Spring 2002: Evaluating Health News

Nutritionist Note:
The primary purpose of this session is to help participants evaluate health information. This topic was covered in the Fall Year 3 session *Making Sense of Health News*. Please review the Yr. 3 Fall session to help you prepare for the Spring 2002 session. For the participants who have already received this session, think about how you could make the information seem new. There is a lot of flexibility in the session to help customize the session to your participants needs.

Nutritionist Guidelines

Time: 120 minutes

WHILMA: Enter session in WHILMA as: **8SP**

Objectives: (Key Points)
In this session, the participant will**:**
- Identify current sources of personal health information.
- Learn how to evaluate health information.
- Practice evaluating health information.

Materials:
- Session reminder (sample provided on page 13)
- Self-monitoring tools
- Articles from newspapers, magazines, etc., on food and disease relationships or dietary supplements or other health related topics–see optional internet resources for sources of articles or use Sample News Articles.

Other WHI Resources Related to Session:
- Participant Maintenance Sessions (Years 5-9) Materials:
  - Year 3 Fall – Making Sense of Health News
  - Fall 1998 Making WHIse Choices Newsletter – "Health News: Help, Hope or Hype?"
  - Spring 1999 – Breast and Colorectal Cancer: The Diet Connection. Optional resources for skill building activities 1. Activity: "Understanding and Evaluating Health News/Research".
  - Spring 2001 – Heart to Heart, Group Nutritionist Resource – "Relationship Between Antioxidants and Cardiovascular Disease".
- Health News Discussion Guide – Vol. 2, Appendix G, Section G6

Optional – Nutritionist Background Reading: Dietary Supplements

- Sarubin, Allison, MS,RD. The Health Professional's Guide to Popular Dietary Supplements. American Dietetic Association, Chicago IL, 1999.
- ADA, Position of the American Dietetic Association: Food fortification and dietary supplements. *JADA* 101:115-125, 2001.
- ADA/AphA joint working group on Dietary Supplements. A Healthcare Professional's Guide to Evaluating Dietary Supplements. Available at: http://www.eatright.com/images/careersm/Dietary%20Supplements%20Text.pdf

Helpful web site

- Berkeley Wellness Newsletter online newsletter http://www.berkeleywellness.com/html/ds/dsSupplements.html

Newsletters

- The Merits of Multivitamins: EN's Guide to Choosing a Supplement - Environmental Nutrition – June 2001, Vol. 24, No. 6
- The Growing Allure of Antioxidants: Are they really all that? Environmental Nutrition – Jan. 2000, Vol 23 No. 1
- Should You Continue Taking Antioxidant Supplements? Tufts University Health and Nutrition Letter. June 2000, Vol. 18, No. 4
- Vitamin E Supplements: The Pendulum Swings Away. Tufts University Health and Nutrition Letter. April 2001, Vol. 19, No. 2
- Does Your Supplement Provide a Nutrient Overdose? Tufts University Health and Nutrition Letter. April 2001, Vol. 19, No. 2
- Vitamins and Minerals, How Much is Too Much? Nutrition Action, June 2001, Vol. 28, No. 5

Optional Background reading: Health News

Newsletters

- Why Nutrition Advice Flip-Flops all the Time ….Or Does It? Environmental News – March 2001
- Solving the Diet and Disease Puzzle, Nutrition Action, May 1999, Vol.26, No. 4

Book

- Duyff, Roberta Larson, MS,RD,CFCS, The American Dietetic Association's Complete Food and Nutrition Guide., Chronimed Publishing, Minneapolis, MN, 1996

Optional - * Internet Resources – Use these web sites to find current news articles

- http://www.eatright.com/members/knowledge/ - ADA's internet website includes daily news features on nutrition related topics and links to these news reports.
- Internet resources for news reports on health issues
  - http://www.nlm.nih.gov/medlineplus/nutrition.html
  - http://www.abcnews.go.com/sections/living/
  - http://www.usatoday.com/news/healthscience/hsfront.html

Peer Group Ideas:

- Identify local sources of reliable health information.
- Tour local Medical facilities to discover what health services they provide.

Below is a list of the maintenance sessions planned for 2002. This information will help Nutritionists plan ahead when responding to participant requests for 'additional information'.

