A D A P
P R O J E C T
Agricultural Development in the American Pacific
Pacific Land Grant Programs

Chu'uk

Food Choices for Healthful Living

based on food group lists

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Acknowledgements

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Nutrient analysis sources:

    Nutritionist III, "N" Squared Computing, 1992

    Exchanges for All Occasions, by M. Franz, MS, RD, 1993

    Food Intake Analysis System, University of Texas Health Science Center
      at Houston, 1992

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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Table of Contents

Introduction

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

Namonuito Atoll

Hall Islands

Nomwin Atoll

Murilo Atoll

Western Islands

Truk Atoll

Pollap Atoll

Polowat Atoll

Nema

Upper Mortlocks

Losap Atoll
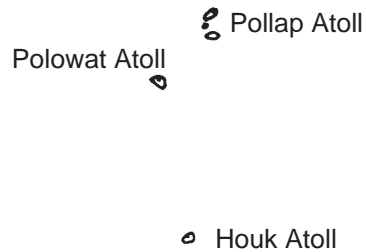
Houk Atoll

Namoluk Atoll

Etal Atoll

Lower Mortlocks

Lukunoch Atoll

Satowan

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.
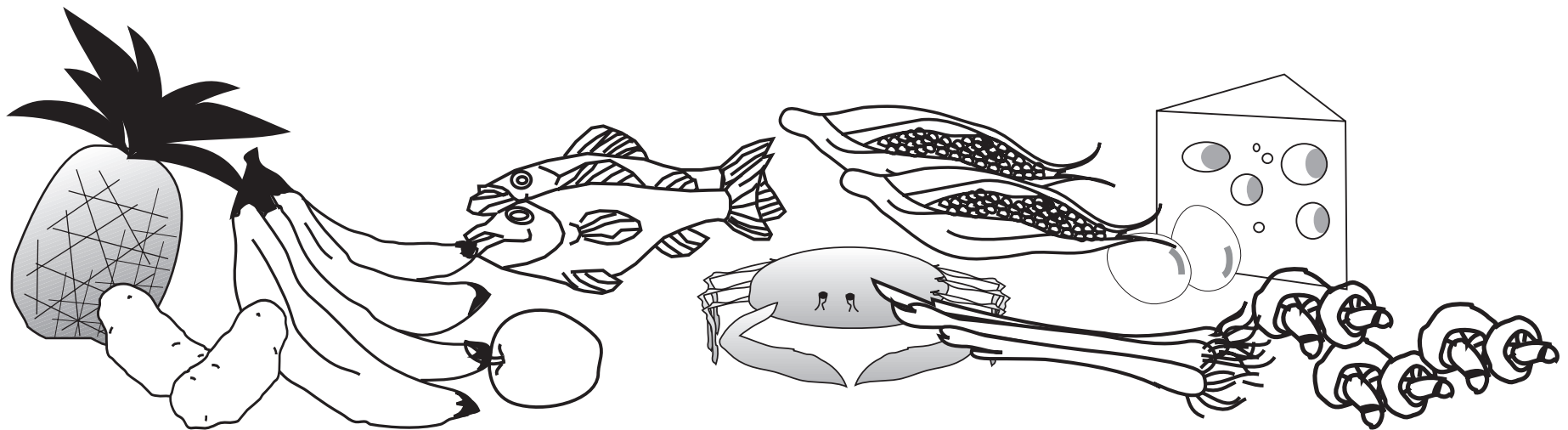
The Food Groups

