This workbook was developed to help adult literacy students learn about nutrition. It contains information sheets, student worksheets, and answers to the worksheets. The information sheets are coordinated with an available audiotape. Some of the topics covered in the workbook are the following: choosing good foods without spending a lot of money; know how eating better can make you healthier; knowing that what you eat affects everything about you; knowing that babies, children, and adults need different foods; and finding places in the community that can help you learn more about nutrition. Seven appendixes provide information on the following: steps to improve health; a basic eating plan for all ages; saving money and time; tips for pregnant women; breastfeeding; ideas for high-quality protein; and lifestyle activities. A glossary lists 53 terms that are underlined in the workbook. (KC)
HEALTH PROMOTION FOR ADULT LITERACY STUDENTS
An Empowering Approach

Nutrition: Eating for Better Health
STUDENT WORKBOOK
The University of the State of New York • The State Education Department
Bureau of Continuing Education Program Development • Albany, New York 12230
Important

What you are about to learn should not be used in place of attention from a health professional or other expert.

This workbook and tape contain the most current information available. The New York State Education Department, the Hudson River Center for Program Development, Inc., and the authors do not assume responsibility for the correctness or completeness of the information.

If you have any questions, talk to your teacher or get more information from someone who works in the health field.

Please start the tape now.
This workbook is to help you learn about nutrition, so that you know the best way to feed your family and yourself. You and your teacher can decide the best way for you to learn this: either working on your own with the cassette, or learning from your teacher with the rest of the class.

If working on your own with the cassette is best for you, the first step is to talk to your teacher about when it's available. When you have the tape and are ready to begin, find a well-lit room, a comfortable chair, and a steady writing surface.

I'll be saying exactly what is on the pages of your workbook so that you can read along with me. If you would like to listen to a certain section again, or need to think for a minute, feel free to stop the tape at anytime. In the workbook, you will see certain words underlined. These are words that are explained in the glossary. If you are still unsure about what the word means, ask your teacher to help you.

You will hear a "BEEP" every so often after I give you instructions. Stop the tape after the beep, so that you can work on the exercises. Don't be nervous about them. They will help you remember what you've learned. If you have trouble with the answers, you can either review the section again by yourself, or ask your teacher for help. You should also talk with your teacher about your progress. Your teacher is there to help you, even if you just need to talk with someone about nutrition.
Taking care of yourself and your family is important. Good health affects the way you feel about yourself and the way others feel about you. Right now, making sure you're the best you can be may make all the difference in the world. How can you feel better each day? One way is to learn to eat the right types of food.

You chose nutrition as one of the things you needed to know more about, so let's get started. After listening to this tape, you will be able to:

- Choose good foods without spending a lot of money.
- Know how eating better can make you healthier, and how you can teach your family the same thing.
- Know that what you eat affects everything about you.
- Know that babies, children, and adults need different foods.
- Find places in your community to help you learn more about nutrition.
Our bodies work better for us when we eat foods that make up a balanced diet. A balanced diet is made up of fruit, vegetables, whole grain and enriched breads, cereals and grains, milk, cheese and yogurt, meats, poultry, fish, eggs, and legumes, which is a whole family of foods that include peas and beans.

Here are some basic do’s and don’ts:

- Do eat different foods that make up a **balanced diet**.
- Do eat foods high in **starch** and **fiber**.
- Don’t eat a lot of sugar and salt.
- Don’t eat foods with high **fat**, saturated **fat**, and **cholesterol**.
- Don’t drink much alcohol, if any.

Appendix A has more on these do’s and don’ts, and Appendix B offers a basic eating plan for all ages.

*Please stop the tape after the beep, so that you can look at the Appendices in the back of this workbook. You can use these to help you complete Worksheet 1 on the next page.*

* * *
WORKSHEET 1

Plan one day's menu for your family using Appendix A and Appendix B for ideas on what and how much to eat.

<table>
<thead>
<tr>
<th>Menu For...</th>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
<th>Snack</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Food</td>
<td>Amount</td>
<td>Food</td>
<td>Amount</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>You</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Member #1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Member #2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Member #3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The next time you meet with your teacher, please review this sheet together.

Nutrition: Eating for Better Health
Different Needs at Different Times
At certain times, we need more of the nutrients stored in different foods to make us grow, to keep our bones and teeth strong, to feed an unborn baby, or to keep us from getting sick. Our children, whether they are babies, young children or teen-agers, need more nutrients at certain times, and our parents do, too.

The Adult Years
Let's talk about the adult years first. Even though your body has stopped growing by the time you're an adult, you still need certain nutrients to stay healthy. As your metabolism slows down, you need less calories. You should especially watch your fat, sugar, and salt.

At the same time, we are always "too busy" to eat right. Although life is demanding, good nutrition should be an important part of every day.

Everyone has trouble making ends meet at times. We all want to keep costs low and get the most for our money. Here are some ways to save money in the store and to plan cheap meals:

- Know what you want to buy -- use a shopping list.
  A shopping list can help you buy everything you need. Shopping after you've eaten a good meal will keep you from "impulse buying." To save time, your shopping list should follow the path you take through the store.
• Compare products and prices.
Use unit price stickers to figure the price per pound and find out which brand gives you the most product for the least amount of money per unit.

Unit pricing lets you compare different brands. When you unit price, you can buy a larger size, so you really save over several weeks or months.

You can also compare products by looking at newspaper ads to check for specials. Store brands are often made by the same company that makes a national brand, but are sold at a lower price because they aren't heavily advertised.

• Stock up on specials.
If the price is very low and the food can be stored easily, buy a lot.

• Use coupons for foods you buy all the time.
Coupons can save you money. If the coupon lowers the price below that of the brand you usually buy, or if you would buy that particular brand anyway, a coupon is a real money-saver. A coupon is not a cost-saver if you buy things you don’t need.

• Check out the competition.
If you are close to two or more stores, a farmer’s market, or a wholesale outlet, you may be able to save by finding which brand is the best buy at which spot.
Look at food choices.

Do you use convenience foods, eat meals away from home, or choose gourmet or specialty foods a lot? These habits can cost much more. Foods made from scratch are much cheaper than convenience foods, except for things like orange juice and pancake and cake mixes.

