Section 5: Conducting the Program

The date has been set, the program has been promoted, and you have reviewed the script and prepared the materials. Now comes the easy part – conducting the program.

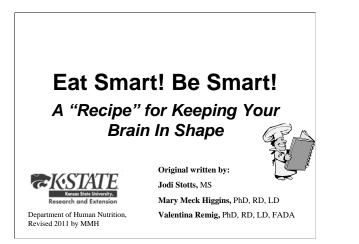
The program should run as follows:

- 1. Give the presentation.
- 2. Pass out the booklets.
- 3. Pass out the survey forms (and pens/pencils) have the audience fill them out collect the survey forms (and pens/pencils).
- 4. Discussion.

Discussion is optional. We suggest this as an ending to your program because we found out when we tested the program that our audience was extremely interested in discussing the topics covered in the presentation, asking related questions, and more. However, it is up to you to conduct a discussion based on the audience's interest, your timeframe, and how comfortable you feel fielding questions. If you do not know the answer to a question asked, be sure to say you do not know but will try to find out. Honesty is the best policy for any presenter.

Presentation

18 PowerPoint Slides with Scripts



Hello! My name is ______ and I would like to welcome you to today's presentation, "Eat Smart! Be Smart! A 'Recipe' for Keeping your Brain in Shape." This presentation comes to you from nutrition experts at Kansas State University's Department of Human Nutrition and from the Kansas Mental Health and Aging Coalition.

Please take a moment to think about why you came to today's talk and what you hope to learn. In a minute, I'll ask one or two of you to share your answer.

[Note to speaker: Pause for a full minute before continuing.]

Will one or two of you share with the whole group your answer?

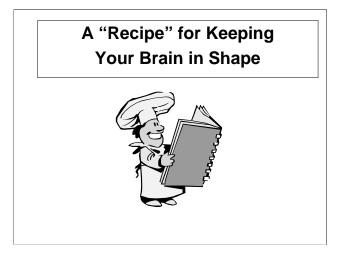
[Note to speaker: Wait for a volunteer. Acknowledge answer. If reason(s) corresponds to something covered in this presentation, respond by saying something like, "We will be discussing that issue towards the middle of the talk."]

How much time do you spend thinking? This may seem like a strange question, but most of our day is spent using our brains. Whether we are reading the newspaper, talking to a friend, assembling a puzzle, crocheting an afghan, exercising, or just relaxing by ourselves, our brains are at work!

Another question – Can the foods you eat help keep your brain "in shape"? Yes. It's true!

Today we are going to discuss how diet and other lifestyle choices help ensure our mental and emotional well-being.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Manhattan, Kansas State University is an equal opportunity provider and employer. Kansas State University, County Extension Councils, Extension Districts, and the U.S. Department of Agriculture cooperating.



2

Have you ever attempted to bake an apple pie or cook a new casserole without following a recipe? For all but the expert cook, this would be a recipe for disaster!

Recipes tell us what ingredients to use and the amount of those ingredients, and how to prepare the mixture, in order to get the final 'blue ribbon' product we desire.

The same is true for our diets. It is helpful to follow a set of guidelines or a "recipe" for good nutrition. The goal is to eat foods that we enjoy and that will help us stay healthy. Research shows that a healthy diet decreases the risk for memory loss, depression, anxiety, Alzheimer's disease, and other dementias. (Dementia is a progressive loss of intellectual function).

Today, we are going to focus on these aspects of our diet. Fortunately, many of the tips we will discuss can also help protect against numerous other health conditions, such as diabetes, heart disease, cancer, and hypertension. That's especially good news, because several of these conditions are related to a decline in our mental well-being, thinking ability and mood.

A Recipe for Keeping Your Brain in Shape: Dietary Ingredients

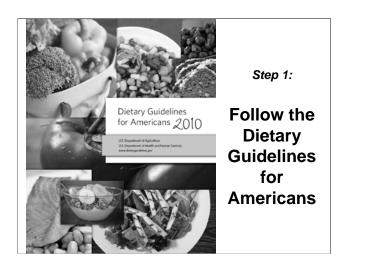
- Follow the Dietary Guidelines for Americans
- Drink plenty of liquids
- Eat plenty of colorful fruits and vegetables, and more whole grains
- Reduce calories from saturated fats
- Supplement with vitamin B-12

Let's take a look at the ingredient list for preparing our recipe to keep our brains in shape. Making these dietary choices promotes strong mental and emotional health:

- Following the Dietary Guidelines for Americans
- Drinking plenty of liquids
- Eating plenty of vegetables high in vitamin E
- Eating more whole grains, and fewer refined grains
- Reducing calories from saturated fats

and

• Supplementing with vitamin B12



Δ

Step 1: Follow the Dietary Guidelines for Americans.