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.
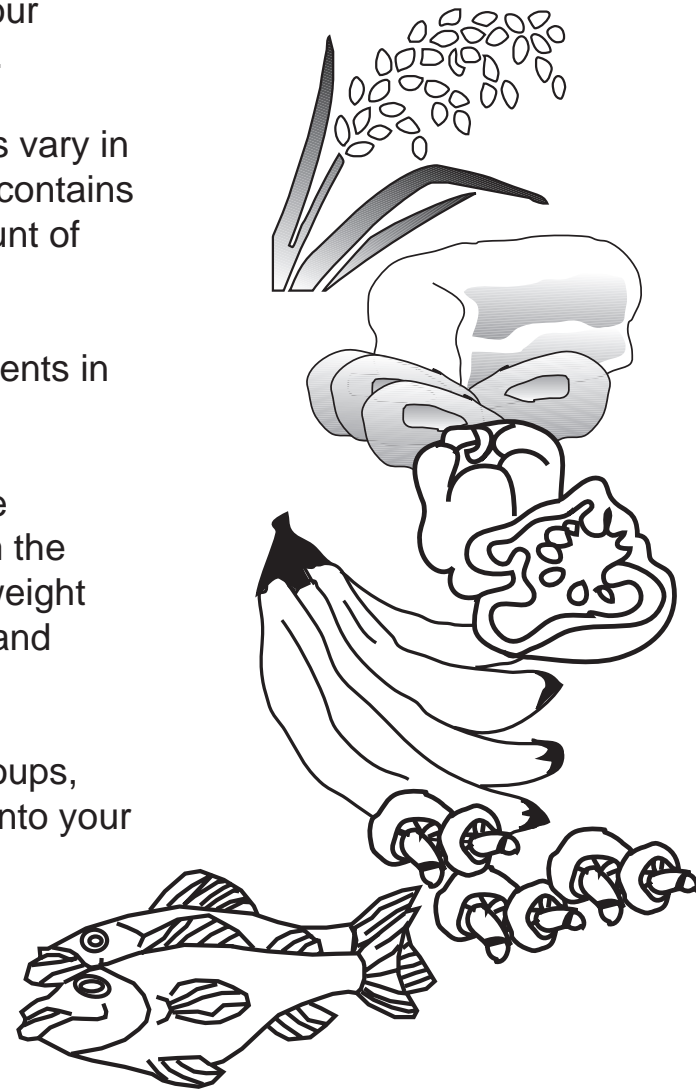
Nutrient Content by Food Group

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.

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.
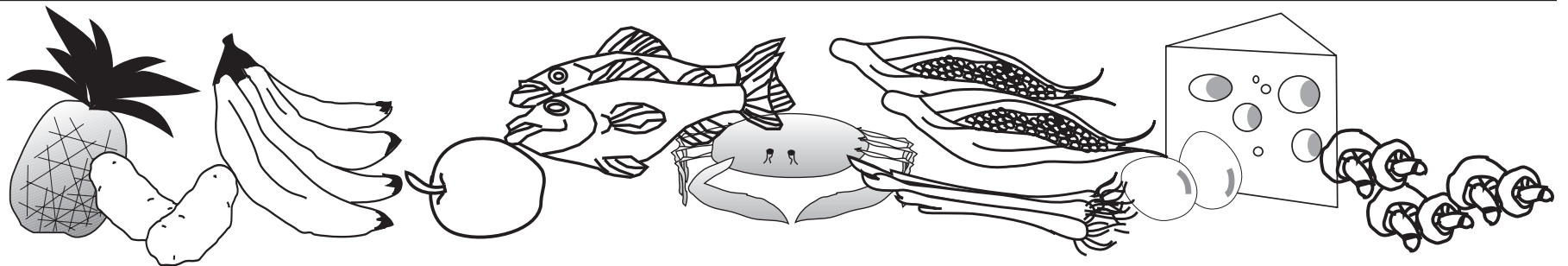
Chu'uk Sample Menu

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	3	3	7	2	2	1	3

Breakfast

1 Starch	1 slice whole wheat toast
1 Fat	1 teaspoon margarine
1 Free	1 cup coffee
1/4 Calcium/Milk	2 tablespoon evaporated skim milk
1 Fruit	1/2 banana (4" long)

