

May, 2000

*University of Washington's Nutrition Academic Award
Introduces MD-RD Quarterly:
towards the provision of optimum medical-nutritional links in the
New Millennium.*



Introducing UWNAA Key Players

Robert Knopp, MD, PI
Principal Investigator,
UW's Nutrition Academic
Award (NAA)
John Coombs, MD
Alan Chait, MD
Adam Drewnowski, PhD
Edward Lipkin, MD, PhD
Jonathon Purnell, MD
Michael Rosenfeld, PhD
Craig Scott, PhD
D. Scott Weigle, MD
Donna Ambrozy, PhD
Kay Houser—Project Co-
ordinator, NAA
Tanis Mihalynuk, BSc, RD,
graduate student, NAA

The University of Washington recently received a 'Nutrition Academic Award' (NAA) from the National Institutes of Health to promote teaching of nutrition in medicine and to provide nutrition education for medical practitioners. The American Medical Association has proposed a project such as this for over thirty years. This newsletter will introduce you to the key players of the NAA at University of Washington. Consistent with the themes of the NIH's NAA, these quarterly newsletters will provide:

- ✿ Practical nutrition tips
- ✿ Continuing medical-nutritional education
- ✿ Q&As for MDs
- ✿ Establishing Links between MDs and RDs.
- ✿ Hot Nutrition Research topics

"You are what you eat"
is now a placebo-
controlled phenomenon...

DASH: Dietary Approaches to Stop Hypertension

Although the DASH study was designed for individuals with high blood pressure, the findings have universal applications. The principles behind this whole-diet approach to controlling hypertension are similar to those of the Food Guide Pyramid, with one added feature—a food group entitled: "nuts, seeds and beans". The results of this randomized, multi-center feeding study: by eating a diet rich in low-

fat dairy (calcium) and fruits and vegetables (magnesium and potassium), subjects were able to reduce systolic and diastolic blood pressure significantly. In fact, more remarkable reductions were noted compared to those subjects omitting dairy products. In addition, African Americans responded more to the DASH diet than Caucasians. This combination diet may have implications for other chronic diseases such as Type



LEARNING OBJECTIVES:

Target audience: Washington Academy of Family Physicians (WAFP) Members.

Upon completion of this newsletter, the reader will gain a greater appreciation for and knowledge of:

- ♥ Portion sizes
- ♥ Utility of food records
- ♥ Outcome of the DASH study
- ♥ Phytonutrients
- ♥ Health benefits of folate
- ♥ Links between medicine and nutrition
- ♥ Blood pressure reduction strategies

See box on page 4 For CME information

2 diabetes, osteoporosis, and heart disease—now that is food for thought....

Other strategies for lowering blood pressure:

- ♥ Modest weight loss (NIH's goal of 15 pounds in 6 months is a realistic goal)
- ♥ Regular physical activity (3 to 5 times a week, for at least 20 minutes)

For more information on the DASH diet, refer to the added handout in this newsletter.

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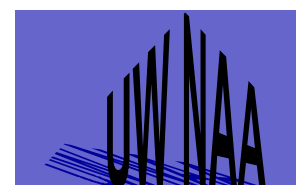
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Inserts: DASH and
portion size hand-
outs

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1 CME credit may be awarded per newsletter by reviewing the contents (see page 4)



What is in a serving?



It would be ideal for MDs and other health professionals to refer patients to a nutrition expert on demand. Yet due to cost, time and other constraints, this is often not feasible. There are a few simple, quick nutrition messages that you can leave your patients with. Since human beings are experts at the art of denial, assist the patient with awareness of serving sizes. For example, a serving of meat from the 2-3 serving 'meat and meat alternates' group of the Food Guide Pyramid is equal to 3 ounces, or the size of a deck of cards. If the patient can learn to



"Being aware of portion sizes is an essential part of weight maintenance"



visualize serving sizes, his or her long term goals of weight maintenance may be easier to achieve. Another example: dairy products, such as cheese, whole fat milk and regular ice cream can be high in saturated fat, the most atherogenic of the fats. Examples of 1 serving from the 'milk and milk products' group:

- * 1 1/2 - 2 oz cheese (2 thin slices)
- * 1/2 cup Ice-cream
- * 1 cup milk or yogurt
- * 1/2 cup of cottage cheese

(all above foods have low-fat versions)

Other examples of a serving from the Food Guide Pyramid:

Breads and Cereals:

- ♥ 1 slice of bread
- ♥ 1/2 cup pasta

Fruits and Vegetables:

- ♥ 1 medium fruit
- ♥ 3/4 glass fruit or vegetable juice
- ♥ 1/2 cup vegetable

Meat and Meat Alternates:

- ♥ 1/2 cup legumes (beans, peas or lentils)

Please refer to insert on serving sizes for more information.