Watch the meat portions.

Meat, fish, and poultry often cost the most. Many people eat larger portions than they need. Your plate should be filled with more vegetables and starchy foods like rice, noodles, and pasta.

Plan your meals.

By planning meals (at least the main meal), you can save with grocery specials on meat and better use the food on hand. Planning also reduces the stress of deciding what to eat each day. You can plan a meal to use up leftovers, too.

Consider the amount of waste.

Along with checking the price per pound, look at the amount of waste from bone and gristle. Also, remember that hot dogs and cold cuts may seem cheap, but they are not wise nutritional choices.

Buy in bulk.

If there is a wholesale outlet nearby, or the local store carries bulk foods, you can often save by buying large quantities.
Eat grain products.
Sugary breakfast cereals, or those with added raisins or nuts, cost more. Stick with plain cereals and add your own extras. "Hot" breakfast cereals like oatmeal are usually cheaper than "cold" ones. Buy plain rice and noodles and add your own sauce (or a can of creamed soup) rather than prepared brands. Look for a day-old or thrift bread store.

Know the dairy products.
Powdered milk can be used for baking and, along with evaporated milk, may be bought with coupons and stored. Surprisingly, convenience stores often have the best price on fluid milk, but they are not the best places to do your regular food shopping.

Buy fresh fruits and vegetables when they're in season.
If a farmer's market is nearby, you may save more by buying a lot at once and freezing or canning the extras.

After the beep, please stop the tape and turn to Appendix C to learn more about saving on your food bills. Then, complete Worksheet 2 on the next page.
WORKSHEET 2

SAMPLE A

Bright & Beautiful
Detergent

Net Wt. 2 lbs.

Unit Price: $2.25/lb.
Units per box: 2
Cost of box: $4.50

SAMPLE B

Store Brand
Detergent

Net Wt. 2 lbs. 8 oz.

Unit Price: $2.00/lb.
Units per box: 2.5
Cost of box: $5.00

1. Which laundry detergent costs less per pound?

2. Which one has a higher price tag?

3. Which detergent is the better buy in the long run, and why?

The answers to this worksheet are in the back of this workbook.

Nutrition: Eating for Better Health
If you look at the total costs of these cereals, Happi-X's and Granola are the most expensive. But, each box has a different size and shape. Sweet Treats is in a big box, but it cost less than the small box of Granola. But, the granola weighs more than the Sweet Treats.

How can you tell which cereal is the best buy when they are all different sizes and costs? One way is to unit cost. To find out the unit cost, you divide the total cost by the unit. For example, the cost of a 15 ounce box of Happi-X's is $3.59. To find out how much each unit, or ounce, costs, divide $3.59 by 15.

\[
\text{Total cost} \div \text{unit} = \text{unit price}
\]

\[
\frac{\$3.59}{15 \text{ ounces}} = 24\$ \text{ per ounce}
\]

How much per ounce do the other cereals cost?

<table>
<thead>
<tr>
<th>Crunchy Bits</th>
<th>Sweet Treats</th>
<th>Granola</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2.79</td>
<td>$2.79</td>
<td>$3.59</td>
</tr>
</tbody>
</table>

Which cereal is the most expensive per unit?

Remember, although one brand of cereal may be cheaper, it might not be the best choice nutritionally. Be sure to read the ingredients and other nutritional information on the side of the box!

The answers to this worksheet are in the back of this workbook.
18 rolls for $4.46!!!
advertised in the flyer from your Local Discount Store

99¢
regular price for a four-pack at your Grocery Store

1) How much does each roll of toilet paper cost?
   Local Discount Store__________
   Grocery Store__________

2) Which is the better deal, cost-wise? ________________________________

3) Which would you buy? Why? ________________________________

The answers to this worksheet are in the back of this workbook.
Women need to take special care of themselves during the childbearing years. If you're taking birth control pills or using an intrauterine device (or IUD), you might need more of certain nutrients. Your health professional will be able to tell you which nutrients you need. If you can't get to a health professional easily, please ask your teacher for the community resource section or the Health Care Resources module in this series for more help.

If you eat poorly or skip meals a lot, you may need to take a vitamin. What happens to a woman in childbearing years who eats poorly or skips meals? She has little energy, tires quickly, has pale skin, and is sicker more often. This is called anemia. Twenty percent of women in childbearing years develop anemia from not getting enough iron or folic acid in the foods they eat. If you don't eat regularly, you're more at risk for anemia. Not eating enough makes the problem worse.

Many women don't drink enough milk. Milk contains calcium. Without enough calcium and exercise, you may be at risk for osteoporosis, a condition of fragile bones that occurs in later life. It's important to have two servings of milk or milk products like yogurt or cheese every day. To reduce your fat, try low-fat or skim milk.

When you're pregnant, your body changes a lot as you carry the baby. Hormone levels change and the growing baby crowds internal organs, making you uncomfortable. Simple changes in diet and exercise can help. If you are experiencing some of these problems, Appendix D can help.

* * *
# WORKSHEET 3

Match the words in the left column to their definitions or outcomes in the right column.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Exercise</td>
<td>a. None</td>
</tr>
<tr>
<td>2.</td>
<td>Osteoporosis</td>
<td>b. May stop nausea and give you more energy during pregnancy, but should not raise pulse higher than 140 beats per minute.</td>
</tr>
<tr>
<td>3.</td>
<td>&quot;Safe&quot; amount of alcohol to drink during pregnancy</td>
<td>c. May pass through placenta and into the baby's bloodstream, increasing heart rate.</td>
</tr>
<tr>
<td>4.</td>
<td>Smoking</td>
<td>d. Condition of fragile bones that occurs in women who don't get enough calcium.</td>
</tr>
<tr>
<td>5.</td>
<td>Caffeine</td>
<td>e. Can cause a lack of energy and pale skin. Occurs when you don't eat enough foods high in iron or folic acid.</td>
</tr>
</tbody>
</table>

*The answers to this worksheet are in the back of this workbook.*
The next part of this tape is about breastfeeding. If this doesn’t relate to you, please fast-forward to the next section on young children.