Lunch

2 Protein/Meat A	2 ounces fish, baked
2 Starch	2/3 cup rice
2 Vegetable	1/2 cup kang kong and 1/2 cup green beens
1 Fruit	1 cup papaya

Snack

2 Starch	2/3 cup breadfruit
1 protein/Meat C	1 chicken wing

Dinner

2 Protein/Meat B	Stirfry: 2 ounces beef steak
1 Vegetable	1/2 cup bela leaves
1 Free	1/2 cup swamp cabbage
2 Fat	2 teaspoon oil
1 Calcium/Milk	1/2 cup tofu
2 Starch	2/3 cup rice
1 Free	1 cup coffee
1/4 Calcium/Milk	2 tablespoon evaporated skim milk

Snack

1 Fruit	1/2 mango

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
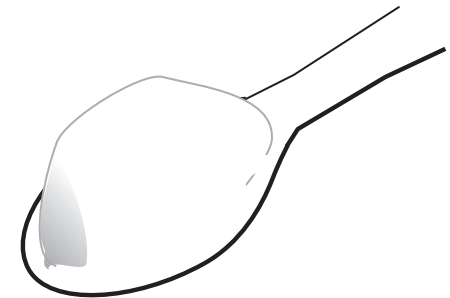
Heaping Spoonful
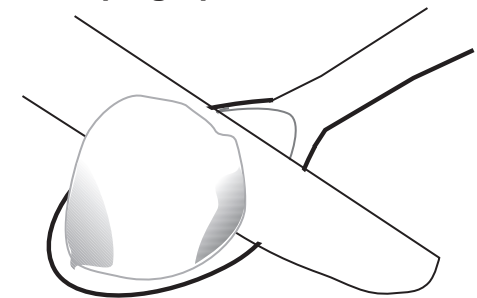
Leveling Spoonful

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.

Hamburger
One patty this size = 3 meat exchanges (3 oz.)

Sliced Beef or **Pork**
Two slices this size = 3 exhanges (3 oz.)

This Thick

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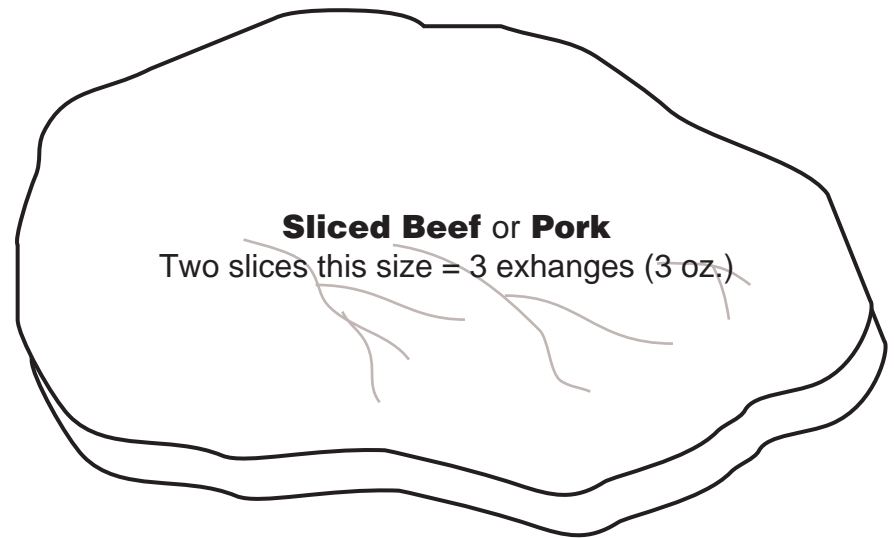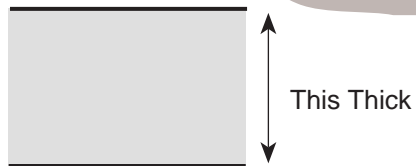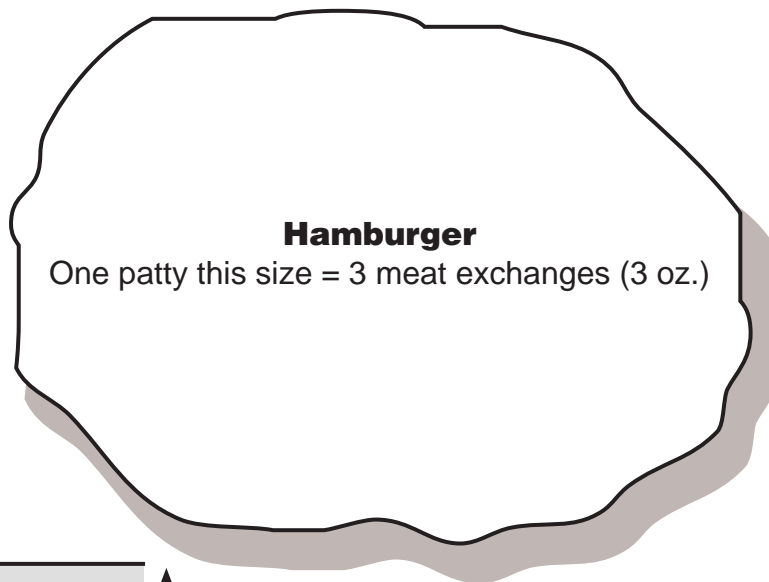
4 ounces raw meat without bone	=	about 3 ounces cooked
5 ounces raw meat with bone	=	about 3 ounces cooked
1 small chicken leg and thigh or 1/2 breast	=	about 3 ounces cooked

