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An overview of zayabetus sakri /diabetes mellitus through unani medicine: Review article

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Abstract
Background: Prevention of Diabetes is a major concern worldwide. It is a major public health problems & these are rising alarming but this Disease is not possible prevent & Control exclusive with allopathic medicine. So, enrich with natural anti-diabetic agent of Unani Medicine, Foods & Vitamins, Lifestyle are also play a safe major role to prevent & control DM & its complication.
Objectives: In this review study I will wanted to explore the causal factor of DM and To explore which & How the Foods & Vitamins, Practiced Lifestyle, various listed Unani Medicinal Plants & formulated Unani Medicine & Anti-diabetics Medicinal Plants are to use prevent & control DMs for Health benefit.
Methods: I searched Unani Pharmacopeia of India, Publication of National Herbarium Bangladesh, ND Health facts & PubMed, internet data from inception to 18 November 2016 observational data relating to Unani Medicine and Diabetes to prevention & control.
Results: Evidence suggests that Foods & Vitamins, Lifestyle various listed Unani Medicinal Plants & formulated Unani Medicine used to prevent & Control of DM.
Conclusions: Somewhat this information should help our knowledge to enrich regarding how & which Foods & Vitamins, Practice Lifestyle various listed Unani Medicinal Plants & formulated Unani Medicine & Anti-diabetics Medicinal Plants are to use prevent & control DM & promoting our Heath care but some traditional practice approaches further should be tested with RCT for authenticity.
What are the implications of my review article on practice or policy: This review study will contribute to reduced prevalence DM in our country. As well, I hope, the understanding of this review study will contribute to improving health status of Diabetic patient.

Keywords: unani medicine, RCT (randomized control trial), DM (diabetes mellitus)

Introduction

Bangladesh is one of the 6 countries of the SEA region. 415 million people have diabetes in the world and 78 million people in the SEA Region; by 2040 this will rise to 140 million. There were 7.1 million cases of diabetes in Bangladesh in 2015. Diabetes mellitus is a leading cause of death and disability worldwide. It is also a major public health problem & this is rising alarming day by day. So, Prevention of Diabetes is a major concern worldwide. This Disease is not possible prevent & Control exclusive with allopathic medicine Includes insulin, oral sulfonylureas (like glimepiride, glyburide, and tolazamide), biguanides (Metformin), alpha-glucosidase inhibitors (such as acarbose), thiazolidinediones (such as rosiglitazone) and meglitinides (including repaglinide and nateglinide).

Because haphazard used of these medicines has a chance to become inactive or resistance. These types of Drugs are also expensive for poor people. Also sometimes Insulin dependent DM (IDDM) patient are mentally uninterested to receive insulin theirs subcutaneous tissues by injecting. For this limitation of reason of Allopathic Medicine, Natural Medicine or Unani Medicine is a opportunity for Diabetic Patient or Non-Diabetic Patient & it has also no chance to become resistance. Unani Medicine are safe to use & less expensive than other medication.

This disease is not possible prevent & Control exclusive with allopathic medicine. So, enrich with natural anti-diabetic agent of Unani Medicine, Foods & Vitamins, Lifestyle are also play a safe major role to prevent & control DM & its complication & also reduced economic burden of Diabetes management of our country.

Case Summary

Diabetes is the 7th leading cause of death in worldwide including Bangladesh by 2030. Now in our country 60% disease are non-communicable & 40% disease is communicable or infectious, so the importance of this disease trends, WHO declared the slogan of World Health Day 7th April, 2016, was Stay Super, Beats Diabetes & World Diabetes Day's 2016 theme was Eyes on Diabetes, over 1/3 people with Diabetics will develop vision loss & one in two adults Diabetes is undiagnosed. Diabetes is a very common autoimmune disease or a group of metabolic disorders that are associated with high blood sugar, either due to lack of insulin being produced by the pancreas or due to insulin resistance which refers to the cells of the body not responding

appropriately to insulin.

