Mobvoi’s TicWatch GTH Pro features **Dual Sensor Technology** that Enables Highly Accurate Insights into Arterial and Heart Health.

**Dual Sensor Technology**

The dual PPG sensors on the TicWatch GTH Pro provide unique insights into arterial health and other biometrics through high-fidelity sensing points both on the wrist and through the finger.

The unique addition of a secondary and specialized PPG sensor on the side of the smartwatch allows for the capture of high-fidelity arterial health biometrics that traditional wrist-based sensors cannot.

With just the light touch of a finger on the side sensor, the TicWatch GTH Pro can measure a user’s arterial waveforms – pressure waves based on the strength of the pulse as blood flows through the body – with algorithms based on ATCOR’s SphygmoCor® technology.

Arterial waveforms measured through the side sensor can then be traced back to the heart and major arteries, providing valuable insights into the cardiovascular system never before seen in non-medical wearable devices.
Arty® Parameters

TicWatch GTH Pro is the first smartwatch in the world to feature the Arty Heart Health analytics platform, incorporating Arty Score, eCAP® (Exercise Capacity®), ArtyAge™, HSX™ (Heart Stress Index), and TruHR®.

**Arty Score**

Arty Score combines several arterial health parameters into a comprehensive, personal heart and arterial health score for easy, frequent review.

Based on proprietary algorithms derived from arterial waveform analysis, Arty Score quantifies each individual's unique cardiovascular profile, thereby offering individualized data, insights, and trends that can be used to monitor overall arterial health.

**eCAP (Exercise Capacity)**

eCAP is an indicator of fitness and directly measures blood flow to the inner muscle of your heart, which is important for overall heart health. Targeting a high eCAP is particularly important for individuals with a history of sub-optimal heart health to ensure the heart has adequate supply of blood to meet demand.

**ArtyAge**

ArtyAge measures the “stiffness” of an individual's arteries and indicates cardiovascular health relative to biological age. ArtyAge can be used to motivate a person to implement lifestyle changes aimed at improving their ArtyAge score.

**HSX (Heart Stress Index)**

HSX is a measurement of the extra load placed on the heart due to the stiffening of the arteries. Targeting a low HSX is important for overall and long-term heart health.

**TruHR**

TruHR is a highly accurate measurement of your heart rate that is similar to how heart rate is calculated from an electrocardiogram.

*ATCOR’s SphygmoCor® technology is the global gold standard in measuring central arterial waveforms. Used by leading pharmaceutical companies, medical researchers, and clinical specialists, SphygmoCor® enables advanced arterial analytics that power personalized insights into arterial health.*
### Case Study 1

**Activity** - Went through 6 weeks low-fat weight reduction diet.

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<tr>
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<th>Before</th>
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<tbody>
<tr>
<td>TruHR</td>
<td>75 bpm</td>
<td>68 bpm</td>
</tr>
<tr>
<td>ArtyAge</td>
<td>40-50</td>
<td>30-40</td>
</tr>
<tr>
<td>eCAP</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td>HSX</td>
<td>65%</td>
<td>30%</td>
</tr>
<tr>
<td>Arty Score</td>
<td>50%</td>
<td>70%</td>
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**Results**
- The diet has significantly decreased the load on his heart by reducing arterial stiffening - HSX dropping from 65% to 30%.
- There is also modest improvement in his heart performance capacity - eCAP increasing from 40% to 45%.
- The overall improvement is reflected in his Arty Score increasing from 50% to 70% over the 6-week period.

### Case Study 2

**Activity** - Increased exercise training time from 4 hours a week to 10 hours a week for 4 weeks.

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<tbody>
<tr>
<td>TruHR</td>
<td>60 bpm</td>
<td>60 bpm</td>
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<tr>
<td>ArtyAge</td>
<td>30-40</td>
<td>20-30</td>
</tr>
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<td>eCAP</td>
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<td>HSX</td>
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<td>30%</td>
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<tr>
<td>Arty Score</td>
<td>65%</td>
<td>75%</td>
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**Results**
- The increase in exercise has raised eCAP from 45% to 65%, indicating better blood flow to the inner muscle of the heart. This has the potential to protect her from exercise limitations that may occur from vascular disease in the heart.
- The additional exercise also modestly decreased the load on her heart by reducing arterial stiffening - HSX dropping from 40% to 30%.
- The overall improvement is reflected in her Arty Score increasing from 65% to 75% over the 2-week period.

Performance changes are based on actual study results.