



Nutrition for Family Living

Susan Nitzke, Nutrition Specialist; susan.nitzke@ces.uwex.edu
Sherry Tanumihardjo, Nutrition Specialist; sherry.tan@ces.uwex.edu
Amy Rettammel, Outreach Specialist; arettamm@facstaff.wisc.edu

May, 2004 Topics

- Should “vegetables” be before “fruit” in the phrase “fruit and vegetables”?
- Substance Abuse and Nutrition Education
- Trans Fat, Saturated Fat, and Cholesterol on the Nutrition Facts Label
- To answer your question: Aspartame (NutraSweet) Safety

Should “vegetables” be before “fruit” in the phrase “fruit and vegetables”?

In continuation of the promotion of “Nature’s Functional Foods: Fruits and Vegetables” by outreach efforts of nutrition specialist Tanumihardjo, a new UW-Madison research-extension project has been awarded by a grant from the U.S. Department of Agriculture for the project entitled “Promotion of high vegetable consumption as a weight-loss strategy and general well-being.” The study will test the feasibility of a high vegetable diet intervention for weight loss, long-term weight-loss maintenance and sustained increased vegetable consumption to improve health. The study began on April 15th, 2004 and continues for four years.

Tanumihardjo, the project director, along with Dr. Leah Whigham, research associate, received this integrated grant after responding to a USDA request for applications in “Human Nutrition and Obesity.” The grant includes a human clinical research component as well as outreach projects. Although high consumption of vegetables and fruits has been associated with many health benefits, including improvement in hypertension, cancer, heart disease and osteoporosis, little research has focused on the effect of high vegetable and fruit consumption on weight loss or weight maintenance.

The Dietary Guidelines for Americans recommend a lifestyle that combines healthy eating and physical activity. Therefore, a secondary goal of the project is to develop a healthy eating program that will be easy to teach and follow without direct medical supervision. A simplified program that does not require advanced training to follow could improve health outcomes.

The outreach projects will educate nutritional professionals on the current status of obesity and the seriousness of the problem in the U.S. A series of lessons will be developed on how and why to incorporate more vegetables into the daily diet as a replacement for other less nutritious or high-fat choices. A series of easy, inexpensive, low-fat, low-calorie recipes that use a variety of vegetables will also be developed. This work continues previous work in the area of vegetable consumption and promotion in the state of Wisconsin by Tanumihardjo.

At a time when obesity rates are increasing, wouldn’t it be nice if we could eat more of something instead of less? Vegetables, for the most part, are one of nature’s best low-fat, low-calorie alternatives to other snack choices. By including a variety of different colored vegetables in our daily diet, we get many different classes of beneficial compounds that promote good health and lower our risk for many chronic diseases.



Substance Abuse and Nutrition Education

Background information for educators - not intended for distribution to program participants.

Following is a summary of information for Extension nutrition educators who are teaching nutrition to people recovering from substance abuse. This summary is intended to provide basic background information for nutrition educators. It is not intended for distribution to program participants.

Extension nutrition specialists occasionally get substance abuse-related questions from Nutrition Educators like, “what do I say when the women in my class at the AODA center complain of severe food cravings?” or “one person in the recovery support group where I teach said that if she eats more than one meal a day she gets nauseated – how do I address this so I can go on with my Pyramid teaching?”

Dietary adjustments related to substance abuse recovery are considered Medical Nutrition Therapy (MNT). A Registered Dietitian with experience in substance abuse and nutrition would be an appropriate person to bring in to address participants’ special dietary needs, such as those expressed in quotes in the paragraph above.

Basic points about the impact of substance abuse on one’s body:

- Substance abuse (alcohol, marijuana, cocaine, narcotics, amphetamines, hallucinogens, solvents, and/or nicotine) can affect any or all of the body’s physiologic systems. Problems can occur in the cardiac, central nervous, digestive, intestinal, hepatic (liver), endocrine (hormonal), immune, and musculoskeletal systems.
- People with a chemical dependency may tend to make poor nutrition choices for a variety of reasons. These include financial and/or living arrangements, lack of interest in food or self-care, lack of knowledge about food programs, lack of transportation, depression, loss of taste, loss of appetite, getting full quickly due to alcohol consumption, underlying medical conditions, or having an eating disorder.
- Chemical dependency affects the nutritional health of a person in many ways. These include:
 - Poor absorption of nutrients due to damage to the digestive system (the stomach, intestines, and/or pancreas)
 - Increased need for nutrients that are used to process the abused substance
 - Increased need for nutrients that are used to heal damaged organs and tissues
 - Nutrients needed for normal body processes can become inactivated and thus unavailable for normal use
 - Loss of nutrients through vomiting, increased urination, and diarrhea
 - Decreased ability of the liver to store nutrients as usual
- The degree and type of malnutrition found in a person who has been abusing substances depends on many factors, including the type and amount of substance used and the length of time used.
- Different substances produce different withdrawal symptoms. Here are some common withdrawal symptoms along with their possible cause(s):
 - Appetite loss – may be due to nausea, headaches, shakiness, and/or a rebound from stopping the use of a substance that stimulated appetite. Can also be caused by depression, gastritis, pancreatitis, and other medical complications.
 - Ravenous appetite (RA) – a rebound from stopping the use of a substance that depressed appetite
 - Food cravings (particularly caffeine and sugar) – substitute for chemicals
 - Moodiness – body adjusting to absence of chemicals
 - Fatigue – body undergoing physical repair; dehydration due to excessive caffeine
 - Weight fluctuations – shifts in fluid balance or changes in eating habits



