

Dietary Biochemistry in Managing Diabetes Mellitus.

Dr. Janan Qassim Muhildeen Al-Khayat
Ahalia hospital Musaffah, Abu Dhabi, UAE



Abstract:

The aim of the presentation is to give a brief idea on the dietary management of diabetes mellitus types 1 and 2

1-**Carbohydrate intake** should emphasize high fiber nutrient-dense carbohydrate.

2- During a flexible insulin therapy program, education on how to use carbohydrate counting and how to consider fat and protein content to determine mealtime insulin dosing is recommended to improve glycemic control.

3- Moderation of **alcohol** intake.

4- Both sweetened and nonnutritive sweetened beverages are decreased with an emphasis on water intake.

5- **Sweeteners** and Diabetes.

6- A reasonable **A1C** goal for many nonpregnant adults is <7%

7- Hypoglycemia should be managed [symptomatic and asymptomatic].

8- For moderate **hypertriglyceridemia** (fasting or nonfasting triglycerides 175-499 mg/dL), clinicians should address lifestyle factors (obesity and metabolic syndrome), secondary factors (diabetes, chronic liver or kidney disease and/or nephrotic syndrome, hypothyroidism), and medications that raise triglycerides.

9- **Vitamins and Minerals** and Diabetes

10- Dietary management of DM in **special situations**: Elder adults, Thyroid Disease, Celiac Disease, Youth and Adolescents, Pregnancy, Hospitalized Patients, Gastroparesis, Advanced Diabetic Kidney Disease

11- Understanding of healthy eating for the **prevention and management of type 2 diabetes**

The influence of diet on weight and glucose-insulin homeostasis is directly relevant to glycaemic control in diabetes, while other outcomes such as cardiovascular complications are further influenced by the effect of diet on blood lipids, apolipoproteins, blood pressure, endothelial function, thrombosis, coagulation, systemic inflammation, and vascular adhesion.

The effect of food and nutrients on the **gut microbiome** may also be relevant to the pathogenesis of diabetes

12- **Mediterranean diet** for prevention and management of type 2 diabetes.

13- **Reversing type 2 diabetes through diet**

Type 2 diabetes was once thought to be irreversible and progressive, but there is a potential for remission. Consensus on the definition of remission is a sign of progress: glucose levels lower than the diagnostic level for diabetes in the absence of medications for hyperglycaemia for a period of time (often proposed to be at least one year).

Keywords— Diet effects on management, prevention, and reversing of Diabetes Mellitus

Professional Biography

I- Dr. Janan Qassim Muhildeen Al-Khayat

DOB: 14/04/1953

Place of Birth: Mosul, Iraq.

Euroscicon Conference on **NUTRITIONAL BIOCHEMISTRY & WORLD NUTRITION CONGRESS**

Profession in Iraq:

Assistant Professor in the Department of Medicine, Tikrit University College of Medicine, Tikrit, till 06-2002.

Present address in U.A.E.: Ahalia Hospital Musaffah dept. of internal medicine,

II- Qualifications

I-M.B.Ch.B. 1978 College of Medicine, Basrah University-Iraq

2- Postgraduate Diploma in internal medicine, 1990, from Al-Mustansyriyah University College of Medicine, Iraq.

3- Arab Board certified, [C.A.B.M.] degree in 1990 [membership of Council of Arab Board for Medical specializations, internal medicine, Baghdad center].

4- Postgraduate Diploma on [Diabetes Mellitus], Leicester Uni. U.K. 2015

5- Postgraduate Master degree in [Diabetes Mellitus] from Cardiff Univ. UK in 2020.

Publications

Dr. Janan published 21 papers in local and international medical journals

Supervision of post-graduate studies

Dr. Janan supervised 7 postgraduate diploma and 1 master theses in Iraq

Dr. Janan had participated in 108 local and international medical conferences and several webinars during 2020-2021.

Teaching and other skills

He is an invited speaker for several medical bodies and pharmaceutical companies.

Dr. Janan had attended 32 Training Workshops.

Dr Janan is a Member of:

1- Iraqi Medical Association since 1978

2- International Iraqi Medical Association since 2010.

3- American College of Physicians since August 2011. [FACP]

4- PACE [Physicians Academy for CVS Education] foundation since 10/2014.

5- American College of Cardiology [MACC] since 9/2019

drjananqa@hotmail.com