## Diabetes at sea – what seafarers need to know

More than one in ten adults are now living with diabetes, and seafarers are at particular risk. In connection with the World Diabetes Day, we highlight how the illness can be prevented and treated while working at sea.

Published 13 May 2025 Written by Kim Jefferies According to the International Diabetes Federation (IDF), an estimated 537 million adults aged 20-79 years are now living with diabetes – more than one in ten of all persons. And by 2030, the number is expected to rise to 643 million.

For seafarers, the risk of developing Type 2 diabetes is higher than the rest of the population – probably partly due to work and other lifestyle factors. However, the risk can be greatly reduced by adopting a healthy lifestyle including adjustments to diet and increase in exercise.

## **About diabetes**

- 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. This leads to high blood sugar, which over time can lead to several disabling and life-threatening health complications.
- Diabetes is classified in one of three ways Type 1, Type 2, or gestational diabetes (diabetes during pregnancy). Type 1 is the most common during 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. It is characterized by insulin resistance where the body does not fully respond to insulin. People with Type 2 diabetes can often initially manage their condition through exercise and diet, but over time, most people will require oral drugs and/or insulin. Nevertheless, a healthy lifestyle will remain important.

## Knowing the symptoms

Many people with diabetes are undiagnosed. The IDF reckons that close to half of those living with Type 2 diabetes do not know it. This easy-to-use risk assessment tool can help predict an individual's risk of developing Type 2 diabetes within the next ten years.

Thankfully, blood sugar tests are a feature of the pre-employment testing done for many seafarers enabling the disease to be treated. Development of the disease can also occur while seafarers are aboard ship and early treatment is essential to managing the condition. Symptoms of diabetes include:

- Excessive thirst
- Excessive urination
- Unintended weight loss
- Confusion, reduced consciousness
- Palpitations
- Restlessness
- Feeling abnormally tired

For more details on symptoms to look out for and further guidance, download the Mariners Medico Guide app. This app, developed by Gard and the Norwegian Centre for Maritime and Diving Medicine, includes the most up to date information about diabetes as well as guidance on initial treatment on board.

Diet and physical activity

There is overwhelming evidence from studies in the USA, Finland, China, India and Japan that lifestyle changes can help prevent the development of Type 2 diabetes in those at high risk. According to IDF, a *majority* of cases among those with risk factors could be prevented through healthy diet and physical activity for a minimum of 30-45 minutes at least three to five days a week.

IDF recommends these dietary guidelines 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

Additional Resources:

Download the Mariners Medico Guide

Free online courses from IDF

Seafarers' Health Information Programme (SHIP)

People focus: Diabetes and the seafarer

The author thanks Alice Jackson Amundsen for her contribution to this article