Breastfeeding
Deciding whether or not to breastfeed is important. While most health professionals think it’s best, only you can decide if it’s right for you. You must be able to think of your baby's needs over your own, and you'll need support from your partner, family, and friends.

If you’re breastfeeding right now, here’s a quick course. You should eat 200 more calories each day than when you were pregnant. You especially need more of vitamins A, C, niacin, riboflavin, calcium, and zinc. Drink lots of liquids, about two or three quarts a day, and always ask your health professional before you take any medicine.

If breastfeeding isn’t for you, you should know some things about formula. Formula is ordinary cow's milk changed to be like breast milk in nutrients. It comes in ready-to-use, concentrate, and powdered form.

Read formula labels carefully and follow the directions exactly. If the formula isn’t diluted enough, the baby could become sick. If you dilute it too much, the baby won’t get enough nutrients. Your health professional can recommend a brand of formula, and tell you how much to use. Babies under six months old should have only formula or breast milk. If your baby is allergic to cow’s milk, you can try soy milk formulas.
Just A Note

Bacteria love to grow in milk, so everything must be completely clean when you're making formula. The water you use should be sterilized by boiling it for five minutes. Make just enough formula for one day and refrigerate it. If you don't use it within 24 hours, throw it away. Don't save formula left in the bottle after feeding.

Never give honey to a baby under one year old. It can cause botulism, a sometimes fatal disease in newborns and babies.
WORKSHEET 4

Use information from pages 14 and 15 and from Appendix E to fill in the blanks in the following sentences.

1. While breastfeeding, a woman should eat _____ more calories each day than she did when she was pregnant.

2. A woman should drink ________ quarts of water each day while breastfeeding.

3. A baby will breastfeed about _______ times in a 24-hour period.

4. Breastfeeding stimulates the mother's _________ to tighten and return to its pre-pregnancy size.

5. Formula is ordinary _________ milk changed to be like breast milk in nutrient content.

6. Babies under _____ months old should have only formula or breast milk.

7. _______ formula may be given to babies who are allergic to cow's milk.

8. Honey may cause _________ in babies under one year old.

9. Everything used to prepare formula must be clean. You may _______ water and bottles by boiling for five minutes.

10. Once mixed, formula should be kept no longer than _______ hours.

The answers to this worksheet are in the back of this workbook.
This section is about young children and teenagers. If you would rather learn about adults over sixty, please fast-forward the tape to the next section.

*Toddlers to Teens*

As your children grow, their likes and dislikes will seem to change every day. Sometimes kids even ask that food be arranged differently on their plates. Even though you won’t be able to get rid of all these problems, it will help you if you know *why* children eat this way.

After the first year, children grow slower. Toddlers (ages one to two) gain five to ten pounds a year. Preschoolers (ages three to five) slow down even more and gain three to five pounds. Since they’re not growing as much, toddlers and preschoolers aren’t as hungry and don’t need as much food. Between the ages of one and two, children learn to eat by themselves, and gradually go from using their hands to using a spoon and fork. You can expect messiness and spilling until age two, but time and practice help, so let them practice a lot.

Although kids probably won’t have a balanced diet every day, you can help them by giving them a wide variety of foods from all the basic food groups. Kids need the same foods as adults, but in smaller portions. Generally, a child’s portion is one-half to three-quarters the serving size of an adult.

If your children only eat certain foods or skip meals, they may need vitamins. Vitamins are not a substitute for a good diet, so don’t be fooled. Remember, overdoses of vitamins can hurt growing children. If your children are eating well, they shouldn’t need vitamins. This may not be true for one- to three-year-olds, because they need more iron at this age. Ask your health professional about this.

*Nutrition: Eating for Better Health*
Children don’t have room for food with lots of calories if they are to eat all the nutrients they need. Encourage them to start good eating habits at a young age. When they are older, these habits will help them to make good food choices. Some of the habits to start are to:

- Encourage children to eat only when they’re hungry.
- Eat meals at regular times if possible.
- Give children healthy snacks in between meals.

There are lots of fun ways to teach children about nutrition. You can take them grocery shopping, and name the foods and where they come from. Together, you and your child could read stories about food.

Children who are allowed to help fix meals feel useful and important. As children move from age six to the onset of puberty, they will be able to help with meals even more. Although they grow slowly during this period, nutrition is still important because it:

- Gives energy for very physical activities.
- Helps to keep away infection.
- Gives building materials for growth.
- Stores nutrients for the adolescent "growth spurt."

Nutrition: Eating for Better Health
Milk is part of a balanced diet throughout life, especially for children ages 10 to 11. At this age, 16 ounces or 2 cups per day is needed. The calcium in milk is "stored" and used by children in their adolescent growth spurt.

To help control fat, you may use low-fat or skim milk in meals. The number of servings from each food group is the same as for young children, although portion sizes may increase with activity levels and age.

Teen-agers! The teen-age years may test you in many ways. Nutritional habits, from the huge appetites of sons to the fad diets of daughters, can add to your worry.

Teen-agers have a striking increase in certain hormones, which causes four major physical changes:

- Increased growth rate
- Increased height and weight
- Change in body composition
- Sexual maturity
Growth varies widely. Girls begin adolescence about 2 - 2½ years earlier than boys. Boys begin later (about age 12 - 13), peaking around age 14 and ending around age 19.

Girls gain body fat during this time. By age 20, women have almost twice as much fat as men, mostly in the hips and breasts. Boys increase muscle tissue, especially in their upper bodies, and decrease overall body fat.

Since girls begin growing earlier, they need more nutrients at an earlier age. Boys will need more food once the growth spurt begins, since their growth is more rapid and produces more muscle. A complete, balanced diet should continue through adulthood.

Teens need the same nutrients as adults, and at least the minimum number of recommended servings from each food group. The exception, again, is milk, which is increased to three servings to meet increased calcium needs.

