



TYPE TWO DIABETES PREVENTION IN NATIVE AMERICANS THROUGH BETTER NUTRITION

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BACKGROUND

Native Americans have a higher risk of diabetes and its complications than any other U.S. racial group. Health disparities contribute to a life expectancy that is 5.5 times lower compared with that of other Americans. This is partly due to the historical and social factors that have affected their health and nutrition, such as colonization, poverty and environmental destruction. This historical trauma contributes to the epidemic of type two diabetes and obesity that are present on Native reservations today. Tribes are engaging in disease prevention and health promotion, such as bringing back traditional food systems that are high in fiber, wild game, fruits & vegetables. Short studies have shown that a return to a traditional diet is associated with improvements in metabolic abnormalities such as glucose intolerance and high cholesterol, triglyceride, and insulin levels

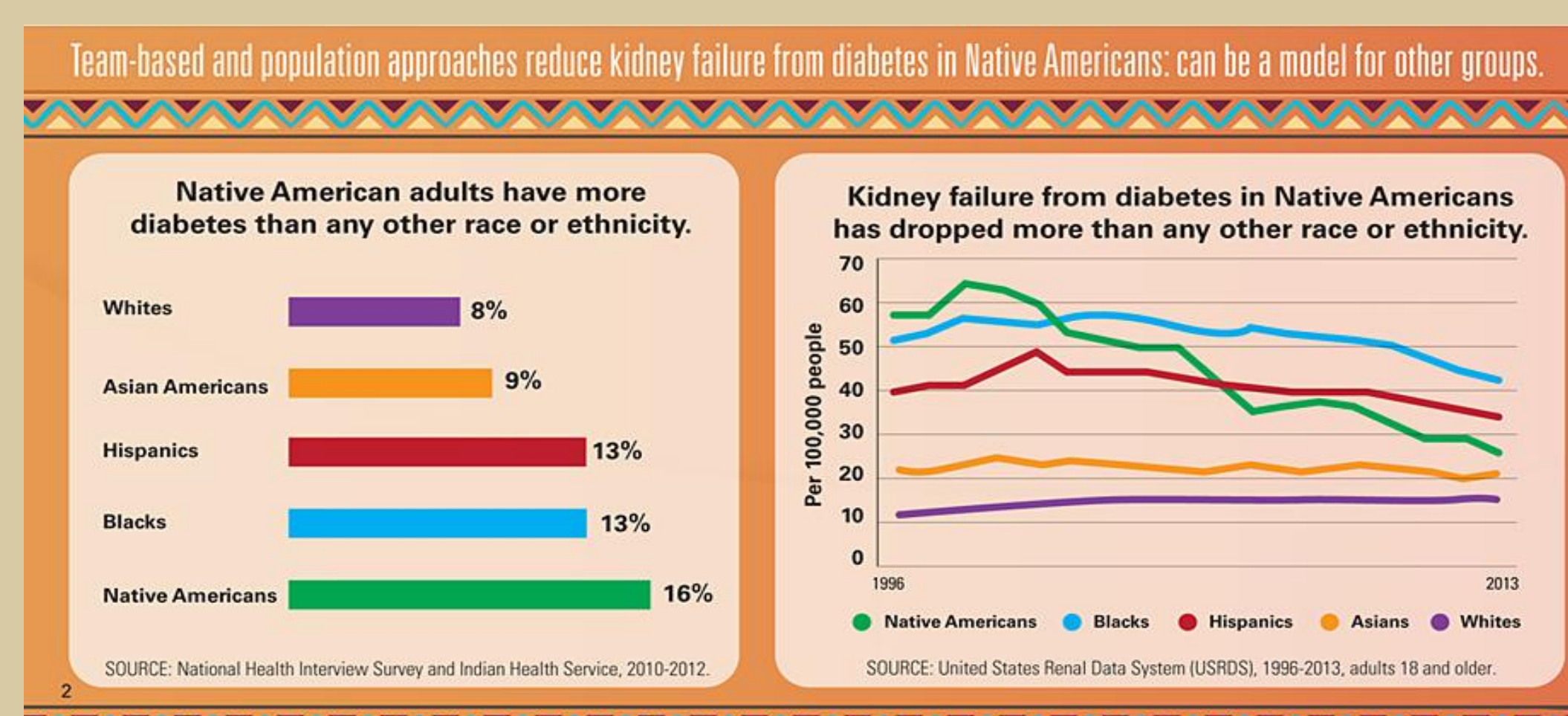


Introduction

- A century ago, all chronic diseases, including diabetes, were practically nonexistent in Indian country. As recently as 1955, diabetes was unrecognized as a leading cause of death as evidenced by its absence in a listing of the 10 most frequent causes of death for this population.
- However, by 2009, diabetes had jumped to number four on the list. American Indians and Alaska Natives now have the highest diabetes prevalence rates of all racial and ethnic groups in the United States. More than 16% of the members of this population have been diagnosed, compared to 8.7% of non-Hispanic whites.
- Equally alarming is the fact that diabetes is increasingly prevalent among Native American Children and young adults. Data from IHS Diabetes Program show a 160% increase in diagnosed diabetes for Native Americans between the ages of 25 and 34 years. For children <15 years, there was a 77% increase during this time.

