

ken Cole 32



# Introduction

It is important today to get the best nutrition value for your food dollar.

Things may be easier than you think, if you know what to shop for and how. Using the nutrition guidelines and food shopping tools suggested here can help you make wise food choices for your money.

To get you started, the first section of this booklet deals with Food Shopping Tools. These tools will help guide you to the best food buys as you shop. Next you'll find sections on each of the five food groups. Each section provides nutrition information, food buying guidelines and budget cutting tips. These will help you shop smarter and buy better to get the most nutrition for your food dollar. The last sections on shopping hints and meal planning will bring together everything you've learned to help you stay within your food budget.

### Prepared by:

Penny K. Ross, R.D., M.S. Food & Nutrition Specialist Food Science & Human Nutrition Cooperative Extension Service Michigan State University East Lansing, Michigan 48824

#### and

Molly Graber, R.D., M.S. Chief Nutritionist Barbara Free, R.D., M.S. Nutrition Consultant Michigan Dept. of Public Health Lansing, Michigan 48909

Special thanks to Max Alderson, Health Education Consultant, Michigan Department of Public Health, for reviewing and editing of these materials.

# **Food Shopping Tools**

Unit pricing and cost per serving are shopping tools which will help you make choices of the less expensive item.

# **Unit Pricing**

Knowing the unit price will help you select the best buy between different packages of the same kind of product. A unit is measured by:

weight—like pounds or ounces of cheese liquid volume—such as pints or quarts of milk

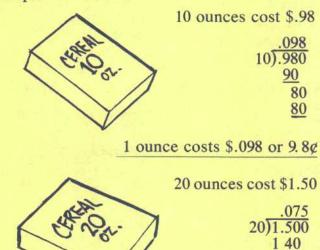
number of pieces—like tea bags in a box area—for non-food items, like the number of square feet in paper towels

If the unit price is not listed on shelf stickers where you shop, you can figure it out.

# **Figuring Unit Price**

Divide the cost of the item by the number of units in the container to get the unit cost. Now you can compare the price of items.

### Example



Best Buy!

1 ounce costs \$.075 or 7.5¢

Breakfast cereal in the 20 ounce box is the better buy if you can store the product. Often the large size may cost less per serving. Always compare to be sure.

# **Cost Per Serving**

Cost per serving will help you find the best buy for the number of people you want to serve.

### **Figuring Cost Per Serving**

Divide the total cost of the food by the number of people it will serve.

### **Ground Beef**

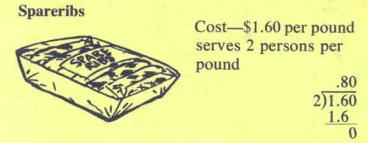
A 132 193	Cost—\$1.89 per pound serves 4 persons per
( BO BO	pound <u>.47</u>
A A A A A A A A A A A A A A A A A A A	<u>1.6</u> .29
Best Buy!	<u>.28</u> 1

Cost per serving of ground beef is \$.47 or 47c

### **Stew Meat**

LEANMART	Cost—\$2.39 per pound serves 4 persons per pound
	(4)2.39 (2.0)2.0
	.39 <u>.36</u> 3

Cost per serving of lean stew meat is \$.59 or 59¢



# Cost per serving of spareribs is \$.80 or 80¢

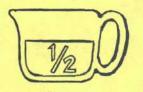
Compare: ground beef at \$.47 per serving, stew meat at \$.59 per serving and spareribs at \$.80 per serving. Ground beef is the best buy.

100

100

# Vegetable-Fruit Group/how much to eat and why

This group includes all varieties of vegetables, fruits, and their juices. You should try to eat about 5 servings from this group everyday. A serving of fruits and vegetables is:

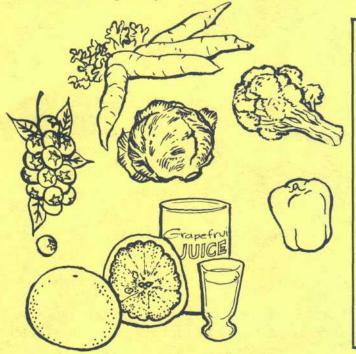




<sup>1/2</sup> cup Juices, cooked or canned fruits and vegetables <sup>3</sup>4 cup Raw vegetables

Foods in this group are important because they provide vitamins A,  $B_6$ , C, and folacin as well as minerals like iron and magnesium. Different nutrients are found in the various fruits and vegetables. Raw and unpeeled fruits and vegetables are good sources of dietary fiber. Whole grains also have fiber. Fiber plays an important role in moving foods through the digestive tract. Eat some fiber foods each day.

Some foods are better than others as sources of nutrients, so plan your meals and snacks to





Raw fruits, 1 medium

<sup>1</sup>/<sub>4</sub> cup Dried fruits

include a variety of different foods from this group.

