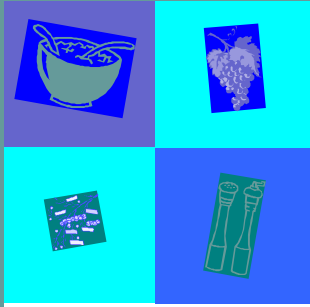


University of Washington's Nutrition Academic Award
Introduces 'MD-RD Quarterly'



Continuing Medical Education (CME)



Continuing Medical Education (CME):

This is the last of a 4-newsletter series. Thank you so much for participating in this CME endeavor!

An Important Note:

Please make sure to fill in all four of your CME forms, including comments, and send them to the UW-CME office for credit (address listed on page 4). Your comments have been very useful for planning future CME endeavors.

Other CME Offerings:

Journal of the American Medical Association (JAMA) provides a variety



of useful patient education pages in addition to CME offerings. Topics range from 'why you should exercise', to 'treating drug dependency' and 'tossing and turning with insomnia'. These pages often include a healthy lifestyle component (diet, physical activity) and may be individualized for patient use. For more information, refer to 'JAMA Patient Page' inserts at the back of

LEARNING OBJECTIVES:

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

Upon completion of this newsletter, the reader will be able to:

- ❖ Suggest 2 warning signs of disordered eating syndromes.
- ❖ Provide 3 examples of questions to ask when taking a brief diet history.
- ❖ Suggest 3 ways to boost metabolism.
- ❖ Link to 3 medical-nutrition websites that can use for patient care or personal use.

See Box on Page 4 For CME Information



Eating Disorders and 'Disordered Eating'

The spectrum of eating disorders and disordered eating patterns includes a continuum of signs and symptoms that often involve some aspect of diminished self-image. Disorders may present as the more readily diagnosed anorexia nervosa, the more difficult to diagnose bulimia (most persons suffering from bulimia are at or slightly above their ideal body weight range), and other weight disorders, including compulsive overeating, binge-eating disorder (BED), and obesity, some of which may fall under the category of 'eating disorders not otherwise specified' (EDNOS) (DSM-IV, 1994).

What can you do to help patients with a suspected eating disorder? The most critical point of any recovery process is the progression from denial to acceptance, which may be facilitated with adequate screen-

ing measures, including:

- ❖ Is the patient pre-occupied by weight-related issues?
- ❖ Does the patient's self-image appear to evolve around weight?
- ❖ Does a physical exam indicate one or more of the following: erosion of teeth/reduction of enamel and/or esophagitis (bulimia); thinning of hair; GI disturbances; history of recurrent medical visits for various symptoms; irregular menstrual cycles.
- ❖ Over- or under-eating may be a sign of comorbid conditions such as depression, which should also be screened for.

If you suspect your patient has an eating disorder, make sure you have a local referral source handy. Nutrition is often the band-aid for underlying issues related to self-esteem and unhealthful coping mechanisms. It is critical that susceptible persons should be seen by profes-

sionals trained specifically in eating disorders.

If your patient can't afford to be referred on to a therapist, check your local yellow pages for support groups, including: over-eaters anonymous, and anorexia/bulimia groups. Group therapy can be an inexpensive and effective modality for sorting through the root cause of disordered eating patterns.

Be sure to emphasize adequate nutrition for performance, including in school, at work, in sports and with relationships. For more information, refer to the following websites:

- American Anorexia and Bulimia Association: www.aabainc.org
- Eating Disorders Awareness and Prevention, Inc: www.edap.org
- Eating Disorders Resources for Physicians and Patients: www.massmed.org/pages/eatingdisorders
- Caring Online www.caringonline.com

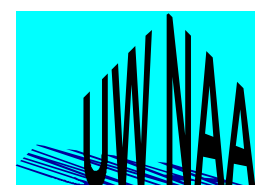
Inside this issue:

Continuing Medical Education (CME)	1
Eating Disorders and Disordered Eating	1
Adding the 'E' Back into Healthy Eating / Boosting Metabolism	2
The Diet History: an essential part of the medical history	3
MD Q&A	3
Hot Topics: The Future of Medical Nutrition	4

Inserts: JAMA patient pages, AAFP / Various handouts

This Newsletter has been sponsored by the University of Washington School of Medicine. Funding for this newsletter includes the TJ Phillips Professorship under the auspices of John Coombs, MD and the National Institutes of Health's Nutrition Academic Award.