Calcium/Milk Group

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

Food	Measure
Low Fat	
Skim milk	1 cup
1% milk	1 cup
Nonfat dry milk powder	1/3 cup
Evaporated skim milk	1/2 cup
Plain nonfat yogurt	1 cup

Food	Measure
Medium Fat (add 1 fat)	
2% milk	1 cup
Evaporated 2% milk	1/2 cup
Plain lowfat (2%) yogurt	1 cup

Food	Measure
High Fat (add 2 fats)	
Whole milk	1 cup
Filled milk	1 cup
Evaporated milk	1 cup
Plain yogurt	1 cup
Filled condensed milk	1/3 cup

1 Cup Skim Milk

**1/2 Cup Evaporated Milk
Add 2 Fat Exchanges**

Food	Measure
Seafood	
Sardines, canned in	
Tomato sauce	2 ounces

Food	Measure
Seafood (add 1 fat)	
Sardines, canned in oil,	
drained	2 ounces
Mackerel	3 ounces
Salmon	
Chinook	3 ounces
Chum	3 ounces
Coho	3 ounces
Pink	3 ounces

Food	Measure
Seafood (Canned fish with bones) (add 2 fats)	
Salmon	
Sockeye, drained	3 ounces
Coho, drained	3 ounces
Mackerel, drained	3 ounces

Food	Measure
Cheese	
Swiss	1 ounce
Romano	1 ounce
Parmesan	1-1/2 ounces
Mozarella (part skim milk)	1-1/2 ounces
Low fat cheese (with 50-90	
calories per ounce)	1 ounce
Low fat Ricotta	5 ounces

Food	Measure
Cheese (add 1 fat)	
Ricotta	6 ounces
Parmesan	2 ounces

Food	Measure
Cheese (add 2 fats)	
Cheddar	1-1/2 ounces
American	1-1/2 ounces
Jack	1-1/2 ounces
Mozerella	2 ounces

Food	Measure
Others	
Dark green leafy vegetables (raw or cooked) such as Kang Kong, spinach, or broccoli	2 cups

Food	Measure
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.

