



This issue is sponsored in part by Abbott Laboratories, Abbott Park, IL

Assessing Readiness To Lose Weight

Eve Gehling
MEd, RD, CDE, Systems Manager, Center for Health Promotion, HealthPartners, Inc., Minneapolis, Minn.

Abstract

Counseling clients on weight reduction is often challenging, as it involves helping clients make multiple behavioral changes. This article briefly reviews the transtheoretical model of behavior change and explains how it can be adapted to help dietitians assess a client's readiness to lose weight. This knowledge can be used to help dietitians further identify key lifestyle behaviors clients are willing to work on and select counseling strategies that reinforce and motivate clients to change.

Overweight clients aren't always motivated or ready to lose weight when they are first prescribed a weight-reduction diet during nutrition counseling for diabetes and other chronic diseases. Some won't see a need for it. Some will say they lack the willpower to do it. Others may, from past failed diet attempts, lack the confidence to try again.

The transtheoretical model of behavior change (stages of change model) has been used by dietitians to help determine whether clients are ready to change dietary behaviors. The model, originally developed as a theory by James Prochaska and his colleagues, classifies clients into one of five stages (precontemplation, contemplation, preparation, action, and maintenance) where movement from stage to stage is reliant upon behavioral and cognitive variables and self-efficacy. The model

identifies the psychological processes for each stage that are helpful in motivating clients to make lifestyle changes for improved health (1).

When applied to weight reduction, the model can be adapted to assess a client's readiness to lose weight. The precontemplation stage identifies those clients whom see no need or have no intention of losing weight in the next six months. The contemplation stage identifies clients who are thinking about losing weight in the next six months. The preparation stage identifies clients who, in the next 30 days, are ready to start or have already started making small behavior changes to lose weight. The action stage identifies clients who have been actively forming new habits and trying to lose weight for six months. The maintenance stage identifies those whom have successfully lost weight or are working to maintain their weight loss for over six months.

A challenge with weight-loss counseling is that weight reduction is a goal rather than a behavior. The goal can be reached only through other behavior changes. So while the stages of change model can be used to help assess a client's readiness to lose weight, additional assessment is needed to identify the specific behavior(s) the individual needs to make and is ready to work on, such as reducing dietary fat, portion control, modifications in eating habits, increasing physical activity, changes in psycho-behavioral habits and attitudes, stress management, or other lifestyle behaviors. Overall improvement in weight-reduction behavior can be complicated to measure. Clients may progress at varying rates through the stages of change for different weight-related behaviors they are working on at the same time. These behaviors are often affected by complex environmental, social-support, and self-efficacy factors.

Assessment Tools

Two tools based on the stages of change

Table 1. Stages of Change Algorithm

Question	Answer	Stage Scoring*			
		PreC.	Cont.	Action	Maint.
1. In the past month, have you been trying to lose weight?	Yes/No	No	No	Yes	Yes
2. In the past month, have you been actively trying to keep from gaining weight?	Yes/No	No	No	Yes	Yes
3. Are you seriously considering trying to lose weight to reach your goal weight in the next six months?	Yes/No	No	Yes	—	—
4. Have you maintained your desired weight for more than six months?	Yes/No	—	—	No	Yes

* PreC. = Precontemplative, Cont. = Contemplative, Maint. = Maintenance. Reprinted with permission from: Allison DB, *Handbook of Assessment Methods for Eating Behaviors and Weight-Related Problems: Measures, Theory and Research*. Thousand Oaks, Calif.: Sage Publications; 1996:412.

Continued on page 4

From the Editor's Desk

Renal Nutrition Forum is published quarterly (Winter, Spring, Summer, Fall) as a publication of the Renal Dietitians Dietetic Practice Group of the American Dietetic Association.

The views expressed in this publication are those of the author and are not necessarily those of The American Dietetic Association.

Articles about successful programs, research interventions, evaluations and treatment strategies, educational materials, meeting announcements and information about educational programs are welcome and should be sent to the Managing Editor by the next deadline.

Future Deadlines

June 1, 2004
September 1, 2004
December 1, 2004

Please forward information to:
Patricia Weber MS, RD
1594 Mountain View Rd.
Springville AL 35146

Subscription cost for non-ADA members is \$35.00. A check or money order should be made payable to ADA/DPG # 21 and sent to:
Caroline Chinn MS, RD, CDE
P.O. Box 9256
Rancho Santa Fe, CA 92067

In This Issue

Assessing Readiness To Lose Weight	1
From the Editor's Desk	2
Practitioner Opportunities	3
Feeding the Terminally Ill	6
Advances in Practice	7
Kidney Friendly Food Facts	13
Stipend Report	14
Chair Messages	15
Rehab Corner	17

©2004 Copyright by RPG.
All rights reserved.

Spring celebrates new beginnings. As renal dietitians, we are always seeking to refresh the ways we assist our patients in self-management. Since we may now see patients with chronic kidney disease earlier in their disease process, we are facing a new issue in our field: helping "obese" patients lose weight while maintaining a good nutrition status. Many patients are being told they have to lose weight before a transplant, and others want to prevent diabetes or balance the calories they absorb from peritoneal dialysis. Eve Gehling has called upon the transtheoretical theory to assess the readiness for weight loss. Try adapting it into your practice for weight loss or even phosphorus control.

Philippa Norton also keeps us on the "cutting edge" with the topic of functional foods in this issue's Advances in Practice. It has been said that food is medicine, and that is the premise for utilizing delicious foods to achieve health benefits. The use of probiotics for gut health is fascinating!

Sharon Schatz expands on the use of vegetarian food in her column, Kidney Friendly Food Facts. As the demographic of people who develop chronic kidney disease expands, we need to be prepared to help our vegetarian patients meet their protein needs.

We are pleased to offer two stipend reports from dietitians who have taken advantage of our scholarship

program. If you are interested in applying for a stipend, you can find the application in the Winter 2004 issue.

We continue to solicit original, well written articles from you, our readership, on your research, continuous quality improvement projects, or efforts at education or exercise. They will be peer reviewed by our excellent staff of volunteer reviewers, and we seek to enhance your competency in the field of renal nutrition.

We give a special thanks to Abbott for cosponsoring this issue, and also to our advertisers. New products are on the horizon to support our chronic kidney disease patients, and we appreciate your using our Forum to let us know about them!

This is my last issue as editor of the *Forum* and I am confident in passing the baton to our new editor, Sarah Carter, RD, CDE, LDN. I've known Sarah for years and find her to be well-qualified, very bright and inquisitive. I think the *Forum* will be in good hands!

Happy Spring!

Patricia Weber

Practitioner Opportunities in Dietetics Education

Dietetics is a constantly evolving field. The Commission on Accreditation for Dietetics Education (CADE) values the input of practitioners to ensure the quality and continued improvement of dietetics education. You are encouraged to use the following opportunities to assist CADE in assuring that students learn about current practice by:

- Agreeing to participate on an advisory board or focus group sponsored by a dietetics education program in your area to give input on current practice.
- Offering opportunities for service learning to dietetics education programs.
- Serving as a preceptor for Coordinated Program, Dietetic Internship or Dietetic Technician students. Preceptors guide students and faculty to opportunities and tasks that fulfill required competencies. Some of these require students to supervise or manage other staff or stu-

dent teams in a project or activity.

- Communicating changes in practice with dietetics educators.
- Volunteering to serve as a dietetics education program reviewer. CADE is required by the U.S. Department of Education to send a practitioner on each site visit review team to help assure the program is up to date and reflects current practice. You must be available to serve a three-year term that includes at least 2 site visits annually plus some additional paper review documents, and attendance at a CADE-sponsored Program Reviewer Workshop when appointed.
- Notifying CADE about concerns related to the quality of education being provided. CADE has an established complaint process. Written information that you provide will be reviewed for compliance

with the education standards and the dietetics education program under question is asked to respond when noncompliance is identified.

The required components of the dietetics curricula for dietitians and dietetic technicians, along with the CADE Accreditation Standards and complaint process and additional information needed to apply to become a program reviewer are available at <http://www.eatright.org/cade>. (Accessed January 18, 2004.) The Accreditation staff are available to answer questions at 800/877-1600 ext. 5400.

Thought of the Month

What's your renal vitamin cost?

NephPlex RX!

Why make your patients pay more?

CALL 1-800-879-4755
for information or samples.

I wish the doctor had prescribed NephPlex RX?

NEPHRO-TECH, INC.
Shawnee, Kansas 66203
www.nephrotech.com

Assessing Readiness To Lose Weight

continued from page 1

model that have been designed to assess a client's readiness to lose weight are the Stages of Change Algorithm (SCA) and the University of Rhode Island Change Assessment Scale (URICA). While neither tool can accurately predict a client's response to weight-loss counseling, they can be useful to clinicians when selecting appropriate counseling strategies and interventions to encourage behavior change.

The SCA consists of four questions which quickly assess a client's weight-loss intentions and current behaviors (2). (See Table 1) Based on selected answers, the tool classifies people into one of four stages: precontemplation, contemplation, action, or maintenance.

The SCA tool is easy to use and its validity is based on studies with other health behaviors. Limitations of the tool are that it does not include a way to identify those in the preparation stage and does not measure outcome success in the action stage. Because of the tool's brevity, it doesn't assess complex dietary behaviors, physical activity levels, or psycho-behavioral factors (e.g., negative self-talk, disordered or compulsive eating, self-efficacy), often involved with weight management. Once a client is deemed "ready" to start a weight-loss program, additional assessment tools are needed to determine which counseling strategies and action steps will best fit the client's needs and lifestyle.

The URICA is an assessment tool that was originally created for use with psychotherapy groups struggling with substance abuse (3). The tool was adapted to use in weight counseling programs (2). Consisting of 32 questions, the tool classifies people into the same four stages of readiness to change as the SCA tool. Because the tool's developers found subjects had difficulty discriminating among the preparation, contemplation, and action stages, the tool does not classify people into a preparation stage. The tool contains eight questions per stage, and can be used to help evaluate treatment progress and identify commonalities of people within each stage grouping. The tool has been helpful predicting behavior-change success and counseling session attendance when used to profile a group.