You need to make a special effort to eat at least one serving of each of the following daily:

Vitamin A-rich food
Vitamin C-rich food
Dark green, leafy vegetable

Listed below are examples of some foods you may choose in following these recommendations:

# Vitamin C-rich Foods Vitamin A-rich Foods

Cantaloupe Grapefruit and juice Orange and juice Tangerine Strawberries

Broccoli Brussels sprouts Cabbage Cauliflower Green pepper Greens (collard, kale, mustard, turnip) Potato (large, baked) Spinach Deep yellow vegetables: Carrots Pumpkin Sweet potato Winter squash

Dark green vegetables: Broccoli Chard Collards Dandelion greens Escarole Mustard greens Spinach Turnip greens

# **Vegetable-Fruit** (cont'd)

# **Making Food Budget Choices**

Finding the best buy in fruits and vegetables will take you to many areas of the store—like fresh produce, canned goods, and frozen foods. Many stores have a special section of generic or "unbranded" foods, which are usually priced less than store brands or advertised brands. You should also compare for quality. Cost per serving is your key shopping tool to cutting costs for fruits and vegetables.

# How Much Should You Buy

Use the chart below to help you judge amounts of fruits and vegetables to buy for your family. It shows how many servings you usually get from a pound of fresh, canned or frozen.

### **Buying Guide**

### Fruits

### 5 servings per pound

Raw: apples, sliced; apricots, sliced; seedless grapes; strawberries

Frozen: blueberries

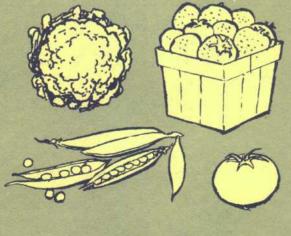
### 4 servings per pound

Raw: bananas, sliced; blueberries, red cherries, peaches, sliced; pears, sliced; plums, halved; rhubarb, cooked

Canned: peaches, sliced; blueberries

### 3 servings per pound

Raw: pineapple, cubed; apples, bananas Frozen: tart cherries, strawberries Canned: blueberries, tart cherries





#### Vegetables

11-12 servings per pound Raw: lettuce—leaf, head, romaine; endive

7-9 servings per pound

Raw: cabbage

6 servings per pound

Raw: carrots, spinach Frozen: peas, corn, asparagus, greens

#### 5 servings per pound

Raw: chopped onions, mushrooms

Fresh cooked: green beans, Brussels sprouts, carrots

- Frozen: carrots, green beans, broccoli, lima beans, cauliflower, spinach, summer squash
- 4 servings per pound

Fresh cooked: asparagus spears, lima beans, beets, broccoli spears, cabbage, parsnips, potatoes

- Canned: lima beans, beets, carrots, corn, pumpkin, peas, spinach, sweet potatoes, tomatoes
- Frozen: okra, winter squash

#### 3 servings per pound

Fresh cooked: cauliflower, summer squash, tomatoes

Canned: green beans

#### 2 servings per pound

Fresh cooked: peas, pumpkin, winter squash, spinach

# Vegetable-Fruit (cont'd) Less Expensive Choices

# **More Expensive Choices**

fresh:	In season fruits & vegetables apples carrots cabbage bananas potatoes onions oranges greens	Out of season fruits & vegetables pineapple broccoli cauliflower Brussels sprouts berries mushrooms spinach asparagus melons pears peaches plums yams
canned:	fruit juices applesauce mixed vegetables peas corn greens beets green beans tomatoes carrots	berries apricots citrus sections asparagus mushrooms fruit nectars
frozen:	concentrated citrus juices spinach squash greens french fried potatoes corn green beans peas	corn-on-the-cob asparagus vegetables in pouch vegetables in cheese and other sauces
dried:	raisins	apricots dates peaches apples

# Vegetable-Fruit (cont'd)

# **Budget Cutting Tips**

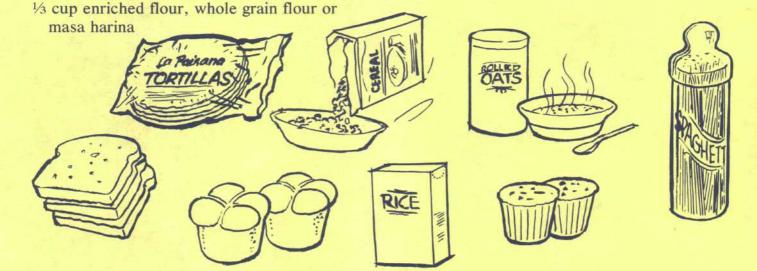
- Compare the different forms of a fruit or vegetable to see which is the best buy — fresh, frozen, canned, or dried.
- When fruits or vegetables are in season and supplies are good, the fresh form is often a good buy.
- Watch for store specials on canned and frozen vegetables your family likes. Stock up on them if you have freezer or shelf space.
- Generic or "unbranded" products are usually less expensive than similar store or advertised brands. Check prices and compare.
- Certain fresh fruits and vegetables like bananas, cabbage, carrots, greens, and potatoes are available year round. They are often less expensive than even fruits and vegetables in season.
- Sauces and seasoning packets increase the price of frozen vegetables. These may cost twice as much per serving. Buy vegetables plain, then add your own flavorings.