Food	Measure
Bread	
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)
Tortilla	1 (6" 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
Rice cakes	2 large or 8 mini
#Ry Krisp (triple square wafer)	3
Saltines	6 (2" square)
Soda	3 (2-1/2" square)
Whole wheat crakers (Finn, Kavli, Wasa)	2-4 slices (3/4 ounce)
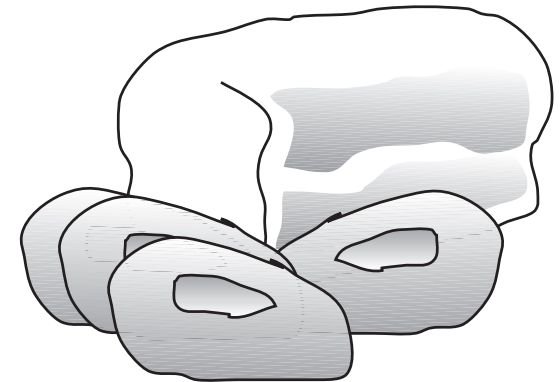
Flour Products

Cornstarch	2 tablespoons
Flour	3 tablespoons
Noodles, beanthread (long rice)	1/2 cup
Noodles, rice	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

Barley	1/3 cup cooked
Banana (cooking)	1/2 cup
#Beans and peas; dried, cooked	1/3 cup
#Beans, baked	1/4 cup
#Beans, butter	1/3 cup
Beans, mongo	1/4 cup
Breadfruit, cooked	1/3 cup
Cassava	1/2 cup
#Corn	1/2 cup
#Corn, cream style	1/3 cup
#Corn on the cob	1 (6" long)
Kon from taro or breadfruit	1/3 cup
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
Pidgeon peas, pods	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
Soybeans, green	1/2 cup
#Squash, winter, yellow	3/4 cup
Taro	1/2 cup (or 1/2" slice)
Yams	1/3 cup
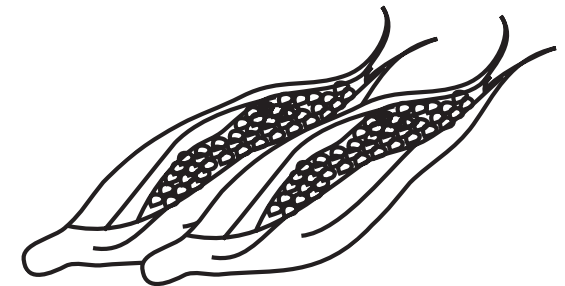
*Food high in salt
√Good source of Vitamin A
#High in fiber

Starch Group (Add one fat)

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

Food	*Measure*
Bread	
Biscuit	1 (2-1/2" diameter)
Cornbread	1 (2" cube)
Chowmein noodles	1/2 cup
Muffin, plain, small	1
Pancake (4" across)	2
Taco shell (8" across)	1
Waffle (4-1/2" square)	1
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
Flour Products	
Stuffing	1/4 cup
Pandanus root	1/2 cup
Rice	
Red rice	1/3 cup
✶Soup	
Cream soup	1 cup

✶Food high in salt

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.

Food	Measure
Apple, fresh	1/2 medium or 1 small (2" diameter)
Apple, mountain	3 medium
Apple, water	3 medium
Applesauce, unsweetended	1/2 cup
Apple juice	1/2 cup
√Apricots, dried	3 halves
√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
Figs, dried	1-1/2
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)
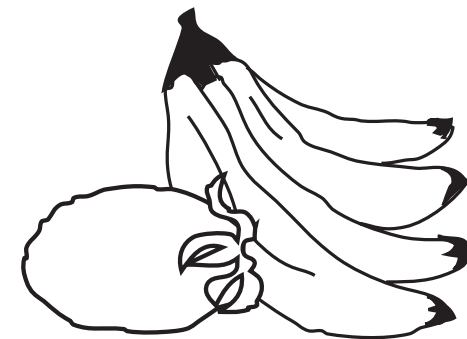
+Good source of vitamin C
√Good source of vitamin A

