

Precision Medicine is Here: Preventing Metabolic Disease with Food as Medicine

The Florida Alliance for Healthcare Value, in coordination with affiliate member and program sponsor DayTwo, recently hosted an informative webinar on an innovative precision medicine approach to addressing metabolic disease that enables a path to remission. Presenters were Josh Stevens, President of DayTwo, and Alan Spiro, MD, FACN, a healthcare leader with over 30 years of experience with Blue Cross Blue Shield, Accolade, Anthem and Willis Towers Watson.

Prevalence and Impact of Metabolic Disease

Florida Alliance for Healthcare Value President and Chief Executive Officer Karen van Caulil, Ph.D. opened the presentation by sharing that diabetes is a top concern amongst employers across the country, with one in seven healthcare dollars spent treating diabetes and associated complications. These medical costs do not include indirect costs such as missed work and reduced productivity. Josh Stevens concurred, adding that metabolic disease costs \$700 billion a year with approximately 75 percent of U.S. adults suffering from some form of it, including diabetes, pre-diabetes, clinical obesity and non-alcoholic fatty liver disease (NASH). He shared that healthcare expenses for employees with diabetes are four times higher than for those employees without diabetes.

Challenges with Traditional Approaches to Metabolic Disease

Despite these staggering costs, traditional approaches to treating metabolic disease, including American Diabetes Association Guidelines, medication, generic nutrition protocols, and surgery such as gastric bypass and banding, have fallen short of addressing the problem. More specifically, Stevens explained that prescription drugs have varied effects, and many patients do not actually see meaningful benefit. In addition, population diabetes programs say “no” to entire food categories like fruit and carbohydrates, making these recommended diets difficult for patients to comply with, especially long term.

“Traditional approaches to nutrition are akin to a blacksmith performing dentistry,” said Stevens. “Yet we know food choices have the biggest impact on living with diabetes.”

Other solutions in the market focus solely on monitoring and management of the diseases versus enabling a path to remission.

A New Approach: Precision Nutrition

About 10 years ago, two researchers in Israel began exploring the microbiome impact on precision nutrition. They determined that individuals respond differently to the same food or combinations of food based on the specific bacteria in their guts. For example, one person can eat a bowl of oatmeal and maintain a consistent, healthy glucose level for several hours while another person may need to add almonds to the oatmeal to avoid experiencing spikes and dips. The focus is not on eliminating entire food groups but instead, eating foods in the right combination.

“This is the big eureka moment for employees on health plans,” explained Stevens. “By understanding how someone will respond to a food, you can combine foods in the right way to flatten their glucose curve.”

Through the DayTwo program, lab work is performed using a stool sample to create an individual gut profile and identify the right food and nutrition plan for each patient. The food prescriptions personalize nutrition in three main ways:

- Meeting the person where they are, from a family and cultural perspective
- Customizing based on personal parameters, including the microbiome test
- Providing support through trained professionals to ensure proper implementation, engagement and sustainability

A1C level and time in range are the primary clinical outcomes for the program with weight a secondary outcome. DayTwo offers up to 100% fees-at-risk for employers who implement the protocol.

“With precision nutrition, we can use food as medicine to bring people under control faster and in an easier, more sustainable way that is not a one-size-fits-all approach,” said Stevens.

Employer Case Study: Covenant HealthCare

Alan Spiro, MD, FACN, shared the experience of Covenant HealthCare, a Michigan hospital system with 4,800 employees and 7,500 covered lives, including 463 employees diagnosed with Type 2 diabetes. Over the years, Covenant had tried multiple approaches to managing employee diabetes with little success. They began testing the DayTwo program in 2020 and have achieved the following results:

- Average 1.55 reduction in A1C
- Average 18 pound reduction in weight
- 63% improved time in range
- 88% member engagement

In addition, their members self-reported:

- 72% increase in energy
- 55% increase in sleep quality
- 48% reduction in hunger

“Covenant found that their members stayed on the program because it was easy and required minimal changes,” explained Dr. Spiro.

Exploring this New Approach

The webinar concluded with commentary, questions and discussion led by tri-sector healthcare executive Jan Berger, MD, who serves as Medical Director of the Midwest Business Group on Health, and Florida Alliance for Healthcare Value Medical Director Jack Mahoney, MD. Topics included employer adoption of precision medicine, differences between DayTwo and other employer metabolic disease solutions, and the emotional health impact of metabolic disease. Dr. Mahoney emphasized the need to educate employers about the benefits of this new approach. The greatest concern centered on employer return on investment for implementing precision medicine.

“We take a value-based approach and only get paid if the desired outcomes are achieved,” explained Josh Stevens. “Our goal is remission, and that can result in a \$10,000 - \$20,000 annual cost savings per employee. This can be a game changer for employees and employers alike.”

Dr. Berger concurred. “Precision medicine sounds expensive, but in this case, we’re talking about food. If you can keep one person from going on a diabetes medication, the return on investment is significant. This is the beginning of totally changing the paradigm of how people get care.”