

# Medical Nutrition Therapy

# **MNTWorks**

# **RDs Provide Better Health Outcomes**

The inclusion of nutrition interventions and counseling, when provided by a registered dietitian as part of a health care team, results in significant improvements in weight and BMI, A1C, blood pressure and serum lipids. The following Grade 1 systematic reviews<sup>1</sup> demonstrate the benefits of RD-provided nutrition services.

### Overweight/Obesity

Studies show medical nutrition therapy (MNT) provided by a registered dietitian to overweight and obese adults for less than six months yields significant weight losses of approximately one to two pounds per week. MNT provided from six to twelve months yields significant mean weight losses of up to 10% of body weight with maintenance of this weight loss beyond one year.

Overweight/obese individuals, who received medical nutrition therapy (MNT) provided by registered dietitians (an average of 2.6 visits) in addition to an obesity-related health management program that included physician visits, nursing support, education materials and tools, were more likely to achieve clinically significant weight loss than individuals who did not receive MNT. This study demonstrates the health benefits associated with the addition of MNT to a health management program (*Source: American Dietetic Association Food & Nutrition Conference & Expo 2009*).

## Hypertension

Medical nutrition therapy (MNT) provided by a registered dietitian lowers blood pressure in adults with hypertension. Studies show MNT provided for less than six months leads to significant reductions in blood pressure of approximately five mm Hg for both systolic and diastolic blood pressure. MNT provided from six to twelve months reported similar significant reductions in blood pressure with sustained reductions in blood pressure beyond one year.

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#### **Diabetes**

Studies evaluating the effectiveness of diabetes medical nutrition therapy (MNT) provided over three to six months by a registered dietitian reported reductions in A1C, ranging from 0.25% to 2.9%, depending on the type and duration of diabetes. Multiple studies showed sustained improvements in A1C at twelve months and longer. Improvements in other outcomes were also observed, such as improved lipid profiles, weight management, decreased need for medications and reduced risk for onset and progression of comorbidities.

# **Disorders of Lipid Metabolism**

Available data from studies on medical nutrition therapy (MNT) provided by a registered dietitian indicate that with two to six planned visits, patients reported 15–22% reduction in total dietary fat (from 32–33% of calories to 25–28% of calories), and 22–36% reduction in saturated fat (from 11–12% of calories to 7–9% of calories). This was accompanied by 6–13% reduction in total plasma cholesterol and 7–14% reduction in LDL-C.

#### **HIV Infection**

Studies regarding medical nutrition therapy (MNT) report improved outcomes related to energy intake and/ or symptoms (with or without oral nutritional supplementation) and cardiovascular risk indices especially with increased frequency of visits. Two studies regarding nutritional counseling (non-MNT) also report improved outcomes related to weight gain, CD4 count and quality of life.

#### **Unintended Weight Loss in Older Adults**

Studies report that individualized nutrition care, directed by a registered dietitian on the health care team, results in improved outcomes related to increased energy, protein and nutrient intakes, improved nutritional status, improved quality of life and/or weight gain.

#### **Chronic Kidney Disease**

Research related to the time requirements for medical nutrition therapy (MNT) provided by a registered dietitian indicate that approximately two hours per month for up to one year may be required to provide an effective intervention for adults with chronic kidney disease. MNT should be initiated at least twelve months prior to the anticipation of renal replacement therapy (dialysis or transplant). Studies regarding effectiveness of MNT report significant improvements in anthropometric and biochemical measurements sustained greater than or equal to one year.

<sup>1.</sup> Grade 1 data. ADA Evidence Analysis Library, http://www.adaevidencelibrary.com/topic.cfm?cat=3949. Accessed April 15, 2010. [Grade Definitions: Strength of the Evidence for a Conclusion/Recommendation Grade I, "Good" evidence is defined as: "The evidence consists of results from studies of strong design for answering the question addressed. The results are both clinically important and consistent with minor exceptions at most. The results are free of serious doubts about generalizability, bias, and flaws in research design. Studies with negative results have sufficiently large sample sizes to have adequate statistical power."]