A variety of tools have been created to help assess a client's readiness to change eating habits, physical activity levels, and assess self-efficacy or decisional balance. Validated tools to measure physical activity and dietary behaviors (e.g., dietary fat, fruit/vegetable consumption, dietary fiber) have been compiled by the Behavior Change Consortium, sponsored by the National Institute of Health, and are listed online at www1.od.nih.gov/behavior-change/index.htm. Other tools include the Dieting Readiness Test, Weight Efficacy Life-Style Questionnaire, and Decisional Balance Inventory (4-6).

Getting Started

If you're not sure how to apply the SCA tool in your clinical setting or practice, remember the acronym, MAAA, which stands for: mention, ask, assess, and advise. After you determine a client would benefit from weight reduction ...

Mention it-Introduce the subject. Often patients wait for health-care providers to bring up the subject before seriously thinking about the need to lose weight.

Ask-Use the SCA questions to find out if clients are ready to control their weight and listen to their responses (see Table 2).

Assess-if clients are ready to start losing weight, use supplementary assessment tools to help determine what weight-related behaviors will most benefit them, and which of these individuals are ready to start.

Advise-help clients set up a personalized action plan that fits their lifestyle. If clients are not yet ready to start making changes in their lifestyle habits, counsel them on the benefits they would receive from weight loss, the risks they are taking if they don't lose weight, and help them overcome the barriers to starting a weight reduction program.

Summary

When counseling clients on weight reduction, it's important to first assess motivational readiness towards weight loss. The SCA tool is a practical first-line tool for clinicians to help determine this. Based on individuals' readiness, further assessment can be done to identify clients' need and weight-related behavior changes they may be ready to make. By tailoring one's assessment approach in this way, the coun-

seling strategies and interventions chosen can help create a personalized action plan leading to success.

REFERENCES

1. Prochaska J, Norcross J, DiClemente C. *Changing for Good*. New York, N.Y.: W Morrow & Co; 1994.
2. Rossi J, Rossi S, Velicer W, et al. Motivational Readiness to Control Weight. In *Handbook of Assessment Methods for Eating Behaviors and Weight-Related Problems*. Allison D, ed. Thousand Oaks, Calif.; Sage Publications; 1995.
3. McConaughy EA, DiClemente CC, Prochaska JO, et al. Stages of change in psychotherapy: a follow-up report. *Psychotherapy*. 1989;26:494-503.
4. Brownell KD. The Dieting Readiness Test. *Weight Control Digest*. 1990;1:6-8.
5. Clark MM, Abrams DB, Niaura RS, et al. Self-efficacy in Weight Management. *J Consult Clin Psych*. 1991;56:754-761.
6. O'Connell D, Velicer WF. A decisional balance measure and the stages of change model for weight loss. *Intl J Addict*. 1998;23:729-750.
7. Kasila N, Poskiparta M, Karhila P, et al. Patients' readiness for dietary change at the beginning of counseling: a trans-theoretical model-based assessment. *J Hum Nutr Diet*. 2003;16(3):159.
8. Vallis M, et al. Stages of change for health eating in diabetes. *Diabetes Care*. 2003;26(5):1,468-1,474.
9. Molaison EF. Stages of change in clinical nutrition practice. *Nutr Clin Care*. 2002;5(5):251-257.
10. Blanchard KA, Morgenstern J, Morgan TJ, et al. Motivational subtypes and continuous measures of readiness for change: concurrent and predictive validity. *Psychol Addict Behav*. 2003;17(1):56-65.
11. Curry SJ, Kristal AR, Bowen DJ. An application of the stage model of behavior change to dietary fat reduction. *Health Educ Res*. 1992;7:97-105.
12. Greene GW, Rossi SR, Rossi JS, et al. Dietary applications of the stages of change model. *J Am Diet Assoc*. 1999;99:673-678.

Gehling E. Assessing readiness to lose weight. Copyright Diabetes Care and Education, a Dietetic Practice Group of the American Dietetic Association. Reprinted by permission from *On The Cutting Edge*, Vol. 24; Number 6, 2003.

Table 2. Common Phrases By Stages

Phrases Clients May Say	Stage
<ul style="list-style-type: none"> • I was born to be big—everyone in my family's big ... • I'm not going to stop eating the foods I want ... • I'm not going to lose weight, so ... • I don't have time to exercise or cook fancy meals ... • What's the point in losing weight? I'll never keep it off and just end up weighing more ... • My spouse cooks all my meals, talk to her ... 	Precontemplation (no intention to change within next six months)
<ul style="list-style-type: none"> • I wouldn't mind losing weight, but ... • I've tried to lose weight before ... • If only there was a magic pill I could take ... • I've been thinking about joining ... • I'm out of shape and know I sit too much ... • I just look at food and gain weight, I wish my metabolism worked faster ... 	Contemplation (thinking about losing weight in the next six months—needs help overcoming barriers to change)
<ul style="list-style-type: none"> • I'm tired of looking and feeling the way I do—I've got to start doing something to feel better ... • I want to learn how to eat healthier ... • What do I need to do to lose weight? • I want to start an exercise program ... • I tried a low-fat dressing and was amazed it tasted OK. • I've been trying to cut back on how much regular soda I drink each day. 	Preparation (ready to start losing weight in the next 30 days or has started trying small changes—needs help getting started and learning basic skills)
<ul style="list-style-type: none"> • I'm eating healthier and am surprised I'm not missing sweets like I thought I would ... • I feel like I spend hours at the grocery store now reading food labels. • I'm eating so many vegetables now I'm starting to feel like a rabbit ... • People at work noticed I'm losing weight ... • I'm starting to get bored with my exercise routine ... • I feel like I'm in a rut eating the same foods every day ... 	Action (actively forming new habits and trying to lose weight for six months—needs help staying motivated, learning new skills, and preventing relapse)
<ul style="list-style-type: none"> • I've always got fresh fruit and vegetables now to nibble on. • I don't snack on chips or candy anymore. • When I eat out, I split my meal with my spouse or just eat half—restaurants serve meals that are just too big ... • It's hard to stay on my diet during holidays and vacations. • If I don't get out to walk every day, I can really feel it. • I've been trying to not eat when I'm not hungry. 	Maintenance (has lost weight for over six months—needs help maintaining weight loss, establishing environmental and social supports, and reinforcing decisions made)

Re/Gen Cookies

LOW Fluid Potassium
LOW Phosphorus Sodium
HIGH Protein Calorie



Formulated For Restricted Diets. Supplies protein and Calories without Fluid.

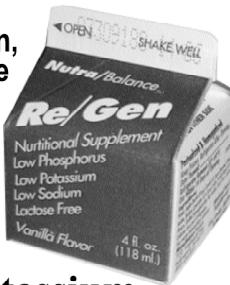
Five Tasty Flavors:

Spice, Vanilla,
Oatmeal Raisin,
Peanut Butter and
Chocolate Chip.

Re/Gen RENAL SUPPLEMENT Balanced Nutrition

High Protein,
High Calorie
Nutrition

4oz.
Serving



- Low Potassium
- Low Phosphorus
- 10 g Protein

Available in Vanilla and Strawberry.

NUTRABALANCE

Nutra/Balance Products

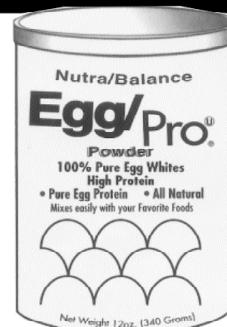
7155 Wadsworth Way, Indianapolis, IN 46219
For information or samples call: 1-800-654-3691

Egg/Pro[®] Powder

100% Pure Egg Whites

- Adds Protein to any food.
- High Quality Egg Protein

MIXES INSTANTLY WITH
YOUR FAVORITE FOOD



Salmonella negative
convenient 12 oz.
Packages or In
individual packets

HCPCS
Code B4155

Feeding the Terminally Ill: The Role of Artificial Hydration and Nutrition

Presented at FNCE 2003

By Richard J. Ackermann, MD

Summarized by Carrie C. Hall, RD, LD. Carrie can be reached at 419-443-1557.

In "Feeding the Terminally Ill", Dr. Richard Ackermann discussed the appropriateness of providing artificial nutrition and hydration to the terminally ill. Dr. Ackermann's key point was that end-stage dementia is a terminal condition. In end-stage dementia, people lose basic functions such as walking, feeding, and toileting. Many healthcare professionals feel that nutrition and hydration should always be continued. However, malnutrition is part of end-stage dementia and generally cannot be reversed. It is known that losing one's appetite is a natural part of the dying process. After prolonged fasting, brain metabolism switches to ketone utilization. Ketones suppress hunger, however this suppression can be easily turned off by

providing even a few hundred carbohydrate calories per day. Other benefits of ketosis include euphoria, alertness and preservation of mental function until just before death, and potential for spiritual or religious experiences.

At least 30% of feeding tubes are placed in demented patients. Currently in nursing homes, over half of feeding tubes are currently being used in patients who have severe cognitive impairment. The use of feeding tubes are convenient for staff, and may be more cost effective than meticulous hand-feeding. Dr. Ackermann argued that rather than immediately placing a feeding tube in a patient who is demented and deemed at nutrition risk, a comprehensive evaluation should be completed to weigh the benefits vs. burdens. Are there benefits to artificially feeding those with severe cognitive impairment?

- Studies have shown that artificial nutrition does not prevent, and can even increase risk of aspiration pneumonia. The largest cohort study showed increased pneumonia and higher mortality in aspirating patients who were tube-fed, versus hand-fed.
- Secondly, no prevention of the consequences of malnutrition is achieved with artificial nutrition. Even after receiving tube feeding, demented patients almost never achieve repletion of lean or fat body mass or resolution of biochemical nutrition markers.
- Studies have shown either no difference in mortality or an increase in mortality among tube-fed patients with advanced dementia.
- There is no prevention or improvement of pressure sores with tube feeders. In fact, bedfast patients who are tube fed

Continued on page 14

Advances in Practice

Impact of different protein sources on health outcomes in adults with kidney disease

By Philippa Norton Feiertag, MEd, RD, CSR, LD. Philippa is a clinical consultant with Clinical Computing, Inc. in Cincinnati, OH. She can be reached at feier@fusenet

Functional foods and the patient with renal failure

As consumers have become more aware of the link between diet and health, many have started to look at the health benefits of foods as well as their nutrient content. Foods, or food ingredients, that provide health benefits beyond basic nutrition are called functional foods, and the market for these items is growing due to increasing consumer demand, advances in food technology and rising healthcare costs (1).

