A STEP IN THE RIGHT DIRECTION

The life of seafaring forces you to be away from your family for months on end. Being healthier enables you to enjoy quality time with your family after your seafaring days are over without having to constantly worry about any lingering medical issues.

The lifestyle recommendations listed in this guide may be difficult for you to implement all at once. You need to remember that the pursuit of a healthier lifestyle is a marathon, not a sprint. Try to adjust your lifestyle a little at a time. If you put in effort consistently, you will definitely see the improvements to your health.
**What is diabetes?**

Due to the lifestyle and working conditions on board vessels, seafarers have been shown to have a higher risk of developing type 2 diabetes. Diabetes is a disease in which your body cannot create or use a substance known as insulin. This leads to high blood sugar, which damages your body over time. Without the proper lifestyle adjustments, people with type 2 diabetes may require medication or even daily insulin injections for the rest of their lives. This guide outlines some of the lifestyle adjustments you can take to reduce your risk of developing the disease.

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**Diabetes can harm your whole body**

**Brain**

Diabetes can lead to strokes, which can cause permanent brain damage or even death.

**Heart**

People with diabetes are more likely to experience heart attacks, which is the most common cause of death among diabetics.

**Eyes**

Diabetes increases the risk of eye diseases and can lead to blindness.

**Kidneys**

Diabetes can damage the kidneys and lead to kidney failure.

**LimbS**

People with diabetes have a 25 times higher risk of amputation compared to the average person.

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**DID YOU KNOW THAT…**

- It is estimated that 1 in 10 adults will have diabetes by 2035
- Diabetes kills a person every 6 seconds
- Diabetics spend an average of USD$2,800 on direct medical costs every year

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**Diabetes is a global health issue**

No. of Diabetics Around the World

- North America: 37m
- Europe: 56m
- Asia: 141m
- South America: 24m
- Africa: 55m
- Australia: 69m

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"Diabetes is an all-too-personal time bomb which can go off today, tomorrow, next year, or 10 years from now."

- Mary Tyler Moore, Actress
“DIABETES IS A LOUSY, LOUSY DISEASE.” - Elaine Stritch, Broadway Singer

WHY DO SEAFARERS HAVE A HIGHER RISK OF DIABETES?
As a group, seafarers have been shown to smoke more, exercise less and eat more than the average person.

<table>
<thead>
<tr>
<th>Health Aspect</th>
<th>Seafarers</th>
<th>General Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>60%</td>
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<td>58%</td>
<td>31%</td>
</tr>
<tr>
<td>Obesity</td>
<td>6/10</td>
<td>5/10</td>
</tr>
<tr>
<td>Unhealthy Waistline</td>
<td>5/10</td>
<td></td>
</tr>
</tbody>
</table>

WHAT ARE THE SIGNS & SYMPTOMS OF DIABETES?

- SLOW HEALING: Having infections, cuts and bruises that do not heal quickly is a common symptom of diabetes.
- BLURRED VISION: High blood sugar levels can result in you seeing floaters or occasional flashes of light.
- CONSTANT FATIGUE: Your body becomes less able to use the blood sugar in your body for energy, so you will feel tired easily.
- TINGLING / NUMBING SENSATION: Sensations of tingling, burning or numbness in the hands and feet, can be signs that your nerves are being damaged due to diabetes.
- EXCESSIVE THIRST & FREQUENT URINATION: When the your blood sugar levels is too high, you will tend to urinate more often, which leads to you drinking more than usual.

ARE YOU AT RISK?
Fill out the questionnaire on the right to find out your risk of developing diabetes.

Use the scoring table below to check your diabetes score.

For example, a diabetes score of 37 will mean that you are at moderate risk and have a 1 in 6 chance of developing type 2 diabetes within the next ten years.

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<tr>
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<td></td>
</tr>
</tbody>
</table>

SCORE SYSTEM

<table>
<thead>
<tr>
<th>Score</th>
<th>Risk</th>
<th>Probability of developing type 2 diabetes within the next 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 19</td>
<td>Low</td>
<td>1 in 100</td>
</tr>
<tr>
<td>19-30</td>
<td>Slight</td>
<td>1 in 25</td>
</tr>
<tr>
<td>31-38</td>
<td>Moderate</td>
<td>1 in 6</td>
</tr>
<tr>
<td>39-54</td>
<td>High</td>
<td>1 in 3</td>
</tr>
<tr>
<td>&gt;54</td>
<td>Very High</td>
<td>1 in 2</td>
</tr>
</tbody>
</table>

Blurred Vision
- High blood sugar levels can result in you seeing floaters or occasional flashes of light.

