**Reverse Diabetes, Dementia, and Chronic Illness**

****

The National Institutes of Health considers **lifestyle intervention/personalized care** the frontline for treating many chronic illnesses. In this model, physicians work closely with the patient and coordinate specialists and experts (such as nutritionists) to match the individual with a unique treatment protocol. Patients become partners in their own care rather than passive recipients [1].

While conventional medicine adds prescriptions to manage symptoms, personalized care acts on the root causes and can actually reverse illness.

**Reversing Diabetes**

In the United States, over 80 million adults suffer pre-diabetes. Although the condition can be reversed through diet and exercise, 70% of these pre-diabetics will develop full-blown type 2 diabetes [2]. Most do not have the expertise, experience, or even motivation to actively monitor and reverse illness. There are many variables to consider; even vitamin D3 has been correlated to pre-diabetic and diabetic outcomes [3].

We do possess the power to reverse diabetes. A 2016 study in the Journal of Diabetes Research and Therapy reports that diet, exercise, drugs, and lifestyle factors can effectively regulate and reverse type 3 diabetes and the accelerated aging associated with chronic illness [4]. The metabolic abnormalities of muscle insulin resistance in type 2 diabetes can be normalized through energy restriction [5]. Unfortunately, lifestyle changes and routines are not easy to integrate.

Medication non-adherence in type 2 diabetes may be as high as 65% in the first year of treatment – in other words, patients have a very difficult time managing their own treatment. This impairs optimal glycemic control and illness outcomes [6]. The use of a digital device to help patients manage diabetes has been seen to reduce hemoglobin A1c and improve glycemic control [7]. Personalized, full-time care and accountability results in exponential magnitudes of improvement.

**Reversing Dementia**

Specialized care and treatment may slow symptoms and even reverse dementia in certain cases. Targeting causative factors can help with dementia prevention.

Anxiety has been linked to cognitive decline and dementia [8]. Low plasma apolipoprotein E is also correlated to dementia [9]. Other potential causative factors (other than genetic inheritance) include inflammation, vitamin and dietary deficiencies, hormonal imbalances, vascular disorder, depression, social activity, diabetes, and alcohol/drug use [10].

Healing diabetes, inflammation, and other causative conditions may facilitate a reverse in dementia. Meticulous testing and monitoring, coupled with regimented lifestyle changes, can help fight this illness. Medications can be used alongside ancillary therapies to slow intellectual decline. Stimulation of cognitive functions (through psychotherapy), for example, improves cognition in dementia patients [11].

**Personalized Physician Care**

Most physicians treat upwards of 5,000 patients at a time, making individual advocacy impossible. Patients with chronic illness are seen for 5-10 minutes after waiting weeks or months on a quadruple-booked list. Then they are sent to fend for themselves.

With personalized physician care, the physician is available 24/7 with long appointments and house calls requiring little-to-no notice. With a limited practice of roughly 150 patients, the physician can tailor and coordinate care down to the minutest details, including the entire spectrum of lifestyle and medical factors. The patient wins a true partner in the journey to conquer their condition.

With a personal health coordinator, specialist care, hospital care, travel medicine service, and the full-blown dedication of an expert physician, patients are empowered to root out the causes of their illness. This is the key to reversing chronic illness.

1. Yeh, Byung-Il & Kong, In D. (2013). The Advent of Lifestyle Medicine. *Journal of Lifestyle Medicine*, 3(1): 1-8.
2. Mcdermott, J., et al. (2018). The Prediabetes Diet Plan: How to Reverse Prediabetes and Prevent Diabetes Through Healthy Eating and Exercise. *Clinical Diabetes,* *36*(4), 334-335. doi:10.2337/cd18-0073
3. Aljabri, K., et al. (2010). Glycemic Changes after Vitamin D Supplementation in Patients with Type 1 Diabetes Mellitus and Vitamin D Deficiency. *Annals of Saudi Medicine,* *30*(6), 454. doi:10.4103/0256-4947.72265
4. Martins IJ & Calderón AM (2016). Diet and Nutrition Reverse Type 3 Diabetes and Accelerated Aging linked to Global Chronic Diseases. J Dia Res Ther 2(2): doi http://dx.doi.org/10.16966/2380-5544.117
5. Taylor, R. (2008). Pathogenesis of Type 2 Diabetes: Tracing the Reverse Route from Cure to Cause. *Diabetologia,* *51*(10), 1781-1789. doi:10.1007/s00125-008-1116-7
6. Giugliano, D., et al. (2018). Clinical Inertia, Reverse Clinical Inertia, and Medication Non-Adherence in Type 2 Diabetes. *Journal of Endocrinological Investigation*. doi:10.1007/s40618-018-0951-8
7. Berman, M. A., et al. (2018). Change in Glycemic Control with Use of a Digital Therapeutic in Adults with Type 2 Diabetes: Cohort Study. *JMIR Diabetes,* *3*(1). doi:10.2196/diabetes.9591
8. Gulpers, B., et al. (2016). Anxiety as a Predictor for Cognitive Decline and Dementia: A Systematic Review and Meta-Analysis. *The American Journal of Geriatric Psychiatry,* *24*(10), 823-842. doi:10.1016/j.jagp.2016.05.015
9. Rasmussen, K. L., et al. (2018). Plasma Apolipoprotein E Levels and Risk of Dementia: A Mendelian Randomization Study of 106,562 Individuals. *Alzheimers & Dementia,* *14*(1), 71-80. doi:10.1016/j.jalz.2017.05.006
10. Bellou, V., et al. (2017). Systematic Evaluation of the Associations Between Environmental Risk Factors and Dementia: An Umbrella Review of Systematic Reviews and Meta-analyses. *Alzheimers & Dementia,* *13*(4), 406-418. doi:10.1016/j.jalz.2016.07.152
11. Carrion, C., et al. (2013). Cognitive Psychosocial Intervention in Dementia: A Systematic Review. *Dementia and Geriatric Cognitive Disorders,36*(5-6), 363-375. doi:10.1159/000354365