

Effectiveness of Medical Nutrition Therapy

Medical Nutrition Therapy (MNT) is an evidence-based application of the Nutrition Care Process that includes nutrition assessment/reassessment, nutrition diagnosis, nutrition intervention and nutrition monitoring and evaluation. MNT is provided by a Registered Dietitian Nutritionist (RDN) with the goal of preventing, delaying or managing diseases or conditions.

MNT results in improved clinical outcomes and reduced costs for physician time, medication use, and hospital admissions for people with obesity, diabetes, lipid metabolism disorders, and other chronic diseases. By using their expertise and extensive training, RDNs deliver care that is coordinated, cost-effective, and supports higher performance in pay-for-value models of care. RDNs help Michiganders achieve significantly improved outcomes with lower total cost of care and better quality of life. Below is a compilation of evidence that shows MNT to be effective.

Cancer

Evidence: MNT as part of a comprehensive treatment strategy can improve outcomes in adult oncology patients for many types of cancer including breast, ovarian, lung, leukemia, colorectal, gastrointestinal and head and neck.

Clinical Guidelines: [European Society for Clinical Nutrition and Metabolism](#); [American Cancer Society](#); [Academy of Nutrition and Dietetics Standards of Practice in Oncology Nutrition](#); [Academy of Nutrition and Dietetics Oncology Practice Guideline](#)

Cardiovascular Disease including Hypertension and Dyslipidemia

Evidence: MNT resulted in improvement of hypertension and pre-hypertension as soon as one month after working with an RDN according to a systematic review of 70 research studies. A review of 34 studies determined that patients who participated in multiple MNT sessions substantially lowered their total cholesterol, low-density lipoprotein cholesterol and triglyceride levels. MNT improved blood sugar levels, weight, blood pressure and quality-adjusted life years and reduced the need for lipid-lowering medications resulting in cost savings.

Clinical Guidelines: [VA/DoD Clinical Practice Guideline](#); [American Heart Association](#); [Academy of Nutrition and Dietetics Hypertension Practice Guideline](#)

Celiac Disease

Evidence: MNT administered by a RDN can improve gluten-free diet management, self-reported general health and wellbeing, anemia, and gastrointestinal symptoms such as indigestion, diarrhea, constipation, and reflux.

Clinical Guidelines: [Canadian Association of Gastroenterology](#)

Eating Disorders

Evidence: MNT provided by RDNs as part of an interdisciplinary care team helps patients with restoring body weight, achieving adequate nutrient intake to meet daily requirements through regular meal patterns and portions and reducing negative beliefs and fears surrounding food.

Clinical Guidelines: [American Psychiatric Association \(Draft Guideline\)](#); [American Psychiatric Association](#); [Academy of Nutrition and Dietetics Standards of Practice in Eating Disorders](#)

HIV/AIDS

Evidence: Early MNT intervention can improve oral intake, symptoms, cardiovascular risk, and prevent progressive weight loss. Nutrition counseling can support weight gain and CD4 white blood cell levels that help to measure the immune system improving quality of life.

Clinical Guidelines: [HIV/AIDS: A Guide for Nutrition Care and Support](#)

Malnutrition

Evidence: Malnourished older adults have longer periods of illness, longer hospital stays and increased readmission rates. MNT provided in the outpatient setting increases overall nutrition status, cognitive and physical function, and food intake with significantly decreased primary care physician costs.

Clinical Guidelines: [American Society for Parenteral and Enteral Nutrition](#); [Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition](#)

Obesity

Evidence: A systematic review of 139 studies found that MNT weight management interventions resulted in a reduction in body mass index, significantly greater weight loss and increased likelihood of achieving 5% weight loss with reduction of fasting blood sugar levels compared to those not receiving MNT

Clinical Guidelines: [Obesity Canada and the Canadian Association of Bariatric Physicians and Surgeons](#); [Academy of Nutrition and Dietetics Standards of Practice in Adult Weight Management](#)

Prediabetes

Evidence: MNT is an effective treatment for prediabetes that can result in a significant reduction in fasting blood sugar, blood sugar two hours after meals and waist circumference. MNT is a cost effective and potential cost-saving intervention for the prevention of diabetes in gained cost per quality-adjusted life years.

Clinical Guidelines: [Joslin Diabetes Center](#); [Academy of Nutrition and Dietetics Standards of Practice in Diabetes Care](#)

For more information from the Michigan Academy of Nutrition and Dietetics, visit www.eatrightmich.org