Excessive Thirst & Frequent Urination
- When the your blood sugar levels is too high, you will tend to urinate more often, which leads to you drinking more than usual.

Slow Healing
- Having infections, cuts and bruises that do not heal quickly is a common symptom of diabetes.

Tingling / Numbing Sensation
- Sensations of tingling, burning or numbness in the hands and feet, can be signs that your nerves are being damaged due to diabetes.

WHAT ARE THE SIGNS & SYMPTOMS OF DIABETES?

- Constant Fatigue: Your body becomes less able to use the blood sugar in your body for energy, so you will feel tired easily.
- Blurred Vision: High blood sugar levels can result in you seeing floaters or occasional flashes of light.
- Excessive Thirst & Frequent Urination: When the your blood sugar levels is too high, you will tend to urinate more often, which leads to you drinking more than usual.

Diabetes Score
- Score: 60%
- Risk: Moderate
- Probability of developing type 2 diabetes within the next 10 years: 1 in 6
“GIVING UP SMOKING IS EASY. I KNOW IT BECAUSE I HAVE DONE IT A THOUSAND TIMES.”

- Mark Twain, Humourist

SMOKING – A GLOBAL HEALTH ISSUE
It is estimated that 22% of the world population are active smokers, and around 6 million people die annually from tobacco use and exposure to tobacco smoke.

SMOKING & TYPE 2 DIABETES
Studies have shown that smokers have a higher chance of developing type 2 diabetes compared to non-smokers.

Health benefits of quitting smoking
No matter how old you are or how long you have smoked, quitting smoking will allow you to live longer and be healthier.

Health benefits of quitting smoking

- **20 MINUTES**
  - Your heart rate drops.

- **12 HOURS**
  - Carbon Monoxide level in your blood drops to normal.

- **2-3 WEEKS**
  - The risk of heart attacks begins to drop. Your lung function begins to improve.

- **1-9 MONTHS**
  - Coughing and shortness of breath decrease.

- **1 YEAR**
  - Your risk of heart diseases is reduced to half of a smoker’s.

- **5 YEARS**
  - Your risk of strokes is reduced to that of a non-smoker.

- **10 YEARS**
  - Your risk of lung cancer death is reduced to half of a smoker’s. Your risk of various cancers also decreases.

- **15 YEARS**
  - Your risk of heart diseases is finally back to that of a non-smoker’s.

**SMOKING IS EXTREMELY HARMFUL!**
Smoking is one of the unhealthiest activities for anyone. It affects nearly every organ in the body and up to half of its current users will eventually die from a tobacco-related disease.

**CANCERS**
- HEAD OR NECK
- LUNG
- LEUKEMIA
- STOMACH
- KIDNEY
- PANCREAS
- COLON
- BLADDER
- CERVIX

**CHRONIC DISEASES**
- STROKE
- BLINDNESS
- GUM INFECTION
- AORTIC RUPTURE
- HEART DISEASE
- PNEUMONIA
- HARDENING OF THE ARTERIES
- CHRONIC LUNG DISEASE & ASTHMA
- REDUCED FERTILITY
- HIP FRACTURE

**Smoking History & Increase in Risk of Type 2 Diabetes**

- EX-SMOKERS 29%
- CURRENT SMOKERS (1-14 cigs/day) 37%
- CURRENT SMOKERS (15-24 cigs/day) 138%
- CURRENT SMOKERS (>25 cigs/day) 194%
REGULAR EXERCISE IS IMPORTANT
It is recommended that you exercise at least 3 times and expend at least 700 calories a week for a healthy lifestyle. There are many ways in which you can exercise while on board the vessel.

<table>
<thead>
<tr>
<th>Exercise Type</th>
<th>Calories per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary Bike</td>
<td>490</td>
</tr>
<tr>
<td>Elliptical Trainer</td>
<td>650</td>
</tr>
<tr>
<td>Treadmill</td>
<td>175</td>
</tr>
<tr>
<td>Slow Walking</td>
<td>270</td>
</tr>
<tr>
<td>Brisk Walking</td>
<td>440</td>
</tr>
<tr>
<td>Jogging</td>
<td>700</td>
</tr>
<tr>
<td>Free Weights/Weight Machine</td>
<td>210</td>
</tr>
<tr>
<td>Rowing Machine</td>
<td>490</td>
</tr>
<tr>
<td>Strength Training</td>
<td>250</td>
</tr>
<tr>
<td>Bodyweight Exercise</td>
<td>700</td>
</tr>
<tr>
<td>Rope Jumping</td>
<td>700</td>
</tr>
</tbody>
</table>