The 2010 Dietary Guidelines advise us on how to choose a nutritious diet within our calorie needs and to have a healthy eating pattern. They are recommendations to help people living in the United States who are ages 2 years and older live longer and healthier lives.

Let's talk in more detail about these recommendations.

The Two Main Tips in the 2010 Dietary Guidelines:

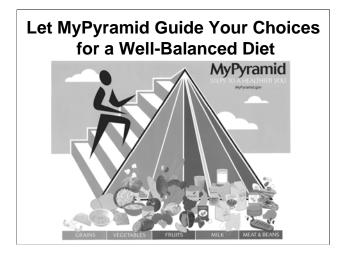
Focus on eating nutrient-rich foods and beverages

Achieve, and sustain, a healthy body weight over time

The 2010 Dietary Guidelines for Americans emphasize two points:

First, we should focus on eating foods and beverages that are nutrient-rich. That means choosing foods and beverages that offer lots of healthful nutrients but few calories.

Secondly, we should maintain a healthy body weight. For most people, this means choosing fewer high-calorie foods and getting more physical activity, so that they gradually lose weight if they are overweight. For other people, this means gradually gaining weight if they are underweight. And for those people who are at a healthy body weight, it means staying at that weight.



MyPyramid is a symbol for what is an all-around good diet. No matter what your eating style is, you can use the MyPyramid to help make healthful food choices. The figure of the person going up the stairs reminds us to be physically active.

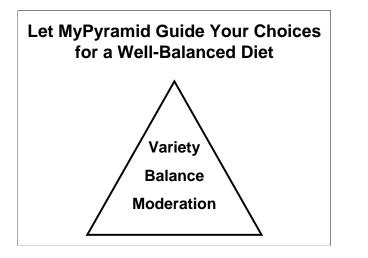
The MyPyramid graphic that you see here shows the parts of a healthful diet. The colorful stripes represent the five main nutrient-rich food groups. Foods are grouped together based on their similar nutrients. So, foods in one food group generally have different nutrients than those in another group.

The five main nutrient-rich food groups include: whole grains, vegetables without added salt, fruits without added sugar, fat-free and low-fat milk and dairy products, and protein foods low in solid fats, such as fish and seafood, cooked dry beans, poultry without skin, lean meats, eggs, nuts, and seeds.

In addition to the food groups that I just mentioned, you should also drink plenty of fluids. We will discuss the importance of liquids in a few minutes.

Oils supply essential nutrients, richness and pleasure when added to the food groups, but they should be eaten in small quantities. They are represented by the small narrow yellow band in MyPyramid.

Three nutrients– calcium, vitamin D, and vitamin B12 – are found in a variety of foods, but older adults in particular may need more of these nutrients in the form of dietary supplements to their food intake.

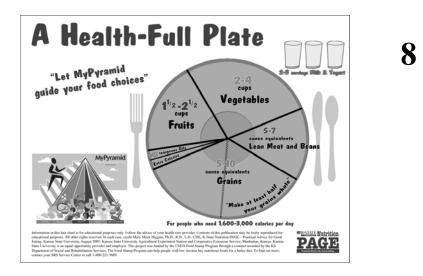


MyPyramid can be broken down into three main messages about eating a well-balanced diet: variety, balance, and moderation.

• For variety, the message is: Eat different foods within each of the five main food groups. No one food supplies all of the nutrients that our bodies need. For instance, choose a variety of vegetables rather than always eating the same one or two kinds. This will help ensure that you meet your nutritional requirements. Enjoy foods that match your lifestyle and your food preferences.

• The message for balance is: Eat foods from each of the main food groups every day. Choose more whole grain foods, such as whole wheat bread, oatmeal, whole grain pasta, brown rice, and popcorn. Choose plenty of vegetables and fruit without added salt, sugars or fats. Choose fat-free or low-fat dairy products and lean protein foods. Also, each day choose to drink at least 8 servings of liquids.