Recently, attention has focused on the ability of non-digestible oligosaccharides, such as fructooligosaccharides (FOS) and isomaltooligosaccharides (IMO), to modify the bacterial composition of the large intestine (2). FOS found in wheat, onions, bananas, honey, garlic and leeks, and IMO present in fermented foods such as miso, soy sauce and sake, belong to a group of functional foods known as prebiotics (2,3). Prebiotics are non-digestible food ingredients that support growth and/or activity of beneficial bacteria present in the colon (4). Oligosaccharides resist digestion by gastric acid and pancreatic enzymes and stimulate growth of the *Bifidobacterium* population (5). Increased concentrations of bifidobacteria have been linked with lower blood urea levels, increased absorption of some vitamins and minerals, modulation of lipid metabolism, inhibition of some pathogens and stimulation of the immune system (2,6-8).

All of these effects can have a positive impact on health outcomes in patients with kidney disease, and several medical nutritional formulas used by this population

incorporate FOS in the form of NutraFlora® (9,10). Since renal dietetics professionals may need to interpret information on functional foods and educate patients on their appropriate use as part of a healthy eating plan, this column will focus on the safety, physiologic effects and health benefits of oligosaccharides for patients with renal disease.

Safety and legal status of oligosaccharides

Oligosaccharides are a significant part of the European diet, where daily intake averages 10 g; Americans consume on average 2.5 g oligosaccharides per day (8,11). In most countries, oligosaccharides can be used without restriction in food formulations, and a panel of U.S. experts performing a Generally Recognized As Safe (GRAS) Self-Affirmation Evaluation reached the same conclusion in 1992 (12).

Approximate levels of FOS intake to optimize health status have been set at 3-10 g/day (1). A dose of 2.75 g FOS/day is sufficient to promote growth of bifidobacteria, while 10 g FOS daily is well tolerated and significantly increases the *Bifidobacterium* population in the colon (13,14). A medical nutrition product containing 3.7 g FOS per 8 fluid ounce serving has been used as the sole source of nutrients in patients undergoing hemodialysis; ingestion of up to 18.5 g FOS daily from this product was well tolerated by these patients (15).

IMO supplied to hemodialysis (HD) patients as a liquid preparation at a dose of 15 g twice daily for 28 days caused some abdominal bloating, but was generally well tolerated (3).

Physiologic effects of oligosaccharides

Oligosaccharides resist digestion by enzymes in the gastrointestinal tract and

undergo fermentation by anaerobic bacteria in the colon to yield short chain fatty acids (acetate, butyrate and propionate) and lactic acid (2,15).

Bifidobacteria are gram-positive anaerobic bacteria, which inhabit the mammalian colon and use FOS as their preferred energy source (15). Introduction of FOS into the diet increases acidity of the colon due to fermentative production of acetate and lactate by bifidobacteria (16,17). These acids, along with other anti-microbial substances produced by bifidobacteria, inhibit the growth of invasive pathogens including *Escherichia coli*, *Clostridium difficile*, *Vibrio cholerae* and *Salmonella*, *Listeria*, *Campylobacter* and *Shigella* species (9,17).

Butyric acid generated during fermentation of oligosaccharides has a powerful trophic effect on the cecum (16). As a result, both the surface area of the cecum and its blood supply increase, allowing a higher rate of solute transfer between the bloodstream and the lumen of the cecum. Short chain fatty acids yielded during fermentation may also inhibit hepatic cholesterol synthesis and redistribute cholesterol from the plasma to the liver, leading to a drop in plasma cholesterol levels (18).

Health benefits of oligosaccharides for patients with renal disease

Increased extra-renal nitrogen excretion:

Dietary protein restriction is implemented in patients with chronic kidney disease (CKD) to decrease plasma urea concentrations and delay the progression .

Animal studies indicate that a diet containing fermentable carbohydrates, including FOS, promotes the transfer of urea from the plasma into the cecum, resulting in a decrease in plasma urea concentration of approximately 30% (16,19). This accelerated

Continued on page 8

urea transfer across the wall of the cecum has been attributed to the trophic effect of butyric acid, which increases both the surface area of the cecum and its blood supply.

Thus, deterioration in renal function may be delayed in patients with CKD and concerns regarding malnutrition during protein restriction may be reduced by prescribing a diet that incorporates FOS and a moderate protein restriction.

Enhanced absorption of some vitamins and minerals:

In patients with renal failure, absorption of vitamins and minerals is influenced by dietary restrictions, drug-nutrient interactions and uremic toxins (20). In addition, patients with stage 5 CKD, undergoing dialysis therapy, sustain loss of B vitamins during dialysis at a rate exceeding normal urinary excretion.

Animal studies indicate that the non-digestible oligosaccharides stimulate absorption of several minerals, including calcium, iron and magnesium (21). The decrease in colon pH, which results from growth of the *Bifidobacterium* population, increases solubilization of these minerals. In addition, FOS may increase the concentrations of proteins that bind these minerals, accelerating their transport into the bloodstream.

Bifidobacteria synthesize vitamins B1, B6 and folic acid (22). In animal studies, increased *Bifidobacterium* concentration in the cecum and colon is associated with a 40% increase in mean serum folate levels.

Improved lipid profile:

Cardiovascular disease is another important contributor to mortality in patients with CKD (23,24). Lipid disturbances in this population include elevated lipoprotein (a) and very low-density lipoprotein (VLDL) in CKD, stages I through 4, and hypertriglyceridemia with decreased high-density lipoprotein (HDL) in stage 5 CKD mainte-

nance dialysis patients (25).

Increased intake of indigestible carbohydrates, including oligosaccharides, has been associated with decreasing plasma triglycerides in normolipidemic human subjects and with reduction in cholesterol levels in hyperlipidemic subjects (18). FOS also reduces de novo fatty acid synthesis in the liver and VLDL production by inhibiting lipogenic enzymes including acetyl-coA carboxylase and fatty acid synthase (26).

The effect of IMO on lipid profiles has been examined in patients undergoing maintenance HD (3). These patients received 30 g IMO daily for 4 weeks and their lipid profiles at the end of the study were compared with those of age- and sex-matched controls who had similar initial lipid profiles, but who did not receive IMO. After the study, patients who had received IMO showed reductions in total cholesterol (17.6%) and triglycerides (18.4%), and increased HDL-cholesterol (39.1%). Thus, IMO was effective in lowering total cholesterol and triglycerides and in raising HDL-cholesterol in HD patients.

Decreased risk of infection:

Infection is a leading cause of death in maintenance HD patients and this population is at significantly greater risk for developing nosocomial infections than other hospitalized patients (27,28). *Clostridium difficile*-associated diarrhea imposes a serious financial burden due to increased healthcare costs, and causes increased morbidity and mortality (29).

When the *Bifidobacterium* population in the colon grows as a result of FOS ingestion, bowel acidity increases (9). This environment has an inhibitory effect on the growth of *Clostridium difficile* and other pathogens (10,17). Consequently, FOS has the potential to decrease both infection rates and associated healthcare costs.

Stimulation of the immune system:

In addition to decreasing infection risk, *Bifidobacteria* increase the ability to fight

infection by impacting the immune system (30). Approximately 70% of the body's immune system is localized in the gastrointestinal tract. Animal studies suggest that growth of the *Bifidobacterium* population as a result of FOS ingestion is accompanied by increased immunoglobulin A (IgA) secretion by Peyer's patch cells in the intestinal mucosa (31). IgA antibodies form the first line of immune defense by inhibiting attachment of microbes to the mucosal epithelial lining, and may also neutralize viruses intracellularly (32,33).

Thus, non-digestible oligosaccharides have a range of potential beneficial effects, and manipulating intestinal microbial populations through diet is a growing area of research. FOS have attracted considerable commercial interest as prebiotics and can be synthesized from sucrose (34).

By keeping abreast of research findings, registered dietitians can educate other healthcare professionals and patients about the roles of functional foods in promoting health. Most importantly, renal dietetics professionals can provide recommendations to their patients for incorporating these foods into their eating plan to optimize health outcomes and decrease risk of disease.

REFERENCES

1. Position of the American Dietetic Association: Functional foods. *J Am Diet Assoc.* 1999; 99:1278-1285.
2. Chow J. Probiotics and prebiotics: A brief overview. *J Ren Nutr.* 2002;12:76-86.
3. Wang HF, Lim PS, Kao MD, Chan EC, Lin LC, Wang NP. Use of isomalto-oligosaccharide in the treatment of lipid profiles and constipation in hemodialysis patients. *J Ren Nutr.* 2001;11:73-79.
4. Roberfroid MB. Prebiotics and probiotics: Are they functional foods? *Am J Clin Nutr.* 2000;71 (suppl 6):1682S-1687S.
5. Cummings JH, Macfarlane GT, Englyst HN. Prebiotic digestion and fermentation. *Am J Clin Nutr.* 2001;73 (suppl 2):415S-420S.