Calorie needs for each individual are very different. Some teenage boys need even more than what's recommended, and may choose more servings from all food groups. Some teens eat a lot of rich foods and stay at the same weight. It is still important, however, not to eat too many of these foods. Stick to foods moderate in fat and sugar. If teens become less active, they should eat less calorie-rich food and have a regular exercise program.
Iron, calcium, magnesium, vitamins A and B₆, zinc, and folic acid are important nutrients in a teen-ager’s diet. Learning more about foods that are high in these nutrients will help your teen-ager and you, so let’s go over the list together:

- Foods that are high in iron are green vegetables, whole grain cereals, dark and leafy green vegetables, peas, beans, heart, oysters, sardines, shrimp, prune juice, dried fruits, nuts, red meat, chili powder, clams, liver, kidneys, lentils, and watermelon juice.

- High calcium sources include all types of milk, ice cream, ice milk, cheese, yogurt, dark and leafy green vegetables, salmon, oysters, sardines, rhubarb, almonds, beans, lentils, cottage cheese, and tofu.

- Magnesium can be found in coriander, cottonseed flour, wheat bran, dried dill weed, celery seeds, sage, dried mustard, basil, cocoa powder, fennel seeds, coffee, savory, cumin seeds, wheat germ, peanut flour, sesame seeds, tarragon, marjoram, poppy seeds, and brazil nuts.

- To get more Vitamin A, eat more tomatoes, carrots, broccoli, mango, papaya, cantaloupe, pumpkin, winter squash, watermelon, sweet potatoes, liver, hot peppers, apricots, beet greens, collards, kale, spinach, mustard greens, swiss chard, and turnip greens.

Nutrition: Eating for Better Health
- **Vitamin B₆** can be found in chicken, fish, fruits, cereals, vegetables, and organ meats.

- **Zinc** sources include oysters, wheat germ, sesame seeds, poppy seeds, wheat bran, yeast, chervil, alfalfa seeds, celery seeds, eggs, thyme, liver, beef, basil, mustard seeds, caraway seeds, and orange pekoe tea.

- Foods high in **follic acid** include beans, oranges, wheat germ, milk, eggs, whole grain breads, crisp head lettuce, whole grain cereals, liver, bananas, tomatoes, soybeans, romaine, and spinach.

Acne has been blamed on many foods, including chocolate, fatty or fried foods, sweets, and soft drinks. However, no medical evidence points to one food. A balanced diet and good skin care will help, but if a teen-ager feels that certain foods make the acne worse, avoid them.

* Please stop the tape after the beep and complete Worksheet 5 on the next page.

***

* Nutrition: Eating for Better Health*
WORKSHEET 5

Place a "T" for True or an "F" for False in front of each of the following statements.

1. _____ Children need all the same foods as adults do, only in smaller portions.

2. _____ Toddlers usually only gain five to ten pounds per year.

3. _____ Vitamin pills are an OK substitute for a good diet.

4. _____ At ages 10 to 11, a child needs 16 ounces of milk each day.

5. _____ Teenagers don't need to drink milk.

6. _____ Girls lose body fat during the adolescent growth spurt.

7. _____ Sardines are a good source of calcium.

8. _____ Chicken is a good source of Vitamin A.

The answers to this worksheet are in the back of this workbook.

Nutrition: Eating for Better Health
Adults Over Sixty

As you get older, you need less calories. Your bodies use calories slower, and you may not be as active as you once were. Lots of senior citizens become overweight unless they change the way they eat. Being overweight can increase the risk of high blood pressure, diabetes, and heart disease. It can also make it hard to breathe, make the heart work harder than it should, and put more stress on bones and joints.

Older adults should eat nutritious meals. You need vitamin D and calcium to keep strong bones and teeth; you need protein to keep and repair body tissues, fight infection, and prevent disease. You can get these nutrients from milk, cheese, meat, eggs, nuts, grains, seeds, and legumes like dried peas or beans.

There seems to be a strong link between salt and high blood pressure. High blood pressure is common in older people. Untreated, it may lead to heart disease, stroke, and kidney problems. Ask your health professional about salt and blood pressure.

If you’re taking any medicine, your health professional or pharmacist should tell you about its side effects, and whether the medicine should be taken before, during, or after meals. They should also give you information on foods which may cause problems with the medicine. If you drink alcohol, be sure to ask about its safety, too.

Please stop the tape after the beep to review Appendix F for ideas on protein. Then turn to the next page to complete Worksheet 6, which will help you figure out how much fat you need each day.

** **

Nutrition: Eating for Better Health
WORKSHEET 6

How Much Fat Do You Need?

No more than 30% of your total calories (or less) should come from fat.

Joe consumes 1800 calories each day. To find out Joe’s limit on fat intake:

1. Multiply 1800 calories by 30% (0.30): $1800 \times 0.30 = 540$ calories
2. Divide 540 calories by 9, since there are 9 calories in one gram of fat: $540 \div 9 = 60$ grams of fat

Therefore, Joe should have a maximum of 60 grams of fat per day.

There are four grams in one teaspoon of fat. To find how many teaspoons of fat 60 grams is:

1. Divide 60 grams by 4: $60 \div 4 = 15$ teaspoons

Therefore, Joe should have a maximum of 15 teaspoons of fat per day.

Compute YOUR Fat Needs

1. My average caloric intake each day = ____________ calories.
2. (# calories per day) $\times$ 0.30 = ____________ calories from fat per day maximum.
3. (# calories from fat per day) $\div$ 9 = ____________ grams of fat per day maximum.
4. (# grams of fat per day) $\div$ 4 = ____________ teaspoons of fat per day maximum.

The next time you meet with your teacher, please review this sheet together.

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1Nutrition Services, Allegheny County Health Department, Pittsburgh, PA, 1988.

Nutrition: Eating for Better Health
"You can't be too rich or too thin." Believing this may harm you, because there is danger with the value placed on being thin. Every year, hundreds of diet books and appetite suppressants flood the market. However, over 90% of the people who lose weight gain it back.

Most diets don't work, and some are even dangerous. Protect yourself and your family, especially teen-agers, from harmful diets. If you want to keep your weight the same, or are thinking about dieting, ask yourself these questions:

1. Why do I want to lose weight? Sample answers may be, "To impress my friends and family," or "To increase how much activity I can do."