Fig 1: Monitor Blood Sugar

Types of Diabetes

- **Type I Diabetes:** Also known as juvenile or insulin dependent diabetes, type 1 diabetes occurs when the cells of the pancreas that are responsible for producing insulin are destroyed by the immune system. As a result, the pancreas permanently loses its ability to produce enough insulin to regulate blood sugar levels appropriately. Type 1 diabetes is usually diagnosed in childhood, and while it can be managed, it cannot be cured.
- **Type II Diabetes:** This form of the disease makes up 90% or more of all cases of diabetes. It usually develops in middle age. It occurs when the pancreas cannot make enough insulin to keep blood glucose levels normal and is made worse by poor food choices, a sedentary lifestyle, and being overweight. Diabetes is a serious condition, but many people with type 2 diabetes do not know they have it.
- **Pre-diabetes** occurs in those individuals with blood glucose levels that are higher than normal but not high enough for a diabetes diagnosis. This condition raises the risk of developing type 2 diabetes, stroke, and heart disease. Many individuals with pre-diabetes go on to develop type 2 diabetes within 10 years.
- **Gestational Diabetes** is high blood glucose that develops at any time during pregnancy in a woman who does not have diabetes. Four percent of all pregnant women develop gestational diabetes. Although it usually disappears after delivery, the mother is at increased risk of developing type2, diabetes later in life. Women of child-bearing age who have diabetes should consult an endocrine specialist about the benefits of managing glucose levels before trying to conceive. About 4% of all pregnant women in the United States are diagnosed with gestational diabetes.

Risk factors for developing diabetes while pregnant include

- Modest weight gain prior to pregnancy (11 to 22 pounds or more)
- Family history of diabetes
- Tobacco use
- African American, Hispanic American, or Asian origin
- Age older than 50 at conception

Neonatal Diabetes

Diabetes may also be associated with genetic syndromes, surgery, drugs, malnutrition, infections, and other illnesses.

Discussion

Type I Diabetes: Type I Diabetes, also known as insulin-dependent diabetes (IDDM) or juvenile diabetes is characterized by the body's inability to produce sufficient amount of insulin. The onset of this disease is typically between 7-15 years, but may present at any age. Type I Diabetes accounts for about 10% of all diabetes.

Underlying Factor of Type I DM

Lifestyle

Dietary Factors: Food allergies to proteins in milk or early introduction of cow's milk prior to age 1 and wheat may increase the risk of Type I Diabetes.

Supplementation with Vitamin D from cod liver oil during childhood and pregnancy reduces risk of Type I Diabetes.

Stress

Stressful events early in life, such as death of a pet, conflict with a teacher, quarrels between parents, failure in a competition, etc. were associated with increased risk of Type I Diabetes.

Environmental

Infections: Gastrointestinal viral infections may trigger Type I Diabetes by increasing intestinal permeability or activating immune cells.

Genetics

Certain genes increase susceptibility to Type I Diabetes, however less than 10% of individuals with those genes actually develop this condition thus indicating the importance of environment and diet.

Risk Factors

Type 1 diabetes

- Family history of type 1 diabetes
- Mother who had pre-eclampsia (a condition characterized by a sharp increase in blood pressure during the third trimester of pregnancy)
- Family history of autoimmune diseases, including Hashimoto's thyroiditis, Graves disease, myasthenia gravis, Addison disease, or pernicious anemia
- Viral infections during infancy, including mumps, rubella, and coxsackie
- Child of an older mother
- Northern European or Mediterranean descent
- Lack of breastfeeding and consumption of cow's

Diagnostic Testing- for type -1, DM

Blood tests are generally used to diagnose Type I Diabetes.

- Fasting plasma glucose ≥7.0 mmol/L
- Random plasma glucose ≥11.1 mmol/L + symptoms of diabetes OR
- Oral glucose tolerance test ≥11.1 mmol/L
- C-peptide, Insulin, Blood Ketones

Urine Tests include urinary glucose, urinary ketones.

