**Type 2 diabetes** (also known as adult-onset diabetes or non-insulin-dependent diabetes mellitus) is a metabolic disease characterised by inefficient utilization of the hormone insulin. This causes an increased blood sugar level.

Type 2 diabetes develops gradually over the years. Blood vessels and eyes are already damaged in early stages of the disease. Serious complications arising from diabetes include heart and circulatory diseases, blindness, and kidney failure.

This test was developed by researchers of the German Institute of Human Nutrition Potsdam-Rehbruecke. It is based on data from the Potsdam EPIC Study* and validated by the Heidelberg EPIC Study and the MONICA/KORA** Study, among others.

**Please note:**
Even individuals with a low risk of diabetes may develop this disease. On the other hand, high-risk individuals may remain healthy.

* EPIC: European Prospective Investigation into Cancer and Nutrition  
** MONICA/KORA: MONItoring trends and determinants in CArdiovascular disease/Kooperative Gesundheitsforschung in der Region Augsburg

### Factors that influence the risk of type 2 diabetes

Different factors affect the risk of type 2 diabetes. Some of these factors, but not all of them, can be altered by a change in behaviour and lifestyle. The factors beneath were taken into account in the German Diabetes Risk Score.

#### Age
The risk of diabetes increases with age. Individuals under 40 years very rarely develop type 2 diabetes.

#### High blood pressure
Individuals with high blood pressure may have a higher diabetes risk.

#### Height
Body height plays a role in abdominal fat (belly fat) distribution so it has an influence on diabetes risk.

#### Diabetes in the family
The risk is higher when blood relatives have or had type 2 diabetes. This increased risk is probably associated with the interaction of genetic and family-specific lifestyle factors.

#### Overweight (waistline)
When excess fat is deposited in the abdomen (waist), there is an increased risk to develop diabetes. Studies have shown that weight reduction can reduce the risk of type 2 diabetes considerably.

How to measure your waistline: stand facing a mirror with your feet approx. 15 cm (6 inches) apart  
Where to measure: midway between the lower ribs and the upper edge of the pelvic bone

#### Physical activity
Physical activity affects the risk of type 2 diabetes in several ways. It helps to maintain a lower body weight and thus the waistline. Physical activity also improves the body’s insulin efficacy and thus the regulation of blood sugar levels.

#### Whole grain bread and muesli
Many studies have shown that eating whole grain products, such as whole grain bread and rolls, cereal flakes, grains and muesli, lowers the risk of type 2 diabetes.

#### Meat
The consumption of red meat, e.g. beef, pork, or lamb, increases the risk of type 2 diabetes. The more you eat these meats, the higher your risk.

#### Coffee
Studies have found a relation between coffee consumption and a lowered risk of type 2 diabetes.

#### Smoking
Smoking has been linked to an increased risk of type 2 diabetes. It can also cause cancer, heart, and circulatory diseases. It is therefore recommended to quit smoking.