• For moderation, the message is: Eat appropriate amounts – enough but not too much – of foods and beverages to meet your energy needs. On average, older adults need approximately 1600 calories per day. Choose a diet low in saturated fat and cholesterol and moderate in total fat, sodium, added sugars, and alcohol. A moderate diet helps you maintain a healthy weight and helps protect you from health problems, such as heart disease, cancer and diabetes, later in life.



This slide shows what MyPyramid would look like on your meal plate. By looking at this example of how to divide your food choices by food groups, you can see how to fill your plate healthfully.

Notice the lines that divide the plate. They show the proportion of how much is recommended that you eat from each food group every day. At each meal and snack, strive to fill about half of your plate with fruits and vegetables, and about one-third of your plate with grains, preferably whole grains. Choose smaller amounts of protein foods, and just a sliver, if any, of oils and extra calories, such as sweets. Notice that three glasses of milk and yogurt are to the right of the plate, reminding us to get three cups of fat-free or low-fat (and low-sugar) dairy servings a day.

The size of your plate matters, too. Use a small plate – we recommend using one that is no wider than 9 inches across.

The amounts of foods shown (in cups or ounces) for each food group are how much is recommended for one day. The lower ranges are for people who need 1,600 calories per day, while the higher ranges are for those who need 3,000 calories per day.

You have one of these handouts in your packet of materials. You might want to post this handout in your kitchen.

[Note to speaker: Read aloud how much food in the food groups is recommended.]



9

Now let's take a break to rest our ears and eyes, stretch our legs, and apply our knowledge. This should be fun!

[Note to speaker: If the group is large, have them divide into a few smaller circles. If the group is small, have them form one large group circle. If possible, ask the group members to stand up and start marching in place. It will be helpful if the speaker demonstrates actions along the way.]

Take turns within your group to call out different fruits. When you say or hear the name of a fruit, raise your arms above your head. Continue going around the circle calling out fruits until you can't think of any more.

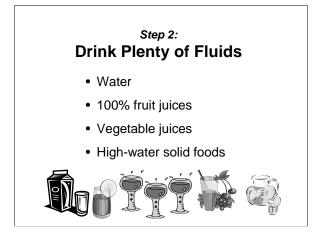
[Note to speaker: When you see fewer people raising their arms, ask the group(s) to do the same activity with vegetables. Use a decrease in arm raising as a sign to stop the activity. Then thank the audience and ask the participants to sit down.]

Fruits	Vegetables
Apples Oranges Bananas Grapes Cantaloupe Nectarines Kiwi Oranges Orangerines Orangerines Orangefruit Orangerines	

As you may have realized during this activity, there are many fruits and vegetables to choose from. In fact, here is a list of 35 fruits and vegetables that you can find at most grocery stores.

Did you know that if you ate one-half cup of each of these for a week, you would not only meet the recommended servings for fruits and vegetables (which is 3 1/2 cups of fruits and vegetables, or more, per day), but you could eat a different type of produce for each serving! Now that's variety!

At the end of today's presentation, I will give you a booklet that contains a list of the produce shown on the screen as well as several other fruits and vegetables.



11

Now let's return our attention to specific aspects of a brain-boosting diet. Step 2 in our recipe is going to add water and other fluids.

To stay mentally alert, you need to drink plenty of fluids each day. Why? Because being well-hydrated helps improve your energy level, increases blood circulation to your brain, and even boosts your emotional stability, so your mood does not fluctuate as much.

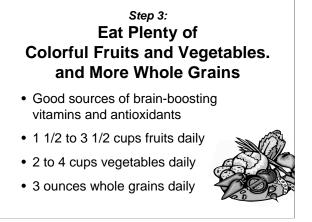
If you are not too keen on drinking eight glasses of plain water, try adding flavor - such as by squeezing a lemon wedge into it. Or you may choose other liquids, for example, 100% fruit juice (such as orange, apple, or cranberry) or vegetable juices (such as tomato juice). Not only do these beverages provide fluid to quench your body's thirst, but they also contain a variety of nutrients.

Watch out for "fruit drinks," "ades" like lemonade, and energy or sports drinks. These often contain a lot of added sugar and perhaps sodium. Look for 100% juice on the label to be sure.

