



High Precision When Measuring Blood Pressure at Wrist

The two arteries at the wrist are located directly under the skin and are surrounded by much less soft tissue than in the upper arm. Furthermore, these arteries are significantly thinner than the artery in the upper arm.

The differences specified above result in the following advantages and disadvantages for patients:

- The wrist device is located close to the arteries from which signals are obtained, and the cuff does not surround as much soft tissue as when applied to the upper arm. Therefore, patients with large amounts of soft tissue on the upper arm have significantly fewer problems when taking readings at wrist.
- The thinner vessels at the wrist are more susceptible to arteriosclerosis, which often accompanies the aging process. In the presence of this condition, the wrist device can often produce error messages.
- Taking readings at the wrist is generally preferable and faster than at the upper arm. As a result, the blood pressure will be checked more often.
- Readings taken at the wrist are more sensitive to movement and can therefore produce error messages.
- The wrist monitor must be held at the same level as the heart when a reading is taken.

This means that wrist devices are more suitable for:

- Relatively young and middle-aged persons [except for those suffering from arteriosclerosis]
- Persons who should always have a blood pressure monitor with them
- Persons who have difficulties positioning the cuff correctly due to an overabundance of soft tissue on the upper arm
- Persons who are able to sit still and hold the device at the same level as the heart when a reading is taken
- Persons who must check their blood pressure frequently.

Wrist devices are less suitable for:

- Older persons [but only if they suffer from arteriosclerosis]
- Persons who are not able to sit still and hold the device at the same level as the heart.