Continued on page 9

Advances in Practices

continued from page 8

6. Gibson GR, Roberfroid MB. Dietary modulation of the human colonic microbiota: Introducing the concept of prebiotics. *J Nutr.* 1995;125:1401-1412.
7. Krause LJ, Forsberg CW, O'Connor DL. Feeding human milk to rats increases *Bifidobacterium* in the cecum and colon which correlates with enhanced folate status. *J Nutr.* 1996;126:1505-1511.
8. Niness KR. Inulin and oligofructose: What are they? *J Nutr.* 1999;129 (suppl 7):1402S-1406S.
9. Ross Products Division Abbott Laboratories Inc. Fructooligosaccharides. April 2002.
10. GTC Nutrition Company. *NutraFlora® and its role in medical nutrition therapy*. 1999.
11. Moshfegh AJ, Friday JE, Goldman JP, Ahuja JK. Presence of inulin and oligofructose in the diets of Americans. *J Nutr.* 1999;129 (suppl 7):1407S-1411S.
12. Coussment PA. Inulin and oligofructose: Safe intakes and legal status. *J Nutr.* 1999;129 (suppl 7):S1412-S1417.
13. Roberfroid MB. Prebiotics and symbiotics: Concepts and nutritional properties. *Br J Nutr.* 1998; 80 (suppl):S197-S202.
14. Bouchnik Y, Vahedi K, Achour L, Attar A, Salfati J, Pochart P, Marteau P, Flourié B, Bornet F, Rambaud JC. Short-chain fructo-oligosaccharide administration dose-dependently increases fecal bifidobacteria in healthy humans. *J Nutr.* 1999;129:113-116.
15. Cockram DB, Hensley MK, Rodriguez M, Agarwal G, Wennberg A, Ruey P, Ashbach D, Herbert L, Kunau R. Safety and tolerance of medical nutritional products as sole sources of nutrition in people on hemodialysis. *J Ren Nutr.* 1998;8:25-33.
16. Younes H, Alphonse JC, Hadj-Abdelkader M, Remesy C. Fermentable carbohydrate and digestive nitrogen excretion. *J Ren Nutr.* 2001;11:139-148.
17. Gibson GR, Wang X. Regulatory effects of bifidobacteria on the growth of other colonic bacteria. *J Appl Bacteriol.* 1994;77:412-420.
18. Pereira DI, Gibson GR. Effects of consumption of probiotics and prebiotics on serum lipid levels in humans. *Crit Rev Biochem Mol Biol.* 2002;37:259-81.
19. Remesy C, Demigne C. Specific effects of fermentable carbohydrates on blood urea flux and ammonia absorption in the rat cecum. *J Nutr.* 1989;119:560-565.
20. Makoff R. Vitamin replacement therapy in renal failure patients. *Miner Electrolyte Metab.* 1999;25:349-351.
21. Scholz-Ahrens KE, Schaafsma G, van den Heuvel E, Schrezenmeir J. Effects of prebiotics on mineral metabolism. *Am J Clin Nutr.* 2001;73 (suppl 2):459S-464S.
22. Crittenden RG, Martinez NR, Playne MJ. Synthesis and utilization of folate by yoghurt starter cultures and probiotic bacteria. *Int J Food Microbiol.* 2003;80:217-222.
23. National Kidney Foundation Task Force on Cardiovascular Disease Executive Summary. Controlling the epidemic of cardiovascular disease in chronic renal disease. Available at: <http://www.kidney.org/professionals/pysfile/cardiointro.cfm>. Accessed January 18, 2004.
24. Pennell JP. Optimizing medical management of patients with pre-end-stage renal disease. *Am J Med.* 2001;111:559-568.
25. Wheeler DC. Cardiovascular risk factors in patients with chronic renal failure. *J Ren Nutr.* 1997;7:182-186.
26. Delzenne NM, Kok N. Effects of fructans-type prebiotics on lipid metabolism. *Am J Clin Nutr.* 2001;73 (suppl 2):456S-458S.
27. Hung YM, Lee SSJ. Analysis of early and late mortality of chronic hemodialysis patients in a hemodialysis center of southern Taiwan. *Dialysis and Transplantation.* 2003;32:198-205.
28. D'Agata EM, Mount DB, Thayer V, Schaffner W. Hospital-acquired infections among chronic hemodialysis patients. *Am J Kidney Dis.* 2000;35:1083-1088.
29. Miller MA, Hyland M, Ofner-Agostini M, Gourdeau M, Ishak M; Canadian Hospital Epidemiology Committee. Canadian Nosocomial Infection Surveillance Program. Morbidity, mortality, and healthcare burden of nosocomial *Clostridium difficile*- associated diarrhea in Canadian hospitals. *Infect Control Hosp Epidemiol.* 2002;23:137-140.
30. Bengmark S. Pre-, pro- and synbiotics. *Curr Opin Clin Nutr Metab Care.* 2001;4:571-579.
31. Hosono A, Ozawa A, Kato R, Ohnishi Y, Nakanishi Y, Kimura T, Nakamura R. Dietary fructooligosaccharides induce immunoregulation of intestinal IgA secretion by murine Peyer's patch cells. *Biosci Biotechnol Biochem.* 2003;67:758-764.
32. Lamm ME. Current concepts in mucosal immunity. IV. How epithelial transport of IgA antibodies relates to host defense. *Am J Physiol.* 1998;274:G614-G617.
33. Lamm ME. Interaction of antigens and antibodies at mucosal surfaces. *Annu Rev Microbiol.* 1997;51:311-340.
34. Kaplan H, Hutchins RW. Fermentation of fructooligosaccharides by lactic acid bacteria and *Bifidobacteria*. *Appl Environ Microbiol.* 2000;66:2682-2684.



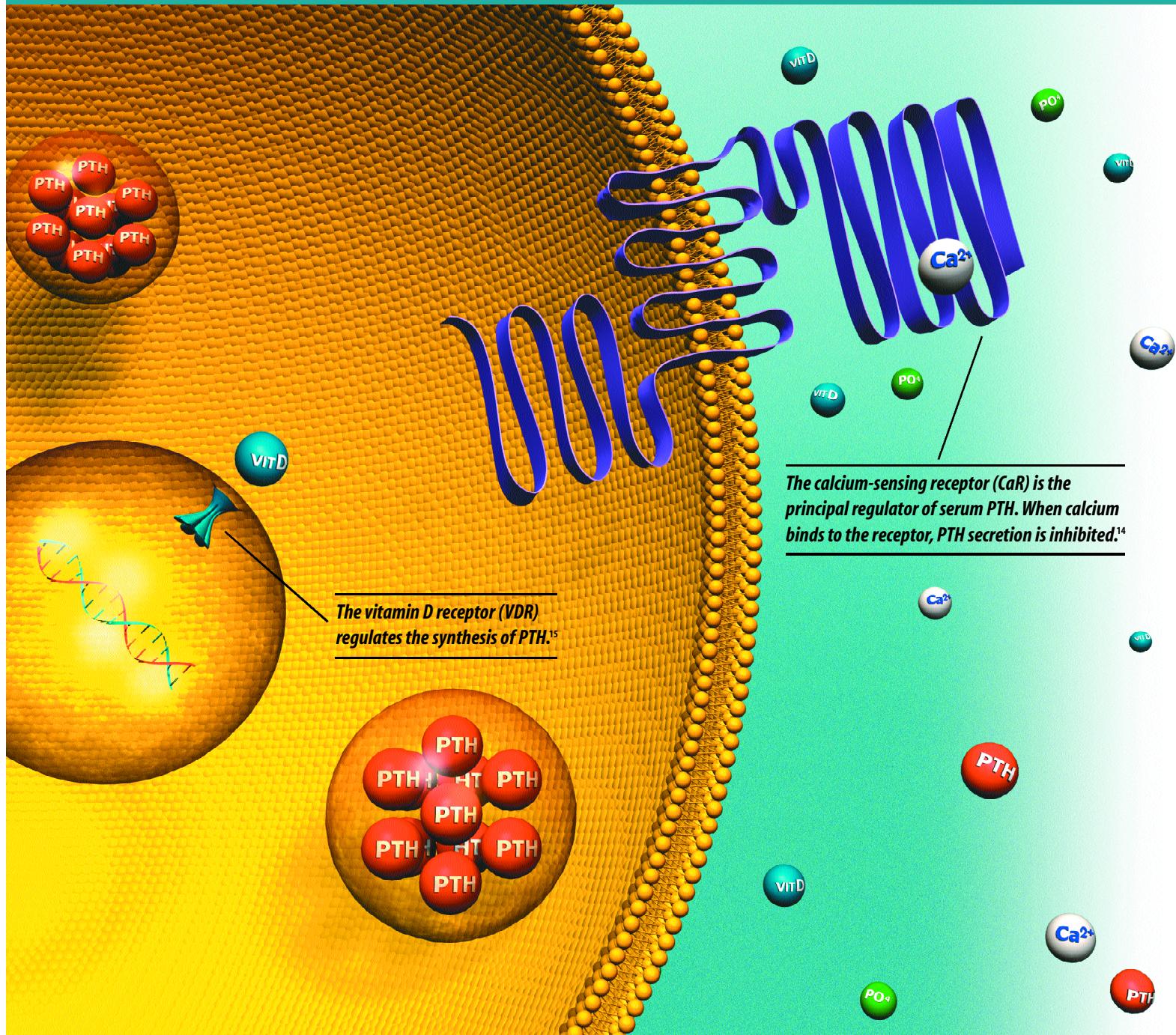
Use food photography
for patient education!

Fluids, phosphorus, potassium, diet basics, meals to go, star fruit info. Both English and Spanish available. Posters & handouts as low as \$7.50. Purchase orders accepted. Visit www.l-tec.com or call 428-895-9068.

"The pictures have been immensely helpful, especially with my Hispanic patients." Renal RD, So. CA

There are new measures of Do current treatment strategies

Achieving the new K/DOQI™ Bone Metabolism targets will be challenging^{1,2}



success in secondary HPT. measure up?

The clinical need for control

Bone disease. Soft-tissue and vascular calcification. Increased morbidity and hospitalizations. These are just some of the associated consequences of metabolic imbalance in end-stage renal disease (ESRD) patients.^{3,6} Most important, an accompanying increased risk of mortality reinforces the critical need for better control of elevated parathyroid hormone (PTH), calcium, and phosphorus levels.^{3,6,7} Yet until recently, the parameters of control were not clearly defined.

Now, the National Kidney Foundation® Kidney Disease Outcomes Quality Initiative (NKF-K/DOQI) has proposed the *Clinical Practice Guidelines for Bone Metabolism and Disease in Chronic Kidney Disease (CKD)*. These guidelines are the first to establish treatment goals for optimal clinical management of secondary hyperparathyroidism (HPT).

NKF-K/DOQI Bone Metabolism target values for stage 5 CKD patients*	
PTH*	150–300 pg/mL
Ca x P†	<55 mg/dL ²
PHOSPHORUS	3.5–5.5 mg/dL
CALCIUM [‡]	8.4–9.5 mg/dL

*Based on intact PTH assays.

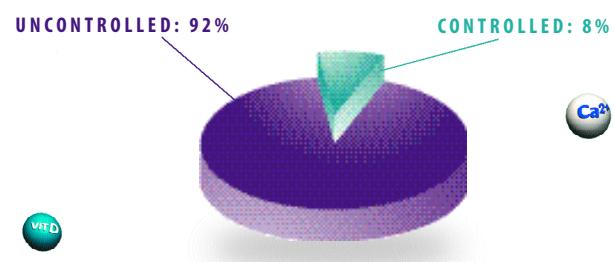
†Corrected total calcium levels.