- Additional tests that are often used in the assessment or management of diabetes include Hemoglobin A1C (Hb1aC), Cholesterol Panel, Kidney Function Test, Amylase, Lipase and blood insulin levels, Liver Function Tests

Every 3 to 6 months

- Blood glucose and Hemoglobin A1C levels are best checked every three months if the diabetes is not well controlled and every six months if it is controlled. If there are any concerns with heart or kidney health they are best monitored every three-to-six months as well.

Yearly Tests

- Blood pressure, eye exam, dental cleaning and checkup and examination of the skin and sensitivity of the feet should be done on a yearly basis as part of diabetes management along with the blood tests listed above.

Sign & Symptoms of Type I Diabetes

Type 1 diabetes can occur at any age, but usually starts in people younger than 30. Symptoms are usually severe and occur rapidly. They include:

- weight loss despite increased appetite
- typically lean body build
- increased urination (polyuria)
- increased thirst (polydipsia)
- increased hunger
- Nausea
- Vomiting
- Abdominal pain
- Absence of menstruation (in case of female)
- fatigue
- loss of feeling or tingling in the feet
- blurry eyesight
- Urinary, genital or skin infections (bacterial or fungal).

Type II Diabetes

Type II Diabetes, which used to be called non-insulin dependent diabetes mellitus or NIDDM, accounts for about 90% of all types of diabetes.

Casual factors

The lifestyle factors associated with Type II Diabetes includes:

Dietary factors

Poor dietary habits (i.e. low fiber, high refined sugar, excess consumption)

Increased alcohol consumption is a major risk factor as it is associated with hypoglycemia, hyperglycemia, and insulin resistance.

- **Exercise:** Lack of movement or exercise and a sedentary lifestyle increase insulin resistance and increase the risk of Type II Diabetes.
- **Sleep:** Sleeping less than six hours or greater than 9 hours a night contributes to weight gain and diabetes.

Cigarette Smoking

Smoking cigarettes increases the risk of developing complications from Type II Diabetes, especially atherosclerosis.

Homeostatic Mechanisms

Chronic dehydration is associated with risk of diabetes and diabetic complications.

Social Stress

Various types of stress factors can contribute to Type II Diabetes, for example psychosocial stress at work have been demonstrated to double the risk of Type II Diabetes in women.

Environmental Time Spent Outside

Studies have shown that adequate time outside can prevent the development of cancer, diabetes, heart disease and osteoporosis.

Environmental Toxins

Environmental toxins are linked to Obesity and Diabetes.

Infections

There seems to be a link between systemic fungal infections, like Candida albicans and chronic diseases such as Type II Diabetes.

Prescription Medications

Diabetes can be drug-induced. The following medications are associated with the development, or worsening of glucose intolerance: corticosteroids, diuretics (especially thiazide diuretics), beta-blockers, beta-adrenergic agonists, oral contraceptives, cyclophilin immunosuppressants, diazoxide.

Gestational Factors

Low birth weight and poor nutrition during infancy may predispose an individual to development of Type II Diabetes in adulthood.

Genetics

A first-degree relative with diabetes, especially early-onset type II diabetes increases the risk of acquiring diabetes.

Risk Factors

Type 2 diabetes

- Family history of type 2 diabetes (one quarter to one third of all individuals with type 2 diabetes have a family history of the condition)
- Age older than 45 years
- Excess body fat, particularly around the waist
- Sedentary lifestyle and high-fat, high-calorie diet
- Abnormal levels of cholesterol or triglycerides in the blood
- High blood pressure
- History of gestational diabetes or polycystic ovarian syndrome (a hormonal disorder that causes women to have irregular or no menstruation)
- African American, Hispanic American, or Native