Upcoming Maintenance Session Topics:

- Summer 2002 PEFI Tool – Explanation & Completion
- Fall 2002 PEFI Results – Review and Discuss Ways to Move Ahead
- Winter 2002 Taking Charge of Your Life (increasing feelings of self-confidence and self-esteem)

Spring 2002: Evaluating Health News (Facilitation Outline)

	GROUP SHARING/NEXT STEPS FOLLOW-UP (20-30 minutes)
(20-30 minutes)	Objective: Participants share thoughts and feelings with other group members about the Winter session (Goal Getting Meals). Purpose: Build group cohesion and self-efficacy. **A. Next Steps Follow-up:** Review the WHI Meal Planning Guide introduced in the Winter Session. Ask open ended questions (see the examples listed below) to assess how the participants used the tool and how they found it helpful. **Q/A:** (Potential questions) ☛ How did you use the WHI Meal Planning Guide? ☛ What were the benefits of using the Guide? ☛ What were the challenges of using the Guide? ☛ What other strategies help you maintain a low-fat eating style?
	**Group Facilitation Suggestions:** Here are some examples of potential ways to encourage group cohesion and connection. • Use the "who else" question: "*Who else found the same information useful or had a similar experience as _____ (name)?"* • Use a "directive" question: "What *about you _____ (name), how did you use the WHI Meal Planning Guide?"* • Point out "common threads" within the group: - *"It sounds like some of you found the recipes useful, but didn't use the menus."* - *"It sounds like ____, and ____, and ____ [participant names] had similar experiences: ____ was most helpful to you. On the other hand, we heard that __ and ___ were more helpful for others."* • Acknowledge differing opinions within the group: Acknowledge and explore*: "We seem to have a difference of opinion. On the one hand, we heard ____. On the other hand, we heard ____. What do others think?"* Acknowledge and shift: *"We seem to have a difference of opinion. On the one hand, we heard ____. On the other hand, we've heard ____. It's OK that we don't always see eye to eye. Are there other comments to share before we move on?"*

Peer Group Sharing: (If peer groups):

Purpose: Provide support and recognition of peer group activities and promote interest.

- ☛ During the past 3 months what types of activities have you done with other members in WHI? (E.g., develop special holiday menus, create set of menus to share with peer group)
- ☛ What do you like about getting together?

NOTE: Consider reintroducing the peer group idea if a particular group has not been participating. (E.g., What would you like to do together outside of your usual DM group meeting?)

✍ *Notes*

	SETTING THE STAGE (5 minutes)
	**Group Facilitation Suggestion:** Before presenting new information, take a few minutes to assess the groups' areas of interest around the session topic. • Set the stage by letting participants know what you are prepared to discuss. (E.g., "*These are the topics I'm prepared to talk about _____." [How to find reliable health information, how to evaluate health information, how to evaluate health news or how to evaluate dietary supplements.] "How does this sound to you?")* • Seek their permission and interest in where they want to spend their time. (E.g., "*Before we begin, I would like to get your input on where you would like to spend most of our time – show of hands?"* • Emphasize individual choice and preference. (E.g., "*Each of you may take something different away from our discussion. It's up to you to decide what's important and how you might use it in your life."*)
	Nutritionists Note: There are 2 core skills to cover in the session: How to identify reliable sources of health information and how to evaluate health information. If your participants want more information consider the following options: (1) Provide more information about research using the Health News Discussion Guide, the Fall Year 3 session or Optional Activity found at the end of the GN materials. (2) Discuss topics related to dietary supplements for example, safety of megadoses of vitamins, efficacy of anti-oxidants, should I be taking a multivitamin or are "natural" vitamins safer? Use references on Dietary Supplements provided in the Resource section to develop discussion questions and handouts.
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A. Set the Stage & Assess Interest

Surveys show that American consumers are confused about the health messages they hear. It seems like new studies contradict old studies. For example: Eggs are bad, now eggs are OK, margarine is better, no margarine is as bad as butter. Who wouldn't be confused. Much of the confusion is compounded because the media has different goals than researchers. Reporters highlight unusual findings to grab your attention. Researchers view each new study as a stepping stone to the truth. The purpose of this session is to help you learn skills to help you evaluate the health information you read or hear.

There are several different options we can use to do that, depending on your interest.

Use open ended questions to assess interest, or list options on board and have participants vote.

Session Topics:

- How to find reliable health information.
- How to evaluate health information.
- Optional – Learn more about how research works.
- Optional – Discuss how to evaluate dietary supplements.

Skill Building

1. Self-Assessment

Objective: Identify current sources of personal health information.