Are You Overweight or Obese? Check your BMI using the table below

<table>
<thead>
<tr>
<th>Height (m)</th>
<th>Normal Range (BMI &lt;25)</th>
<th>Overweight Range (BMI 25-30)</th>
<th>Obesity Range (BMI 30+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.50</td>
<td>&lt;59kg</td>
<td>59 - 68kg</td>
<td>&gt;68kg</td>
</tr>
<tr>
<td>1.55</td>
<td>&lt;62kg</td>
<td>62 - 72kg</td>
<td>&gt;72kg</td>
</tr>
<tr>
<td>1.60</td>
<td>&lt;67kg</td>
<td>67 - 77kg</td>
<td>&gt;77kg</td>
</tr>
<tr>
<td>1.65</td>
<td>&lt;71kg</td>
<td>71 - 82kg</td>
<td>&gt;82kg</td>
</tr>
<tr>
<td>1.70</td>
<td>&lt;75kg</td>
<td>75 - 87kg</td>
<td>&gt;87kg</td>
</tr>
<tr>
<td>1.75</td>
<td>&lt;80kg</td>
<td>80 - 92kg</td>
<td>&gt;92kg</td>
</tr>
<tr>
<td>1.80</td>
<td>&lt;84kg</td>
<td>84 - 97kg</td>
<td>&gt;97kg</td>
</tr>
<tr>
<td>1.85</td>
<td>&lt;89kg</td>
<td>89 - 103kg</td>
<td>&gt;103kg</td>
</tr>
<tr>
<td>1.90</td>
<td>&lt;94kg</td>
<td>94 - 108kg</td>
<td>&gt;108kg</td>
</tr>
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</table>

If you are in the overweight or obese range, consider losing some weight. Studies have shown that an overweight person can reduce his risk of diabetes by 33% if he can lose 7% of his body weight.

OBESITY IS UNHEALTHY
People who are obese suffers from more health issues and have a higher chance of premature death from all causes compared to a healthy person.

<table>
<thead>
<tr>
<th>Condition</th>
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<tbody>
<tr>
<td>Type 2 Diabetes</td>
</tr>
<tr>
<td>Colon Cancer</td>
</tr>
<tr>
<td>Depression</td>
</tr>
<tr>
<td>Stroke</td>
</tr>
<tr>
<td>Gallbladder Cancer</td>
</tr>
<tr>
<td>High Blood Cholesterol</td>
</tr>
<tr>
<td>Premature Osteoarthritis</td>
</tr>
<tr>
<td>Kidney Cancer</td>
</tr>
<tr>
<td>Death Psychological Stress</td>
</tr>
<tr>
<td>Gallbladder Disease</td>
</tr>
<tr>
<td>Increased Heart Disease</td>
</tr>
<tr>
<td>Increased Surgical Risk</td>
</tr>
<tr>
<td>Sleep Apnea</td>
</tr>
<tr>
<td>Breathing Problems</td>
</tr>
<tr>
<td>Asthma</td>
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DIET & DIABETES
On average, people are consuming upwards of 2,900 calories a day, which is about 1.4 times more than the recommended daily calorie intake. A proper diet can greatly reduce your risk of diabetes.

HEALTHY DIET
While you may not have much say in the food provided on board the vessels, you can still pursue a healthier diet by reducing your total calorie intake and/or by increasing the percentage of healthy food types in your diet.

BENEFICIAL FOOD TYPES

WHOLE GRAINS
Contains dietary fiber, B vitamins, minerals and anti-oxidants, which help to lower blood pressure and cholesterol levels.

NUTS
A good source of omega-3 fatty acids, vitamin E and fibre when consumed in moderation.

LOW FAT DIARY
Provides calcium which makes the bones stronger, and other minerals that help maintain a healthy blood pressure.

GREEN LEAFY VEGETABLES
Contains high vitamins and mineral levels, and are known for their anti-inflammatory and anti-oxidant properties.

OILY FISH
Contains vitamin A & D and is rich in omega-3 fatty acids, which reduces the risk of cardiovascular diseases, and maintain a healthy blood pressure level.

HARMFUL FOOD TYPES

PROCESSED RED MEAT
Rich in cholesterol, saturated fats and additives that are closely linked to heart diseases.

SUGAR SWEETENED BEVERAGES
Contains a significant amount of empty calories (sugar sweeteners) that leads to obesity and other harmful health effects.

TRANS FAT
Closely associated with a higher risk of type 2 diabetes and coronary heart diseases.

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