- Compare store brands and advertised brands of frozen vegetables and fruit juices. Store brands are usually a few cents cheaper.
- Larger bags of frozen vegetables may be cheaper per serving than the boxed type. Measure out the amount you need and return the rest to the freezer for another meal.
- Use leftover vegetables in soups, casseroles, or salads. Throwing away leftovers is expensive.
- Use cabbage, endive, or escarole as the base for salads rather than more expensive lettuce and greens. Mix your salads for variety.
- Plant a garden if you have space in your yard or neighborhood. Also take advantage of nearby farms where you can pick your own fruits and vegetables in season. Many vegetables grow well in Michigan. Learn to can or freeze extra summer produce to use during the following winter.

# Bread-Cereal Group/how much to eat and why

You should eat about 5 servings from this group every day. A serving is:

- 1 ounce cereal (this varies from <sup>1</sup>/<sub>4</sub> to 1<sup>1</sup>/<sub>2</sub> cups so check the package label)
- <sup>1</sup>/<sub>2</sub> to <sup>3</sup>/<sub>4</sub> cup cooked noodles, macaroni, spaghetti, other pastas; rice, barley, bulgur, grits, or cornmeal
- 1 slice of bread
- 1 six inch tortilla
- 1 small roll, muffin, bagel, or biscuit
- 2 cups popcorn



### **Bread-Cereal** (cont'd)

These whole grain, enriched or fortified foods are important sources of B vitamins, iron, protein, and energy. Whole grain breads and cereals also add fiber, magnesium and other minerals and vitamins. The amount of nutrients in one serving is small. But, the total servings in a day help meet your nutrient needs.

Eat a variety of cereals and grains daily. Select only whole grain, enriched, or fortified products. Try to have some whole grain foods every day.

Breads and cereals can be inexpensive sources of nutrients and energy. Plan extra servings for those family members who need extra calories.

# **Making Food Budget Choices**

The choices you make from the bread and cereal group depend on the price you want to pay. Some of these choices are convenience foods which may save you preparation time but not money. Most bread products freeze well so save any extras for another day.

Cost per serving is your key shopping tool for choosing items in this food group.

### How Much Should You Buy?

Use the chart below to help you judge the amount of bread and cereals for your family.

### **Buying Guide**

### Bread

1 slice of bread usually weighs 1 ounce:

a 1 pound loaf has 16 slices

a 11/2 pound loaf has 24 slices

#### Cereal

1 ounce of plain cereal or 1.3 ounces of cereal with raisins is a usual serving. The amount varies from  $\frac{1}{2}$  cup to  $\frac{1}{2}$  cups.

Read the package label for the volume of one ounce.

#### Rice

Dry rice cooks up to four times its original volume.

<sup>1</sup>/<sub>2</sub> cup dry makes about 2 cups cooked 1 cup dry makes about 4 cups cooked

#### Macaroni and other Pasta

Pasta usually doubles in volume when cooked.

1 cup dry makes about 2 cups cooked 2 cups dry make about 4 cups cooked

### Noodles

Most noodles increase slightly in volume when cooked.

#### Flour

1 pound of enriched flour is about 4 cups 1 pound of whole wheat flour is about 3<sup>1</sup>/<sub>3</sub> cups

# **Bread-Cereal** (cont'd)

# **Less Expensive Choices**

### **More Expensive Choices**

Enriched white rice, whole grain rice	Instant rice, seasoned rice, wild rice
Regular or quick cooking "hot" cereals	Instant hot cereals and ready-to-eat cereals
Enriched or whole grain macaroni or spaghetti	Noodles and other specialty pasta
Enriched white or whole grain bread, frozen	Buns, rolls, bagels, taco shells, tortillas, pita
bread dough, cornbread mix	bread, French bread
Saltines	Graham crackers
Muffin or biscuit mix	Bakery muffins or biscuits
Enriched or whole grain flour	Cake flour*

\*Inexpensive cake flour can be made by sifting together 2 tablespoons of cornstarch with enough enriched all purpose flour to fill one cup.