Purpose: Help participants identify why they may benefit from learning how to evaluate health information.

Current sources of health information.

Q/A: (Potential open-ended questions)

- ☛ When you make a health care decision, where do you look for information? For example, if you decided to take supplements, where would you look for information?
- ☛ What influence does the media (e.g., TV, radio, newspapers, magazines, etc.) have on your health decisions?
- ☛ Have you been confused by any health news recently?
- ☛ Where can you find reliable information?
- ☛ Why is it important to find reliable information?

Group Facilitation Suggestions:

- Use a "who else" question: "*Who else feels confused about health news they read in the paper?"*
- Point out "common threads": "*Several of you mentioned _____."*

Use the participants' comments to briefly point why it is important to become skilled at reading and evaluating health information.

- Reflect and Summarize: "*We've heard that _____."*

2. Discussion: Evaluating Health Information

Objective: Learn how to evaluate health information.

Purpose: Help participants build self-confidence by identifying what information is needed to evaluate health information.

A. Discuss how to evaluate health information.

- Ask open ended questions to elicit ideas from participants on how to evaluate health information/supplements.

QA: (Potential Questions):

- ☛ What information do you need to know to evaluate health information?
- ☛ What do headlines tell you?
- ☛ What details would you look for in an article?
- ☛ What type of research is this? (Does the article report on personal experience or objective research?)
- ☛ What is objective research? (What type of study was used? Who participated, how many and how long was the study? Where was the article published?)
- ☛ Who supports the research, do they benefit financially from the results of this research?

Nutritionist Group Facilitation Option: Instead of discussing how to evaluate health information, review **Worksheet 1** with the group and have them identify examples for each question. This review may make it easier for participants to complete the Worksheet when they are evaluating health articles or supplements.

- Ask open ended questions about the Worksheet such as:

  QA: (Potential Questions)
  - ☛ What kind of statements grab your attention?
  - ☛ What alerts you that something sounds too good to be true?
  - ☛ What kind of study can prove cause and effect?
  - ☛ How can you tell if the author profits from the research?
  - ☛ What other information would you look for to evaluate health research?

- Summarize and reflect groups' comments
- Briefly point out how they can use this information to evaluate health research and, supplements.

SKILLS PRACTICE - Practice evaluating health news

3. Skills Practice - Practice evaluating health news

Objective: Practice evaluating health information

Purpose: Provide opportunity for participants to use a checklist to evaluate health information.

Group Nutritionist note: Anticipate participant interests to find news articles that are relevant to your groups. Consider asking participants to bring in articles, look for articles in your local paper or popular magazines, use the web sites listed in the reference section to find articles on food and supplement related research or if your participants have expressed an interest in dietary supplements or herbal products look for articles or advertisements promoting these products.

A. Complete Worksheet 1 – Evaluate Health News

- Participants complete Spring Worksheet 1- *Evaluating Health News* (pg. ___)
- Provide participants with a News article – recent research on foods or dietary supplements.
- Have participants work in small groups – pairs or triads.
- Each group will evaluate a different article using the Evaluating Health News Worksheet.
- Ask each group to share what they discovered with the group. Use open ended questions, such as:

QA: (Potential Questions)

- ☛ What grabbed your attention when you read this article?
- ☛ What type of dramatic statements did you find in your article?
- ☛ What type of statements did they make that may sound too good to be true?
- ☛ What type of research was used?
- ☛ What do we know about the number of participants?
- ☛ The length of the study?
- ☛ Who profits from this research?
- ☛ Based on what we just discussed, would you believe the information in this article?
- ☛ Would you change your behavior based on this article?

✍ *Notes*

	NEXT STEPS (15 minutes)
(15 minutes)	Objective: Participants reflect on information and skills that may help them evaluate health information. Purpose: Increase likelihood that participants will be able to evaluate health information that helps them make choices that support WHI goals. **A. Next Steps Discussion.** Ask participants open-ended questions to help participants' assess their level of interest in the information presented, their confidence in using the information and their readiness in using the information. **QA:** ☛ What did you learn from this activity? ☛ What about this session was of interest to you? ☛ How confident do you feel that you will be able to use this information to evaluate health information?
Notes	
	**Group Facilitation Suggestions:** Reflect and summarize: • *You've mentioned many important things that you've learned today including: ____, ____, ____, and ____.* • *____,____and _____ were most interesting and helpful for you.* • You're feeling confident that you will be able to use this information to help you evaluate news articles.