You can even "eat" some of your water in solid foods. Juicy fruits and vegetables, such as celery, lettuce, tomato, grapes, and watermelon, contain more than 90% water. Soups, some desserts such as frozen yogurt, and gelatin salads also contain water.

It is very important that you don't rely on your thirst level to prompt you to drink liquids. As we age, our sense of thirst dulls and is not a reliable indicator of our body's need for fluids. By the time we feel thirsty, we are already somewhat dehydrated. Urine color is a better indicator of hydration: urine should be pale yellow in color. If it is dark yellow or appears concentrated, you need more fluids.

Make it a habit to drink water or other liquids throughout the day – with meals and in-between meals. If you are sick with fever, diarrhea, or vomiting or if you are traveling by airplane, you will need to consume even more fluids each day.



12

Another step for keeping your brain in shape is to eat plenty of deeply colored fruits and vegetables high in vitamins, and more whole grains with fewer refined grains. Colorful fruits and vegetables, and whole grains, are rich in nutrients – vitamins, minerals, plant antioxidants and other healthful substances that can help protect you against mental decline. Whole grains contain high levels of a vitamin called thiamin, and fruits and vegetables are excellent sources of many vitamins that are linked to brain health. These foods help improve memory and reasoning ability, and help protect against Alzheimer's disease and many other diseases, too.

For example, the B vitamins folate and vitamin B6 are linked to brain health because they help maintain proper levels of homocysteine [HO-MO-SIS-TEEN] in the blood. Homocysteine is naturally produced in the body. It can become elevated in the blood when we don't consume enough of certain B vitamins. High levels of blood homocysteine may increase risk for heart disease, stroke and Alzheimer's disease and certain forms of dementia.

The B vitamin folate is also linked to brain health because a deficiency of it may increase the risk for depression, possibly by lowering brain levels of serotonin [SARA-TOE-NIN], a brain chemical, and <u>S-a</u>denosyl<u>m</u>ethionin<u>e</u> [ES-A-DEN-O-SILL-METH-I-O-NEEN], an amino acid which is often called SAM-E [SAMMY] for short.

Some older individuals have trouble absorbing folate. Eating foods that are fortified with folate, such as enriched breads, helps.

Aim to eat at least 1 1/2 cups of fruits and 2 cups of vegetables a day. Choose deeply colored fruits and vegetables often, because they have the most nutrients. Most of the time, choose fruits without added sugar, and vegetables without added salt. Also, aim to eat more whole grains, and fewer refined grains. For example, choose whole wheat breads and pastas, oatmeal, popcorn and brown rice. Look for breads that say 100% whole grain on the label. Also, buy products that are enriched or fortified with B vitamins. If you do not consume a diet containing these fortified foods and if you do not eat many fruits, vegetables and whole grains, nutrition experts recommend that you take a multivitamin-with-minerals supplement that contains B vitamins.

Step 4: Reduce Calories from Saturated Fats

- > Avoid trans fats and eat less saturated fats
- Eat less bakery products, fried food, fatty meats, poultry skin, tropical oils, hydrogenated oils, high-fat dairy products
- Choose seafood in place of some meat and poultry

13

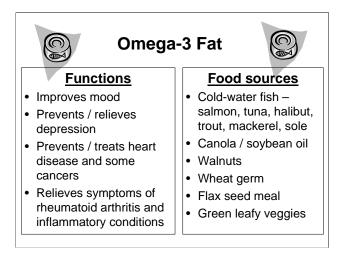
The 4th step in the recipe for keeping our brains in shape is "Reduce calories from saturated fats." Since about one-half or more of the brain is fat, it should not be surprising that dietary fats can affect how well it works. There are many types and sources of dietary fats.

Research indicates that eating too many saturated fats and *trans* fats can harm health. For instance, saturated fats raise cholesterol levels in the blood. Elevated cholesterol, along with high blood pressure, can increase the risk of dementia by slowing blood flow through the body and to the brain. Overconsumption of *trans* fats may produce similar results.