2. Do you need special foods, devices, books, medicine, or vitamins for the diet?

3. Does it promise rapid weight loss (more than two pounds per week)?

4. Does it sound sensational, such as "eat all you want," "no will-power needed," or "spot reduction?"

5. Does it encourage using drugs or pills to get rid of water or to reduce your appetite?

6. Does the diet limit groups of foods or eliminate a basic food group?
7. Does the diet lack the supervision of qualified health professionals?

8. Does the diet lack skills to maintain weight loss and prevent regain?

If you answered "yes" to one or more of the above questions, chances are the program is not healthy.

Your health professional can help you choose a weight-loss plan. Some of the things you'll learn from him or her are to:

- Stay way from diets that push one particular food group or nutrient.
- Stay away from diets that have you drink only water, juice, tea, and coffee.
- Stay away from diets with prepared formulas or mixes; they usually do not promote wise eating habits or long-term weight loss.

Guess what? If a diet sounds too good to be true, it is! A fad diet is a temporary and possibly harmful way to lose weight which is probably not the best for your body. Also remember that someone is usually making lots of money from a fad diet that just doesn't work.
Exercise

Eating right and exercising go hand-in-hand. Without exercise, you may become a victim of heart disease, stroke, high blood pressure, diabetes, overweight, and obesity.

Besides helping you stay fit and healthy, daily exercise can help you:

- Cope with stress
- Feel better about yourself
- Be more energetic
- Prevent bone loss with aging
- Be less depressed
- Feel more attractive
- Control your appetite

We're talking about changing lifestyles when we talk about regular exercise. Set aside a regular time to exercise, so that you will keep up with your exercise routine. If it's a regular part of your day, exercise becomes an enjoyable habit instead of a chore. Always see your health professional before beginning any exercise program. For some ideas of everyday activities that can give you a workout without a lot of effort, stop the tape after the beep and look at Appendix G. You may also want to ask your teacher about the exercise module called *Exercise: Benefits for Body and Mind*.

* * *

After you review Appendix G, take some time to complete Worksheet 7 to set your own goals for better health.

* * *
WORKSHEET 7

What are your health goals? To eat better? To provide healthy meals for your family? To exercise more? Take a few moments to write down your goals in the space provided.

EXAMPLE: My goal is to eat food that is better for me without spending more money. Starting tomorrow, I will do this by learning more about nutrition, using coupons, and unit pricing.
Congratulations on finishing this workbook! We hope that the information has been helpful to you. Now is the time for you to start using some of the tips and ideas that you have just learned about nutrition. If you would like to learn more about nutrition, ask your teacher for ideas, and maybe even share what you’ve already learned with your classmates.
APPENDIX A

STEPS TO IMPROVE HEALTH

1. **Eat a wide range of foods, including:** fruits, vegetables, whole-grain/enriched breads, cereals/grain, milk, cheese and yogurt, meats, poultry, fish, eggs, and **legumes** (peas and beans).

2. **Stay away from fat, saturated fat, and cholesterol.**
   a. Eat lean meat, poultry, fish, and **legumes** (peas and beans).
   b. Cut away extra fat from meats.
   c. Don't use eggs and organ meats (liver) a lot.
   d. Use very little butter, cream, hydrogenated margarine, shortening, lard, and coconut or palm oils.
   e. Broil, bake, or boil foods instead of frying.

3. **Eat foods with starch and fiber.**
   a. Eat **starches** instead of fats and sugars.
   b. Pick **whole grain** foods, fresh vegetables and fruits, beans, and peas.

4. **Eat less sugar.**
   a. Honey, brown sugar, and syrups (corn, maple) are all sugars.
   b. Eat less candy, ice cream, cake, cookies, desserts, and soft drinks.
   c. Use only fresh fruit or fruit canned in natural juices.
   d. Watch labels for hidden sugar: sucrose, maltose, dextrose, lactose, fructose, and syrup.
   e. Watch labels for the first or second ingredient listed; if any sugar is listed, it means there is a lot.
5. **Eat less salt.**
   a. Cook with herbs.
   b. Eat unsalted or lightly salted foods.
   c. Cook with very little salt, or none at all.
   d. Don’t add extra salt to food at the table.
   e. Don’t eat a lot of chips, pickles, or **cured meats** (ham, bacon) or much cheese, soy sauce, steak sauce, ketchup, and garlic salt.
   f. Read labels on **processed foods**, which are foods treated with preservatives to keep them from going bad.

6. **Drink little alcohol, if at all.**
   a. One to six drinks per week seem to cause little harm in most adults.
   b. Pregnant women and those who can’t control alcohol intake should not drink at all.
   c. If watching your weight, limit how much you drink.
   d. Alcohol is full of **empty calories**. It can also get in the way of choosing the right foods or lead to overeating.
APPENDIX B

BASIC EATING PLAN FOR ALL AGES

MILK
Recommended amount: 16 ounces per day (32 ounces for pregnant women).
Adult portions: 1 cup milk; 1 cup yogurt; 1 - 1½ ounces cheese.
Children's portions: ½ - ¾ cup milk; ½ to ¾ cup yogurt; ¾ to 1 ounce cheese.
Healthy tips:
▶ Since children take in smaller portions, they need to eat more often to meet their total needs. ▶ Milk is important, but don’t overdo it and not leave room for other important foods.

BREADS AND WHOLE GRAINS
Recommended servings: 6
Adult portions: 1 slice bread; 1 cup ready-to-eat cereal; ½ cup pasta.
Children's portions: ½ - ¾ slice of bread; ½ cup ready-to-eat cereal; ¼ - ½ cup pasta.
Healthy tips:
▶ Examples of good breads and whole grains are oatmeal, whole wheat bread, whole wheat muffins, brown rice, graham crackers, and buckwheat pancakes.

FRUIT
Recommended servings: at least 2
Adult portions: 1 apple, ½ banana, ½ cup juice, ½ cup sliced peaches.
Children’s portions: ½ apple, ½ banana, ¼ cup sliced peaches, ½ cup juice.
Healthy tip:
▶ Drink fruit juices instead of fruit-flavored drinks. Fruit-flavored drinks have more sugar and more calories.
APPENDIX B (continued)

VEGETABLES

Recommended servings: at least 3
Adult portions: ½ cup.
Children's portions: ¼ - ½ cup.
Healthy tips: ► Eat all types (dark green, deep yellow, starchy) of vegetables. ► Many children don't like vegetables, but encourage them to eat some. ► Don't let children fill up on favorite foods (breads, fruit) if they won't have enough room for vegetables.