The Food Guide Pyramid basics: a great beginning



Important principles of healthy eating:
* Variety
* Moderation



UW's Nutrition Academic Award introduces:

Robert Knopp, MD, PI UWNAA's Principal Investigator, Professor of Medicine, and an expert in long-term dietary intervention studies. Dr. Knopp and his collaborators have recently shown that more fat restriction does not necessarily achieve a greater LDL-C reduction and that fat restricted diets may adversely affect triglycerides and HDL-C. Trained at Cornell and published extensively, with professorships and Chief positions at Harvard and UW, Dr. Knopp will oversee all activities of UW's NAA.

John Coombs, MD Dr. Coombs has recently joined UWNAA's team. His current professional activities include: T.J. Phillips Professor of Family Medicine, Associate Vice President for Medical Affairs, Clinical Systems and Networks and Associate Dean for Regional Affairs and Rural Health to list a few. Dr. Coombs has a longstanding personal and professional interest in this field—he conducted graduate research in medical-nutritional education.



Alan Chait, MD Dr. Chait is an authority on the relationship between LDL oxidation and atherogenesis in model systems and in subjects with diabetes or CVD. Recently, he and his colleagues have underlined various atherogenic mechanisms of oxidized LDL. Dr. Chait is Co-PI of the UWNAA and Professor of UW's Department of Medicine.

Adam Drewnowski, PhD Dr. Drewnowski is the Director of the Nutritional Sciences Program at the University of Washington. He holds appointments as Professor of Epidemiology at the School of Public Health and as Adjunct Professor of Internal Medicine at the Medical School. Dr. Drewnowski's research deals with the contribution of taste and food preferences to dietary choices and eating habits.

Edward Lipkin, MD, PhD Dr. Lipkin provides a variety of nutrition-related expertise, including studies in regulation of insulin secretion, skeletal calcium deposition, parenteral nutrition, energy and mineral metabolism and cardiovascular health. Dr. Lipkin is a model for other medical professionals regarding his convictions to institute sound nutrition messages into medical education.

Nutrition Trivia: Did you know that folate was the last vitamin to be added to fortified foods? The Enrichment Act of 1942, which included adding iron, niacin, thiamin, and riboflavin to refined grain products was amended in 1996 to include folate. Its health benefits include reduction in the incidence of neural tube defects and in individuals with high serum homocysteine levels, an independent risk factor for heart disease. Folate also prevents certain anemias. Dietary sources of folate include leafy greens, enriched grains, fortified cereals and foods, and fruits and vegetables.



“It is clear that one of the largest holes in the curriculums of many medical schools is ‘practical knowledge’ of nutrition”

(M. Rosenfeld, 1999)

Jonathon Purnell, MD Dr. Purnell has focused on the etiology of central obesity and its interaction with insulin resistance and hyperlipidemia. He is the Director of the Weight Regulation Disorders Clinic at Harborview Medical Center.

Michael Rosenfeld, PhD Dr. Rosenfeld was instrumentally involved in the first studies showing oxidized LDL immunostaining in atherosclerotic plaque in the arterial wall. He is an expert in arterial wall biology and mechanisms of atherogenesis. Professor, scientist, and mentor to assorted graduate students at UW are a sampling of Dr. Rosenfeld’s other professional undertakings.

Craig Scott, PhD Dr. Scott is an expert in the implementation and evaluation of medical education programs and is currently conducting research on student assessment of nutritional training in the third year of medical school at UW. As a participant in the previous Preventive Cardiology Academic Award at UW, he provides various insights regarding medical education issues to UW’s NAA. He is a Professor in UW’s Department of Medical Education.

D. Scott Weigle, MD As Associate Professor in UW’s Department of Metabolism, Endocrinology and Nutrition, Dr. Weigle is an expert in the field of endocrinology. His recent studies involve uncovering the mechanisms of lipodystrophy – a common phenomenon observed in HIV+ patients.



Donna Ambrozy, PhD Dr. Ambrozy works with Dr. Scott in a continuing effort to provide excellence in medical education. She specializes in medical curriculum content and structure, including the use of standardized or trained patients to assess performance.