Fruit Group *(Continued)*

Food	*Measure*
+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
Soursop, pulp	1/3 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
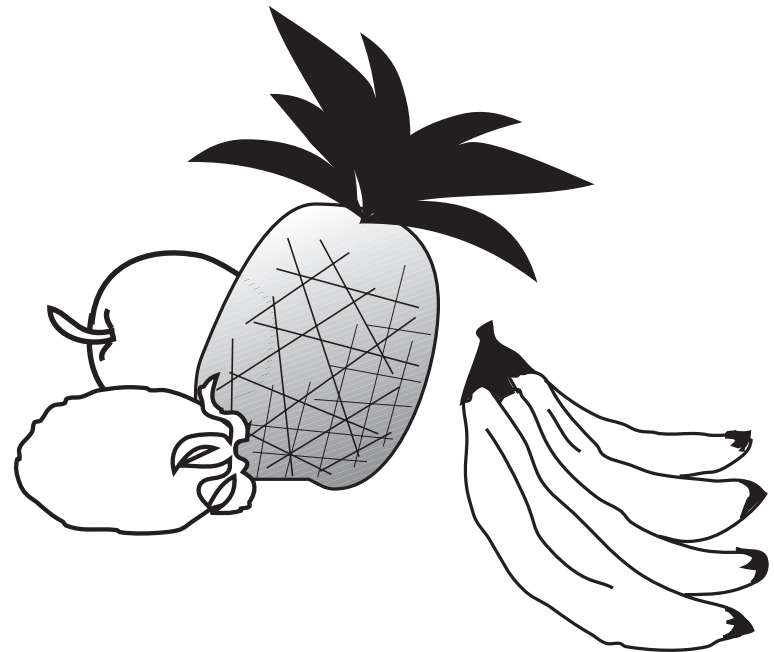
Vegetable Group

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

+Asparagus

Bamboo shoot
Banana bud/flower
Beans, goa (winged)
Beans, green
Beets
Beet greens
√+Bela leaves
Bittermelon, fruit
√+Broccoli
+Brussel sprouts

√Carrots
+Cauliflower
Celery
Cucumber

Eggplant

Gourd
+Green pepper

Kangkong (Seri)

√+Murungka leaves
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

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

√+Vegetable juice

Water chestnuts
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

√Fern leaves and stems

Green onions

√Kang kong (Seri)

Lettuce

√Parsley

+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.

Food	Measure
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)	1 ounce or 1 slice (3" x 3" x 1/4")
Breast	1 ounce or 1/3 piece (3 pieces to one pound)
Drumstick	1 ounce or 2/3 piece
Thigh	1 ounce or 1/2 piece (4 pieces to one pound)
Roasted	1 ounce or slice (3" x 3" x 1/4")
Chicken, ground	1 ounce
Egg	
Whites, large	3

✶Food high in salt

24
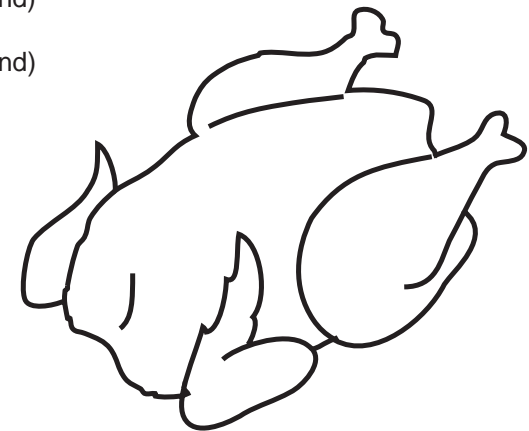
Fish, fresh

Abalone, catfish, lobster, mackerel (opelu)	1 ounce
cod, herring, mahimahi, mullet, parrot, red snapper, reef fish, sashimi, sole, 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	1 cup
✶Tuna, canned in water	1/4 cup