FOOD TASTING (10-15 minutes)

Objective: Sample new food products and identify new and different ways to use familiar foods.

Purpose: Increase likelihood that participants will use foods and recipes that support WHI goals

Clinic Choice: Food Tasting Suggestions

- Spring Vegetables or Fruit Desserts

Nutritionist Resource 1

Optional Activity – Refer to Year 3 Fall Making Sense of Health News or Health News Guide, Vol. 2, Appendix G, Section G6

Discuss types of research studies- Intervention, Observational

Review the types of research studies most commonly used with people. Provide a brief overview. Discuss the pros and cons of each type of study.

The two types of research studies most commonly used with people are:

- Studies that test ways to prevent or treat a disease. (Intervention studies [Randomized controlled clinical trials])
- Studies that follow and observe groups of people (Observational studies)

QA: (Potential Questions)

Ask open ended questions, such as:

- What type of research study is the WHI Dietary Study?
- Intervention studies are sometimes called the "gold standard". What does that mean?
- What helps the study be fair? (what prevents bias?)
- What are some of the challenges of doing an intervention trial?
- What are some of the benefits of intervention trials?

- What is an observational study?
- What are some examples of observational studies?
- What helps observational studies be fair? (What may bias observational studies?)
- What are some of the challenges of doing an observational study?
- What are some of the benefits of observation studies?

Notes

Spring 2002 Reminder
(Electronic copy available)

Evaluating Health News

Are you confused? You're not alone. Surveys report that most Americans are confused by the health messages they hear. It seems like new studies contradict old studies. For example: Eggs are bad, now eggs are OK; margarine is better than butter, no margarine is as bad as butter. Who do you believe? Much of the confusion is compounded because the media has different goals than researchers. Reporters highlight unusual findings to grab your attention. Researchers view each new study as a stepping stone to the truth. In our next session we'll talk about how to evaluate health information.

Sample News Article - 1

One Cup of Coffee May Temporarily Harden Arteries

STOCKHOLM (Reuters Health) — The amount of caffeine in just one cup of coffee could be enough to harden a person's arteries for several hours afterward, according to a study presented at the European Society of Cardiology Congress here.

Hardened arteries, or atherosclerosis, put extra pressure on the heart and increase the risk of heart attack and stroke, researchers said. They noted that their findings could have implications for people already at risk of these conditions. "People must be careful with caffeine, especially if they have high blood pressure," said Dr. Charalambos Vlachopoulos from the Cardiology Department of the Henry Dunant Hospital in Athens, Greece. "After drinking a cup of coffee, blood pressure can rise up to 5 or even 10 millimeters of mercury. The amount depends on the individual and dose." "Regular rises of this magnitude are important in a person's long-term prognosis and could increase their risk of suffering from a stroke or heart attack," Vlachopoulos said. "I think that people with high blood pressure...should consider reducing their caffeine intake or having caffeine-free drinks."

The researchers gave a group of 10 healthy volunteers either inactive placebo capsules or capsules containing 100 milligrams of caffeine—a quantity equivalent to one cup of coffee. On another day, the volunteers received the opposite capsule from the previous dosage. Neither the volunteers nor the testers knew the sequence in which the volunteers had been given the capsules. Caffeine consumption caused an increase in wave reflection a measure of arterial stiffness—for at least 2 hours, according to the study results. Found in coffee, tea and soft drinks, caffeine is the most widely used drug in the world, Vlachopoulos said. In the Western world, 8 out of 10 adults consume caffeine in some form.

Sample News Article - 2

Doctors Say a Chocolate a Day Keeps Them Away

Tuesday, September 4, 2001
By Patricia Reaney

GLASGOW, Scotland, Sep 04 (Reuters) — Good news for chocoholics. The treat favored by millions may also be good for you, US researchers said Monday. Chocolate contains compounds called flavonoids that can help maintain a healthy heart and good circulation and reduce blood clotting—which can lead to heart attacks and stroke. "More and more, we are finding evidence that consumption of chocolate that is rich in flavonoids can have positive cardiovascular effects," Carl Keen, a nutritionist at the University of California, Davis, told a science conference. "We not only have observed an increase in antioxidant capacity after chocolate consumption, but also modulation of certain compounds which affect blood vessels."

