



world diabetes day

14 November

Type 2 diabetes – Know your risk factors

The number of people with diabetes has nearly quadrupled since 1980 and the numbers grow year by year. According to the WHO, a large proportion of Type 2 diabetes can be prevented by a healthy diet, regular physical activity, maintaining a normal body weight and avoiding tobacco use. Prevalence of the condition has correspondingly grown in seafarer populations threatening their health and wellbeing. November 14 is World Diabetes Day and a reminder to check your risk factors and take preventive action.

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Diabetes is a life-long condition where the body struggles to metabolise glucose, either due to lack of insulin or inability to use the insulin produced. Insulin is a hormone produced by the pancreas that enables glucose to enter the cells in the body and be an energy source of the cell. If insulin is lacking or is not sufficient, sugar accumulates in the blood leading to high blood sugar. High blood sugar, over time causes damage to many of the body's organs, leading to disabling and life-threatening health complications such as kidney failure, heart conditions, nerve damage, eye disease resulting in visual loss, increasing risk of leg ulcers, and impaired healing of wounds. Diabetes has also been recognised as a risk factor for COVID-19 related hospitalisation.

According to the [International Diabetes Federation](#) (IDF) an estimated 537 million adults aged 20-79 years are now living with diabetes – more than 1 in ten of all persons. By 2030, the IDF estimates the number will rise to 643 million.

Diabetes is classified as Type 1, Type 2, or gestational diabetes (diabetes during pregnancy). Type 1 diabetes is the major type of diabetes in childhood but can occur at any age. Type 1 diabetes cannot be prevented and those with the disease require insulin injections to survive.

Type 2 diabetes accounts for the vast majority (over 90%) of diabetes worldwide. Type 2 diabetes is characterized by insulin resistance where the body does not fully respond to insulin. Because insulin cannot work properly, blood glucose levels keep rising, releasing more insulin. For some people with type 2 diabetes, this can eventually exhaust the pancreas resulting in the body producing less and less insulin, causing even higher blood sugar levels. People with Type 2 diabetes can often initially manage their condition through exercise and diet. However, over time most people will require oral drugs and/or insulin, nevertheless, healthy lifestyle will remain an integral part of the diabetes management plan.

According to the IDF, the risk factors associated with developing type 2 diabetes include:

- Family history of diabetes
- Overweight
- Unhealthy diet
- Physical inactivity
- Increasing age
- High blood pressure
- Ethnicity
- Impaired glucose tolerance – (higher than normal blood glucose but below the threshold for diagnosing diabetes)

The IDF has developed a simple to use type 2 risk [assessment tool](#) that aims to predict an individual's risk of developing type 2 diabetes within the next ten years.

Prevention of type 2 diabetes

Some risk factors of Type 2 diabetes, for example, family history, cannot be changed. However, according to the IDF, research indicates that for those with risk factors, a **majority** of cases could be prevented through healthy diet and physical activity at least three to five days a week for a minimum of 30-45 minutes.

IDF recommendations for a healthy diet (for the general population):

- Choosing water, coffee or tea instead of fruit juice, soda, or other sugar sweetened beverages.
- Eating at least three servings of vegetable every day, including green leafy vegetables.
- Eating up to three servings of fresh fruit every day.
- Choosing nuts, a piece of fresh fruit, or unsweetened yoghurt for a snack.
- Limiting alcohol intake to a maximum of two standard drinks per day.
- Choosing lean cuts of white meat, poultry or seafood instead of red or processed meat.
- Choosing peanut butter instead of chocolate spread or jam.
- Choosing whole-grain bread, rice, or pasta instead of white bread, rice, or pasta.
- Choosing unsaturated fats (olive oil, canola oil, corn oil, or sunflower oil) instead of saturated fats (butter, ghee, animal fat, coconut oil or palm oil).

A particular threat in terms of the associated risk of developing type 2 diabetes is the consumption of high sugar foods, particularly sugar-sweetened beverages.

For those at risk of developing type 2 diabetes, making healthy choices today may prevent or delay development of the disease later in life.

Additional Resources

The International Seafarers' Welfare and Assistance Network (ISWAN) [Seafarers' Health Information Programme \(SHIP\)](#) includes modules and materials on shipboard fitness, healthy food and managing weight.

The [Mariners Medico Guide app](#) includes the most up to date information about type 1 and type 2 diabetes, with detailed descriptions of the diseases, symptoms to look out for, and guidance on initial treatment on board. The guide is designed by doctors specialised in maritime medicine as an assessment tool specifically for seafarers while at sea. It is possible to search by symptoms as well as condition, and it is written in easy-to-follow language and steps. It can be downloaded for free for desktop as well as Apple and android mobile devices. Once downloaded, the medical guide is available without internet access. The Mariners Medico Guide includes contact details and links to shore based telemedical assistance and is approved by the Norwegian flag state.

For statistics regarding the prevalence of type 2 diabetes in seafarers from the Philippines see Gard Insight article [People focus – Diabetes and the seafarer](#) co-authored by Alice Jackson Amundsen and Christina Tsouni, Senior Claims Executive Piraeus.