Experts have developed these guidelines based on the best available evidence. These guidelines may help define a new standard of care for managing CKD patients with secondary HPT.

The new challenge

Implementing these new guidelines in clinical practice will be a challenging task. To achieve optimal patient outcomes, PTH, Ca x P, phosphorus, and calcium levels must all be controlled and maintained.^{3,6,8} With the limitations of available treatment options, managing PTH and Ca x P simultaneously forces clinicians to make trade-offs between their therapeutic goals. Therapies that lower PTH often need to be limited or interrupted due to hypercalcemia or hyperphosphatemia caused by their use.^{7,9–13} As a result, it will be challenging for most patients to reach the K/DOQI goals.^{1,2,7} Only 8% of patients reach all 4 key target levels (PTH, Ca x P, P, and Ca) with current therapy. The majority (83%) do not maintain these levels over a 6-month follow-up period.²

The vast majority of dialysis patients are currently not within K/DOQI target values for PTH, Ca x P, P, and Ca²⁺



¹Evaluation of US hemodialysis patients (n=3540) in the Dialysis Outcomes and Practice Patterns Study (DOPPS) from 1997–2000. Percentages represent values for patients at baseline.²

Meeting the K/DOQI guidelines will be challenging, and reaching the recommended target levels may require new strategies. However, achieving and maintaining these target levels offers a significant opportunity for both physicians and patients.⁷

References: 1. Young E, Satayathum S, Pisoni R, et al. Prevalence of values on mineral metabolism being outside the targets from the proposed new draft NKF-K/DOQI and European Best Practice Guidelines in countries of the Dialysis Outcomes and Practice Patterns Survey (DOPPS). Presented at: World Congress of Nephrology; June 8–12, 2003; Berlin, Germany. W414. 2. Kim J, Pisoni RL, Danese M, Satayathum S, Klassen P, Young EW. Achievement of proposed NKF-K/DOQI bone metabolism and disease guidelines: results from the Dialysis Outcomes and Practice Patterns Study (DOPPS). Submitted to: American Society of Nephrology 2003 Renal Week; November 12–17, 2003; San Diego, Calif. 3. Block GA, Hubert-Shearn TE, Levin NW, Port FK. Association of serum phosphorus and calcium x phosphorus product with mortality risk in chronic hemodialysis patients: a national study. *Am J Kidney Dis.* 1998;31:607–617. 4. Pisoni R, Satayathum S, Young E, et al. Predictors of hyperphosphatemia and its association with cardiovascular mortality in hemodialysis patients: international results from the DOPPS. Presented at: World Congress of Nephrology; June 8–12, 2003; Berlin, Germany. W415. 5. Raggi P, Boulay A, Chasan-Taber S, et al. Cardiac calcification in adult hemodialysis patients: a link between end-stage renal disease and cardiovascular disease? *Am Coll Cardiol.* 2002;39:695–701. 6. Ganesh SK, Stack AG, Levin NW, Hubert-Shearn T, Port FK. Association of elevated serum PO₄, Ca x PO₄ product, and parathyroid hormone with cardiac mortality risk in chronic hemodialysis patients. *J Am Soc Nephrol.* 2001;12:2131–2138. 7. National Kidney Foundation. K/DOQI clinical practice guidelines for bone metabolism and disease in chronic kidney disease. *Am J Kidney Dis.* In press. 2003. 8. Massry SG. New bone metabolism and disease in CKD guidelines. Lecture presented at: 35th Annual Meeting of the American Society of Nephrology; November 2, 2002; Philadelphia, Pa. 9. Johnson CA, McCarthy J, Ballie GR, Deane J, Smith S. Analysis of renal bone disease treatment in dialysis patients. *Am J Kidney Dis.* 2002;39:1270–1277. 10. Sprague SM, Liach F, Amdahl M, Tacetta C, Battle D. Paricalcitol versus calcitriol in the treatment of secondary hyperparathyroidism. *Kidney Int.* 2003;63:1483–1490. 11. Bacchini G, Fabrizi F, Pontoriero G, Marelli D, Di Filippo S, Locatelli F. 'Pulse oral' versus intravenous calcitriol therapy in chronic hemodialysis patients: a prospective and randomized study. *Nephron.* 1997;77:267–272. 12. Quarles LD, Yohay DA, Carroll BA, et al. Prospective trial of pulse oral versus intravenous calcitriol treatment of hyperparathyroidism in ESRD. *Kidney Int.* 1994;45:1710–1721. 13. Goodman WG, Hladik GA, Turner SA, et al. The calcimimetic agent AMG 073 lowers plasma parathyroid hormone levels in hemodialysis patients with secondary hyperparathyroidism. *J Am Soc Nephrol.* 2002;13:1017–1024. 14. Brown EM. Calcium receptor and regulation of parathyroid hormone secretion. *Rev Endocr Metab Dis.* 2000;1:307–315. 15. Dusso AS. Vitamin D receptor: mechanisms for vitamin D resistance in renal failure. *Kidney Int.* 2003;63(suppl 85):S6–S9.

National Kidney Foundation is a registered trademark of the National Kidney Foundation, Inc.; K/DOQI is a trademark of the National Kidney Foundation, Inc.

MAKING SECONDARY HPT A PRIMARY FOCUS.

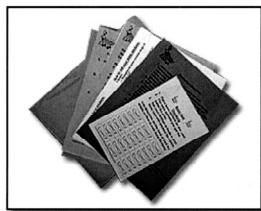
AMGEN®

Products of the ADA Renal Practice Group (Marketed through the Kidney Thinking Company)

www.kidneythinking.com

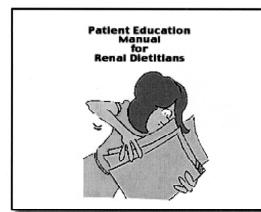
BONE STORE - A motivational program/game startup kit that includes all the materials needed to help start motivating dialysis patients toward better phosphorus control. This is a product of the ADA's Renal Practice Group. All materials in the kit are camera-ready for your copying pleasure.

\$10.00



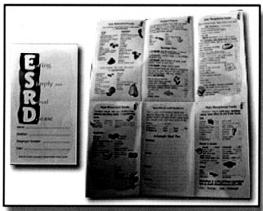
PATIENT EDUCATION MANUAL - A collection of the "best of" the patient education materials included in the Renal Forum, a quarterly publication of the ADA's Renal Practice Group. All materials in the kit are camera-ready for your copying pleasure.

\$10.00



EATING SIMPLY WITH RENAL DISEASE PAMPHLET - Brought to you by the Renal Practice Group of the American Dietetic Association is the long awaited simplified version of the National Renal Diet. It is a colorful, low literacy pamphlet that provides some basic information about calories, protein, salt and diabetes. The pamphlet opens up to approximately 14x22 (fits on the freezer door of the fridge). The inside sections include the green light "go foods" and "yellow light cautions light foods" for potassium and phosphorus as well as information on fluids, protein and a sample menu section. The pamphlets are packaged in packs of 25's.

1-3 \$15.00/Pack, 4-7 \$15.00/Pack
8-10 \$14.50/Pack, 10+ \$14.00/Pack



Kidney Thinking Company
17 Cotley Street
Berkley, MA 02779

jgoode@kidneythinking.com julieb@kidneythinking.com

To order visit our website at www.kidneythinking.com or fill out and return the form below:

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____

Item	Quantity	Price per Unit	Total
Bone Store		\$10.00	
Patient Education Manual		\$10.00	
Eating Simply with Renal Disease		\$15.50 for 1-3 packs \$15.00 for 4-6 packs \$14.75 for 7-10 packs \$14.00 for > 10 packs	
		Total	
		Shipping & Handling: 0-\$49.99 = \$5.50, \$50.00-\$99.00 = \$10.50, >\$100.00 = \$15.50	
		Plus	
		Total Enclosed	

Kidney Friendly Food Facts

Sharon Schatz, MS, RD, CSR, CDE

Sharon works as a renal dietitian with Gambio Healthcare in Mt. Holly, NJ. She can be reached at srsmrd@aol.com or sharon.schatz@us.gambio.com

With a diverse patient population, there have been requests for information regarding vegetarian diets. Vegetarian nutrition has greatly expanded, both in the knowledge base and commercially available products. Fortunately, there are informative articles by renal colleagues as well as useful web sites. This column will highlight these.

How many of you remember the amino acid profile charts for protein combining? These are no longer necessary as intake for the whole day is emphasized instead. The perspective on a food's protein quality changed in the 1990's. For years the Protein Efficiency Ratio (PER) evaluated this, but it was flawed, due to being based on the amino acid profile required by rats. In addition to a protein's amino acid profile, its digestibility is now a major factor, as reflected by the World Health Organization (WHO), the U.S. Food and Drug Administration, and U.S. Department of Agriculture (USDA) adoption of The Protein Digestibility Corrected Amino Acid Score (PDCAAS). Foods that meet the WHO guidelines for children 2 to 5 years of age receive a rating of 1.0. PDCAAS values are: 1.0 for whey protein, whole egg, and casein; .99 for soy protein concentrate; .92 for beef protein; and .68 for canned kidney beans.

Potassium and phosphorus intakes are of concern in the vegetarian diet. Phosphate absorption is reduced to 50% in grains and legumes since it is in the form of phytic acid. We need to be aware that nutrient data can vary for similar types of processed foods. Potassium and phosphorus content is not always on the food label, and you may need to contact the food manufacturer to obtain this information.

The following articles by dietitians are helpful:

Berkoff, N. Vegetarian and vegan meal planning. *Diabetes Self-Management* 2003; 20(3):56-73.

David, KD. "What? You want me to eat TOFU!!!!". *Renal Nutrition Forum* Spring 2001.

Pagenkemper, J. Planning a vegetarian renal diet. *J Renal Nutr* 1995;5:234-238

Pagenkemper, J. The use of soy products in treating renal disease. *The Soy Connection* 1999;7(4)2,4.<http://www.talksoy.com/SoyConnection/default.htm>. Accessed January 18, 2004.

Patel C. Results from the vegetarian renal resource questionnaire. *Renal Nutrition Forum*. 1999;18(4):15.