# **Budget Cutting Tips**

9 cups all purpose flour

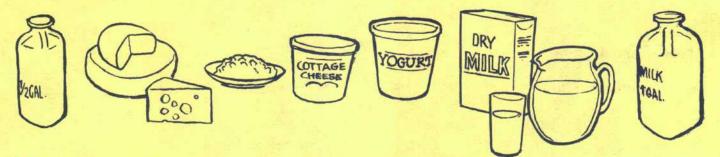
- Rice is inexpensive. Serve it plain, in casseroles, soups, as a meat filler, or in desserts like rice pudding.
- Cooked hot cereals are about half the price per serving compared to ready-to-eat cereal. You can also use them for fillers in meat loaves and meat balls. Look at the cost per serving of cereals.
- Instant hot cereals in individual packages always cost more per serving than those in an average sized box.
- Generic or store brand grains, flour, pasta, and mixes often cost less than advertised brands. Compare costs.

- Use stale bread to make bread crumbs, bread pudding, or French toast. Day-old bread and buns are just as wholesome as fresh and usually cost half the price.
- Enriched or whole grain bread can be served plain or toasted as an economical snack.
- Already flavored and seasoned cereals and grains usually cost more than if you add the fruit, spices, or herbs at home.
- For best buys in bread and cereal, compare the unit cost and cost per serving. Larger packages may cost less per unit than smaller ones. Buy the larger size if you have enough storage space.
- Make your own baking mixes for biscuits and muffins. These can be less expensive than ready-made mixes.

1/3 cup baking po 1 tablespoon sal 2 teaspoons created 4 tablespoons su 21/2 cups nonfat	<ul> <li>cup baking powder</li> <li>blespoons sugar</li> <li>cups nonfat dry milk</li> <li>ups canned shortening</li> <li>cups nonfat dry milk</li> <li>cups canned shortening</li> <li>cups nonfat dry milk</li> <li>cups canned shortening</li> <li>cups nonfat dry milk</li> <li></li></ul>				corn meal.		
Product Biscuits 10 to 20	Put in MM 3 cups	i Bowl: Sugar —	Mix Top Water 1 cup	gether: Egg —	Combine until blended and knead 10 times	Batter roll and cut out; put on pan	Cook 400°F oven for 10 minutes
Pancakes 18	3 cups	_	1½ cups	1	until blended	pour on hot, greased skillet	375°F or moderate heat skillet
Muffins 12	3 cups	2 Tbsp.	1 cup	1	until just moistened	fill greased muffin tins 34 full	400°F oven for 20 minutes

# Master Mix (MM) 13 cups

7



# Milk-Cheese Group/how much to eat and why

Most people should have at least 2 servings from this group every day. Children, teens, and pregnant and breastfeeding women need more. For one serving you can choose any of these:

1 cup (8 ounces) fluid milk

1 cup plain yogurt

1/3 cup\* dry milk powder

\*Note: or amount for 1 cup fluid milk; check package label

2 cups cottage cheese

2 ounces processed cheese food like American or Swiss.

Note: pre-sliced squares are usually 34 ounce each

1<sup>1</sup>/<sub>2</sub> ounces aged or hard cheese like American, Cheddar, Colby, Monterey Jack, Muenster, Provalone, or Swiss

Milk and cheese are very good sources of calcium, riboflavin, vitamin  $B_{12}$ , and protein. Milk also has vitamin A and may be fortified with vitamin D. Choose vitamin D-fortified milk. Cheese and yogurt are not usually fortified.

# **Making Food Budget Choices**

Cost per serving and unit cost are your key shopping tools to reduce cost in the milk and cheese group. Compare cost per serving to 1 cup of milk or yogurt. Compare milk costs by the price per quart.

### **Buying Guide**

Non-fat dry milk fortified with vitamins A and D is the least expensive form of milk.

Skim, non-fat, 1%, 2% fat fluid milk and buttermilk powder are less expensive than fluid whole milk (3.5% fat).

Buttermilk and flavored fluid milk are more expensive than other types of milk.

Yogurt and cheese are more expensive than milk because of the processing involved. There is a wide range of prices for cheese. Processed and domestic cheeses cost less than imported types.

Use non-fat dry milk to make your own hot cocoa mix for much less than the cost of store purchased instant cocoa.

### Hot Cocoa Mix/handy for snacks or at breakfast

2 cups non-fat dry milk powder 1 cup sugar ½ cup unsweetened cocoa powder (generic)

Put milk powder, sugar, and cocoa into a quart container. Stir well. Store in tightly covered jar in cool, dry place.



To use: Place 3 tablespoons of mix in cup; stir in about <sup>1</sup>/<sub>4</sub> cup of boiling water to dissolve powder; then add <sup>3</sup>/<sub>4</sub> cup more hot water.

Stir and serve.