American (particularly Pima tribe in Arizona) descent
- Low birth weight or a mother's malnutrition in pregnancy (this may cause metabolic disturbances in a fetus that lead to diabetes later in the child's life)
- Depression is associated with a 60% increased risk of type 2 diabetes

Diagnostic Testing- for type -2, Diabetes

Diabetes is often discovered, especially in the elderly, as part of routine annual blood testing. The following are the diagnostic values for diabetes:
- Fasting plasma glucose ≥7.0 mmol/L
- Random plasma glucose ≥11.1 mmol/L + symptoms of diabetes OR
- Oral glucose tolerance test ≥11.1 mmol/L

Additional tests that are often used in the assessment or management of diabetes include Blood Glucose, Hemoglobin A1c (Hb1aC), C-peptide, Insulin, Blood Ketones Cholesterol Panel, Kidney Function Test, Amylase, Lipase & Blood insulin levels, Ferritin, Liver Function Test.

Address other associated conditions including
- Erection problems, depression and/or anxiety.

Every 3 to 6 month
- Blood glucose and Hemoglobin A1C levels are best checked every three months if the diabetes is not well controlled and every six months if it is controlled. If there are any concerns with heart or kidney health they are best monitored every three-to-six months as well.

Yearly Tests
- Blood pressure, eye exam, dental cleaning and checkup and examination of the skin and a nerve test to check for changes in sensitivity in the feet should be done on a yearly basis as part of diabetes management along with the blood tests listed above.
- It is important to continue monitor the feet for ingrown toenails, cuts and sores on the feet that might become infected or general foot care

Sign & Symptoms of Type II Diabetes

People with type 2 diabetes often have no symptoms, and their condition is detected only when a routine exam reveals high levels of glucose in their blood. Occasionally, however, a person with type 2 diabetes may experience symptoms listed below, which tend to appear slowly over time:
- Numbness or burning sensation of the feet, ankles, and leg
- Fatigue
- Polyuria (increased urination)
- Polydipsia (increased thirst)
- Hunger
- Central obesity
- Skin tags (acanthosis nigricans) are common
- Bladder, kidney or skin infections appear more frequently and heal more slowly
- Vision problems, such as Blurred or poor vision
- Poor wound healing
- Erectile dysfunction/ Impotence

In some cases, symptoms may mimic type 1 diabetes and appear more abruptly, such as:
- Excessive urination and thirst
- Yeast infections
- Whole body itching
- Coma. In severe cases, high blood glucose may affect water distribution in brain cells, causing a state of deep unconsciousness, or coma.

Usule Alaaz/ Method of Treatment

A) Manage or Control or Prevention of Underlying causes

People with diabetes can use the following therapies to help manage their blood glucose levels and to prevent complications:
- Lifestyle changes, such as a well-balanced diet and regular exercise
- Medications, particularly insulin for individuals with type 1 diabetes and some people with type 2 diabetes

The goal of diabetes treatment is to achieve and maintain healthy blood glucose levels. A major study called the Diabetes Control and Complications Trial (DCCT) found that people with diabetes who kept their blood glucose levels close to normal reduced their risk of developing major complications from the condition.

Alaaz/Unani Medication

A. Dawa Murada for Ziabetes Sakri/ Diabetes Mellitus,

People have long used plant-based medicines in the treatment of diabetes. Unani Medicine for Type I Diabetes includes: (It is always advisable to work with a Expert Unani doctor prior to taking any Unani Medicine.)

Various medicinal plant that may have a role in the management or prevention of diabetes include:

i) Karela/ Bitter Gourd (*Momordica charantia*).

Bitter gourd, also known as bitter melon, can be helpful for controlling diabetes due to its blood glucose lowering effects. It tends to influence the glucose metabolism all over your body rather than a particular organ or tissue.