Patel, C. Vegetarian renal diet and practical applications. *Renal Nutrition Forum*. 2000; 19(3)1,3,4.

Position of the American Dietetic

Association and Dietitians of Canada: Vegetarian diets. *JADA* 2003;103:748-765 Stephenson, TJ. Soy protein in the renal diet. *Renal Nutrition Forum* Spring 2001.

Vegetarian Nutrition, A Dietetic Practice Group of the American Dietetic Association. *Vegetarian Diets in Renal Disease*.

http://www.vegetariannutrition.net/fact_sheets.htm. Accessed January 18, 2004.

I've divided the web sites into three categories: general vegetarian information, soy protein, and whey protein. Although they are not renal specific, having a broader knowledge base will enable us to better understand some of the patients' practices. Vegetarian habits vary widely including one of the newest trends, "raw foods" that has been in the printed media and on television.

Continued on page 18

Table I: Top 20 ORAC Foods

Fiber Content of Lower Phos and K+ Grains and Cereal Products
(corrected from Kidney Friendly Food Facts, Fall 2003)

Food	Portion	Fiber gm	K+ mg	Phos mg	Na+ mg	Phos/gm fiber	K+/gm fiber
Barley, Pearled, cooked	.5 cup	3.0	73	42	2	14.1	24.5
Buckwheat groats, roasted, cooked	.5 cup	2.3	74	59	3	26.0	32.6
Bulgur Wheat, cooked	.5 cup	4.1	62	36	5	8.8	15.2
Corn Bran, crude	.5 cup	32.5	17	27	3	0.8	7.5
Couscous, cooked	.5 cup	1.1	46	17	4	15.5	41.8
Cream of Wheat, cooked	1 cup	1.8	43	43	3	24.6	24.6
Farina, cooked with water	1 cup	3.2	30	28	0	8.6	9.2
Kasha, roasted, cooked	.5 cup	2.3	74	59	3	26.0	32.6
Kellogg's Apple Cinnamon Squares cereal	.5 cup	3.1	111	103	13	32.7	35.2
Kellogg's Blueberry Squares	.5 cup	3.2	122	108	14	33.4	37.8
Macaroni, enriched, cooked	1 cup	1.8	43	76	1	41.8	23.6
Noodles (egg), enriched, cooked	1 cup	1.8	45	110	11	62.5	25.6
Oatmeal, cooked with water	1 cup	4.0	131	178	2	44.7	32.9
Popcorn, air-popped	1 cup	1.2	24	24	<1	19.8	19.8
Quaker Crunchy Bran cereal	.5 cup	3.2	38	24	169	7.5	11.9
Ralston cereal cooked with water	.5 cup	3.0	77	73	3	24.0	25.3
Rice, brown, cooked	.5 cup	1.8	77	75	1	42.9	44.0
Shredded Wheat, rectangular biscuit 1 each	2.6	103	101	0	39.3	40.1	
Spinach Egg Noodles, cooked	1 cup	3.7	59	91	19	24.7	16.0
Wheat Chex cereal	.5 cup	1.7	58	55	134	33.3	35.2

Stipend Report

Rural Nephrology: Working Together to Improve Outcomes in Renal Disease

By Susan Scarpelli RD, LN

Presented November 21, 2003 at a Chronic Kidney Disease Update at Roanoke, West Virginia. Susan can be reached at renalnutri-tion@yahoo.com.

According to Rebecca Schmidt, DO, Chief, Section of Nephrology West Virginia University School of Medicine, chronic kidney disease (CKD) is a big problem that is getting bigger. More and more people are identified with risk factors for CKD and an increasing number of patients each year start life-sustaining therapy with dialysis. CKD is a costly disease, financially as well as socially and emotionally. If growth continues at the current rate, this figure will double by the year 2010. The problem is compounded by the evolving shortage of nephrologists.

The National Kidney Foundation's K/DOQI guidelines divide CKD into five stages. Stage 1 includes people at risk for CKD

with a glomerular filtration rate (GFR) greater than 90 mL/min. People in this category might be diabetics, hypertensives, the elderly, people with a family history of kidney disease, males, people of certain ethnic backgrounds and cigarette smokers. Stage 2 is defined by a mild decline in GFR to 60-89 mL/min. Stage 3 is defined as a moderate decline with GFR of 30-59 mL/min. Stage 4 patients have a severe decline with a GFR of 15-29 mL/min. Stage 5, or End Stage Kidney Disease, is kidney failure with a GFR of 15 mL/min or less. According to statistics published in the American Journal of Kidney Disease in 2002, the number of patients with Stage 3 CKD greatly outnumbers the estimated population of patients with Stages 4 and 5. While 8,000,000 patients have been estimated to have CKD, approximately 300,000 patients ultimately reach Stages 4 and 5. In other words, those with advanced kidney disease are more likely to die than to make it to dialysis.

Like hypertension, CKD is silent. Early detection of chronic kidney disease allows for optimal care. With the declining num-

ber of nephrologists, primary care physicians need to be aware of and screen for CKD. It is possible to delay the progression by using certain drugs that reduce blood pressure in the kidney (as well as elsewhere in the body), controlling blood pressure, controlling diabetes, as well as treating comorbidities such as cardiac and vascular diseases.

In the early stages of CKD, a dietary protein restriction may delay the progression. However, in late stages of kidney disease, a high protein diet may accelerate renal damage. Conversely, once the disease progresses to end stage and dialysis-dependence increased protein intake may be necessary to treat or ward off malnutrition. These patients tend to be catabolic as uremia increases. A low protein intake is associated with renal preservation. Consultation with an experienced renal dietitian is recommended as early as stage 3 CKD as each patient will have different needs with each stage of declining renal function.

Feeding the Terminally Ill: The Role of Artificial Hydration and Nutrition

continued from page 6

may actually have worse outcomes, because tube-fed patients produce more stools than those who are hand-fed.

- There is no reduction in the risk of infection with tube feeders. Tube feeding can actually increase risk of infection.
- Cognitively impaired patients do not functionally improve with the placement of artificial nutrition.
- No improvement in patient comfort is achieved by providing artificial nutrition. Patients without terminal nutrition and hydration rarely experience hunger or thirst. Fluid-related symptoms (diarrhea, edema, etc.) are improved when tube feeding is withdrawn or withheld.
- There is an increased use of chemical or physical restraints when demented patients are placed on artificial nutrition. Of course, these add more complications

and ethical concerns. This is not to say that artificial nutrition is not useful in some situations. However, no studies have shown benefits of providing artificial nutrition to demented patients. Artificial nutrition can be beneficial for certain non-demented patients, particularly those who are being bridged through a reversible illness or who have esophageal obstruction.

Dr. Ackermann feels that there are alternatives to providing artificial nutrition to the terminally ill. He recommends discontinuing the use of nonessential medications, such as anticholinergic meds, sedatives, antipsychotics, bisphosphonates, NSAIDs, and digoxin, in demented patients. Hand-feeding programs do take extra time and dedication, however these type of programs

help preserve the patient's right to eat by mouth. Tricks of the hand-feeding program are providing more finger foods, preferred foods, strong flavors, and encouraging multiple swallows and more personal assistance.

In summary, the large majority of geriatricians and ethicists now do not recommend tube feeding or artificial nutrition/hydration in terminally ill patients, based on lack of benefit and potential harm. The key is to educate caregivers on the benefits vs. the burdens of providing artificial nutrition. It is not "assisted suicide" when caregivers decide to forego life-sustaining treatment. Patients have the choice of "allowing nature to take its course." As dietitians, it is part of our responsibility to support our patients' and patient caregivers' informed decisions.

Chair Messages

By Jenny Smothers, RD, LD and Susan M. Reams, RD, CSR, LD

Jenny is a Regional Dietitian Coordinator for the Mid-South Region of Renal Care Group. She can be reached at [jsmthers@renalcare-group.com](mailto:jsmothers@renalcare-group.com). Susan is Chair of the Council on Renal Nutrition of NKF and a renal dietitian at Mercy Medical Center in Des Moines, IA. She can be reached at sreamswdm@prodigy.net

Jenny:

STAYING "CONNECTED" WITH YOUR PROFESSION

It has been my pleasure and honor to serve as your Chair for this past year. It has been a great experience for me to be able to meet many of you and work with some very talented and capable dietitians in our association. Friendships have grown alongside the work and projects of RPG. I know that RPG will remain strong with the forward-thinking leadership from our 2004-2005 Chair, Anne Ishmael, and her experienced Executive Board.

In today's hectic world, most of us lead very busy lives! Most dietitians like to stay busy and involved in so many areas - our workplace, our families, our communities and friends, and with our profession. As it has been said, "If you want something to get done, ask a busy person to do it!" Many dietitians that I know seem to be very organized individuals who can "get a lot done".

But, how can we 'stay connected' with the profession of renal dietetics? I'd like to suggest a few simple ways:

- Stay involved by offering to serve on a committee, a work group, or a board, if needed. Renal Practice Group has needs and positions to be filled every year by people like you. By becoming more involved, you will 'stay in the know' on current happenings in your profession.
- Become a grassroots legislative advocate for your association! In late 2003, the Medicare reform bill was passed by the Senate and the House, containing two

major new benefits affecting dietitians. Passage of this bill represents a major expansion of the MNT benefit to increase access of millions of people to the services of Registered Dietitians. The expansion of MNT is the direct result of years of lobbying by dietitians to educate Congress on the preventive and therapeutic benefits of nutrition to Americans. Also, many ADA members who support ADAPAC have contributed to this bill's passage - by getting ADA's message out on Capitol Hill through our competent ADA/D.C. staff. By becoming involved in legislative activities in your local area, you can also work together to better our profession, while at the same time, 'staying connected'.

- Soon you will be able to visit our RPG Website. Our new and improved website, renalnutrition.org, is under construction and will be hosted by ADA, with direct links from the ADA website, at eatright.org. It will allow daily updates from the ADA database, DMIS, for new members, directories, and other current information. Public sections, and easily-accessed members section of the website will work together to serve as a benefit for renal dietitians and for the public. Information on links and resources to external sites will be available, along with articles from the *Renal Nutrition Forum*. The members' section will also contain downloadable PDF Files on past issues of the *Forum*. Information on RPG members, officer lists, benefits, educational tools, publications to order and more are a part of this new website. I feel that the website will be an optimal way for our membership to 'stay connected' and current with our profession. Of course, it will only be as current as the information that we submit, and our Web Coordinator, Cathy Goeddecke-Merickel, along with the ADA WebMaster will try hard to ensure that we have a quality site. We are very excited to improve this member benefit.