# Milk-Cheese (cont'd) Budget Cutting Tips

• If you prefer the taste of whole milk but not the calories or cost, mix it half and half with reconstituted non-fat dry milk.

Mix a quart of non-fat dry milk according to package directions and add it to a quart of whole milk. Chill several hours before serving.

- Use non-fat dry milk and buttermilk powder for cooking and baking.
- Buy the largest size milk container you can use within a week of the sell date. Compare prices. You can save 5 to 15 cents per quart by buying half-gallon or gallon containers.

- Cheese is more expensive than milk but adds variety to your meals. Bulk cheese is less expensive than sliced, shredded or single wrapped slices. Compare the cost per pound.
- Processed cheese food is usually less expensive than cheese. It is good in sandwiches and melted for cheese sauce.
- Imported cheeses like Edam, Gouda and Swiss are more expensive than those varieties made locally. Select domestic types for lower cost.
- Homemade yogurt is easy to make and costs less than advertised brands. If you want flavored yogurt, add your own fruit, jam or flavors at home.

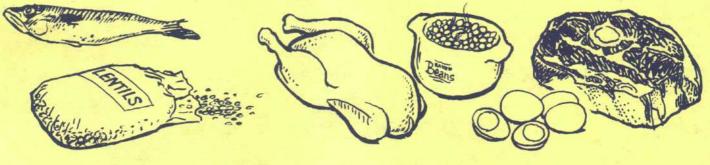
# Meat-Poultry-Fish-Beans Group/how much to eat and why

This food group includes all varieties of meat, poultry, and fish as well as meat alternatives such as dry beans, dry peas, eggs, peanut butter, nuts, and seeds.

Each day you should eat 2 servings for a total of 5 to 6 ounces of food from this group. Count as a serving 2 to 3 ounces of lean meat, poultry or fish after cooking and not including bone, gristle or fat. Your meat, poultry, fish, or alternate can be divided among meals and snacks. It is not necessary to include these foods every time you eat—as long as you get a total of 5 to 6 ounces daily.

To equal the amount of protein from 2 ounces of meat, you can choose any of the following:

- <sup>1</sup>/<sub>3</sub> to <sup>1</sup>/<sub>2</sub> cup cooked, lean beef, chicken, pork or fish
- 1 small hamburger patty (3 ounces raw)
- 1 medium chicken leg
- 2 hot dogs
- 3 chicken wings
- 1 to 1<sup>1</sup>/<sub>2</sub> cups cooked, dry beans or lentils; walnuts or pecans
- <sup>1</sup>/<sub>2</sub> cup almonds, peanuts, sesame or sunflower seeds
- 4 tablespoons peanut butter
- 2 large eggs





# Meat-Poultry-Fish-Beans (cont'd)

Foods in this group are important because they supply protein, iron, thiamin, zinc, magnesium, and vitamins  $B_6$  and  $B_{12}$ . Different quantities of vitamins and minerals are present in each of the various kinds of meats and alternates. Because of this variation in nutrients, you should plan your meals to include a variety of different foods from this group over the week. Some foods are much better than others as sources of these needed nutrients, for example:

- Vitamin B<sub>12</sub> is found in all meat, fish, eggs and poultry, but not in nuts, seeds or beans.
- Iron and zinc are present in large amounts in liver, red meats and dry beans.
- Nuts are a good source of magnesium.

### **Making Food Budget Choices**

The lowest cost meat per pound is not always the best buy. You must also consider how many people a piece or package will serve. When shopping, compare the cost per serving of different meats, not the cost per pound.

# **How Much Should You Buy?**

Plan on 2 to 3 ounces of lean cooked meat for each serving. The amount of fat, bone and gristle varies in different cuts of meat. Use the guide below as a shopping tool to learn how many servings you will get from a pound of some kinds of meat, fish, and poultry. Always look at the items as you choose because individual cuts may have more fat or bone.

### **Buying Guide**

### **4 Servings Per Pound**

Items with little or no fat or bone, such as ground meat, round steak, lean stew meat, liver, center cut of ham, fish steaks and fillets, flank steak, boneless roast with little fat like beef sirloin tip, chicken breasts.

#### **3 Servings Per Pound**

Items with a medium amount of bone, fat and gristle, such as most roasts, pork chops, steaks, ham with bone, whole turkey, chicken legs, dressed fish.

# Less Expensive Choices

Dry beans, peas, lentils Eggs Peanut butter Frozen fish fillets Canned tuna or mackerel Liverwurst (Braunsweiger) Liver Ground beef or pork Whole turkey or chicken Cured ham with bone Pork loin or shoulder roast with bone

### 1 to 2 Servings Per Pound

Items with much bone, gristle, or fat such as lamb rib chops, plate and breast of veal or lamb, spareribs, shank, chicken wings and backs, shortribs.