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





Adding the 'E' (Enjoyment) Back Into HEALTHY EATING



The other day, a mentor and I were talking about potluck dining. She was pleased to report that her Mexican dish she brought to her last party was an overwhelming hit, and she used less than half the fat than was suggested in the recipe!. She included fat-free sour cream, salsa and plenty of spices while skimping on the butter when preparing this dish. The other party-goers were pleasantly surprised when she shared her recipe secrets. It is a common misconception that healthy, low-fat food tastes bland. Provide your patient with the following tips for low-fat food preparation:

- ♥ **Include as many colors, textures, shapes and sizes while preparing foods.** Get the family involved in fun food preparation.
- ♥ **All the flavor without the fat!** Have fun surprising friends, family, and colleagues when you tell them you cut down the fat by at least one measure and guess what? It still tastes great! The old adage: steam, bake, broil, etc. instead of frying
- ♥ **Enjoy ethnic varieties of foods.** The more variable one's intakes, the greater the assurance that one is getting all the nutrients that the body requires. Try meatless varieties of ethnic dishes, including flavorful, protein-rich spreads (Hummus).
- ♥ **Spice up your life.** Not only can spices add color and flavor, they can also be rich in phytonutrients. If you have some extra garden or window-space, grow your own herbs for optimum taste and nutrient benefits.
- ♥ **'Lite' cooking classes** are well received, especially around the holiday seasons. This is a great time to bond with patients and peers, and share best-kept family recipe secrets.
- ♥ **Fish and omega-3 fatty acids**—the American Heart Association and others recommend consuming at least 2 fish meals a week. The cold-water fish (ie: salmon and halibut) are the best source of omega-three fatty acids, which have several physiological benefits, including anti-clotting, anti-inflammatory, anti-thrombogenic and anti-dermatitic agents.



METABOLISM-BOOSTING

Your patient inquires about ways to counter-act age-related reduction in basal metabolic rates. How do you respond? Although this is a natural phenomenon, one can counteract slowed metabolism occurring every decade of one's life in several ways. Provide your patients with the following tips.

Rx for Boosting Metabolism:

- ♥ **Quit starving yourself:** when you deprive yourself of food, your thrifty genotype reacts by preparing for a famine state, and holding onto calories for dear life, literally. The key is to incorporate small, sustainable lifestyle changes that can become adopted into one's lifestyle, without shocking the body. Gradually cut down on portion sizes, particularly of high-fat items.
- ♥ **Exercise longer, or more often, and 'activate your lifestyle'** by taking stairs, walking to work and appointments and planning events that focus on physical activity. Exercise can boost the basal metabolic rate for several hours after the activity.
- ♥ **Vary exercise**—alternate the gym with the garden, with walks, swims, cycling, work as many muscles as possible. Build-up of muscle tissue is favorable, as it is more metabolically active than fat tissue.
- ♥ **Don't skip breakfast:** this can reduce one's energy-burning capacity in addition to increasing the tendency to eat more calories later in the day, when the body's metabolism slows in preparation for sleep.
- ♥ **Excess alcohol consumption and smoking** can inhibit metabolism of abdominal fat. This fat tissue has implications in heart disease and insulin resistance syndrome. Weight gain does occur after smoking due to a temporary reduced metabolism, but inform your patients that this need not be permanent.
- ♥ **Resist PMS cravings:** metabolic rate of women may increase between ovulation and menstruation. Buy small pieces of chocolate, and avoid having a lot of sweets readily available around the home when the 'munchies' arrive.
- ♥ **Eat smaller, more frequent meals**—they are less taxing on the metabolic pathways in the body.
- ♥ **Eat a moderate fat diet**—Recent NCEP Guidelines suggest a 25% to 35% diet for heart health, with lower percentages for persons desiring to lose weight. Dietary fat is readily converted to fat stores in the body. Use food labels as your guide.
- ♥ **Use Stress reduction techniques** to avoid binges and unhealthy behaviors as a result of feeling 'out of control' in life.



'The whole of science is nothing more than a refinement of everyday thinking'
~Albert Einstein, Out of My Later Years~

Nutrition Trivia: Vitamin K mediates the gamma-carboxylation of glutamyl residues on several proteins, notably osteocalcin. High concentrations of circulating undercarboxylated osteocalcin have been associated with low bone mineral density and increased risk of hip fracture. Vitamin K's involvement in bone metabolism may also be via its effect on urinary calcium excretion or on inhibition of production of bone resorbing agents including Prostaglandin E2 and Interleukin 6. Although the mechanism is unclear, future research may reveal that vitamin K is equally or more important than calcium in maintenance of bone integrity.



High protein diets, such as the popularized 'Atkins' regime, can also lead to reduced calcium concentration in bones. Acid is a by-product of protein metabolism. The body responds by leaching calcium from bones in the form of calcium carbonate, an effective buffering agent. It is thought that vegetable proteins are less deleterious to bone health as more alkaline products are formed from their metabolism. The bottom line: moderation in protein intakes with attention to increasing vegetables, in particular the dark, leafy green varieties (good source of Vitamin K) and low-fat dairy products are suggested. Currently, America's favorite vegetable is the potato chip! Encourage a more colorful, varied diet, with lots of fruits and veggies.



'It should be the function of medicine to help people die young as late in life as possible'

~Ernst Wynden, quoted in the New York Times



The Diet History: An Essential Part of Every Medical History

Extensive research in the field of medical-nutrition reveals the following recurring theme: MDs want to include more nutrition information in patient encounters BUT they often report reduced confidence in nutrition counseling. The field of nutrition can be a daunting one: it is ever-evolving, and national recommendations continue to be updated with ongoing scientific breakthroughs. However, a basic diet history can provide you with a richness of information without having to pay attention to the minutiae of nutrition science. Take a few minutes, if you can, to get a quick sense of your patient's usual dietary intakes. This critical information will allow you to write an optimum prescription for your patient, which includes diet, physical activity, stress, and other aspects of lifestyle. Use the following information to guide you through the process.

