Welcome to the inaugural issue of Medical Nutrition Therapy News, a newsletter intended to raise awareness of the importance of medical nutrition therapy (MNT) in people with prediabetes and type 2 diabetes (T2D).

**Major Associations Advocate Medical Nutrition Therapy**

The American Diabetes Association (ADA)\(^1\) and the American Association of Clinical Endocrinologists (AACE)\(^2\) recognize lifestyle modification that includes dietary intervention as a critical component of diabetes management. According to AACE, MNT is important in preventing diabetes, managing existing diabetes, and preventing or slowing the rate of complications. It is important at all levels of prevention.\(^2\)

As noted by Dr. Osama Hamdy, Medical Director of the Obesity Clinical Program at Joslin Diabetes Center and Assistant Professor of Medicine, Harvard Medical School, to ensure the implementation of MNT, it must be considered a necessity, not an option.

Much like prescription medication, writing “exercise and medical nutrition therapy” on the prescription pad will serve as practical management advice—to both provider and patient!

**Medical Nutrition Therapy Standardizes Metabolic Management and Can Improve Healthcare Outcome**

Epidemiologic data have proven that diabetes is a poorly managed pandemic.\(^3\) A comprehensive strategy for management of diabetes is one that incorporates equally lifestyle modifications, MNT, and medications and results in patient adherence.\(^2\) MNT is important at all levels of prevention, and studies demonstrate primary, secondary, and tertiary positive outcomes.\(^4-7\)

The latest data from the Look AHEAD (Action for Health in Diabetes) study showed the positive impact MNT had on patient weight, HbA1c and lipid levels when provided with a structured dietary plan.\(^8\) The study compared the effectiveness of intensive lifestyle intervention (ILI) with that of diabetes support and education (DSE) in 5,145 overweight and obese patients with T2D.

Results showed ILI (including specialized nutrition formulas) compared with DSE significantly improved HbA1c levels (Figure 1 and weight loss (Figure 2), at 1 year.\(^8\) Even after 4 years, improvements in HbA1c and weight were sustained.\(^8\) ILI also lowered blood pressure and improved lipid profiles in study patients, averaged across 4 years.\(^8\)

**Figure 1. HbA1c change from baseline at 1 year**

<table>
<thead>
<tr>
<th>Change in HbA1c Level (%)</th>
<th>Average effect across visits: -0.27 (P&lt;0.001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control intervention</td>
<td>-0.27 (P&lt;0.001)</td>
</tr>
<tr>
<td>Including specialized nutrition formulas</td>
<td>N=5,145</td>
</tr>
</tbody>
</table>

**Figure 2. Weight change from baseline at 1 year**

<table>
<thead>
<tr>
<th>Change in Weight (%)</th>
<th>Average effect across visits: -5.27 (P&lt;0.001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control intervention</td>
<td>-5.27 (P&lt;0.001)</td>
</tr>
<tr>
<td>Including specialized nutrition formulas</td>
<td>N=5,145</td>
</tr>
</tbody>
</table>

Interestingly, a 1-year analysis further demonstrated that the number of meal replacements (MR) consumed was related to weight loss.\(^9\) Patients who consumed more meal replacements experienced greater weight loss than those who consumed less.

Thus, it appears that ILI (including specialized nutrition formulas) facilitates improvement in glycemic control, sustained weight loss, and improvement in risk factors for cardiovascular disease. Successful weight loss appears to be correlated, in part, with adherence to MNT.
Global Experts Develop a Transcultural Diabetes Nutrition Algorithm

MNT is thought to be an integral part of the management and treatment of diabetes, and therefore clinical practice guidelines, physician-patient education resources, and practical tools are needed to help the physician develop a comprehensive management approach that includes MNT. Current clinical practice guidelines are regionally focused and do not take cultural sensitivities into account. Based on the need to address geographic and ethnocultural factors that allow for individualization locally and regionally, a Global Task Force for Development of Transcultural Algorithms in Nutrition and Diabetes was convened.

These internationally respected healthcare professionals with an interest in nutrition and diabetes worked together to develop a transcultural approach to MNT that accommodates regional differences in genetics, lifestyles, foods, and cultures along with increased physical activity and exercise.

This approach was detailed in an abstract at the ADA meeting in June,11 and in a poster at the 1st Asia-Pacific Congress of Nutrition,12 and the XI Asian Congress of Nutrition,13 both held in July.

The proceedings of the task force meeting were developed into a manuscript which has been accepted for publication in Current Diabetes Report.

International Experts in Diabetes and Nutrition Meet to Discuss Medical Nutrition Therapy in the Comprehensive Management of Metabolic Disease

The 1st International Summit on Nutrition Therapy for Metabolic Management was held regionally in Taipei, Taiwan and Miami, Florida on July 8 and September 24, 2011, respectively. Over 100 thought leaders from around the world gathered to attend this unique meeting, of which the importance of MNT was a key focus. Concepts such as the need for a Transcultural Diabetes Nutrition Algorithm and GTSN treatment matrix were introduced by global thought leaders in diabetes and nutrition.

In Taipei, co-chairs Dr. Jeffrey Mechanick (USA) and Dr. Osama Hamdy (USA) along with faculty members Drs. Wayne Huey-Heng Sheu (Taiwan), Man-Wo Tsang (Hong Kong), and Refaat Hegazi (USA) were joined by endocrinologists, primary care physicians, and dietitians representing the Philippines, Hong Kong, Indonesia, Malaysia, Taiwan, Singapore, Vietnam, and Thailand. In Miami, the co-chairs and Dr. Hegazi were joined by Drs. Alexis Bolio Galvis (Mexico) and Alexander Benchimol (Brazil). Representation varied throughout North and Latin America, with healthcare professionals from Canada, Mexico, Ecuador, Argentina, Brazil, Colombia, Dominican Republic, El Salvador, Guatemala, Nicaragua, Peru, and Venezuela.

References