To reduce your intake of harmful *trans* and saturated fats, read the Nutrition Facts labels. Also, avoid – or at least eat less frequently and in small amounts – bakery products, fried foods, fatty meats, poultry skin, and foods made with coconut oil, palm kernel oil, or hydrogenated or partially hydrogenated oils. Rather, eat moderate portions of lean cuts of beef or pork, and skinless chicken and turkey. For dairy products, eat less high-fat dairy products, such as whole milk, ice cream, regular cheese, and butter. Rather, choose fat-free or low-fat dairy products, such as skim milk, fat-free yogurt and low-fat cheeses, which are excellent sources of calcium, protein and many other important nutrients. Finally, choose seafood instead of eating beef, pork, chicken and turkey for more of your meals.

Choosing the unsaturated kinds of fats (such as omega 3s, polyunsaturated and monounsaturated fats) can improve your brain health. For example, nuts and seeds are high in healthful unsaturated fats and also in vitamin E.

Vitamin E from food sources, not from supplements, is associated with improved memory and learning, and reduced risk for Alzheimer's disease. Eating foods high in vitamin E may protect the brain from oxidative damage, thereby decreasing the chances for getting Alzheimer's disease. Get plenty of vitamin E from the foods you eat, since using vitamin E supplements has not been shown to decrease the chances for getting this disease. Foods high in vitamin E include: 1/4 cup sunflower seeds, 24 almonds, and 1 ounce hazelnuts; 1 tablespoon sunflower or safflower oil; 1 cup tomato sauce or 1/4 cup tomato paste; and 1 cup cooked spinach or turnip greens.



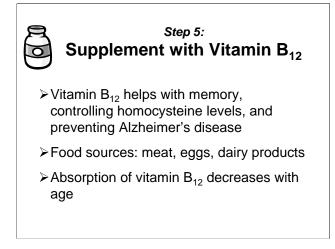
14

Your body needs some fat to stay healthy. In order to get more of your fats as unsaturated fats, eat not only more nuts and seeds, but also more fish.

The special kind of fat found in fatty fish that live in very cold water is known as omega-3 [OH-MAY-GUH] fats. Omega-3 fats help with brain functioning. When eaten in adequate amounts, they may improve mood and prevent or relieve depression. In addition to improving mood and relieving depression, omega-3 fats can play a preventive and treatment role in heart disease, certain cancers including colon cancers, and rheumatoid arthritis and some other inflammatory conditions.

The omega-3 fats in fish that live in cold water, such as salmon, herring, sardines, trout, halibut, mackerel, sole, flounder, oysters, tuna and crab, have been shown to be especially healthful for the brain. Eating fish once a week, or more, also helps protect against cognitive decline. Fish should not be battered and fried, but rather should be prepared without added *trans* or saturated fats. The FDA recommends eating no more than twelve ounces of all kinds of fish each week, which would be about four standard servings.

Omega-3 fats are found not only in fish, but also in some plant foods, including canola oil, soybeans and soybean oil, walnuts, wheat germ, flax seed meal and oil, and some green leafy vegetables. It doesn't take very much to meet daily recommendations for omega-3 fats – just one tablespoon of canola oil or ground flax a day is enough.



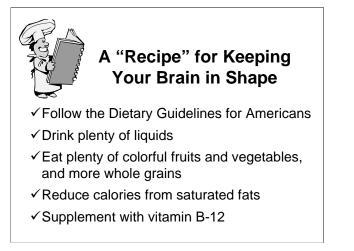
Step 5: Supplement with vitamin B12.

Vitamin B12 is necessary for proper nerve function, including neurons in the brain needed for memory. Vitamin B12 also works with two other B vitamins, folate and vitamin B6, to maintain proper levels of homocysteine. As we discussed a few minutes ago, homocysteine at improper levels increases the risk for Alzheimer's disease and some forms of dementia.

Many B vitamins are found in plant foods, such as fruits, vegetables, legumes, and whole-grains.

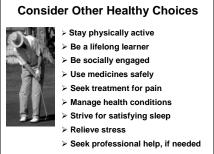
However, vitamin B12 is found in animal products, including meat, eggs, and dairy products. Another unique characteristic of vitamin B12 is that the older we get, the harder it is to absorb it properly from food. The reason for this is that there's a decrease in the amount of stomach acid produced by people ages 50 years and older. Since stomach acid releases vitamin B12 from food, when we produce less acid, we have less vitamin B12 absorbed. Of course, not everyone will have difficulty absorbing this vitamin, but many older adults do. Some older adults get monthly B12 shots to treat diagnosed B12 deficiency.