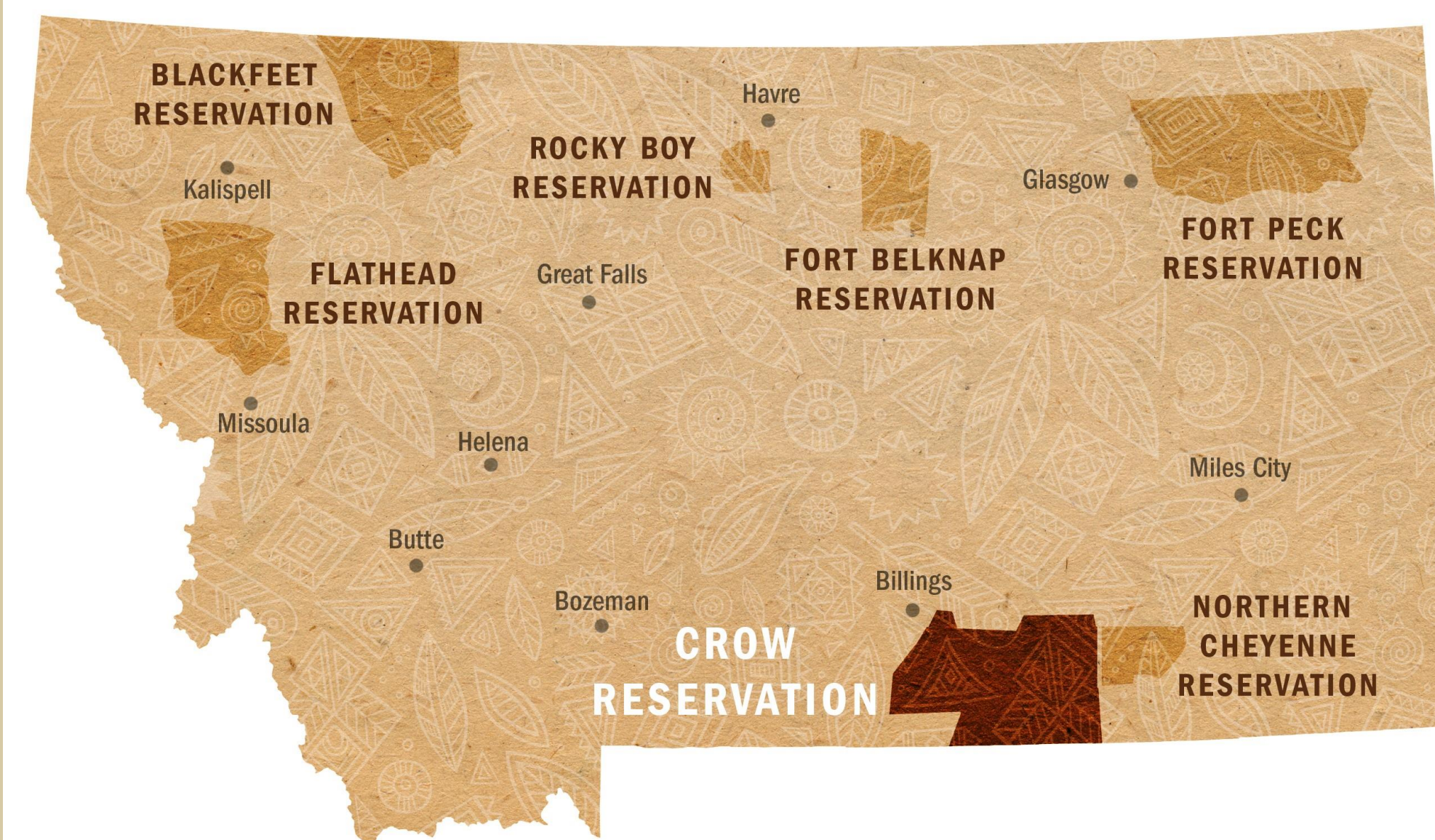
Findings

- Significantly higher rates of obesity and type 2 diabetes; lower intake of dietary fiber and higher dietary fat intake; and less energy expenditure for work or leisure activities. The researchers concluded that development of type 2 diabetes and obesity are preventable and are caused primarily by behavioral and lifestyle factors.
- Changes in food consumption are also influenced by what is available in the marketplace. Because of limited finances, lack of transportation, and other factors, many tribal members have limited access to grocery stores, which offer a wider selection of nutrient-rich foods to promote good health. Convenience stores in small reservation communities often carry a large inventory of sodas, energy drinks, chips, and other snack foods and offer a paucity of high-quality fresh fruits and vegetables. Fresh fish and other low-fat protein sources are often expensive and in short supply.
- Other influences on modern dietary intake patterns include access to fast food, the inclusion of fried foods such as frybread (considered by some to be a traditional food and a symbol of intertribal unity and community), and numerous community events, ceremonies, and celebrations that provide access to food for hours or days at a time, and the use of government commodities, which historically have been high in fat and added sugars and low in fiber.



Crow Nation's Efforts

In Montana, the Crow tribe carries a large percentage of diabetes compared to the rest of the state. Crow plans to implement an adapted version of the evidence-based Diabetes Prevention Program within the Indian Health Services Infrastructure on the Crow Reservation. The program's goals include eating less fat and fewer calories and exercising at least 150 minutes per week in order to achieve a weight loss of at least 7% of each participant's body weight. Little Big Horn College will work with IHS providers to refer eligible prediabetes patients to the 12-month long lifestyle modification program coached by trained community health workers. Through partnerships with various community organizations and tribal leaders, this program will increase community capacity and empowerment, as well as decrease the overall burden The Crow Tribe implemented a community garden for community members to make use of to help with the food dessert & price gauging happening on & near their reservation.



