

## Addressing the Growing Need for Chronic Kidney Disease (CKD) Medical Nutrition Therapy in Primary Care Settings: Update on the National Kidney Disease Education Program's CKD Diet Initiative

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**This article has been approved for 1.5 CPE units. The online CPEU quiz and certificate of completion can be accessed in the Members Only section of the RPG web site via the My CPEU link. In addition, this CPE offering is available to current RPG members only and the expiration date is November 15, 2011.**

Since its inception in 2001, the National Kidney Disease Education Program (NKDEP) has worked to improve the early detection and treatment of chronic kidney disease (CKD). Approximately 23 million Americans aged 20 and older may have CKD, and that number is expected to rise with the increasing rates of diabetes and hypertension, the two leading risk factors for CKD (1). Although usually considered a specialist's disease, early CKD can be managed in the primary care setting and integrated into existing care for patients with diabetes and hypertension. However, CKD remains poorly managed, in part because clinicians, including Registered Dietitians (RDs), feel inadequately educated. Despite the fact that Medicare provides coverage for three hours of CKD Medical Nutrition Therapy (MNT) in the first year and two hours in subsequent years, the benefit is underutilized, with only 9,486 RD Medicare providers enrolled (2). For these reasons, NKDEP developed a CKD Diet Initiative to fill the need to provide simplified and accessible professional and patient education materials, to train general practice dietitians to counsel people with CKD, and to facilitate referrals for CKD MNT from primary care physicians.

NKDEP initiated this effort with a roundtable discussion with members of the Renal Practice Group (RPG) to obtain insights into the barriers to counseling CKD patients who are not on dialysis. The participating renal dietitians reported that RDs who do not practice renal education daily may not be as familiar with the specific challenges of the renal diet and need refresher training from RDs experienced in CKD MNT. In addition, they commented that primary care providers need to be educated on the importance of MNT and the need for referrals for CKD. The participants encouraged NKDEP to develop an agenda that helps to improve CKD patient outcomes by encouraging strategies that can be initiated by dietitians (3).

Subsequent to the initial roundtable discussion, NKDEP conducted in-depth interviews and held two focus groups with RDs across nine practice areas. The participants reinforced the original comments from the roundtable discussion and provided feedback on patient and provider training materials. The comments also informed the development of an overall strategy for NKDEP's CKD Diet Initiative to improve MNT to CKD patients. This article is intended to update the RPG on these activities.

### New Research Activities

After the initial roundtable discussion, NKDEP held in-depth telephone interviews with RDs from nine different dietetic practice groups (DPGs) to gain insight into current practice outside the experience of the renal dietitian. Many of the general practice dietitians (GPDs) who participated in the interviews reported that they had limited experience with CKD but had seen an increase in CKD patient referrals. As a result, they expressed a need for an update/refresher course on how to assess and provide MNT to CKD patients. They also reported a need for simple patient education materials available from one source; they often had to access materials from many different sources and found that the reading level for their patients was usually too high. Many recommended that NKDEP develop a professional guide on the CKD diet, and simple, easy-to-read materials for lower literate patients.

### Strategy of the NKDEP CKD Diet Initiative

Based on in-depth interview findings, NKDEP developed an overall strategy for the initiative. Goals included: development of easy-to-read patient education and training materials; training GPDs to provide CKD MNT as part of their care of patients with diabetes and/or hypertension in primary care practice; and educating primary care practitioners on the importance of CKD MNT and making referrals to RDs, when appropriate.

Both of the subsequent focus groups, composed of renal and GPDs who had varying experience with CKD MNT, discussed

## NKDEP CKD Nutrition and Diet Materials

These free, downloadable, and reproducible materials are designed to provide key information about CKD and diet for RDs and their patients. The patient materials are written below a seventh grade reading level.

### For RDs:

**Chronic Kidney Disease and Diet: Assessment, Management and Treatment** - an overview guide on treating CKD patients who are not on dialysis.

### For CKD Patients Who Are Not on Dialysis:

**Eating Right for Kidney Health: Tips for People with CKD** – a handout about the basics of nutrition in CKD.

**Nutrition Tips for People with CKD** – individual handouts on:

- Sodium
- Protein
- Phosphorus
- Potassium
- Food-label reading

**Your Kidney Test Results** – a useful tool for assessment and education about test results with patients.

**Visit NKDEP at [www.nkdep.nih.gov](http://www.nkdep.nih.gov) to view and download these materials free of charge.**

ways to implement the proposed strategy. They supported a Certificate of Training in CKD Diet Management program, similar to the American Dietetic Association's (ADA) Certificate in Training in Weight Management program, as an effective avenue for training. They suggested both online and in-person training to minimize travel time and cost. Although many commented that a formalized mentoring program was hard to implement and maintain, they encouraged post training support, such as an online CKD community to discuss decision support and patient self-management issues. They also noted there was a need to develop a "business case" to help RDs "sell" the idea of referrals to primary care practitioners who manage CKD patients who are not on dialysis.