Taking a vitamin B12 supplement, or eating foods that are fortified with vitamin B12, is recommended for older adults. Stomach acid is not needed to absorb the vitamin B12 found in supplements or in fortified foods. A variety of vitamin B12 supplements are available on the market. I suggest choosing a generic brand because they cost less. Be sure to follow the label about when to take it and how many tablets to take at a time, and talk it over with your health care provider to see if this advice is right for you.



Let's take a moment now to review. We have discussed the ingredients of a brain boosting diet. The steps in our recipe are: following the Dietary Guidelines for Americans; drinking plenty of fluids; eating plenty of colorful fruits and vegetables, and more whole grain; reducing calories from saturated fats; and supplementing with vitamin B12.

Make these dietary choices to promote optimal mental and emotional health.



Making other healthy lifestyle choices complements our brain-boosting diet and promotes mental and emotional vitality.

Stay physically active. Regular exercise increases oxygen-rich blood flowing to the brain, which improves mental performance, increases the ability to focus and concentrate, and enhances mood. Walking, swimming, water aerobics, and gardening are all excellent forms of exercise. If exercise is new to you, consult your doctor to find out which activities are right for you.

Be a lifelong learner and be socially engaged. Socializing and regularly engaging in leisure activities, such as reading books and doing hobbies, keeps your brain cells stimulated. This helps decrease the risk for developing Alzheimer's disease and other forms of dementia.

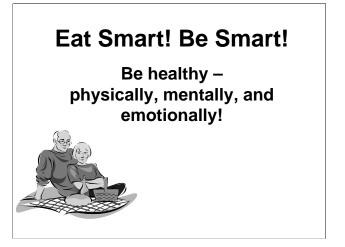
Use medicines safely. Memory problems are sometimes an unwanted side-effect of medicine. If you notice having more trouble remembering things or you take a number of medicines, speak to your doctor or pharmacist. Using medicines safely will ease your mind.

Seek treatment for your pain. Pain may limit your ability to focus or remember things. Take measures to relieve physical pain rather than living with it. It is also important to manage existing health conditions. Risk for mental decline and depression increase when common medical conditions (such as diabetes, hypertension, and high cholesterol) are not controlled.

Relieve stress. Chronic stress is associated with mental decline. Understand what causes stress in your life and incorporate stress reduction techniques into your daily routine.

Strive for satisfying sleep. Lack of sleep impairs our judgment, mood, and ability to think straight. If you suffer from insomnia or feel that you are not getting a sound night's sleep, try to determine the cause and make adjustments.

Finally, when depression, anxiety, or other mental changes interfere with life activities, professional help should be sought. If you know someone who shows the symptoms of depression or other emotional problems, or with their ability to think clearly, encourage him or her to see a doctor to determine the cause. You could offer to go with them. Other professionals within their community such as a counselor, clergyman, or registered dietitian, can also help.



Your diet and other healthy lifestyle choices do affect your mental and emotional vitality. So eat smart and be healthy – physically, mentally, and emotionally!

Now I will pass out a **take-home booklet** designed by nutrition experts in K-State's Department of Human Nutrition. The booklet contains information related to today's discussion. Please take one if you are interested.

[Note to speaker: Please hold up the take-home booklet and review the name of each article contained within.]

I will also handout a brief **participant survey** for you to complete. It will only take a few minutes of your time. Please return the survey to me when you are finished.

Thank you so much for joining me today!

[Note to speaker: Please return completed surveys to Dr. Mary Meck Higgins as indicated on the survey form.]

[*Optional statement:* If you are interested in learning more about how **a** healthy lifestyle or the proper use of medicines and herbals can promote mental and emotional well-being, please let me know. Nutrition experts at Kansas State University have developed presentations on these topics, called "Live Smart! Be Smart! How a Healthy Lifestyle Promotes Mental and Emotional Vitality" and "Medicine and Herbal Safety: Easing Your Mind."]

Section 6:

Presenter Evaluation of the Program

Evaluation is the final step of the program. It provides program designers with important information needed to analyze the program's usefulness and effectiveness.