- ❖ On a typical day, what do you usually eat, starting with your first meal? (patients may be skipping breakfast)
- ❖ Include probes, such as 'did your sandwich include any dressings /spreads (mayonnaise, butter)?'; 'did you eat anything in-between these meals?'; 'what was the portion size of the meat (3 ounces is the size of a deck of cards)?'
- ❖ Inquire about consumption of alcohol, smoking (vitamin C intakes increase about 2-fold for smokers), and use of herbal / botanical supplements (Ephedra (Ma Huang) has been implicated in sudden deaths). Pay careful attention to potential drug-drug and drug-nutrient interactions.
- ❖ Ask about location of meals. This may lead to an 'a-ha' for the patient. For example, the patient may realize that he or she snacks excessively while watching television, and avoid this habit in the future.
- ❖ Evaluate fluid intake. Are most fluids calorie-free? Is patient consuming adequate fluids? Sometimes, thirst can be confused as hunger. Drinking fluids before meals can curb appetites.
- ❖ Assess Body Mass Indices (BMI). This is a rapid indicator of health risks associated with weight (see below for a quick calculation method).
- ❖ Do a quick waist circumference check for increased risk of heart disease and insulin resistance syndrome (over 35 inches for women and over 40 inches for men is associated with increased health risks)



MD Q&A:

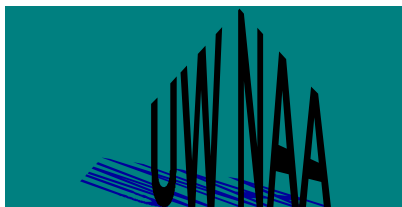
Q: Is there a more rapid way of calculating Body Mass Indices than the standard, metric calculation?

A: Yes, there is. Instead of using the standard BMI calculation (weight in kilograms divided by height in meters squared), try this calculation out:

$$\frac{\text{Weight in Pounds}}{\text{Height in Inches Squared}} \times 705$$

BMI is an excellent quick assessment of health risks associated with weight. Remember: a BMI of approximately 19 to 25 is associated with the lowest health risks.

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*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 provide continuing medical education for physicians.*

The University of Washington School of Medicine designates this education activity for a maximum of 4 hours in Category 1 towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credits that he/she actually spent on the activity. 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.*

****This is part 4 of a 4 part newsletter series. Please be sure to send all of your CME forms, including your comments, to receive the designated 4 total possible credits for this series.**

* **Disclosures:** *No conflicts of interest were disclosed.*

HOT TOPICS: What does the Future of Medical Nutrition Hold?

Match one's genotype to one's drug, diet and lifestyle... perhaps this isn't as futuristic as we think. In a recent 'Food as Medicine' conference in Jackson Hole, Wyoming, several topics were covered that relate to the future of nutrition interventions in medicine:

- ❖ *Interpreting Biochemical Individuality based on both genetic and environmental uniqueness*
- ❖ *Practicing Patient-Centered versus Disease-Centered Diagnoses*
- ❖ *Promoting the dynamic balance of one's internal and external environments (homeodynamics)*
- ❖ *Understanding Web-like Interconnections of physiological factors*
- ❖ *Defining Health as a Positive Vitality—not just the absence of disease.*

FUTURE CME OPPORTUNITIES:

A final note: this is the LAST of four newsletters that you will be receiving. Thank-you so much for your interest in this newsletter which is part of a medical-nutrition dissertation project. If you have any outstanding inquiries, don't hesitate to contact tanisvve@u.washington.edu.

The conference was sponsored by the Center for Mind and Body Medicine (CMBM). The concept of 'chemical individuality', as was introduced by Archibald Garrod in 1909 was reviewed extensively. Today, we often refer to this concept as 'single nucleotide polymorphisms' (SNP's) or incomplete genetic penetrance. Due to the efforts of the Human Genome Project (HGP), matching one's genotype with one's medical-nutritional prescription may not be far away. This has already become an issue with slow metabolizers of drugs, such as the anti-childhood leukemic agent and the slow-metabolizing polymorphism.

Future CME opportunities sponsored by the CMBM include:

- **Comprehensive Cancer Care** (October, 2001)
- **Mind Body Spirit Medicine** (November, 2001)

For more information, log onto www.cmbm.org. Tapes from the 'Food as Medicine' conference on topics of interest are also available.

EDITOR'S NOTE:

My sincere apologies for the delay in sending this last newsletter to you. I underwent surgery in March of this year, which delayed several events in my dissertation project. Enjoy your last edition of this newsletter and best wishes for continued success. Tanis Mihalynuk,



*'One cannot think well, love well,
sleep well, if one has not dined
well' ...
~Virginia Woolf-A Room of One's Own*