It helps increase pancreatic insulin secretion and prevents insulin resistance. Thus, bitter gourd is beneficial for both type 1 and type 2diabetes. However, it cannot be used to entirely replace insulin treatment.
- Drink some bitter gourd juice on an empty stomach each morning. First remove the seeds of two to three bitter gourds and use a juicer to extract the juice. Add some water and then drink it. Follow this treatment daily in the morning for at least two months.
- Also, you can include one dish made of bitter gourd daily in your diet.

Precaution & Warning: Bitter melon can be extremely dangerous to take when pregnant.

ii) Darchini/ Cinnamon (*Cinnamomum zeylanicum*):

Powdered cinnamon has the ability to lower blood sugar levels by stimulating insulin activity. It contains bioactive components that can help prevent and fight diabetes.

Certain trials have shown that it can work as an effective

option to lower blood sugar levels in cases of uncontrolled type-2 diabetes.

Cinnamon, however, should not be taken in excess because we commonly use Cassia cinnamon (found in most grocery stores) which contains a compound called coumarin. It is a toxic compound that increases the risk of liver damage.

There is another variety of this herb known as Ceylon cinnamon or "true cinnamon." It is considered safer for health but its effects on blood glucose levels have not been studied adequately.

- Mix one-half to one teaspoon of cinnamon in a cup of warm water. Drink it daily.
- Another option is to boil two to four cinnamon sticks in one cup of water and allow it to steep for 20 minutes. Drink this solution daily until you see improvement.
- You can also add cinnamon to warm beverages, smoothies and baked goods.

In a clinical study of 60 people with type 2 diabetes, intake of 1, 3, or 6 grams of cinnamon per day reduced glucose, triglyceride, LDL cholesterol, and total cholesterol levels. Other clinical studies have found similar results. As a result, experts claim that cinnamon may play an important role in regulating blood sugar in people with diabetes.

iii) Methi/Fenugreek seeds (*Trigonella foenum graecum*).

Fenugreek is an herb that can also be used to control diabetes, improve glucose tolerance and lower blood sugar levels due to its hypoglycaemic activity. It also stimulates the secretion of glucose-dependent insulin. Being high in fiber, it slows down the absorption of carbohydrates and sugars.

- Soak two tablespoons of fenugreek seeds in water overnight. Drink the water along with the seeds in the morning on an empty stomach. Follow this remedy without fail for a few months to bring down your glucose level.
- Another option is to eat two tablespoons of powdered fenugreek seeds daily with milk.

Warning: Fenugreek may interact with blood-thinning medications, such as warfarin (Coumadin).

iv) Amla (Emblica officinalis)

Indian gooseberry, also known as Amla, is rich in vitamin C and Indian gooseberry juice promotes proper functioning of your pancreas.

- Take two to three Amla, remove the seeds and grind it into a fine paste. Put the paste in a cloth and squeeze out the juice. Mix two tablespoon of the juice in one cup of water and drink it daily on an empty stomach.
- Alternatively, mix one tablespoon of Amla juice in a cup of bitter gourd juice and drink it daily for a few months.

v) Jamun/ Indian Black Berry (Syzgium cumini)

Black plum or jambul, also known as jamun can help a lot in controlling blood sugar level because it contains anthocyanins, ellagic acid, hydrolysable tannins etc.

Each part of the Jambul plant such as the leaves, berry and seeds can be used by those suffering from diabetes. In fact, research has shown that the fruits and seeds of this plant have hypoglycemic effects as they help reduce blood and urine sugar levels rapidly.

The seeds, in particular, contain glycoside jamboline and alkaloid jambosine that regulate control blood sugar levels.

Whenever this seasonal fruit is available in the market, try to include it in your diet as it can be very effective for the pancreas. Else you can make a powder of dried seeds of Jambul fruit and eat this powder with water twice a day. This fruit is native to India and its neighboring countries but you can find it at Asian markets and herbal shops.

vi) Aam/ Mango Leaves

The delicate and tender mango leaves can be used to treat diabetes by regulating insulin levels in the blood. They can also help improve blood lipid profiles.