There are two parts to the evaluation process:

- 1. Audience evaluation. The "Participant Survey" forms are provided to conduct this portion of evaluation.
- Presenter evaluation. The "Presenter Evaluation Report" is provided for this portion of evaluation. A hardcopy of this form is available on the next page and a file form is available on the diskette or CD. Review this form before the program and then fill it out after the program is over.

Please return the completed "Participant Surveys" and your "Presenter Evaluation Report" to:

Dr. Mary Meck Higgins Department of Human Nutrition 202 Justin Hall Manhattan KS 66506



Presenter Evaluation Report

County & State:	_Date of program:		
Name of person(s) who delivered the program:			
Employer of presenter:			
Location of program:	Number attending:		
Collaborating Agencies/Organizations:			
Program (Select ONLY one)			
 Live Smart! Be Smart! How Healthy Lifestyle Choices Promote Mental and Emotional Vitality Eat Smart! Be Smart! A "Recipe" For Keeping Your Brain in Shape Medicine and Herbal Safety: Easing Your Mind 			
Program Length (include time spent in discussion with participants)			
less than 20 minutes 41-60 minutes			
20-40 minutes more than 60 minutes			
How did you market this program? (Choose all that apply)			
Bulletin board Newsletter H	Posters TV		
Flyers/brochures Newspaper Flyers/brochures Fl	Radio Word of mouth		
Where did you market this program? (specify)			
Characteristics of the audience (select all that are appropriate)			
Independent living Caregivers			
Assisted living Other (specify)			
Full-care			
Comments (regarding presentation, audience, materials, or other)			

Attach this form to the "Participant Surveys" collected after the presentation. Please send to: Dr. Mary Meck Higgins, Department of Human Nutrition, 202 Justin Hall, Manhattan, KS 66506.

Section 7: References

<u>General</u>

U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2010). <u>Dietary Guidelines for Americans 2010</u>. 7th Edition, Washington, DC. Online at *www.dietaryguidelines.gov* (accessed Mar 4, 2011).

Fillet, H. M., Butler, R. N., O'Connell, A. W., Albert, M. S., Birren, J. E., Cotman, C. W., Greenough, W. T., Gold, P. E., Kramer, A. F., Kuller, L. H., Perls, T. T., Sahagan, B. G., Tully, T. (2002). Achieving and maintaining cognitive vitality with aging. <u>Mayo Clinic Proceedings</u>, 77, 681-696.

Slides 6 and 7

Center for Nutrition Policy and Promotion. (2005). <u>MyPyramid</u>. Washington, D.C.: United States Department of Agriculture. Online at *www.mypyramid.gov* (accessed Mar 4, 2011).

Higgins, M. M. (2011). <u>A description of the modified MyPyramid for older adults</u>. Manhattan, KS: Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Online at *www.ksre.ksu.edu/humannutrition/DesktopDefault.aspx?tabid=75* (accessed Mar 4, 2011).

<u>Slide 8</u>

Higgins, M. M. (2005). <u>A health-full plate.</u> Manhattan, KS: Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Online at *www.ksre.ksu.edu/humannutrition/DesktopDefault.aspx?tabid=75* (accessed Mar 4, 2011).

<u>Slide 10</u>

Stotts, J., Higgins, M. M., Remig, V. (2011). <u>Choose a variety of fruits and vegetables daily</u>. Manhattan, KS: Kansas State University Agricultural Experiment Station and Cooperative Extension Service.

<u>Slide 11</u>

Higgins, M. M. (2011). <u>Nutrition PAGE: Drink fluids often</u>, 2(1). Manhattan, KS: Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Online at *www.ksre.ksu.edu/humannutrition/DesktopDefault.aspx?tabid=98* (accessed Mar 4, 2011).

<u>Slide 12</u>

Duthie, S. J., Lawrence, J. W., Collins, A. R., Leaper, S., Berger, K., Deary, I. J. (2002). Homocysteine, B vitamin status, and cognitive function in the elderly. <u>American Journal of Clinical Nutrition</u>, 75, 908-913. Engelhart, M. J., Geerlings, M. I., Ruitenberg, A., van Swieten, J. C., Hofman, A., Witteman, J. C., Breteler, M. M. (2002). Dietary intake of antioxidants and risk of Alzheimer disease. <u>Journal of the American Medical Association</u>, 287(24), 3223-3229.