Antioxidants are substances that help reduce the effects of cell-damaging free radicals in the body. Fruits, vegetables, nuts and whole grains are high in antioxidant vitamins such as C and E. Keen presented research on the effects of chocolate on blood clotting to the British Association for the Advancement of Science conference here. The study was funded by the confectionery maker Mars Inc.

NOT ALL CHOCOLATE CREATED EQUAL
Flavonoids in chocolate are derived from cocoa, which is rich in the compounds. Some research has shown that a small bar of dark chocolate contains as many flavonoids as six apples, 4.5 cups of tea, 28 glasses of white wine and two glasses of red wine. But Dr. Harold Schmitz said there are variations in the levels of flavonoids in chocolate and cocoa products depending on the production process, during which many flavonoids can be destroyed. "All chocolates are not created equal in regards to flavonoid content," Schmitz, a scientist with Mars, told a news conference.

Flavonoids are thought to reduce the risk of cardiovascular disease, the leading cause of death in many industrialized countries, by reducing platelet aggregation—when blood platelets combine into a sticky mass and form clots. But the British Heart Foundation said that although chocolate contains flavonoids, it also has high levels of saturated fats and sugar. "Fruits and vegetables contain much higher levels of flavonoids, plus many other beneficial nutrients without the fat content," the foundation said. "So the message is, enjoy a little chocolate in moderation, but ensure you eat five portions of fruit and vegetables daily to get all the flavonoids you need without the added fat," it advised.

Keen and his colleagues measured the impact of chocolate on platelets in the blood in 25 volunteers. The researchers collected blood samples from volunteers who ate 25 grams (0.9 ounces) of chocolate with a high flavonoid content and other volunteers who ate bread. They took blood samples from both groups 2 and 6 hours after they ate the chocolate or bread to measure their platelet activation. Volunteers who consumed the chocolate had lower levels of platelet activity, which would reduce the probability of having a blood clot. The scientists found no change in the group that ate the bread.

Sample News Article - 3

Lab Study Finds Possible Villainy in Vitamin C Pill

The vitamin C pills taken by millions of health-conscious Americans may actually help produce toxins that can damage their DNA, a step toward forming cancer cells, a laboratory study suggests.

In a study appearing in the journal *Science,* University of Pennsylvania researchers said they found, in test tube experiments analyzing the action of vitamin C, that the nutrient can act as a catalyst to help make a toxin that can injure DNA, the body's genetic code.

The findings do not mean that vitamin C causes cancer, said Ian A. Blair, lead author of the study, but the research does sound a warning about the use of vitamin C pills.

"Vitamin C can do some good things, but it can do some bad things as well," Blair said. "If you really wanted to be cautious, you just wouldn't use supplementation (vitamin pills)."

Instead of pills, Blair said people can get all the nutrients they need through a balanced diet, particularly fruits, vegetables and grains.

Balz Frei, a professor at the Linus Pauling Institute at Oregon State University, said the Blair study "is an important finding in understanding the chemistry of vitamin C." He cautioned that the results come from a test tube study, which involves chemicals in glass lab dishes, and that the same action may not occur in living animals.

"Just because you damage DNA doesn't mean you'll get cancer," Blair said. "The cell has an exquisite repair mechanism for lesions in the DNA."

Blair said the research may explain the failure of studies that have attempted to show vitamin C can protect against cancer.

"There are two camps—people who think vitamin C supplementation is good for you and those who think it is bad for you," he said. There is limited scientific evidence that it is really good for you.

Sample News Article - 4

Vitamin C Shows Promise in Heart Failure Patients

Therapy with vitamin C may help heart failure patients by improving the function of their blood vessels, results from a small study suggest. However, researchers say it is too early to recommend the vitamin as a treatment for congestive heart failure.

In a study that looked at vitamin C treatment in 34 patients with congestive heart failure—as well as how the vitamin affected cells in the test tube—German and French researchers found that the vitamin appeared to keep cells in the blood vessel wall from dying. They say this protection from cell death could explain previous study findings suggesting that vitamin C benefits blood vessel function in people with congestive heart failure.

Researchers led by Dr. Stefanie Dimmeler, of the University of Frankfurt in Germany, report the findings in the October 30th issue of Circulation: Journal of the American Heart Association.

Congestive heart failure occurs when the heart cannot pump efficiently enough to meet the body's needs, resulting in symptoms such as fatigue and shortness of breath. Heart failure usually results from an underlying heart condition such as coronary artery disease.

