#### **FACTS AND PRECAUTIONS FOR DIABETES PATIENTS**

**Glucose** is very important fuel for our brain but when glucose is not properly metabolized, it leads to excess sugar in the blood. Our body is not able to produce enough INSULIN or use INSULIN effectively for metabolism of sugar in our blood stream. This condition is known as **DIABETES MELLITUS** or commonly known as SUGAR.

In INDIA we have approx. 77 million patients suffering from diabetes or Sugar.

## There are many factors leading to this condition:

- 1. Insulin resistance
- 2. Medicines for Pneumonia, HIV, Statins, Diuretics, Anti seizure drugs, Psychiatric drugs and medicines to treat inflammatory illness such as Rheumatoid.
- 3. Removal of Pancreas
- 4. Genes and family History
- 5. Overweight, Obesity and Physical inactivity
- 6. High blood pressure and High cholesterol
- 7. Complications due to Diabetes can be as below:
  - Nerve damage
  - Kidney Damage
  - Damage in eyes
  - Hearing Impairment
  - Depression

### **Role of LIVER in our body:**

Glucose in our body comes from food and Liver. Sugar is absorbed in blood stream with the help of Insulin.

In case of starving, stored glycogen in liver is broken down into glucose which is absorbed for maintaining the glucose level in blood. So, in case of any problem in liver, it can lead to **Diabetes** 

Today's topic is about the medicine used to treat Diabetes which contain METFORMIN.

Side effects of METFORMIN SALT.

Metformin depletes our body from water soluble Vitamin B12 and leads to the deficiency.

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## Effects of vitamin B12 deficiency: Low levels of vitamin B12 causes

- 1. Neurological damages
- 2. Anaemic condition due to improper functioning of bone marrow for manufacturing of Red Blood Cells
- 3. Mood changes
- 4. Memory loss
- 5. Dementia
- 6. So if you are consuming metformin daily, you need to monitor your Vitamin B12 levels to prevent conditions as mentioned below.
- 7. Foods rich in Vitamin B12:
  - Vitamin B12 is mainly found in animal products such as dairy products, eggs, fish, meat and poultry products.
  - Also vitamin B12 is available in fortified foods.

# Vitamin B12 daily requirement is 2.4 mcg for adults as per RDA value.

### **Yoga Exercises for Diabetes Patients:**

- ❖ **Kapalbhati**: In this exercise, there is forceful exhalation of air which in turn avtivates our immune system. This process should be done 20 times in one go and should not be repeated for more than 5 times simultaneously
- ❖ Dhanurasana: For performing this asana, lie down in crocodile pose with stomach facing downwards. Bring your arms close to the body and take deep breath to relax body and spine. While exhaling, bend the knees and hold your feet with hands and stretch to make shape of bow. Now hold this postion for sometime and then return to normal pose while inhaling. This asana stimulates liver and pancreas for management of diabetes.
- ❖ Paschimottanasana: This is forward bending pose which massage our internal organs such as kidneys, spleen, adrenal glands and liver and improves their functions.