Tanis Mihalynuk, BSc, RD Editor of this inaugural newsletter, Tanis is in UW’s Graduate Program in Nutritional Sciences, the workings of the UWNAA being the focus of her dissertation. Her work history includes nutrition education and development in hospital, public health and international settings.

Kay Houser As Project Coordinator, Kay has the challenging position of juggling the activities, priorities and activities of UW’s NAA. Located at Harborview Medical Center’s Northwest Lipid Clinic, Kay may be reached at (206) 731-3452 or by e-mail: khouser@u.washington.edu.



MD Q&A: (from ‘Nutrition for Physicians’ course for 2nd year medical students, University of Washington, Spring, 2000)

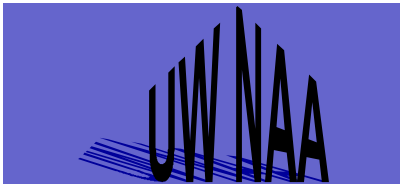
Q: What is the estimated time for a woman to return to her pre-pregnant weight?

A: Although Cindy Crawford claimed to do this in four months, she had a personal trainer by her side. Although rate of weight loss will be highly variable, activities such as low-fat, healthy eating plans, breastfeeding and regular physical activity will assist in this process. Breastfeeding is both beneficial to baby and mom as it assists with slow, gradual weight loss. A realistic goal for new mothers: aim to reach pre-pregnant weight within 6 to 12 months after delivery.

“The word ‘health’... comes from a root that means ‘whole’. Part of being a healthy person is being well integrated and at peace, with all the systems acting together”.

(Dr. Candace Pert)

University of Washington's
Nutrition Academic Award



*committed to excellence in practical
medical-nutritional education for
the New Millennium*

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CME INFORMATION:*

Accreditation: The University of Washington School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

Credit Hour and Category Designation: This is part 1 of a series of 4 quarterly newsletters. The University of Washington School of Medicine designates this continuing medical education activity for 1 hour in Category 1 of the Physician's Recognition Award of the American Medical Association. There is a one-time fee of \$30.00 to apply for 1 credit per quarterly newsletter, for a total of 4 CME credits. Please see CME insert for more information.

Instructions: To qualify for Category 1 credit and receive a transcript verifying the hour (s) earned, the reader must review the information contained in this newsletter and complete the self-assessment and course evaluation as instructed (see CME insert). The estimated time to study the newsletter and complete the self-assessment and course evaluation is 1 hour.

* **Disclosures:** Faculty members involved in preparing this material are required to disclose any financial affiliation they have that would present a potential conflict of interest. No conflicts of interest were disclosed.

Hot Topics– Vegetables, Fruit and Phytonutrients

The therapeutic use of foods date back to ancient Egyptian, Greek and Roman times. However, until recently, supporting clinical trials confirming their health benefits were scant. Favorable components of foods include the popularized antioxidants and the more obscure compounds under the umbrella classification of 'phytonutrients'—biologically active compounds of plant origin. Examples are phenolic substances such flavonoids (citrus, other fruit), catechins and epicatechins (green tea, chocolate, red wine) and the isoflavones (soy products). Although it may take several years to clinically confirm the mechanisms of these elusive substances, we can safely preach the message to "eat your fruits, veggies and whole

grains". We can also suggest moderation in consumption of higher fat, palatable foods such as chocolate, recently touted for its phytonutrient content. Genetically, we are programmed to consume an "almost vegetarian" diet, consisting of gram quantities of vitamin C, over 25 grams daily fiber (current recommendations— although most of us eat less than half of this) and the odd critter here or there. Messages that we can provide our patients with:

- ♥ Eat a variety of fruits, vegetables and whole grains to maximize 'phytonutrient' benefits— the bright colored ones are often antioxidant and phytonutrient-rich.

- ♥ Soy products are a novel addition to diets, and they often taste good. Examples include flavored and regular soy milk, soy-based veggie burgers and cheeses, and soy nuts.
- ♥ Green tea is phytonutrient-rich. Add citrus, chill and make 'iced green tea' in the summer months.
- ♥ Even chocolate, which contains certain phytonutrients (Journal of the American Dietetic Association, January, 2000) can be part of a healthy, low fat, varied diet—just watch portions.

"We are hoping to raise the general level of consciousness of both faculty and student body of nutritional awareness to justify nutrition and education as one of the major themes in the medical educational career at the University of Washington."

(Robert Knopp, MD, 1999)

