



## Check your blood pressure (BP)

Blood pressure is taken using an instrument called a **blood pressure meter**.



Blood pressure is always given as two numbers, the systolic and diastolic pressure. They are written one before the other, such as 120/80 mmHg.<sup>1</sup>

There are different types of blood pressure meters. They monitor blood pressure either on the upper arm or the wrist.

Instructions:

- Place the inflatable cuff on the inside of the upper arm right above the elbow (or the artery on the inside of the wrist). The stethoscope must be placed on an artery.
  - Keep your arm at heart level while doing a blood pressure measure. You can rest your arm on a table in a comfortable place.
  - Press the “Start” button to pump air into the cuff. This will stop the flow of blood through the artery.
  - The air is automatically released from the cuff letting the blood flow again.
  - The sounds of the pulse picked up by the stethoscope are converted into digital figures. The screen shows two values, the systolic and the diastolic blood pressure.
- ⇒ First measure your partner’s resting BP.  
 ⇒ Then make her/him run up and down the stairs to the Biology room 10 times. Measure the blood pressure again.

name			
	systolic/diastolic	systolic/diastolic	systolic/diastolic
<b>resting BP</b>			
<b>BP after physical exercise</b>			

⇒ Compare your BP to the values given in the text.

Normal blood pressure ranges from 110 mm Hg to 150 mm Hg (as the ventricles contract) over 60 to 80 (as the ventricles relax). Patients with readings that exceed either of these ranges are treated for hypertension (high blood pressure). Readings below either of these ranges indicate hypotension (low blood pressure) which does not usually require treatment.

<sup>1</sup> Hg = chemical symbol for mercury (=Quecksilber). In original blood pressure meters the value was not shown as a digital figure, but measured as the rising and falling of mercury in a thin tube.

