

## Special Cardiovascular Check-Up

Cardiovascular disorders are the most frequent cause of death in industrial countries; they are responsible for around 50% of deaths in Germany.

The cause is usually arterial sclerosis - an inflammatory fatty build-up and calcification of the inner walls of the arteries. The changes develop subtly, beginning in youth and remaining symptom-free and dormant for years, until they suddenly result in an acute event, such as a heart attack, sudden cardiac death or a stroke. Almost 50% of heart attack patients experience no warning signs before they suffer an infarction! Between 30% and 50% of heart attack patients die before they reach the hospital.

It is therefore wise to carry out targeted diagnostics early with imaging techniques in order to detect the start of symptomless arterial sclerosis. After all, it may be possible to take actions (such as lifestyle changes) in order to halt the arterial sclerosis process or, in some cases, even reverse it. As part of the special cardiovascular check-up, we carry out an assessment of your personal cardiovascular risk profile and your existing danger of a heart attack, in addition to imaging diagnostics. In addition, we determine and analyse traditional risk factors for cardiovascular diseases (high blood pressure, obesity, diabetes mellitus, high blood fat, smoking, inactivity).

All results are summarised by our experienced specialists in a detailed final report. Based on the results, we provide you with extensive advice regarding lifestyle changes (including reducing or rectifying known risk factors) and potentially effective preventative medications.

**When is this indicated or recommended?**

**The special cardiovascular check-up is recommended for people,**

- who already have one or more cardiovascular risk factors (e.g. high blood pressure, obesity, diabetes mellitus, increased blood fat, smoking, inactivity),
- already have one or more cases of cardiovascular diseases in their family,
- have complaints or symptoms that could be related to the cardiovascular system (e.g. breathlessness; pain in the chest or in the legs, in particular under physical strain; dizziness; sight or memory disorders).

**Diagnostic methods used**

**Diagnostics included in the special cardiovascular check-up:**

- Comprehensive medical history and thorough physical examination
- Analysis of bodily composition (bio-electrical impedance analysis)
- Measurement of lung function and lung volume (spirometry)
- Resting ECG (electrocardiogram)
- Pulse wave analysis
- Stress ECG (ergometry)
- Doppler sonography of the arm and leg arteries using ankle brachial pressure index
- Labs (blood tests, urine analysis)
- Ultrasound examination of the heart (colour and tissue doppler echocardiography)
- Ultrasound examination of the arteries of the neck (carotid duplex sonography), including measurement of vessel wall thickness (intima-media thickness)
- Ultrasound examination of the thyroid gland
- Ultrasound examination of the abdominal vessels and the kidneys

**Optional diagnostics where indicated:**

- Computer tomography of the heart (cardio CT) with coronary calcification measurement (coronary calcium scoring) and visualisation of the coronary blood vessels (non-invasive CT coronary angiography)

	<ul style="list-style-type: none"> <li>• Magnetic resonance imaging with visualisation of vessels (MR angiography)</li> <li>• Long-term blood pressure measurement over 24 hours</li> <li>• Long-term ECG over 24 hours</li> </ul>
<b>How much time to allow for</b>	You should allow for roughly between five and six hours for the examinations.
<b>Preparing for the appointment</b>	<p>In order to avoid influencing the lab values, it is important that you <b>fast</b> for the eight hours prior to your appointment (no solid food, still water allowed).</p> <p>We request that diabetic patients <b>not</b> take their anti-diabetic medication on the morning of the check-up. You can take all other medications as normal with still water.</p> <p>Otherwise, no special preparation is necessary. Should you have any results or reports from previous examinations, please bring these along with you. Ideally, these should be in German or English or have been translated.</p>
<b>Procedure</b>	<p><b>Welcome:</b></p> <p>We will welcome you in our preventive medicine area. Once you have signed in, your doctor will greet you and you will receive information about how the appointment will proceed from there.</p> <p><b>1. Preliminary examinations:</b></p> <ul style="list-style-type: none"> <li>• Bio-electrical impedance analysis: measurements and calculations of the body mass index, waist and hip circumference as well as bodily composition (fat, water, muscles)</li> <li>• Measurement of lung function and lung volume (spirometry)</li> <li>• Resting ECG</li> <li>• Pulse wave analysis and ankle brachial pressure index</li> <li>• Blood taken for blood tests, urine analysis (lab). in the blood analysis, values such as blood count, organ function, metabolic and mineral values are determined.</li> </ul> <p><b>2. Doctor consultation:</b></p> <p>In an extensive personal consultation, you will be asked about any current symptoms, previous illnesses, your family history and your lifestyle.</p> <p><b>3. Physical examination</b></p> <p>A thorough physical examination is then performed.</p> <p><b>4. Ultrasound diagnostics:</b></p> <p>Ultrasound examination of the carotid arteries of the neck, the heart as well as the abdominal vessels, the kidneys and the thyroid gland.</p> <p><b>5. Optional diagnostics where indicated:</b></p> <p>Should the special cardiovascular check-up indicate that it is necessary to carry out further examinations, in many cases, it may be possible for these to be carried out on the same day. This may include computer tomography of the heart (cardio CT) with coronary calcification measurement (coronary calcium scoring) and visualisation of the coronary blood vessels (non-invasive CT coronary angiography) as well as magnetic resonance imaging with visualisation of the vessels (MR angiography). A more extensive examination such as a long-term blood pressure measurement or long-term ECG is also conceivable.</p>

These services are not included in the package price.

**6. Final consultation:**

Once the examinations have been concluded, your doctor will provide you with thorough information about their results.

**7. Results folder and doctor's note:**

You will receive your personal results folder with all results and findings as well as extensive explanations and recommendations in the post between two and four days later.

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