Heart failure patients also show poor function in the blood vessel walls, and research suggests that damaging forms of oxygen called reactive oxygen species accumulate in the blood as the condition progresses, Dimmeler told Reuters Health. This oxidative stress, she explained, may contribute to dysfunction in the blood vessel wall—called the endothelium—by killing off endothelial cells.

Vitamin C is an antioxidant, which means it helps remove cell-damaging oxygen compounds from the body. "Therefore," Dimmeler said, "we questioned whether antioxidative treatment of heart failure patients with vitamin C against these reactive oxygen species can reduce endothelial cell death."

She and her colleagues gave 34 patients either vitamin treatment or an inactive placebo. Treated patients first received an intravenous dose of vitamin C, followed by 3 days of oral supplements. All were on standard drug treatment for heart failure.

Before treating the patients, the researchers had found in experiments that exposing endothelial cells to vitamin C kept certain inflammatory proteins from pushing the cells to "commit suicide"—a process called apoptosis.

Similarly, when they examined blood samples from the patients, they found that those who received vitamin C showed far less evidence of apoptosis in endothelial cells than they had before treatment. Placebo patients showed no such change.

According to Dimmeler, these findings may help researchers better understand the mechanisms behind heart failure, and suggest that either dietary vitamin C or heart failure drugs with added antioxidant properties could slow the course of the disease.

"However," she said, "(vitamin C) has not yet been proven to prevent disease progression in congestive heart failure."

SOURCE: Circulation 2001;104.

Sample News Article - 5

Antioxidants Do Not Help Cholesterol-Lowering

Taking antioxidants reduces the benefits of cholesterol-lowering drugs. It's often assumed that taking vitamins, herbs and other supplements will be beneficial or, at worst, do no harm. But there's increasing evidence that supplements do interact with prescription drugs.

The latest example is a study by doctors at the University of Seattle, which reveals that people taking antioxidant supplements do not get the full benefit of cholesterol-lowering drugs. The trial looked at 153 patients with heart disease, who had low levels of high density lipoprotein (HDL or 'good' cholesterol). They were divided into four groups: cholesterol-lowering drugs, antioxidant vitamin cocktail, vitamins plus drugs and placebo.

When HDL levels were measured, they increased 25 per cent in the drug only group, but only 18 per cent if antioxidants were added. The interaction between two approaches to try to lower heart disease risk is a worry—until we know more, it could be best to get your antioxidants from a healthy diet, especially if you are on cholesterol-lowering drugs.

Source: Atherosclerosis, Thrombosis and Vascular Biology August 2001

Sample News Article - 6

Avoid Herbal Remedies Before Surgery

Gingko biloba caused a gall bladder surgery patient to develop serious bleeding. Medicinal garlic caused spinal bleeding in another patient, who needed a second operation to avoid permanent paralysis.

Both are real-life examples of surgical complications that can develop from herbal medicines. They are cited by University of Chicago doctors who developed a list of recommendations on when to stop taking such products before an operation.

"We suspect that these cases represent only a small fraction of the actual adverse events related to herbal medications since there is no adequate reporting mechanism," said Drs. Michael Ang-Lee, Jonathan Moss and Chun-Su Yuan.

A University of Chicago survey found that up to 50% of pre-surgery patients there use herbal medicine, according to Yuan, and similar results have been found at other hospitals.

"Many herbs do have beneficial effects, but if patients don't have enough knowledge these herbs can cause adverse effects," Yuan said.

The researchers note that the American Society of Anesthesiologists recommends that all herbal medicines be stopped at least two to three weeks before surgery to avoid complications.

But the Chicago doctors say their review of medical literature suggests a more targeted approach. Their recommendations, published in Wednesday's *Journal of the American Medical Association*, refer to eight commonly used products: echinacea, ephedra, garlic, gingko biloba, ginseng, kava, St. John's wort and valerian.

Gingko biloba, for example, which has been used for age-related eye disease, impotence and altitude sickness, can raise the risk of bleeding. It should be discontinued at least 24 hours before surgery, the researchers said.

Garlic, which may lower blood pressure and cholesterol, also prevents clotting and should be discontinued at least 36 hours before surgery, the researchers said.

They encouraged patients to tell their physicians about any herbal products they may be taking and said doctors should aggressively question patients about their use of such products, especially before surgery.

"The prevention, recognition and treatment of complications begin with explicitly eliciting and documenting a history of herbal medicine use," the researchers said.