Note: One pound of dry beans makes 6 cups when cooked. A one-pound can of cooked beans is 2 cups.

# **More Expensive Choices**

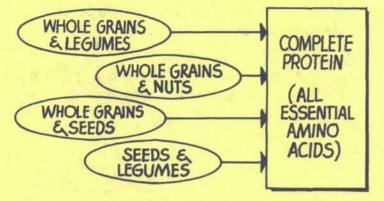
Nuts Seeds Many luncheon meats Beef rib roast Beef steaks Flank steak Lamb chops or leg roast Pork chops Chicken neck bones Spareribs Shortribs Veal chops or roast

# **Meat-Poultry-Fish-Beans** (cont'd)

# **Plants Can Supply Protein Needs**

Legumes (dry beans, dry peas, lentils), nuts, seeds and whole grains contain all the essential amino acids to make the complete protein your body needs. But, they are at lower levels than those found in animal protein. Animal products, like meat, poultry, and milk, have the right mixture of all the amino acids your body needs. You can also get this proper mixture by eating combinations of whole grains, legumes, nuts or seeds.

### **Making Plant Protein Into Complete Protein**



To have a balance of amino acids from plant protein you should eat generous amounts of whole grains, legumes, nuts and seeds. If a meal without animal protein does not include these foods, the resulting amino acid mixture will be incomplete. This meal then needs to have milk, cheese, or eggs added.

Another way to get good protein for low cost is to mix a plant protein food with an animal protein food. You can do this with milk, cheese, eggs, or other animal proteins. Some examples are:

Chili Con Carne (ground beef and legumes)

Bean and Cheese Nachos (legumes and cheese)

Walnut Cheddar Loaf (nuts, eggs, and cheese)

Grilled Cheese Sandwich (cheese and bread)

Pro-Burger (ground meat and soy protein extender)

The list below shows examples of foods that are whole grains, legumes, nuts, and seeds.

### Whole grains\*

Barley	Oats
Buckwheat	Rice (brown or white)
Bulgur	Rye
Corn	Wheat (whole or enriched)
Millet	
*Whole grains come	from the bread-cereal group.

Whole grains come from the bread-cereal group

# Legumes

Mung beans
Peanuts
Peas
Soybeans
Split green peas
Other dry beans

# Nuts and Seeds

Almonds	Walnuts
Brazil nuts	Other nuts
Cashews	Pumpkin seeds
Hazel nuts	Sesame seeds
Pecans	Squash seeds
Pistachios	Sunflower seeds

To combine plant protein so that you get a complete protein, food on these lists should be prepared and served together. The following food combinations show how this can be done:

Whole grains + legumes = Rice & red beans

Whole grains + nuts = Oatmeal & walnuts

Whole grains + seeds = Whole wheat bread with sesame seed spread

# Meat-Poultry-Fish-Beans (cont'd)

# **Budget Cutting Tips**

- Compare prices by cost per serving, not cost per pound.
- Limit serving sizes to 2 to 3 ounces. Extra amounts of meat are expensive and are not necessary for good nutrition. Fill out meals by using extra servings from other food groups.
- Use low cost meat alternatives like legumes or eggs to keep costs down.
- Buy advertised specials when they cost less per serving than your usual choice.
- Turn leftovers into casseroles, soups, stews or sandwiches to avoid waste.
- Ask the butcher to cut large roasts into smaller meal portions for you. Freeze the portions and space them out for your meals.
- Pre-breaded items like chicken or fish are usually more expensive than plain. Save money by preparing your own crumb mixture and breading the food yourself.
- If you have a freezer, you can buy large cuts of meat called subprimals at savings. You can cut the meat in meal size portions. Wrap, label, and freeze these.
- Use bones for soup stock. Add meat, rice, and vegetables to make a hearty soup.
- Beef: Chuck cuts, shoulder cuts, round steak and ground beef are usually the most economical.
- Pork: Blade and arm steaks or chops, blade Boston roasts, and ground pork are usually the most economical.

- Poultry: Whole chickens are usually less expensive than chicken parts. You'll save money by cutting them up yourself.
- Fish: Fresh fish is usually more expensive than frozen fillets.
- Luncheon meats and sausage: These products are often higher in price than other meat products because they are more processed. Liverwurst is the most economical luncheon meat. Use leftover beef, chicken, and pork when they are less expensive than luncheon meats for sandwich fillings.
- Eggs: A serving of eggs is less expensive than a serving of meat and provides good quality protein.



# Reminder

Meat, fish, and poultry spoil easily. Buy only as much as you can use before it spoils.

# **Non-Essential Food Group**

This food group includes foods like butter, margarine, mayonnaise and other salad dressings, and other fats and oils; candy, sugar, jams, jellies, syrups, sweet toppings and other sweets; soft drinks and other highly sugared beverages; alcoholic beverages such as wine, beer and liquor; and snack foods like chips, snack cakes and pies, and doughnuts.

