How to use......The Automatic Blood Pressure Machine

Equipment needed:

Using the Monitor
Attaching the Arm Cuff
- Wrap the cuff around the upper arm, about 2 - 3 cm above the elbow. Place the cuff directly against the skin, as clothing may cause a faint pulse, and result in a measurement error.
- Constriction of the upper arm, caused by rolling up a shirtsleeve, may prevent accurate readings.

How to Take Correct Measurements
For the most accurate blood pressure measurement:
- Sit comfortably at a table.
- Rest your arm on the table at heart height.
- Relax for about five to ten minutes before measurement.
- Place the centre of the cuff at the same height as your heart.
- Remain still and keep quiet during measurement.
- Do not measure right after physical exercise. Rest for twenty or thirty minutes before taking the measurement.
- Try to measure your blood pressure at the same time every day.

Measurement
During measurement, it is normal for the cuff to feel very tight. (Do not be alarmed)

After Measurement
After measurement, record your data and remove the cuff. Press the START button to turn off the power.

Note: The device has an automatic power shut-off function, which turns the power off approximately one minute after measurement. Allow at least ten minutes between measurements on the same person.
How to use...... Measure Manual Blood Pressure

Equipment needed:

- The participant should be seated with their arm at heart level rested on a table with the palm facing up. Wrap cuff firmly around the upper arm; aligned with the brachial artery. The sphygmomanometer is placed so that it is clearly visible to the investigator.

- Place the cuff 2-3 cm above the elbow. The centre of the cuff should be over the brachial artery. Place the bell of the stethoscope firmly over the brachial artery slightly above the elbow.

- Close the air screw. Inflate the cuff so that it exceeds the systolic pressure (no sound). For the general population inflate the cuff up to 180 mmHg. When testing within the student population the first time 160 mmHg should be sufficient. On subsequent measurements inflate the cuff 20-30 mmHg higher than previous readings, e.g. if formal systolic BP is 120 mmHg, inflate to 140 mmHg.

- Slowly open the air release screw at a rate of 2-3 mmHg per second. The point where you hear repetitive clear tapping sounds for at least two beats gives the Systolic blood pressure. The point where the repetitive sounds disappear is the Diastolic blood pressure. Both measurements should be taken to the nearest 2 mmHg.

Blood Pressure Norms

<table>
<thead>
<tr>
<th>Condition</th>
<th>Systolic (mmHg)</th>
<th>Diastolic (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>&lt;110</td>
<td>&lt;70</td>
</tr>
<tr>
<td>Normal</td>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td>Mild Hypertension</td>
<td>140-160</td>
<td>90-100</td>
</tr>
<tr>
<td>Hypertension</td>
<td>160-200</td>
<td>100-120</td>
</tr>
</tbody>
</table>

N.B If you are measuring blood pressure before testing a participant’s blood pressure MUST BE BELOW 140/90 mmHg.