Susan: OUR TRIP TO THE "HILL"

Professional Councils Meet with Congressional Offices

On October 3, 2003, the National Kidney Foundation (NKF) Professional Council Executive Committee Chairs met with key congressional health staff in Washington, D.C. Troy Zimmerman and Monica Billger accompanied them from the NKF Washington D.C.'s Public Policy Office. Sally Rice, the CNSW Chair, Melinda Martin-Lester, the CNNT Chair, I detailed the role and team approach of allied health professionals in the care of kidney patients. We discussed a variety of issues regarding chronic kidney disease (CKD), and highlighted NKF public policy priorities.

The scheduled meetings were held with the professional staff from the House of Representatives Committee on Ways and Means, Subcommittee on Health, which included the health staff from the offices of Representative Dave Camp (R-MI), Representative Michael Bilirakis (R-FL), Senator Blanche Lincoln (D-AR) and Senator Jon Kyl (R-AZ). Representative Camp serves on the Ways and Means Health Sub-committee; Representative Bilirakis is the Chairman of the House Energy and Commerce Subcommittee on Health, and Senators Lincoln and Kyl are members of the Senate Finance Committee. These committees have jurisdiction over the Centers for Medicare and Medicaid (CMS) and these legislators have been very receptive to the needs of individuals with CKD.

The Council Chairs shared our professional and personal experiences with staffing/patient ratios in dialysis centers and discussed how an increase in the CMS composite rate being paid to dialysis facilities could help to alleviate funding constraints and staffing pressures. We also highlighted NKF's support for predialysis education legislation (Representative

Continued on page 16

Chair Messages

continued from page 15

Camp is the sponsor of the legislation to increase the composite rate and Senator Lincoln sponsored a bill to establish a CMS predialysis education benefit for individuals with CKD).

Our day "on the Hill" was a wonderful team opportunity for educating our legislators and their staff to visualize the many "faces" of patients with CKD. It was an exciting opportunity for all of us as integral members of the NKF interdisciplinary team. Each of us had an opportunity to describe our role on the treatment team and how we contribute and strive for positive medical outcomes with our patients.

One vital issue we all emphasized was the need for CMS reimbursement for predialysis education for all healthcare disciplines. Together, we provided vivid examples of how a well-informed and educated patient could feasibly delay the need for dialysis or make the initiation of dialysis less traumatic. Thus, costly emergency room visits for emergent dialysis intervention and/or lengthy acute hospitalizations for access placement and emergent dialysis could be avoided as well. A major contribution that was strongly emphasized was the "how to's" that we do to assist in guiding our clients to maintain an adequate quality of life through coping and adjustment to dialysis.

Together, we described the demographics of the "average" dialysis patient and how the financial, educational and employment opportunities are affected by the limited resources amongst the diverse patient populations across the United States, specifically Native Americans, Hispanics and Asians.

In addition to discussing the need for CMS reimbursement for predialysis education, we also provided examples of how the current composite rate was affecting staffing ratios with the increasing patient population and the need to strongly consider the proposed incremental 1.6% annual increase over the next 3 years. With the increasing numbers of new CKD patients, we find the dialysis units' staffing shortage issues have made it difficult to keep up with the demands of providing the

optimum quality of care that is required. Dialysis facilities need adequate funds to retain their staff and maintain the safe working environment where everyone can be comfortable. As operating expenses outpace the reimbursement increases, we see a decrease in trained nurses and an increase in the technicians. The dialysis units must be able to pay their staff a fair, equitable salary, while maintaining quality.

We also restated the need for universal coverage of immunosuppressive medication to remove a major barrier to some considering transplant as an option, as well as maintaining a viable graft for as long as possible in any individual who is transplanted. It was an opportunity for me to be able to provide very basic information to the legislative staff, who virtually had no experience in CKD and to see and hear their reactions to our discussions.

It is important for all of us, including renal dietitians, to realize that legislators and their staff do want to hear from their constituents on matters of public interest. CKD is a complex illness that affects patients in many different ways. As medical professionals, we have the knowledge and experience to educate the legislators on issues that affect our patients.

One example is payment for pre-renal replacement therapy education. Studies have shown that patients who have had some education regarding the stages of CKD have better overall outcomes in regard to modality choices, hospitalizations, nutrition and coping skills. CMS is already providing payment for nutrition counseling, and this bill would provide a payment system for limited patient visits with other multidisciplinary personnel.

We urged the congressional key staff members to retain the Senate Amendment, which would provide financial reimbursement for kidney disease education services for CMS beneficiaries, with CKD, before they would require kidney dialysis or a kidney transplant. As the renal dietitian team member, I emphasized how beneficial the Medical Nutrition Therapy Act (MNT) of 2002 was for providing the needed nutrition education to

the physician-referred predialysis patient.

As many of us realize, there are too many new patients who have to start dialysis before they are psychologically ready, and a large majority of these patients come to our clinics in a severely malnourished state. As such, education has been shown to improve patient outcomes and reduce costs for the health care system. Qualified providers under the proposed bill, should also include social workers, nurses and transplant coordinators.

We came away from these meetings with a better understanding of what Congress is facing in regard to the various pieces of the bills. As a team, we were able to convey to the congressional staff members our concerns as dialysis professionals and how the CMS legislation would affect our patient and staffing issues. Our job as dialysis professionals is to advocate for our patients and to assure that they receive quality care through adequate staffing and safe environments.

This visit was a team approach because we were able to convey our support of the proposed bills that would directly affect the CKD patient population. The pleasantries with doing this together were opportunistic. We were able to share our abilities and there was a definite comfort level in being able to "feed" each other with facts and reiterate previously mentioned discussions with everything that we were feverishly trying to present.

We were very gracious and quite appreciative to the congressional staff members for the time they allowed for us to educate them, to share our thoughts, our experiences and to put forth our recommendations. These congressional staff members were receptive to the needs of kidney patients and the role of allied health professionals. NKF's professional councils, CNSW, CNNT and CRN are an important facet in the Foundation's advocacy efforts and we, as Chairs were able to share our experience with our respective councils the following day during the Summit meetings in Baltimore. It was be an experience that we will remember for a long time.

Rehab Corner

By Maureen McCarthy, MPH, RD, CSR, LD Maureen is a Renal Dietitian with Renal Care Group—Pacific Northwest Renal Services, Portland, OR. She can be reached at mmcarthy@renalcaregroup.com or 503-944-2661

A Model of An Exercise Program: "Move Your Wagons"

This month's guest columnist is Julie Geraci, MEd, RD, LD. At the time the article was written she was the Renal Dietitian at Eastern Oregon Dialysis (EOD) Clinic of Renal Care Group, Pacific Northwest Renal Services in LaGrande, OR.

The success of an exercise program depends on full involvement and support from the staff. At Eastern Oregon Dialysis (EOD) we began the effort to establish a program with an in-service by myself for the staff on the benefits of exercise as well as a demonstration of some chair exercises for dialysis patients featured in the "Feelin' Fit" video series from the National Kidney Foundation of Oregon and Washington. This video series has cardiovascular, range of motion and strengthening exercises. Staff indicated a commitment. Next, letters were sent to the nephrologists to seek approval for patients to exercise and rule out any contraindications to prevent exercise in any of the patients. As it turned out, all patients were approved by their physicians to exercise. Finally, patients were surveyed to assess their interest in an exercise program.

As a team, the dialysis staff decided to start the exercise program with the morning patients on Monday-Wednesday-Friday. The patients received a handout which described the program of chair exercises during dialysis, suggested what they should wear and advised them to bring extra pillows for back support during the exercises.

Initially I attended the first sessions to get patients started with chair exercises, and I

or 2 staff members assisted. The key was to have at least one staff member actually doing the exercises with the patients each time. After several weeks, we added the second MWF shift. About half of the patients participated regularly during the 3 months of our focus on exercise.

I was looking for a way to provide an incentive to continue the exercise program, and thought that something connected with the Oregon Trail of pioneer days might be fun. We developed a program called "Move Your Wagon". A map of Oregon was made, with the Oregon Trail starting from Boise, ID, and continuing to Oregon City, OR, a distance of about 430 miles. The trail was divided into 10 mile segments, the average daily distance actually covered by the wagon trains. Each segment represented one day of exercise.

Each dialysis patient had their own covered wagon posted on the trail and it moved forward one segment each day they exercised. We also re-defined exercise to include anything the patient reported to us, including chair exercises at home, walking, gardening, using exercise machines, and doing housework.

Prizes were to reward patients at stops along the way. Most of the prizes were donated and included penlights, playing cards, Balance Bars, Mugs, blankets, backpacks, fanny packs, and grand prize of a collapsible cooler. For every 60 miles completed, a prize was awarded, with a total of 7 prizes obtainable per patient. The prizes became "better" further along the trail. With this incentive, 17 of 19 patients, or almost 90% started exercising! The major outcome was anecdotal reports of improved well-being. The staff participated, but were not eligible for prizes.

Everyone had a great time participating in "Move Your Wagon". Many of the patients stated that they felt better getting more exercise. The exercise videos are still being offered and many of the patients continue

to exercise, even though the incentive program has ended. Exercise is also encouraged outside of the clinic. Our goal is to make exercise a central aspect in the lives of our patients, giving them a greater sense of well being and achievement. This can lead to the patients feeling better about themselves and developing a better attitude toward their lives in general.

Julie Geraci, MEd, RD, LD, is currently a Regional Clinical Consultant for Genzyme Corporation. She welcomes your comments at julie.geraci@genzyme.com or at her voice mail 800-932-3135.

SAVE THE DATE!

FNCE

2004 FOOD & NUTRITION CONFERENCE & EXPO

October 2 – 5, 2004

Anaheim, California

Kidney Friendly Food Facts

continued from page 13

General Vegetarian web sites:

Dieto Bio, la sante au natural is a French web site geared towards organic foods containing articles in English, <http://www.dietobio.com/dossiers/en/>. Some provide descriptions on cereals and seed composition, sprouting, soy and soy products, and nut consumption and health. Nutrient data is provided.