Frog legs   1 ounce

Luncheon Meat, 95% fat free   1 ounce

Pork

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

Soybeans, boiled   1/3 cup

Tripe   1 ounce

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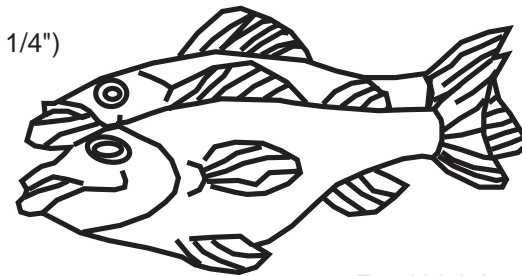
White and dark meat, roasted   1 ounce
✶Turkey ham, turkey pastrami,
   turkey breast (processed)   1 ounce or 1 slice (3" x 3" x 1/4")

Turkey, ground   1 ounce

Veal

Leg, loin, rib, shank, shoulder

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

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25

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.

Food	*Measure*
Beef (most types fall into this category, fat trimmed))	
Roast (rib, chuck, rump)	1 ounce or 1 slice (3" x 2" x 1/4")
✶Ground beef (15% fat), meatloaf	1 ounce
Steak (cubed, porterhouse, T-bone)	1 ounce or 1 slice (3" x 2" x 1/4")
Cheese	
Mozzarella	1 ounce
Ricotta	1/4 cup
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)	1 large
Egg substitutes (with 56-80 calories per 1/4 cup)	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
Pork (most pork products fall into this category, fat trimmed)	
✶Ham, butt, loin, shoulder, arm, picnic	1 ounce or 1 slice (3" x 2" x 1/4")
Shoulder blade	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)
Tuna, canned in oil, drained	1/4 cup
Veal Cutlet (ground or cubed, unbreaded)	1 ounce

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26
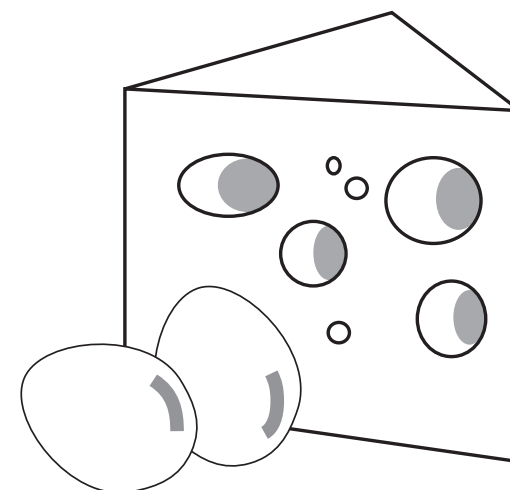
Protein/Meat Group C (high in fat)

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

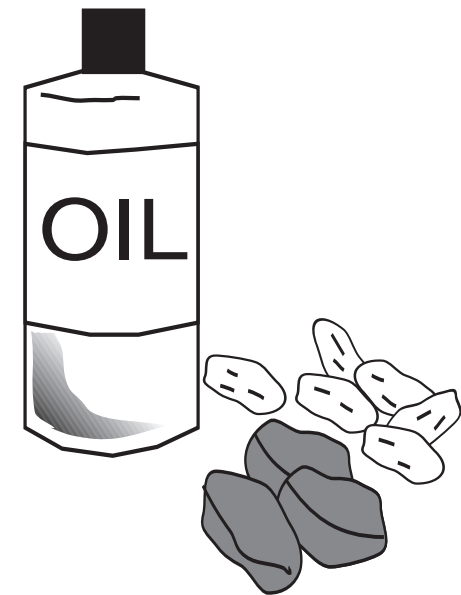| Food	Measure
Beef	
Brisket	1 ounce
Corned beef	1 ounce
Ground beef (20% or more fat)	1 ounce
Lean short ribs	1 ounce
Rib eye	1 ounce
Rib roast, club and rib steak	1 ounce or 1 slice (3" x 2" x 1/4")
Spare ribs (meat, without bone)	1 ounce
Cheese (all regular cheeses)	
Cheddar, American, Monterey, Swiss, Provolone, Blue	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

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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.

