

# Journal of Diabetes Research and Endocrinology

Open access Commentary

# Understanding Diabetes: Types, Symptoms, and Management

Noah Aio Yamada\*

Department of Diabetes, Hokkaido University, Japan

#### **DESCRIPTION**

Diabetes is a chronic condition that affects millions of people worldwide, characterized by elevated blood sugar levels due to issues with insulin production or function. Understanding diabetes is crucial for effective management and prevention. There are three primary types of diabetes: Type 1, Type 2, and gestational diabetes. This form is an autoimmune disorder where the body's immune system attacks insulinproducing beta cells in the pancreas. Typically diagnosed in children and young adults, individuals with Type 1 diabetes require lifelong insulin therapy to manage their blood sugar levels. This is the most common form accounting for about 90-95% of all diabetes cases. It often develops in adults but is increasingly seen in children due to rising obesity rates. In Type 2 diabetes, the body becomes resistant to insulin or doesn't produce enough. Lifestyle factors such as poor diet, lack of exercise, and obesity significantly contribute to its onset. This type occurs during pregnancy and typically resolves after childbirth. However, it can increase the risk of developing Type 2 diabetes later in life for both the mother and the child. Regular screening during pregnancy is crucial for managing this condition. The symptoms of diabetes can vary depending on the type but commonly include Increased thirst and frequent urination, Extreme fatigue, Blurred vision, Slow-healing sores or frequent infections. Unexplained weight loss (more common in Type 1) Numbness or tingling in the hands or feet (more common in Type 2) Recognizing these symptoms early can lead to timely diagnosis and management, reducing the risk of complications. If left unmanaged, diabetes can lead to serious health complications, including Diabetes increases the risk of heart disease and stroke. High blood sugar can damage nerves, leading to issues such as peripheral neuropathy. Diabetes can affect kidney function, potentially leading to kidney failure. Diabetic retinopathy can result in vision loss and blindness's. Poor circulation and nerve damage can lead

to foot ulcers and infections. Effective diabetes management involves a combination of lifestyle changes, medication, and regular monitoring. Key components include A balanced diet rich in whole grains, fruits, vegetables, and lean proteins can help maintain stable blood sugar levels. Portion control and understanding carbohydrate intake are also vital. Exercise helps improve insulin sensitivity and lower blood sugar levels. Aim for at least 150 minutes of moderate-intensity aerobic activity each week, alongside strength training. For those with Type 1 diabetes, insulin therapy is essential. For Type 2 diabetes, lifestyle changes may be sufficient initially, but oral medications or insulin may be needed as the disease progresses. Regularly checking blood sugar levels helps individuals understand how food, activity, and medications affect their diabetes management. Diabetes education programs can empower individuals to make informed decisions about their health. Support from healthcare providers, family, and diabetes support groups can also enhance management efforts. Diabetes is a manageable condition with the right approach. Awareness, early diagnosis, and proactive management can help individuals lead healthy lives and minimize the risk of complications. With ongoing research and advancements in treatment, there is hope for better management and potential breakthroughs in the future. Diabetes management also emphasizes the importance of mental health, as living with a chronic condition can lead to stress, anxiety, and depression, making support systems and self-care strategies essential for overall well-being.

## **ACKNOWLEDGEMENT**

None.

## **CONFLICT OF INTEREST**

None.

Received: 02-September-2024 Manuscript No: IPJDRE-24-21868 Editor assigned: 04-September-2024 **PreQC No:** IPJDRE-24-21868 (PQ) **Reviewed:** 18-September-2024 QC No: IPJDRE-24-21868 **Revised:** Manuscript No: IPJDRE-24-21868 (R) 23-September-2024 **Published:** 30-September-2024 DOI: 10.36648/ipjdre.08.03.25

Corresponding author Noah Aio Yamada, Department of Diabetes, Hokkaido University, Japan, E-mail: Yamada6@gmail.com

Citation Yamada AN (2024) Understanding Diabetes: Types, Symptoms, and Management. J Diab Res Endocrinol. 8:25.

**Copyright** © 2024 Yamada AN. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.