The Food and Nutrition Information Center, part of the USDA, has a vegetarian nutrition resource list, http://www.nal.usda.gov/fnic/pubs/bibs/gen_vegetarian.htm that is rather comprehensive. Its drawback, however, is that it was last revised in May 2002.

International Vegetarian Union, <http://www.ivu.org>. Check out the Vegetarian Frequently Asked Questions (FAQ), <http://www.ivu.org/faq/> with sections on definitions, ingredients, common foods, food specialties, and nutrition. The Vegetarian Resource Group <http://www.vrg.org/index.htm> The site features areas on vegetarian nutrition, ingredient information, vegan information, and recipes.

Soy and Soy Protein web sites:

The College of Agricultural, Consumer, and Environmental Sciences at the University of Illinois at Urbana-Champaign has a Soy-bean Resources site for consumers with numerous links, <http://web.aces.uiuc.edu/ssresources/consumers.html#Soy%20Foods>.

The Soy Connection Interactive, <http://www.talksoy.com/SoyConnection/>, has archives of past newsletters

Soy Info Online!, <http://www.soyinfo.com/>, has detailed information including a soy product glossary with definitions, protein and nutrients from other beneficial legumes, and links to other sites.

Soy Protein Products: Characteristics Nutritional Aspects, and Utilization by Joseph G. Ebdres, Ph.D. is a detailed guide to soy that includes definitions and methods of preparation, protein quality and human nutrition, use in food systems, and regulations regarding usage. Download from <http://www.spccouncil.org/>.

United Soybean Board and Soy Protein Partners, <http://www.soybean.org/> has a downloadable PDF format Soyfoods Guide.

U.S. Soy foods Directory with Soyfoods Descriptions: <http://www.soyfoods.com/soyfoodsdescriptions/descriptions.html>

Nutrient profiles of several soy foods can be found on <http://www.walford.com/soydata.htm>

Whey web sites:

U.S. Dairy Export Council, <http://www.usdec.org/Products/WheyNM.cfm>, has a reference manual for U.S. Whey and Lactose Products in PDF format.

Whey Protein Institute, <http://www.wheyoflife.org>, has lists of whey protein products by manufacturer with product name, phone numbers, and web sites. Ingredient details are available with data for calcium, phosphorus, sodium, and potassium. The whey products include powders, protein bars, beverages, and other whey items. (All websites were accessed on January 18, 2004.)

PRODUCT INFORMATION	DIATX	NEPHRO-VITE® 80+	NEPHRO® CAPS++	NEPHRO® 100++
FOLIC ACID	5 mg	1 mg	1 mg	1 mg
COBALAMIN (B12)	1 mg	6 mcg	6 mcg	6 mcg
PYRIDOXINE (B6)	50 mg	10 mg	10 mg	10 mg
THIAMINE (B1)	1.5 mg	1.5 mg	1.5 mg	1.5 mg
RIBOFLAVIN (B2)	1.5 mg	1.7 mg	1.7 mg	1.7 mg
NIACINAMIDE OR NIACIN	20 mg	20 mg	20 mg	30 mg
PANTHOTERIC ACID (B5)	10 mg	10 mg	5 mg	10 mg
BIOTIN	300 mcg	300 mcg	150 mcg	300 mcg
VITAMIN C	50 mg	60 mg	100 mg	60 mg
PRESCRIPTION REQUIRED	YES	YES	YES	YES

- Elevated homocysteine is a strong independent risk factor for cardiovascular disease.
- The majority of renal patients experience mild to moderate hyperhomocysteinemia

© 2004 Panlab, LLC. All rights reserved. Panlab is a registered trademark of Panlab, LLC. Panlab is a registered trademark of Panlab, LLC. Panlab, LLC. Covington, IA 50435

www.diatx.com

2003 - 2004 RPG Executive Committee

RPG Mission: The RPG is the advocate of the dietetics profession serving the public through the promotion of optimal renal nutrition, health and well-being.

RPG Vision: RPG members will be leaders in providing scientifically sound renal nutrition care and education for patients, the profession and the public.

Chair

Jenny Smothers, RD, LD
5209 Wood Lake Cove
Tupelo, MS 38801
662/844.0009
Fax: 662/690.9200
jsmothers@renalcaregroup.com

Chair-elect

Anne Ishmael, MS, RD, LD
11430 East Freeway #330
Houston, TX 77029
713/450.4991
Fax: 713/450.4994
Anne.Ishmael@us.gambro.com

Immediate Past Chair

Jill Goode, MS, RD, LD
1621 Winston Dr.
Florence, AL 35630
888/389.3300 ext. 7843
jgoode@bonecare.com

Secretary

MaryAnn Thornton, RD, LD
405 Fernwood Drive
Severna Park, MD 21146
410/768.5722
Thorntonmv@msn.com

Treasurer

Caroline Chinn, MS, RD, CDE
P.O. Box 9256
Rancho Santa Fe, CA 92067
760/743.4401
caroline.chinn@us.gambro.com

EDITORIAL STAFF:

Advertising Editor

Marianne Hutton, RD, CDE
2355 Morningside Circle
Santa Rosa, CA 95405
707/575.0974
Fax: 707/575.0974
Fnlyfit@pacbell.net

Managing Editor

Cathi Martin, RD, CSR, LDN
106 Mooreland Drive
Springfield, TN 37172
615/384.8939
Fax: 615/384.1949
cjmartin@renalcaregroup.com

Editor

Patricia Weber, MS, RD, CSR, CDE, LDN
1594 Mountain View Road
Springville, AL 35146-7307
205/629.3922
pajw67@hotmail.com

Assistant Editor

Sarah Carter, RD, CDE, LDN
126 Meadowbrook Lane
Tullahoma, TN 37388
sarahc1966@yahoo.com
931/393.7967

Website Editor

Catherine M. Goeddeke-Merickel, MS, RD, LD
9386 Magnolia Way North
Maple Grove, MN 55369
612/834.4474
jmerickel@comcast.net

ADA Practice Team Manager

Lori Smuckler, RD
120 S. Riverside Plaza, Suite 2000
Chicago, IL 60606-6995
800/877.1600 ext. 4778
Fax: 312/899.4812
Lsmuckler@eatright.org

Professional Issues Delegate

Annalynn Skipper, MS, RD, FADA, CNSD
1653 W. Congress Parkway
425 TOB
Chicago, IL 60612
312/942.3349
askipper@rush.edu

COMMITTEES:

Membership Chair:

Catherine M. Goeddeke-Merickel, MS, RD, LD
9386 Magnolia Way North
Maple Grove, MN 55369
612/834.4474
jmerickel@comcast.net

Nominating Committee:

Chair:
Lois Hill, MS, RD, CSR, LD
1676 Donelwal Dr
Lexington, KY 40511
859/252.7712
Fax: 859/2520.2117
ljbill@aol.com

Member:

Robyn Spilker, MEd, RD, LD
500 Cedar Lane
Waterville, OH 43566
419/878.3209
Fax: 419/878.8276
rhspilker@aol.com

Member:

Mary Moore Snipes, MS, RD, LD
9005 SW 83rd Street
Miami, FL 33173
305/825.5369
Fax: 305/825.5358
Mssems61@aol.com

AREA COORDINATORS/COMMITTEE

CHAIRS

Area II / Reimbursement Chair
Julie Geraci, RD, LD
Eastern Oregon Dialysis
710 Sunset Drive
LaGrande, OR 97850
541/663.8420
julieg1948@yahoo.com

Area II / Awards and Scholarships

Mary Jo Dahms, RD, LD
DaVita Dialysis
2785 White Bear Avenue
Suite 201
Maplewood, MN 55109
612/777.8839
MJDahms@DaVita.com

Area III/Education Chair

Mary Moore Snipes, MS, RD, LD
9005 SW 83rd Street
Miami, FL 33173
305/825.5369
Mssems61@aol.com

Area IV/Lending Librarian (Western U.S.)

Jane Louis, RD, CSR, LD
Renal Care Group-Ft. Bend Dialysis
3819 Cartwright Rd.
Missouri, TX 77459
281/403.0749
jlouis@renalcaregroup.com

Area V/Lending Librarian (Eastern U.S.)

Heather Ohlrich, RD, LD
Ohio Renal Care Group - Farnsworth
3764 Pearl Rd.
Cleveland, OH 44109
276/739.0500 ext. 258
hohlrich@renalcaregroup.com

Area VI/Legislative Chair

Karen Basinger, MS, RD, LD
DaVita
11941 George Ave.
Wheaton, MD 20902
301/949.9783
Kbasinger@davita.com

Area VII/CQI Chair

Julie Barboza, MS, RD, CSR, CRNP
17 Cotley Street
Berkley, MA 02779
508/821.9008
Fax: 508/880.7193
julieb1@comcast.net

Lost in the Mail? If you are aware of any RPG members who have not received their copy of the Renal Nutrition Forum, please tell them to contact the Membership Chair. Please provide their name, mailing address, ADA membership number, and issue(s) missing.

We want all members to receive this publication.

Where are You? If you have moved recently, or had a name change, please send changes to ADA using the change of address card in the Journal to avoid delayed issues of your Renal Nutrition Forum.

2004 Renal Practice Group Election Results

Lois Hill, MS, RD, CSR, Robin Spilker, RD, LD and Mary Moore Snipes, MS, RD, LD, the Renal Practice Group Nominating Committee, have submitted the official 2004 RPG election results. The 2004 Ballot Results are:

Chair-elect:Cathi Martin, RD, CSR, LD

Secretary: Cathy Goeddeke-Merickel, MS, RD, LD

Nominating Committee: Susan Knapp, MS, RD, CSR, LD, Chair

Marcy Bushman, MPH, RD, CSR, LD

Joanne Cooke, MS, RD, CSR, LD

Congratulations to the New Officers!

2004 Copyright by Renal Dietitians
Dietetic Practice Group of the American Dietetic Association.
All rights reserved.

Patricia Weber, MS, RD, CSR, CDE, LDN
Editor, *Renal Nutrition Forum*
1594 Mountain, View Road
Springville, AL 35146

PRSR. STD.
U.S. POSTAGE
PAID
Cincinnati, OH
Permit No. 6523