PROTEINS

Recommended servings: 2 - 3 (total 3 - 4 ounces lean).
Adult portion: 2 - 3 ounces lean meat or fish.
Children's portion: 1 - 2 ounces lean meat.
Healthy tips: ► Eat meat, fish, poultry, and eggs. ► Stay away from processed lunch meats (bologna and hot dogs) because they have high fat and low iron, minerals, vitamins, protein. ► Read labels. ► See Appendix F for ideas on getting protein without spending lots of money.

FATS AND SUGARS

The American Heart Association recommends the daily limit for fat intake be 30% of the total number of calories. Other sources say to eat only 10% to 20%. Most women should try to keep fat below 50 to 67 grams, and men below 67 to 83. By reading labels, it is easy to figure out the amount of fat in certain foods.

Nutrition: Eating for Better Health - Appendices
SAVING CA$H AND TIME

TIPS FOR SHOPPING AND LOW-COST MEALS

- Know what you want to buy. Make a shopping list.

- Compare products. Use unit price stickers to figure out the price per pound and to figure out which gives you the most for the least amount (see below).

<table>
<thead>
<tr>
<th>Package Size</th>
<th>Sticker Price</th>
<th>Unit Price (per pound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pound</td>
<td>$0.49</td>
<td>$0.49</td>
</tr>
<tr>
<td>2 pounds</td>
<td>$0.78</td>
<td>$0.39</td>
</tr>
<tr>
<td>3 pounds</td>
<td>$1.32</td>
<td>$0.44</td>
</tr>
</tbody>
</table>

By unit pricing, you can see that the two pound package gives the best price per pound. Unit pricing lets you look beyond the sticker price, breaking it down to compare easily. You may buy a bigger package to get the best unit buy, so the real savings come over weeks or months.
TIPS FOR THE BUSY PERSON, WORKING PARENT, OR SINGLE COOK

- Plan menus ahead of time.

- Borrow quick-and-easy cookbooks from your local library or County Cooperative Extension office.

- Make large batches of food when there is time. Freeze single portions for future meals.

- Read labels on convenience foods to see how they fit into your eating pattern.

- Use a microwave oven (if available) to save time defrosting and cooking.

- Have your major meal at lunchtime and a lighter meal for dinner.

- Eat nutritiously if you must eat away from home. Remember that eating out costs more.

- Eat meals with a friend, each of you bringing something to share.

- Have quick-to-fix breakfast foods on hand. If you're not hungry in the morning, take a nutritious snack for later!
TIPS FOR PREGNANT WOMEN

- See a health care professional.
  A health care professional will guide you through your pregnancy by checking your overall condition and watching your diet. Seeing a health care professional as soon as you find out that you are pregnant is the most important tip of all.

- Good posture
  Sitting or standing the right way, which is called good posture, helps stop backaches. Exercising may stop nausea and give you more energy. Walking and swimming are best, but other exercise is okay as long as you don’t feel pain, only get a little tired, and your pulse is no higher than 140 beats per minute. See your health care professional about an exercise program.

- Weight Gain
  You’ve heard the old saying, "You’re eating for two now." In truth, you are. The weight you gain affects the baby’s birth weight. Health care professionals agree that higher birth weight means a healthier baby. They recommend that you gain 24-30 pounds, at a rate of 2-4 pounds the first three months, and one pound every nine days afterward. Do not start a new diet when pregnant without talking to your health professional first.
Watch what you put into your body.
What you put into your body affects the unborn baby. If you're breastfeeding, you should still watch what you eat after the baby is born. It's important to eat a wide range of foods with enough calories and nutrients, especially proteins, iron, folic acid, and calcium.

Alcohol is bad for the baby because it slows the growth of its cells or kills them, especially the cells in the brain. Too much drinking can cause birth defects. Even small amounts of alcohol, like two drinks per day, may hurt the unborn baby. There is no "safe" amount of alcohol during pregnancy.

Avoid all drugs: street drugs (like marijuana or cocaine) and even over-the-counter drugs (like aspirin). Smoking can cause low birth weight in babies, and cancer and lung disease in adults.

Caffeine is also a drug, found mostly in coffee, tea, colas, and chocolate. It can pass into the baby's bloodstream, making its heart beat faster. If caffeine made you jittery or short of breath before you got pregnant, you should stay away from it now. Try to drink caffeine-free coffee, tea, and colas or caffeine-free beverages such as ginger ale or root beer. Stay away from cocoa products and chocolate.

Even though some people who take chances have babies with no problems, any unsafe behavior is risky. Changing bad habits at any time can help both mother and child.
APPENDIX E

BREASTFEEDING: IT'S YOUR CHOICE

Advantages

- Breastmilk is the perfect food: it has the right balance of nutrients, is easy to digest, and has antibodies to fight infection.

- Breastfeeding is safe and clean. The milk is at the right temperature and always available.

- Breastfeeding helps the mother's uterus tighten and go back to its pre-pregnancy size more quickly. It also helps the mother lose weight because she uses more calories while breastfeeding.

- Breastfeeding is quicker than bottle-feeding. It is less work and more convenient.

- Breastfeeding helps build a close and loving tie between mother and child.

---

1 See your health care professional for more information and recommendations about breastfeeding.

*Nutrition: Eating for Better Health - Appendices*
Disadvantages

- Many new mothers worry that they don't have enough milk. If the baby is growing and gaining weight, there should be no problem. Formula may be used if the mother really does not have enough.

- When breastfeeding, babies need to eat more often: 8-12 times in 24 hours.

- It may be hard for working moms to work and breastfeed. It can be done with careful planning.

- The new mother may feel tied down, although milk may be expressed or "pumped" to use later. She might also use formula if she needs to be away.
IDEAS FOR HIGH-QUALITY PROTEIN

Certain foods can be combined so that they provide better protein together than in either food separately. Here are some combinations of foods that go well with each other.