Food	Measure
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
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
Sesame seeds	1 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.

Food	Measure
Butter	1 teaspoon
*✶**Bacon**, crisp	1 slice
Cheese, cream	1 tablespoon
Coconut	
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 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
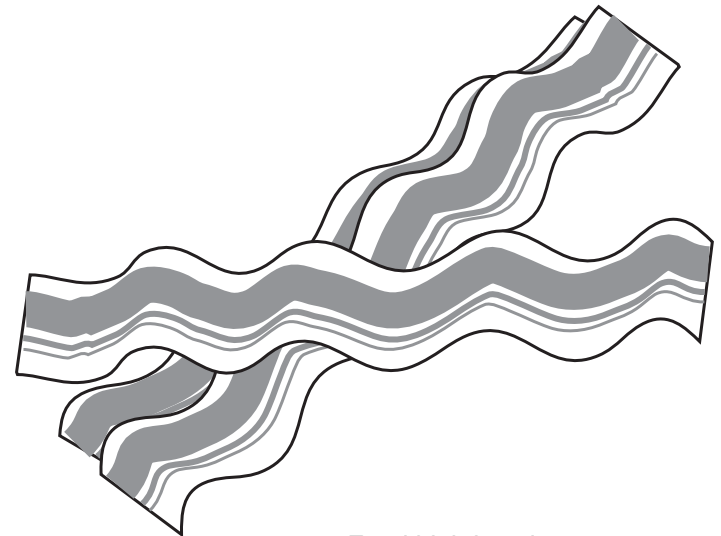
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Note: A medium **turkey tail** contains 12 fat servings which equals 60 grams of fat.

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, artifically 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
- Lime juice
- *Molly McButter*
- Mustard, dry or prepared
- Parsley
- Pepper
- ✶Salt (in moderation)
- ✶Soy Sauce (in moderation)
- Spices and herbs
- Tabasco sauce
- Vinegar

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30

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.

Food	Measure	Food Group
*Alcohol - Beer	12 ounce, can	3-1/2 fat
Wine	4 ounce, 1/2 cup	2 fat
Whiskey, gin, rum, vodka (100 proof)	1-1/2 ounce 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	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
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
Granola bars	1 small	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, syrup	1 tablespoon	1 fruit
Jello	1/2 cup	1 fruit
Juice drinks	12 ounce can	2-1/2 fruit

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

Other Foods for Occasional Use *(Continued)*

Food	Measure	Food Group
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
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

Recipe	Measure	Food Group
Banana Flower with Pork Meat	1 serving	2 protein/meat, 2 vegetable, 1-1/2 fat
Banana Flower Salad	1 serving	1-1/2 starch, 1 fruit, 1 vegetable, 10 fat
Clams with Vegetables	1 serving	3 protein/meat, 1 vegetable, 1-1/2 fat
Fish Sashimi	1 serving	8-1/2 protein/meat, 1 fruit, 1 vegetable, 4-1/2 fat
Fish Ball	1 serving	5 protein/meat, 1/2 vegetable, 3 fat
Mackeral/Eggplant with Curry Powder	1 serving	3 protein/meat, 2 vegetable
Mackeral Patties	1 serving	1/2 starch, 2 protein/meat, 1/2 vegetable, 4 fat
Meatless Burger	1 serving	1/2 starch, 2 protein/meat, 1-1/2 vegetable, 1 fat
Palusami	1 serving	1-1/2 protein/meat, 1-1/2 vegetable, 8-1/2 fat
Pandanus Drink	1 serving	1 starch, 2 fat
Papaya Drink	1 serving	1/2 starch, 1/2 calcium/milk, 1/2 fruit, 1 fat
Pumpkin Soup	1 serving	2-1/2 starch, 1 "B" protein/meat, 5-1/2 fat
Rice Tempura	1 serving	3-1/2 starch, 3 protein/meat, 3 fat