

## TYPE 2 DIABETES – WHAT DOES TREATMENT INVOLVE?



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### DEAR PATIENT,

Type 2 diabetes is very widespread amongst the adult population. The characteristic feature of this disease is a permanently elevated blood sugar (glucose) level. In colloquial English it is also known as “adult-onset diabetes”. If left untreated diabetes can damage vessels, nerves and organs. However, if diagnosed and treated early on, damage can be avoided in some cases or its progression slowed down. The following text gives you an overview of the goals and possibilities of treatment for type 2 diabetes. More detailed information is provided in the Patient Guideline: see box overleaf.

#### At a glance: treating type 2 diabetes

- In consultation with your doctor the first step is to agree personal treatment goals, for instance your long-term blood sugar value (HbA1c).
- Treatment includes patient education programmes and the readjustment of certain habits like diet and physical activity.
- Medication is only prescribed when blood sugar remains high despite a healthy lifestyle.
- In some cases a combination of several blood sugar-lowering medicines is prescribed after some time if one alone is not sufficient.

#### ► AGREE TREATMENT GOALS

Before beginning treatment agree personal treatment goals with your doctor. There are no steadfast rules. Have the advantages and disadvantages calmly explained to you. The changes and target values that make sense for you depend, amongst other things, on your age, needs and lifestyle. Other illnesses likewise play a role.

You agree treatment goals for:

- Lifestyle
- Blood sugar
- Blood lipids
- Weight
- Blood pressure

Ask if there is anything you haven't understood fully. You can also think about who could help you to achieve your goals. For instance that could be your partner, friends or a self-help group. Your goals should be checked and, if necessary, adjusted during your course of treatment.

#### ► TARGET RANGE FOR THE HbA1C VALUE

By means of your long-term blood sugar value – the HbA1c value – your doctor can determine how well adjusted your blood sugar was over the previous weeks. It also indicates whether your treatment is working. You decide, together with your doctor, which value is ideal for you. There is no set limit. Experts recommend aiming for a value in the range of 6.5 to 7.5 percent (48 to 58 mmol/mol). This is to avoid secondary complications if possible. But it doesn't mean your value absolutely has to be in this range.

High blood sugar values are a risk factor but other accompanying conditions like high blood pressure, lipometabolic disorders or smoking can promote the onset of secondary damage through diabetes, too. Studies indicate that it is advantageous to reduce a very high blood sugar value. In contrast, lowering an only slightly elevated value often offers less of a benefit.

Furthermore, a particularly strict blood sugar level may be associated more frequently with dangerous hypoglycaemia which cannot be detected with the HbA1c value.

## ▶ Treatment of type 2 diabetes

### ▶ STAGES OF TREATMENT

As a rule treatment follows a stage-by-stage treatment plan.

- **Stage 1:** First, you should attend a patient education programme and, if necessary, make lifestyle changes. That means: be more physically active, adopt a healthy, balanced diet if possible and refrain from smoking. This may already enable you to achieve your personal HbA1c target value and you won't need medication.
- **Stage 2:** Doctors should only prescribe medication when blood sugar is still too high despite adopting a healthier lifestyle. Blood sugar-lowering tablets are called *oral antidiabetics*. In most cases these tablets contain the active ingredient *metformin*. If there are contra-indications to taking metformin, other medication can be prescribed.
- **Stage 3:** If one tablet does not help, you will be given additional medication. Treatment only with insulin is also possible if, for instance, you have an intolerance to the tablets.
- **Stage 4:** In the case of patients whose HbA1c value is still not in the target range, the last stage involves intensive treatment with insulin and several other diabetic medications.

Experts recommend the next stage of treatment if you have not achieved your agreed HbA1c target value after 3 to 6 months. The transition from one stage to the next is dependent on acquiring new knowledge and practical skills. You can learn them, for instance, in a patient education programme.

### ▶ MORE INFORMATION

This Patient Information is based on the **Patient Guideline "Treatment of Type 2 Diabetes"**:  
[www.patienten-information.de/patientenleitlinien](http://www.patienten-information.de/patientenleitlinien)

The Patient Information was prepared as part of the Programme for National Care Guidelines. It has the backing of the Germany Medical Association, the National Associations of Statutory Health Insurance Physicians and the Association of Scientific Medical Societies.

Further brief information on the subject "Diabetes": [www.patinfo.org](http://www.patinfo.org)

Methodology and sources can be accessed here:

[www.patienten-information.de/kurzinformationen/quellen-und-methodik/diabetes-therapie](http://www.patienten-information.de/kurzinformationen/quellen-und-methodik/diabetes-therapie)

#### Contact to self-help groups

You can find out from NAKOS (national contact and information office for the encouragement and support of self-help groups) where there is a self-help group in your area: [www.nakos.de](http://www.nakos.de), Tel.: 030 3101 8960

The active ingredient which is suitable for you depends, amongst other things, on your habits and the number of medicines you take every day. Possible side-effects, interactions with other medicines and kidney function are particularly important. Furthermore, you should reach your personal treatment goals, if possible, without any side-effects like hypoglycaemia or weight increase.

### ▶ WHAT YOU CAN DO

- Talk to your doctor about your ideas and your lifestyle. They can then be taken into account when agreeing your targets.
- You should attend a patient education programme. There you can learn how best to achieve your treatment goals.
- Be sure to adopt a healthy, balanced diet. There are no strict instructions or bans. In general the same recommendations for a wholesome diet apply to people with, as to people without, type 2 diabetes. There's no need for special diabetic products or diabetic foods.
- More physical activity and sport are usually possible for diabetics, too. To be on the safe side, check with your doctor first. Remember that physical activity normally lowers blood sugar.
- Drink alcohol in moderation and do not smoke.
- Make an effort to attend the regular check-ups and take your medication as prescribed by your doctor.

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