COMBINATIONS

Rice and beans

Rice and milk

Rice and lentils

Wheat products with milk or cheese

Wheat and beans

Cornmeal and beans

EXAMPLES

Beans and rice
Rice and bean casserole
Hopping John (rice and black-eyed peas)
Rice cereal with milk
Cheese and rice souffle
Rice pudding
Rice and cheese casserole
Rice and lentil casserole
Macaroni and cheese
Cereal with milk
Cheese sandwich
Baked beans with wheat bread
Baked beans with brown bread
Corn tortilla and beans
Corn bread and navy beans
Tamale pie

2Courtesy of The American Red Cross

Nutrition: Eating for Better Health - Appendices
<table>
<thead>
<tr>
<th>Ingredient Combination</th>
<th>Recipes</th>
</tr>
</thead>
</table>
| Beans and milk         | Succotash (lima, beans, corn, milk)  
|                        | Bean chowder  
|                        | Lentil soup and glass of milk  
|                        | Beans and cheese  
|                        | Bean salad and cottage cheese  
|                        | Split pea soup  
| Peanuts, milk, and wheat | Peanut butter sandwich and glass of milk  
| Potatoes and milk      | Cream of potato soup  
|                        | Scalloped potatoes  
|                        | Potato pancakes  

*Nutrition: Eating for Better Health - Appendices*
APPENDIX G

LIFESTYLE ACTIVITIES

- Walk up & down stairs
- Park farther away
- Get off the bus early
- Mow and weed the lawn
- Make bread from scratch
- Walk the dog
- Wash the car
- Start a garden
- Carry home small grocery bag or load the car yourself
- Do errands with the kids rather than sending them for you
- Plan trips with physical activity
- Scrub the floors and windows
- Take a walk during lunch time
- Do exercises while watching TV
- Do leg lifts while brushing teeth
- Stand rather than sit while waiting
- March in place while waiting for laundry
- Walk more, sit less
- Walk to talk to your co-worker or neighbor
- Practice tensing stomach muscles while driving or riding

3Adapted from Why Weight? by Nutrition Services, Allegheny County Health Dept., Pittsburgh, PA, 1986.

Nutrition: Eating for Better Health - Appendices
acne a skin condition in which oil glands become irritated and cause pimples.

adolescent the period of time between childhood and maturity, usually pre- to early teens.

anemia a condition resulting from low blood hemoglobin; person is usually pale and weak. Anemia can be prevented by eating foods high in iron and folic acid.

antibodies blood proteins which fight infections.

appetite suppressant a drug or other substance which curbs the desire to eat.

bacteria a microscopic organism which often carries germs.

balanced an equal division of amount. A balanced diet has the correct parts from each food group to make it even.

botulism a kind of food poisoning.

caffeine a drug which raises the heart rate, found especially in tea and coffee.

calcium a grayish-white element found in bones and teeth.

calorie a unit for measuring how much energy food provides.

cholesterol a fatty substance found in animal tissues, thought to cause hardening of the arteries. Cholesterol is commonly found in foods high in animal fat such as cheese and red meat.

concentrated having larger amounts of the primary ingredient. Concentrated juices must be diluted with water to be restored to their regular consistency.

consumption the overall amount eaten or drunk.

"convenience" foods foods that are fast and easy to use, but often higher in calories and less nutritious than foods made from scratch.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>cured meats</td>
<td>meats preserved by salting, drying, or smoking; examples are ham, bacon, sausage, and smoked turkey.</td>
</tr>
<tr>
<td>diabetes</td>
<td>a disease in which sugar and starch are not properly digested by the body. Diabetes can often be controlled through diet, but may need to be regulated by taking insulin.</td>
</tr>
<tr>
<td>diet</td>
<td>the sort of foods regularly eaten by a person.</td>
</tr>
<tr>
<td>dilute</td>
<td>to thin down, or to make a liquid less concentrated by adding water or other liquid.</td>
</tr>
<tr>
<td>empty-calorie</td>
<td>describes foods which aren’t nutritious and are probably high in fat and calories. Potato chips are an example of an empty-calorie food.</td>
</tr>
<tr>
<td>enriched</td>
<td>claims to have higher quality because of added vitamins or minerals, but is not always better.</td>
</tr>
<tr>
<td>express</td>
<td>to press or squeeze out milk from a female’s breasts.</td>
</tr>
<tr>
<td>fat</td>
<td>a whitish or yellowish substance which cannot be broken down by water, found in animals and certain seeds such as sunflowers.</td>
</tr>
<tr>
<td>fiber</td>
<td>a thin strand making up animal or vegetable tissue. Fiber helps regulate digestion.</td>
</tr>
<tr>
<td>folic acid</td>
<td>a B vitamin which is important to prevent anemia.</td>
</tr>
<tr>
<td>gourmet</td>
<td>an authority on good food and drink. Gourmet is often used to describe foods which are especially fancy or rich.</td>
</tr>
<tr>
<td>gristle</td>
<td>tough tissue found in animal meat.</td>
</tr>
<tr>
<td>health professional</td>
<td>one with knowledge and advanced training regarding the state of being well and free from illness, i.e., a doctor, nurse, or chiropractor.</td>
</tr>
<tr>
<td>hormones</td>
<td>substances produced in the body which stimulate various organs.</td>
</tr>
<tr>
<td>impulse-buys</td>
<td>items bought on a sudden whim rather than because of previous planning.</td>
</tr>
<tr>
<td>Intrauterine Device</td>
<td>(IUD) a contraceptive that is inserted into and left inside the uterus for a prolonged period of time.</td>
</tr>
</tbody>
</table>
**legumes**
plants which contain seeds in pods such as peas, peanuts, or beans. Legumes are usually high in protein.

**metabolism**
the body process which either uses food for energy or converts it into living tissues.

**microwave oven**
an oven that cooks with heat from microwaves going through the food. Microwave ovens usually cook much faster than conventional ovens.

**muscle**
fibrous tissues which contract and relax to make body parts move.

**nausea**
a feeling of sickness or disgust, usually in the stomach.

**nutrition**
nourishment; the way to keep a person alive and well with food.

**osteoporosis**
a bone disorder in which bones become weaker and more brittle. Osteoporosis is found mostly in older women who have passed menopause.