Nutrition for Family Living May, 2004

-
- Diarrhea – damage to stomach and intestines, changes in eating habits, excessive juices, milk, sugary foods, caffeine, fruits and vegetables
 - Constipation – excessive laxative use, stomach and intestinal damage, changes in eating habits
 - Flatulence – damage to stomach and intestines, stress, anxiety, eating too fast

Vitamin and mineral deficiencies resulting from substance abuse can also produce symptoms that are like withdrawal symptoms. People recovering from chemical dependency should speak with their doctors about supplementation.

It is important to recognize that there are protocols for nutritional management of the symptoms listed above. A qualified registered dietitian or other qualified medical professional should provide this type of counseling. Check in your community for a resource person you can turn to if your program participants are in need of some help managing these symptoms. The local hospital or other facility with a psychiatric unit may be a good place to start looking for an RD or other medical professional that works with substance abuse issues. Other agencies providing AODA treatment may also have access to a qualified professional, if the agency you partner with does not.

Implications for Educators

There is a place for basic Food Guide Pyramid and Dietary Guidelines nutrition education with this population. The goals are to get these learners back to eating regular meals and snacks; a variety of foods; whole grains, fruits and vegetables for fiber; eating recommended numbers of servings from every food group to ensure adequate nutrients; and choosing beverages and foods to moderate sugar intake. Teaching about balancing food intake with physical activity is also an appropriate topic with this population. All of this is in line with basic nutrition education.

Here are some specific tips from Laura Snyder, Psychiatric Dietitian at Meriter Hospital in Madison:

- Be aware that people recovering from substance abuse are advised to limit their caffeine intake, and substance abuse programs often have their own rules about what “limit” means.
- It might take awhile for people to recover from loss of appetite. It’s appropriate to encourage eating regular meals and snacks throughout the day, as you normally do in nutrition education. As you see with all of your nutrition education, some people will take longer than others to make changes.
- Weight gain is common in the first few months of recovery for a number of reasons, including ravenous appetite, food cravings, and anti-depressant medication. The weight gain often levels off within a few months, but not always. Encouraging physical activity and eating well (Pyramid style) is appropriate. Rather than focusing on the weight gain, focus on how beneficial it is to this person’s health that she/he is recovering from substance abuse.
- For people with cravings, referring them to their therapist for ways to cope with those cravings can be beneficial.

Dawn O’Shea, Washington County nutrition educator, reviewed this newsletter article and offered these tips:

- Realizing that many of the women have little appetite or are experiencing nausea, it might be a good idea to keep food prep demos pretty small and not have an expectation that all the learners will try the food during the lesson. I have offered to wrap food for participants to take home and often I found that they did eat it at a later time. I have found that the assistance with food preparation skill development is essential, and is appreciated by both learners and caseworkers.
- Moodiness, as a withdrawal symptom, has a big impact on the general reception of teaching sessions. Nutrition educators need to realize that this is part of the recovery process and not necessarily a reflection of the nutrition educator or topic.



Nutrition for Family Living May, 2004

If the group you are teaching has a number of nutrition concerns related to their recovery, you may find that the best thing for you to do is to stick with Resource Management and/or Food Safety topics. In the meantime, you could help arrange to bring in an RD or other qualified medical professional who can help teach about the nutritional management of withdrawal symptoms. Once those more technical concerns are addressed, you may be able to go back to basic nutrition education.

The American Dietetic Association's Manual of Clinical Dietetics states the following in its chapter about nutritional management in chemical dependency:

“Many individuals lack daily living skills, such as meal planning, grocery shopping, cooking, and food storage. Learning about and practicing food selection and meal planning skills will facilitate long-term compliance to healthy eating.”

UW-Extension and WNEP have expertise and resources for teaching daily living skills, so it may make sense to prioritize these topics in your teaching with participants recovering from substance abuse until their Medical Nutrition Therapy needs have been met and they are ready to hear Pyramid basics.

Source: Manual of Clinical Dietetics, 6th edition. Chicago, Illinois: American Dietetic Association; 2000.

With input from: Laura Snyder, Psychiatric Dietitian, Meriter Hospital, Madison WI; Bev Phillips, WNEP Coordinator; Gloria Green, WNEP Training Coordinator; Cheryl Moza, Milwaukee County nutrition educator; Dawn O'Shea, Washington County nutrition educator.

