eggplant	D049*	nas
Trichosanthes cucumerina	snake gourd	—	porchoyog

Edible Plants of Yap *(Continued)*

<i>Species Name</i>	<i>English Name</i>	<i>Sp. No.</i> ¹	<i>Yapese Name</i>
STARCHY STAPLES			
<i>Alocasia macrorrhiza</i>	giant taro	A062	la'iy nkan
<i>Artocarpus altilis</i>	breadfruit	A002*	zow
<i>Artocarpus heterophyllus</i>	jakfruit	A091	zow ni yima unum
<i>Colocasia esculenta</i>	taro	A046*	mal
<i>Cyrtosperma chamissonis</i>	giant swamp taro	A103*	lak'
<i>Dioscorea alata</i>	yam	A071*	du'og
<i>Dioscorea esculenta</i>	Chinese yam	A078	zep
<i>Ipomoea batatas</i>	sweet potato	A034*	kamotiy
<i>Manihot esculenta</i>	cassava	A011*	ziyogang
<i>Musa x paradisiaca</i>	plantain	A004*	Pa'w ni mlum
<i>Xanthosoma sagittifolium</i>	American taro	A063*	la'iy, Honolulu
GREEN LEAVES			
<i>Brassica chinensis</i>	Chinese cabagge	C094*	nappa
<i>Brassica juncea</i>	nappa	—	nappa
<i>Brassica oleracea</i>	head cabbage	C019*	"head cabbage"
<i>Colocasia esculenta</i>	taro	C097*	mal
<i>Curcubita pepo</i>	pumpkin	C025*	galbas, p'aw ni gamanman
<i>Hibiscus manihot</i>	bele	C005	"bele"
<i>Ipomoea aquatica</i>	swamp cabbage	C098*	kangkung, kangkong
<i>Ipomoea batatas</i>	sweet potato	C038*	kamotiy, kamut
<i>Ipomoea littoralis</i>	giliy	—	giliy
<i>Latuca sativa</i>	lettuce	C045	"lettuce"
<i>Moringa oleifera</i>	horseradish tree	C026*	kalumngay
<i>Piper betel</i>	pepper leaf	—	gabuy
<i>Xanthosoma sagittifolium</i>	American taro	C093*	La'iy, Honolulu
OTHER VEGETABLES			
<i>Allium cepa</i> @	green onion	D077*	nengi
<i>Areca catechu</i>	betel nut	F006	buw
<i>Brassica oleracea</i>	broccoli	D122	"broccoli"
<i>Cocos nucifera</i>	coconut	P026*	uchub
<i>Daucas carota</i>	carrot	D002*	"carrot"
<i>Inocarpus fagifer</i>	Tahitian chestnut	F064*	Bu'oy
<i>Phaseolus vulgaris</i>	green bean	G005	mame
<i>Psophocarpus tetragonolobus</i>	winged bean	G032	mame, star bean
<i>Saccharum officinale</i>	sugarcane	—	mak'il
<i>Terminalia catappa</i>	tropical almond	F059	kel
<i>Zea mays</i>	corn	D059	tomorokos

FAMINE/MINOR FOODS

Allium sp.@	Chinese leek@	—	nira
Allophylus timoriensis	—	—	engel, angel
Amaranthus sp.@	amaranth@	C009	@
Anacardium occidentale	cashew apple	—	manga
Annona reticulata	bullock's heart@	—	"corozon"
Annona cherimola	chermoya	—	sawsawchuren marg
Annona squamosa	custard apple	E027	"atis"
Apium graveolens	celery	D027	"celery"
Artocarpus mariannensis	wild breadfruit	—	thow (thowan pan)
Asplenium nidus	bird's-nest fern	—	chaz
Bambusa vulgaris	bamboo	—	puw
Brassica oleracea	cauliflower	D025s*	"cauliflower"
Bruguiera gymnorrhiza	oriental mangrove	—	yangach, rok
Cajanus cajan	pigeon pea	—	"pigeon pea"
Centella asiatica	pennyworth	—	chilmofon
Chrysophyllum cainito	star apple	—	kainito
Citrus aurantium	sour orange	—	gurgur nu waab
Citrus limon	limon	E051	remong
Citrus macroptera	Yapese orange	—	gurgur, marathal
Cnidioscolus chayamansa@	chaya	—	—
Coffea arabica	coffee	W035	koffiy
Cucurbita maxima	pumpkin@	—	glabas, p'awnigamanman
Cycas circinalis	cycad	—	faltir
Davallia solida	leather fern	—	tilbug, chichro'ol
Dioscorea bulbifera	bitter yam	—	yyoy, rok
Dioscorea pentaphylla	5-fingered yam	A074	doel
Diospyros ferrea	—	—	achingal
Enhalus acoroides	sea grass	—	lem
Eugenia uniflora	Surinam cherry	—	—
Ficus virens	Yapese banyan	—	wachgey (aw)
Fortunella japonica	kumquat	—	—
Cordyline fruticosa	ti	—	rich
Hibiscus rosa-sinensis	red hibiscus	—	"hibiscus"
Hibiscus sabdariffa	roselle	—	floras
Lagenaria siceraria	gourd	—	sirouri
Luffa cylindrica	loofa	—	—
Luffa acutangula	angled loofa	—	—
Melastoma malabathricum	—	—	ramluw
Morinda citrifolia	Indian mulberry	—	mangal'weg
Nephrolepis sp.@	sword fern	—	garniw
Nypa fruticans	nypa palm	—	aying
Pandanus tectorius	screwpine	@	ngir
Pachyrhizus erosus	yam bean	—	deday?
Passiflora quadrangularis	granadilla	—	kudamono
Phaseolus mungo	mung bean	G016?	mame
Physalis angulata	wild cape-gooseberry	—	pilpil
Portulaca oleracea	purslane	—	@
Pouteria sp.	egg fruit	—	—
Punica granatum	pomegranate	—	"abas"
Pueraria lobata	kudzu	—	deday

Edible Plants of Yap (Continued)

Species Name	English Name	Sp. No. ¹	Yapese Name
FAMINE/MINOR FOODS (Continued)			
Raphanus sativus	radish, daikon	D088?	daikong
Rhizophora spp.	mangrove	—	malil
Salacia cf. chinensis	—	—	woway
Sechium edule	chayote	D034	—
Sesbania grandiflora	sesbania	—	—
Spondias dulcis	vi-apple	—	titimer, tutumer
Spondias mombin	hog plum	—	titimer
Syzygium caryophyllus	bell apple	—	arfath
Syzygium samarangense	wax apple	—?	arfath
Tacca leontopetaloides	Polynesian arrowroot	A001	chobchob
Tamarindus indica	tamarind	—	—
Tetragonia expansa	New Zealand spinach	C001*	"New Zealand spinach"
Theobroma cacao	cocoa	W034?	kakaw
Trichosanthes angina	snake gourd	—	porchoyog
Vigna sesquipedalis	long bean	G057?	mame
Zizphus mauritiana	jujube	—	—

¹Key number in Dignan, C.E. et al. 1994. The Pacific Islands foos composition tables. So. Pac. Comm., Noumea.

²Falanruw, M.V. 1995. The Yapese agricultural system. Univ. So. Pac. Ph.D. dissertation, and pers. comm. (1996).

*Indicates additional key numbers as well.

³This is what is probably incorrectly identified as *Syzygium samarangense* in the So. Pac. Comm. book.