**physical**
of or relating to the body.

**placenta**
an organ that develops in the womb during pregnancy and supplies the fetus with nourishment.

**posture**
the way a person stands or sits or walks.

**processed foods**
foods treated with preservatives or other chemicals to keep them from going bad. Processed foods are widely considered unhealthy.

**protein**
an organic compound made up of nitrogen, found in plants and animals, and forming a key part of the diet.

**puberty**
the time when a person's reproductive organs become mature and are able to produce offspring.

**resource**
something or someone to provide help or support.

**soft drinks**
non-alcoholic drinks such as soda, usually high in sugar.

**starch**
a white carbohydrate important in human food.

**sterilize**
to make sterile or free from germs.
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>unit pricing</strong></td>
<td>pricing of items according to a standard unit such as a pound or quart. Unit pricing helps the buyer to see which brand would be least expensive if each were the same size.</td>
</tr>
<tr>
<td><strong>uterus</strong></td>
<td>the hollow organ in women where a child is conceived and nourished during pregnancy; the womb.</td>
</tr>
<tr>
<td><strong>vitamins</strong></td>
<td>organic substances found in many foods and key to the nutrition of humans and other animals.</td>
</tr>
<tr>
<td><strong>whole-grain</strong></td>
<td>breads or cereals made from whole-grain flours such as wheat, oat, or rye rather than enriched white flour.</td>
</tr>
<tr>
<td><strong>wholesale</strong></td>
<td>the selling of goods in large quantities. It is often cheaper to buy storable items wholesale.</td>
</tr>
</tbody>
</table>
SAMPLE A

1. Which laundry detergent costs less per pound?
   
   Answer: Sample B, Store Brand Detergent

2. Which one has a higher price tag?

   Answer: Sample B, Store Brand Detergent

3. Which detergent is the better buy in the long run, and why?

   Answer: Sample B, Store Brand Detergent. It costs less per pound and there is more in
   the box, so it will last longer and you get more for your money even though you have to
   spend more up front.

SAMPLE B
ANSWERS TO WORKSHEET 2 (continued)

HAPPI-X's

<table>
<thead>
<tr>
<th>Crunchy Bits</th>
<th>Sweet Treats</th>
<th>Granola</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 oz.</td>
<td>12 oz.</td>
<td>14 oz.</td>
</tr>
<tr>
<td>$3.59</td>
<td>$2.79</td>
<td>$3.59</td>
</tr>
</tbody>
</table>

If you look at the total costs of these cereals, Happi-X's and Granola are the most expensive. But, each box has a different size and shape. Sweet Treats is in a big box, but it cost less than the small box of Granola. But, the granola weighs more than the Sweet Treats.

How can you tell which cereal is the best buy when they are all different sizes and costs? One way is to unit cost. To find out the unit cost, you divide the total cost by the unit. For example, the cost of a 15 ounce box of Happi-X's is $3.59. To find out how much each unit, or ounce, costs, divide $3.59 by 15.

\[
\text{Total cost} ÷ \text{unit} = \text{unit price}
\]

\[
\$3.59 ÷ 15 \text{ ounces} = 24\text{¢ per ounce}
\]

How much per ounce do the other cereals cost?

Crunchy Bits 23¢
Sweet Treats 28¢
Granola 26¢

Which cereal is or the most expensive per unit? Sweet Treats

Remember, although one brand of cereal may be cheaper, it might not be the best choice nutritionally. Be sure to read the ingredients and other nutritional information on the side of the box!

Nutrition: Eating for Better Health - Worksheet Answers
Nutrition: Eating for Better Health - Worksheet Answers

18 rolls for $4.46!!! advertised in the flyer from your Local Discount Store

regular price for a four-pack at your Grocery Store

1) How much does each roll of toilet paper cost?

Local Discount Store $0.25

Grocery Store $0.25

2) Which is the better deal, cost-wise? Neither, because they cost the same.

3) Which would you buy? Why? If you have a lot of storage space and have a large family, you may want to buy the larger size to save shopping time.
ANSWERS TO WORKSHEET 3

1. Exercise  
   a. None

2. Osteoporosis  
   b. May stop nausea and give you more energy during pregnancy, but should not raise pulse higher than 140 beats per minute.

3. "Safe" amount of alcohol to drink during pregnancy  
   c. May pass through placenta and into the baby's bloodstream, increasing heart rate.

4. Smoking  
   c. May pass through placenta and into the baby's bloodstream, increasing heart rate.

5. Caffeine  
   d. Condition of fragile bones that occurs in women who don't get enough calcium.

6. Anemia  
   e. Can cause a lack of energy and pale skin. Occurs when you don't eat enough foods high in iron or folic acid.

   f. Can cause low birth weight in babies.
1. While breastfeeding, a woman should eat \textbf{200} more calories each day than she did when she was pregnant.

2. A woman should drink \textbf{2 - 3} quarts of water each day while breastfeeding.

3. A baby will breastfeed about \textbf{8 - 12} times in a 24-hour period.

4. Breastfeeding stimulates the mother’s \textit{uterus} to tighten and return to its pre-pregnancy size.

5. Formula is ordinary \textit{cow’s} milk changed to be like breast milk in nutrient content.

6. Babies under \textbf{6} months old should have \textit{only} formula or breast milk.

7. \textit{Soy milk} formula may be given to babies who are allergic to cow’s milk.

8. Honey may cause \textit{botulism} in babies under one year old.

9. Everything used to prepare formula must be clean. You may \textit{sterilize} water and bottles by boiling for five minutes.

10. Once mixed, formula should be kept no longer than \textbf{24} hours.
ANSWERS TO WORKSHEET 5

1. **T** Children need all the same foods as adults do, only in smaller portions.

2. **T** Toddlers usually only gain five to ten pounds per year.

3. **F** Vitamin pills are an OK substitute for a good diet.

4. **T** At ages 10 to 11, a child needs 16 ounces of milk each day.

5. **F** Teenagers don’t need to drink milk.

6. **F** Girls lose body fat during the adolescent growth spurt.

7. **T** Sardines are a good source of calcium.

8. **F** Chicken is a good source of Vitamin A.