Trans Fat, Saturated Fat, and Cholesterol on the Nutrition Facts Label

As mentioned in the December 2003 Nutrition for Family Living, food manufacturers have until Jan. 1, 2006 to list trans fat on the nutrition facts label of foods and dietary supplements.

FDA has updated one of the articles on its Web site to help consumers gain a better understanding of trans fat and how it will appear on Nutrition Facts labels. This Web article has features that engage consumers through enhanced graphics and learning activities. The article explains which foods often contain trans fat; how to choose foods with lower combined amounts of saturated and trans fats and lower amounts of cholesterol for heart-healthy choices. It also contains practical tips for daily use, plus a quiz and label comparisons of actual products to help consumers use the Nutrition Facts Panel to make sound food choices.

The Web article can be found at: <http://www.cfsan.fda.gov/~dms/transfat.html>

Keeping it in perspective.

According to food surveys, trans fats provide an estimated 2 to 3% of total calories in the American diet, compared with 12% from saturated fat and 34% from total fat. Following the Food Guide Pyramid, with its emphasis on whole grains, fruits, and vegetables, and helping people manage their food dollar by purchasing less processed foods are educational strategies that can help people reduce their intake of saturated and trans fats.



Nutrition for Family Living May, 2004

To answer your question: Aspartame (NutraSweet) Safety

Q: I had a meeting with the head of our health department last week. She brought up not drinking diet pop based on new findings re: diet pop consumption/sweeteners and the miss-diagnosis of MS. Supposedly, drinking the pop is related to symptoms that mimic MS...leading to the wrong diagnosis in patients. Have you heard anything about this?

A: From Susan Nitzke –

I believe the fear of artificial sweeteners has been triggered by one of those "urban myths" that is widely circulated on the Internet. The American Dietetic Association's position statement on the use of nutritive and non-nutritive sweeteners was updated in 2000 and makes no mention of the problems you're referring to (http://www.eatright.org/Public/GovernmentAffairs/92_adap0598.cfm).

The Multiple Sclerosis Foundation has a statement on its website that might help dispel this common but unfounded belief. See http://www.msfocus.org/publications/pub_articles_aspart.html.

To be sure I hadn't missed something new, I ran a Medline search for articles on aspartame and multiple sclerosis since 1996 and there were none in the medical literature. I did find a recent review article re-stating aspartame's safety. I've pasted the abstract below.

In a nutshell, there have been petitions to the FDA and many warnings over the Internet claiming that aspartame (NutraSweet) causes symptoms of MS and other scary things, but there is no good scientific evidence to back them up -- just scientific-sounding declarations. If your Public Health department head is aware of good evidence to the contrary, I'd be anxious to learn about it.

Butchko HH. Stargel WW. Comer CP. Mayhew DA. Benninger C. Blackburn GL. de Sonnevile LM. Geha RS. Hertelendy Z. Koestner A. Leon AS. Liepa GU. McMartin KE. Mendenhall CL. Munro IC. Novotny EJ. Renwick AG. Schiffman SS. Schomer DL. Shaywitz BA. Spiers PA. Tephly TR. Thomas JA. Trefz FK.

Institution Medical and Scientific Affairs, The NutraSweet Company, Mt Prospect, Illinois 60056, USA. harriett.h.butchko@nutrasweet.com

Title - Aspartame: review of safety. [Review] [620 refs]

Source - Regulatory Toxicology & Pharmacology. 35(2 Pt 2):S1-93, 2002 Apr.

Abstract

Over 20 years have elapsed since aspartame was approved by regulatory agencies as a sweetener and flavor enhancer. The safety of aspartame and its metabolic constituents was established through extensive toxicology studies in laboratory animals, using much greater doses than people could possibly consume. Its safety was further confirmed through studies in several human subpopulations, including healthy infants, children, adolescents, and adults; obese individuals; diabetics; lactating women; and individuals heterozygous (PKUH) for the genetic disease phenylketonuria (PKU) who have a decreased ability to metabolize the essential amino acid, phenylalanine. Several scientific issues continued to be raised after approval, largely as a concern for theoretical toxicity from its metabolic components--the amino acids, aspartate and phenylalanine, and methanol--even though dietary exposure to these components is much greater than from aspartame. Nonetheless, additional research, including evaluations of possible



Nutrition for Family Living

May, 2004

associations between aspartame and headaches, seizures, behavior, cognition, and mood as well as allergic-type reactions and use by potentially sensitive subpopulations, has continued after approval. These findings are reviewed here. The safety testing of aspartame has gone well beyond that required to evaluate the safety of a food additive. When all the research on aspartame, including evaluations in both the premarketing and postmarketing periods, is examined as a whole, it is clear that aspartame is safe, and there are no unresolved questions regarding its safety under conditions of intended use.