Servings from this group are not required. You do not need to eat these foods daily to be well-nourished. Eat them after recommended servings from the other food groups are included in your meals and snacks.

Foods in this group are high in calories in comparison with the nutrients they provide. Some examples of 75 calorie servings of non-essential foods are listed below:



Sweets

sandwich cookie
 oz. soda pop
 chocolate kisses
 Tbs. honey



Fats

2 tsp. butter or margarine2 tsp. cooking oil1 Tbs. salad dressing (French)1 Tbs. mayonnaise



**Alcoholic Beverages** 

oz. gin or whiskey
 oz. beer
 oz. dry wine
 1<sup>3</sup>/<sub>4</sub> oz. sweet wine

If you have high energy (calorie) needs, you may select additional servings from either the essential four food groups or from the nonessential food group. These foods help satisfy hunger and fill up those with big appetites because of activity or rapid growth. You will get more nutrients for your food dollar if you buy foods from the first four food groups.

Foods in the non-essential group usually have a higher calorie concentration. They may also be higher priced—especially when you buy them in convenient or ready-to-eat form. Making foods from basic ingredients, such as preparing your own fruit punches or salad dressings at home, can help save money spent for non-essential foods.

Food mixtures are included in the non-essential food group—even when they contain foods from the other groups. This is because food mixtures are often made with extra fats, sauces, or sweets which add calories. When you eat a food mixture containing foods from different groups, count an item as a serving if the amount of food is the recommended portion size for that food group.

### Non-Essential Foods (cont'd)

# **Making Food Budget Choices**

Foods from the non-essential food group can be one of the first areas to cut back when the budget is tight. There are other food items which are not essential for good nutrition but raise food costs. These include coffee, tea, condiments, spices and herbs. For many people, one in every five dollars goes toward items which have low nutrient value and are not necessary. This is a large bite out of the food budget. Careful planning, wise shopping and breaking a few old habits can help bring costs down.

Keep a list of the foods you buy from this section. Do you spend more than one-fifth of your food dollar here? Spending less on fats, sweets, and alcohol can mean extra money for foods from the other food groups.

# **Budget Cutting Tips**

- Use cost per serving as a shopping tool for these items. Prices vary by brand.
- Carbonated beverages cost more than fruit ades and punches.
- If you make flavored drinks often, buy the large bulk containers of drink mixes rather than individual one-serving packets.
- Buy candies and sweets only when you have money left after buying food from the essential four food groups.
- Deep fat frying is an expensive way to prepare food. Most foods that you might fry can be oven-baked instead. Coat the food with bread or cereal crumbs and bake until golden brown.
- If you are not restricting the kind of fat you use, buy the cheapest kind of margarine or oil available.
- Brown sugar is almost three times more expensive than white sugar. Both have the same amount of calories. Substitute white sugar for half to all of the brown sugar in your recipes.

# **Meal Planning**

As you plan your meals, include all food prepared at home whether or not it is eaten there. You will probably want to plan snacks for growing children and active teenagers. Many adults also like snacks. Keep everyone's energy needs in mind.

Plan each day's meals and snacks to include at least minimum servings from the essential four food groups. Use a variety of foods for color, flavor, texture, and temperature.

You could plan like this:

Meals:

first—main dish add—fruit and/or vegetables add—bread and cereal group selections add—milk and cheese group selections finally—any choices from the non-essential group

Snacks:

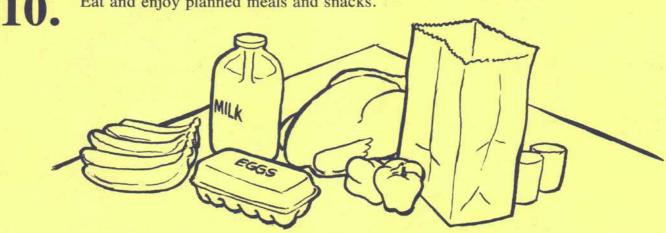
Plan snack foods for those family members who like them. Serve foods from the essential four food groups if you have not used the minimum servings at meals.

Think about the next day's meals and repeat the planning.

Two sample meal plans are shown on page 16 to get you started. You may want to try making a food group menu and then use it to fill in your choices.