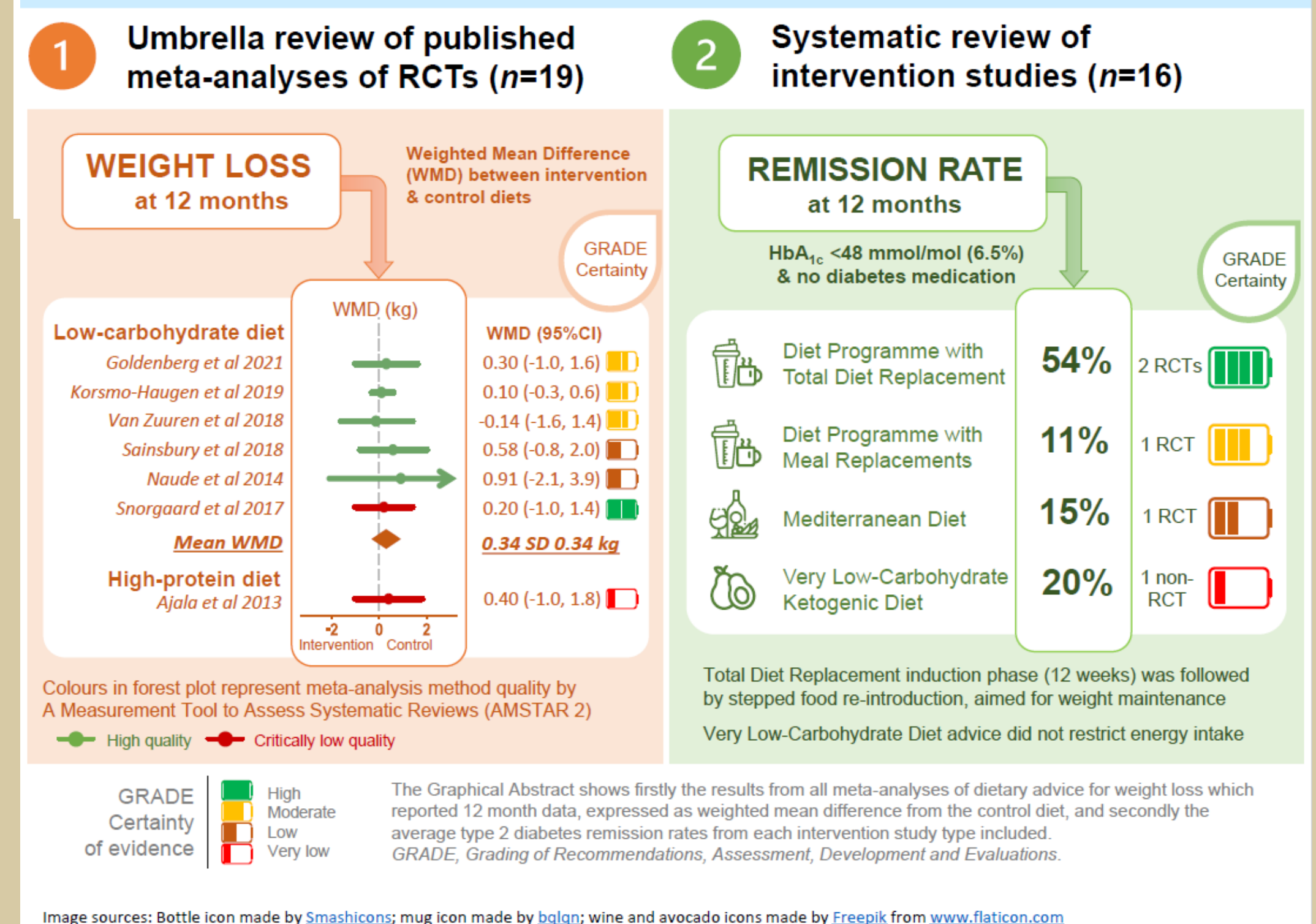
Food is more than sustenance to put into the body. For Indigenous people, it is intricately tied to land, ceremony, family, and spirituality. At the same time the food system was being dismantled by the reservation system and movement of the people off of their traditional lands, the family system was being completely disrupted by the destruction of the traditional clan and its teaching systems.

Prevention Strategy

The Special Diabetes Program for Indians (SDPI) is an example of a multilevel intervention for diabetes treatment and prevention. This program was established by Congress in 1997, with oversight from IHS. Since 1997 there has been an increase in diabetes services provided by the SDPI. Nutrition, physical activity and education play important roles in helping prevent this epidemic amongst Native Communities.

- Small studies show that having home cooked meals benefit families, time well spent together and having food rich in nutrients can help with prevention.
- Physical activity, along with a high protein diet can greatly reduce the risk of diabetes amongst our people

DIET ADVICE FOR TYPE 2 DIABETES WEIGHT MANAGEMENT



Acknowledgements

The author would like to express deep appreciation for the following individuals:

THESIS Staff
Shelby Keller
Julie Foster
SPTHB
CDC



Resources