## Decision Support and Patient Self-Management Materials

After the initial telephone interviews, NKDEP developed a suite of nutrition resources for managing patients with CKD. These materials included a simplified decision support guide for the RD (provider tool), and easy-to-read self-management handouts for the RD to use with the CKD patient. To provide feedback on the first set of materials, NKDEP conducted a focus group with a representative from each of the nine DPGs interviewed earlier. The goal was to find an RD from each practice area with experience in CKD. Recruitment proved to be difficult, confirming an earlier finding that not many RDs are practicing CKD MNT.

The focus group participants had positive feedback on the materials. They liked the simplicity of the provider tool and the reading level of the patient materials and they recommended that NKDEP develop fact sheets on single nutrients to enable MNT sessions focusing on individual nutrients (phosphorus, potassium, etc), in addition to the overview handout for patients who would only be seen once. Also, they commented that material will be needed to address cultural food preferences for the diverse populations they serve. To improve the provider tool, they suggested more details on dietary intervention, a more functional layout, and an organization that reflects CKD disease progression.

As a result of the focus group findings, NKDEP revised patient materials and created new ones. The resulting guide for patients provides a quick overview of the diet components. While intended to be used by RDs, this handout can also be used by primary care providers to introduce the basics of the CKD diet changes before making a referral. To help patients understand their lab test values and why the changes to the diet are being recommended, NKDEP developed a "Kidney Tests Report Card" that provides simple explanations of the common tests and room for the provider to enter the latest values. Enabling continuity of care, this customizable handout can also be used by other members of the health care team to provide updates on test results or answer the patient's questions. NKDEP also developed a series of individual fact sheets on sodium, protein, phosphorus, potassium, and the food label. All patient materials are written between a fifth and seventh grade reading level.

In addition, NKDEP transformed the tool for professionals from a narrative format into a tabular design, organizing its content into the following categories: assessment, slowing progression, and reducing complications. As much as possible, the information in the tool is evidence-based, drawing upon the ADA Evidence Based Library for CKD and existing literature. However, since data is limited for CKD patients not on dialysis, many

# Advances in Practice....

*“Some RDs with many years of experience are not comfortable with the renal diet. There are so many things that are involved with the renal patient. It’s not just a low-sodium diet. It’s being able to see all different disease states and knowing how to treat.”*

NKDEP Focus Group Participant

*“I’m starting to get referrals for CKD patients more regularly.”*

NKDEP Focus Group Participant

*“CKD is unidentified and we need to alert physicians of the need for referrals to dietitians.”*

NKDEP Focus Group Participant

of the recommendations for CKD are extrapolated from renal replacement therapies literature. Before finalizing the materials, NKDEP conducted additional reviews by RDs practicing CKD MNT and their patients. The completed materials can be accessed on the NKDEP website at [www.nkdep.nih.gov/ckd\\_nutrition](http://www.nkdep.nih.gov/ckd_nutrition).

## Next Steps

To address the need for a CKD update/refresher for registered dietitians, NKDEP is developing training materials which ADA will adapt as an online Certificate of Training in CKD (expected to launch in mid 2011). Administered through the ADA Center for Professional Development, the online program will include interactive activities, case studies, assessments, and the CKD business case. Both ADA members and non-members will be able to earn continuing professional education units and, upon successful completion of an assessment, will earn a Certificate of Training in CKD Diet Management. The ADA will review the web-based modules with members of the RPG as part of the developmental process. All supplemental materials developed by NKDEP as part of this collaboration will be publicly available online.

Next, we will explore developing an online CKD community

### ***Dietetic Practice Groups included in the In-depth Interviews and Focus Groups:***

- ***Medical Nutrition Practice Group***
- ***Clinical Nutrition Management***
- ***Healthy Aging***
- ***Renal Dietitians***
- ***Nutrition Entrepreneurs***
- ***Diabetes Care and Education***
- ***Dietetic Educators of Practitioners***
- ***Dietetics in Health Care Communities***
- ***Public Health/Community Nutrition***

forum to allow RDs and other members of the multidisciplinary health care team to discuss and post comments with fellow practitioners. In addition, we will be working with the Dietetic Educators of Practitioners Practice Group to interest students in renal practice and expand training curricula. Also, NKDEP will encourage referrals to RDs for CKD MNT as part of its forthcoming online matrix of suggested curriculum activities for the new six-hour Kidney Disease Education benefit from the 2008 Medicare Improvement for Physicians and Providers Act.

NKDEP will develop linguistic and cultural adaptations of the patient materials to allow RDs to use them with non-English speaking clients and to address the need for cultural food preferences. We will likely develop additional patient education fact sheets in the future and are open to suggestions for future topics from RDs who use the materials.

We look forward to a continued collaboration with RPG members on all aspects of the NKDEP Diet Initiative. We hope that they will participate in the Certificate of Training in CKD Management Program and encourage other RDs not working in the renal field to also participate. If you have comments or suggestions, please contact Eileen Newman, MS, RD, NKDEP Associate Director at [Eileen.newman@nih.gov](mailto:Eileen.newman@nih.gov).

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## References

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