# **Tips for Meal Planning**

- Make a food spending plan. Decide how much money you have to spend for food each month and divide that into weekly amounts.
- 2. Plan your meals a week in advance. Planning ahead can reduce waste, limit unplanned leftovers, and stop unnecessary trips to the store. You can save on your food bill if you spend about a half hour planning before shopping.
- 3. As you plan, count the number of meals and snacks you will serve during the week. Also consider how many family members or others will be present at each meal.
- 4 Check newspaper ads and supermarket flyers for weekly specials you can work into meals. However, don't purchase items you will not use just because they are on sale.
- 5 Use coupons to buy those items you use regularly. Even with coupons some foods aren't cheaper. Before you buy, check the price of other brands and compare.
- 6. Use your meal plans to write your shopping list. A list helps you remember all the items you need. This saves shopping time. You also are less likely to buy foods you don't need when you use a list.
- Shop for food when you are not rushed. Shop when you won't be distracted by other family members or crowds of other shoppers. Stick to your list. Don't buy on impulse unless you can use the food and it's less expensive than the one you planned to buy.
- 8. Compare unit prices of different brands of the same product. Store brands and generic products are often bargains.
- Put your food in proper storage when you get home. 9 Refrigerate all perishables. Rewrap meats for the freezer in meal-size portions. Store canned foods in cool, dry places. Put flour, mixes, and other dry foods in tightly covered containers to avoid insect problems.
  - Eat and enjoy planned meals and snacks.



# Food Group Menu Guide

Breakfast Meat-Poultry-Fish-Beans Bread-Cereal

Fruit Milk

Non-essential

Lunch Meat-Poultry-Fish-Beans

Vegetable-Fruit

Bread-Cereal Milk-Cheese Non-essential

Snack Bread-Cereal Milk-Cheese Non-essential

Dinner Meat-Poultry-Fish-Beans Vegetable-Fruit

Bread-Cereal Milk-Cheese

Non-essential

\*These foods are to be served together at a meal.

Daily Tally Vegetable-Fruit Bread-Cereal Meat-Poultry-Fish-Beans Milk-Cheese

**Sample Menus** 

Family 1

Cooked Oatmeal Whole wheat toast Orange juice Milk for cereal and children Margarine; jelly Beverage

Split pea soup Peanut butter\* Carrot sticks Tangerine Toast\* Milk

Children's Snack Fortified cereal Milk\* Sugar and cocoa\*

Beef meat loaf Baked potato Broccoli\* Corn bread Cheese sauce\* Milk for children Margarine Sugar cookie

Total Servings 5 5 5 2—adults 4—children

### Family 2

Bran Cereal Whole wheat toast Apple juice Milk for cereal

Sugar; butter Beverage

### Liverwurst\*

Cabbage-Raisin slaw Banana Sandwich bread\*

Sugar; beverage

Evening Snack Rye bread Colby cheese Carbonated beverage

Baked chicken Mixed green salad\* Baked sweet potato Muffin Milk

Italian dressing\* Margarine Rice pudding

Total Servings 5 6 5 2 The following table summarizes the servings you should plan from each of the food groups:

# **Suggested Daily Eating Guide**

# **Food Groups**

# Vegetable-Fruit Group

1 serving<sup>†</sup> = <sup>3</sup>/<sub>4</sub> c. raw, 1 medium piece, <sup>1</sup>/<sub>2</sub> c. juice or cooked fruit or vegetable

Including sources of: Vitamin C

Vitamin A, fiber and a dark green leafy vegetable

#### **Bread-Cereal Group**

1 serving<sup>†</sup> = 1 slice of bread or 1 oz. cereal Include a combination of both whole grain products and enriched or fortified products daily

Milk-Cheese Group  $1 \text{ serving}^{\dagger} = 1 \text{ cup } (8 \text{ oz.}) \text{ milk}$ 

### Meat-Poultry-Fish-Beans Group

1 serving<sup>+</sup> = 2 to 3 oz. cooked, lean meat, fish or poultry without bone, or meat alternate

### Non-Essential Food Group

Includes fats, sweets and alcoholic beverages

Can be eaten when minimum recommended servings from other groups are eaten and energy needs are great enough to use up the high calorie level of this kind of food

\*These serving numbers are recommended because they increase the likelihood of meeting your nutrient needs. †Serving sizes are slightly smaller for pre-school children.

# Number of Servings Each Day \*

5 (6 servings for pregnancy and lactation)

daily (2 servings for lactation) daily

5 (6 servings for pregnancy and lactation)

1 to 10 yrs : a total of 2 to 2½ cups 11 to 18 yrs: a total of 4 cups Adults : a total of 2 cups Pregnancy: add 1 cup Lactation: add 2 cups

2 (3 ounces total for pre-school children) (5 to 6 ounces total for others)

Daily servings from this group are not required.



Michigan Department of Public Health MSU and MDPH are Affirmative Action/Equal Opportunity employers. They will not discriminate against any individual or group on the basis of race, color, religion, national origin or ancestry, age, sex (or marital status), or handicap.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824.

This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU and MDPH. Reprinting cannot be used to endorse or advertise a commercial product or company.