- Soak 10 to 15 tender mango leaves in a glass of water overnight. In the morning, filter the water and drink it on an empty stomach.
- You can also dry the leaves in the shade and grind them. Eat one-half teaspoon of powdered mango leaves two times daily.

vii) Gurmar boti/ Gymnema (*Gymnema sylvestre*).

Preliminary human research reports that gymnema may be beneficial in patients with type 1 or type 2 diabetes when it is added to diabetes drugs being taken by mouth or to insulin. Gymnema may alter the ability to detect sweet tastes.

viii) Bakain/ Neem (*Azadirachta indica*).

According to a 2000 study published in the Indian Journal of Physiology and Pharmacology, Indian lilac or neem can be beneficial in controlling blood sugar or helpful in preventing or delaying the onset of diabetes. Neem leaf extract contains several compounds that can reduce insulin requirements among diabetic people without any apparent effect on blood glucose levels.

- Neem tablets help lower blood glucose levels. Take neem tablets or powder to control diabetes after consulting a doctor.
- Those who are at a higher risk of developing diabetes can chew 4 or 5 tender neem leaves daily or every other day on an empty stomach to prevent it.
- Diabetic Patient, Fresh tender leaves of Neem are cooked with shrimps and oil; then eaten with rice. Dried leaves are soaked in water over night and decanted extract is taken orally.

ix) American ginseng (*Panax quinquefolium*).

Although both Asian (*Panax ginseng*) and American (*Panax quinquefolium*) ginseng appear to lower blood glucose levels, only American ginseng has been studied scientifically. Several clinical studies report a blood sugar-lowering effect of American ginseng (*Panax quinquefolium*) in individuals with type 2 diabetes, both on fasting blood glucose and on postprandial glucose levels. One clinical study found that people with type 2 diabetes who take American ginseng before or together with a glucose meal experience a reduction in glucose levels after they consume the meal. American ginseng may not be appropriate for people with autoimmune disease.

Warning: It may interact with several medications, including blood-thinning medications, such as warfarin (Coumadin), among others. People with a history of hormone-sensitive cancers should only use ginseng under the guidance of their physician.

x) Okra

Okra, also called ladies' finger, has constituents such as polyphenolic molecules that can help reduce blood glucose levels and control diabetes.

A 2011 study published in the Journal of Pharmacy and Bio-Allied Sciences found okra seed and peel powder to have anti-diabetic and anti-hyper-lipidemic potential.

- Cut off the ends of a few okras and prick them in several places using a fork. Soak the okras in a glass of water overnight. In the morning, discard the okras and drink the water on an empty stomach. Do this daily for several weeks. Check more about it here.
- Also, include okra in your diet.

Warning: Avoid in people with known allergy or sensitivity to neem (*Azadirachta indica*) or members of the Meliaceae family.

B) Dawa Murakkava for Zayabetus Sakri (Diabetes Mellitus): (Any one or two of the following may be taken orally)

Tab. Dolabi, 01-02 tablet orally intake daily before meal. Useful in diabetes associated with obesity, non-healing wounds and diabetic carbuncles Tab Selvin, 01-02 tablet orally intake twice daily. Useful in diabetes associated with premature ejaculation, erectile dysfunction, etc.

Tab. Alisa, 01-02 tablet orally intake 2-3 times daily. Cap. Gintone, 500mg 01 capsule orally intake twice daily.

Ispaghol (Husk), Trifal Churna also helful to control blood sugar levels.

Triphala Churna: A simple combination of three fruits - *Terminalia chebula*, *Terminalia bellirica*, *Emblica officinalis* helps reduce blood sugar levels, relieve constipation and provides eye care. It is a very good source of antioxidants.

Preventive Care of Diabetes Mellitus

Type 1 diabetes: There is no proven way to prevent type 1 diabetes. However, research conducted in Finland suggests that adequate amounts of vitamin D, particularly in the first year of life, may decrease one's chances of developing type 1 diabetes within the first 30 years of life.