Johnson, M. A. (2003, Summer). Nutrition, dementia, and cognition: Remembering what is best for your clients. <u>Gerontological Nutritionists: A</u> <u>Practice Group of the American Dietetic Association (newsletter)</u>, pp. 11-13.

Koehler, K. M., Pareo-Tubbeh, S. L., Romero, L. J., Baumgartner, R. N., Garry, P. J. (1997). Folate nutrition and older adults: Challenges and opportunities. Journal of the American Dietetic Association, 97(2), 167-173.

LeBoeuf, R. (2003). Homocysteine and Alzheimer's disease. <u>Journal of the</u> <u>American Dietetic Association</u>, 103(2), 304-307.

Morris, M.S., Jacques, P. F., Rosenberg, I. H., Selhub, J. (2001). Hyperhomocysteinemia is associated with poor recall in the third National Health and Examination Survey. <u>American Journal of Clinical Nutrition</u>, 73, 927-933.

<u>Slide 13</u>

Johnson, M. A. (2003, Summer). Nutrition, dementia, and cognition: remembering what is best for your clients. <u>Gerontological Nutritionists: A Practice</u> <u>Group of the American Dietetic Association (newsletter)</u>, pp. 11-13.

Morley, J. E. (2002). Nutrition and cognition in older persons. In I. H. Rosenberg & A. Sastre (Eds.), <u>Nutrition and aging: Vol. 6. Nestlé nutrition workshop series</u> <u>clinical and performance program</u> (pp. 121-134). Nestec Ltd.

<u>Slide 14</u>

Knous, B. L. (2001). <u>Omega-3s: Fats you should and can eat.</u> Manhattan, KS: Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Online at *www.ksre.ksu.edu/library/fntr2/mf2519.pdf* (accessed Mar 4, 2011).

Su, K-P., Huang, S-Y., Chiu, C-C., Shen, W. W. (2003). Omega-3 fatty acids in major depressive disorder: A preliminary double-blind, placebo-controlled trial. <u>European Neuropsychopharmacology</u>, 13, 267-271.

Tiemeier H, van Tuijl, H. R., Hofman, A., Kiliaan, A. J., Breteler, M. M. B. (2003). Plasma fatty acid composition and depression are associated in the elderly: the Rotterdam Study. <u>American Journal of Clinical Nutrition</u>, 78, 40-46. <u>Slide 15</u>

Abyad, A. (2002). Prevalence of vitamin B12 deficiency among demented patients and cognitive recovery with cobalamin replacement. <u>The Journal of Nutrition, Health and Aging</u>, 6(4), 254-260.

Duthie, S. J., Lawrence, J. W., Collins, A. R., Leaper, S., Berger, K., Deary, I. J. (2002). Homocysteine, B vitamin status, and cognitive function in the elderly. <u>American Journal of Clinical Nutrition</u>, 75, 908-913.

Engelhart, M. J., Geerlings, M. I., Ruitenberg, A., van Swieten, J. C., Hofman, A., Witteman, J. C., Breteler, M. M. (2002). Dietary intake of antioxidants and risk of Alzheimer disease. <u>Journal of the American Medical Association</u>, 287(24), 3223-3229.

Johnson, M. A. (2003, Summer). Nutrition, dementia, and cognition: remembering what is best for your clients. <u>Gerontological Nutritionists: A Practice</u> <u>Group of the American Dietetic Association (newsletter)</u>, pp. 11-13.

LeBoeuf, R. (2003). Homocysteine and Alzheimer's disease. <u>Journal of the</u> <u>American Dietetic Association</u>, 103(2), 304-307.

Morris, M.S., Jacques, P. F., Rosenberg, I. H., Selhub, J. (2001). Hyperhomocysteinemia is associated with poor recall in the third National Health and Examination Survey. <u>American Journal of Clinical Nutrition</u>, 73, 927-933.

Russell, R. M., Baik, H. W. (2001). Clinical implications of vitamin B12 deficiency in the elderly. <u>Nutrition in Clinical Care</u>, 4, 214-220.

<u>Slide 17</u>

Stotts, J., Higgins, M. M., Remig, V. (2011). A healthy lifestyle promotes mental and emotional well-being. Manhattan, KS: Kansas State University Agricultural Experiment Station and Cooperative Extension Service.