Type 2 diabetes: Considerable evidence from population based studies suggests that type 2 diabetes is highly preventable, particularly through exercise and weight management. Studies suggest that you do not need vigorous physical activity to lower your risk of diabetes; moderate, regular exercise, such as walking for 30 minutes most days of the week, is enough. In general, lifestyle changes recommended to treat diabetes may help prevent the condition as well.

Lifestyle

People with diabetes can improve significantly from lifestyle changes, particularly diet and exercise. People with type 2 diabetes may even eliminate the need for medications when they make appropriate lifestyle changes. The management of diabetes is always multi-factorial. It involves ongoing attention to a number of lifestyle factors including:

Maintain *Healthy Body Weight*

Dietary recommendations

Eat three meals a day at regular times and space meals no more than six hours apart in order to control blood glucose levels.

The American Diabetic Association (ADA) recommends that people with diabetes consume a healthy, low-fat diet, rich in grains, fruits, and vegetables.

Carbohydrates tend to have the greatest effect on blood glucose.

Foods that contain a high amount of carbohydrates include grains, pasta, and rice; breads, crackers, and cereals; Starchy vegetables, including potatoes, corn, peas, and winter squash; legumes such as beans, peas, and lentils; fruits and fruit juices; milk and yogurt; and sweets and desserts.

Non-starchy vegetables, such as spinach, kale, broccoli, salad greens, and green beans, are very low in carbohydrates. Add cinnamon, onion and garlic to the diet or add as a supplement. Ensure you drink adequate water,

Exercising

Exercise at least 3 - 5 times per week can prevent development of Type II Diabetes and can help manage blood sugar levels when you have diabetes. Exercise is important to maintain body weight, muscle mass, and improve insulin sensitivity. Adjusting insulin levels with exercise may be required.

Rest and Relaxation

Stress relaxation aids blood sugar control.

Sleep: Lack of sleep or disrupted sleep can alter insulin and glucose levels.

Antioxidants

Preliminary clinical studies show that the following antioxidants may improve diabetes (by returning blood glucose levels to the normal range) and reduce the risk of associated complications:

- Vitamin C, Vitamin E, Two additional substances that show preliminary evidence to possibly help control blood sugar include:
- Biotin (a B-complex vitamin): Possibly helpful for type 2 diabetes; brewer's yeast is a good source of biotin.
- Vitamin B6. Possibly helpful for both type 1 and type 2 diabetes.

In addition, the following antioxidants have been shown to improve cholesterol levels in people with type 2 diabetes.

- Beta-carotene
- Vitamin C (1000 mg per day)
- Vitamin E (800 IU per day)

Keep monitoring your blood sugar levels.

Foot Care of Diabetic Paitent Quit smoking.

Outcomes
Somewhat this information would help our knowledge to enrich regarding how & which Foods & Vitamins, Practiced Lifestyle, various listed Anti-diabetics Unani Medicinal Plants & formulated Unani Medicine are to use prevent & control DM & promoting our Heath care but some traditional practice approaches further should be tested with RCT for authenticity.

Implications
This review study will contribute to reduced Incidence & prevalence DM in our country. As well, I hope the understanding & following of this review study will contribute to reduced prognosis and long-term complications of diabetes such as Eye damage, including cataracts or retinal disease, Diabetic ketoacidosis, Kidney damage, Nerve damage/ Nerve damage such as peripheral neuropathy, Disease of large blood vessels/ Heart disease and stroke/ High blood pressure, Lipid (fat) imbalance in blood, Musculoskeletal and connective tissue disease, Increased risk of infection such as fungal infections, Foot ulcers and infections, Skin problems, including bruising, dryness, itching, hair loss, warts, gangrene (tissue death), and skin ulcers, Cognitive impairment.

Conflicts of Interest
The authors declare no conflict of interests.

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