A healthy microvascular system is important to provide nutrients and oxygen to all the cells in your body and remove waste products away from our organs.

Nutrients and oxygen enter the blood via the intestinal system and lungs respectively, and are distributed to your organs via the large arterial blood vessels. Inside the organs, delivery of nutrients and oxygen from blood to tissue cells occurs in the smallest blood vessels that are very close to individual tissue cells. These microvessels are imaged by the GlycoCheck system, and a number of important parameters are measured to be able to determine the health of the microvascular system.

A healthy microvascular system has a sufficient number of microvessels that facilitate blood flow to the tissue cells. The GlycoCheck system measures the total number of blood vessels (TOTAL DENSITY) and also determines how many of these are used to deliver nutrients and oxygen to the tissue cells (VALID DENSITY) by assessing the red cell content (RBC Filling %) of each individual blood vessel.

To maintain a healthy microvascular system and to prevent loss of microvessels, each microvessel of the microvascular system is coated with a protective gel-lining called the GLYCOCALYX. This protective coating prevents blood cells from sticking to the wall and fluid from leaking through the wall of microvessels. The GlycoCheck system measures how deeply red blood cells can penetrate into the protective glycocalyx coating, which is reflected in the PBR value. A high PBR value means deeper penetration and more damage of the glycocalyx lining.

Overall health of the microvascular system is represented by the MVHS Score (MicroVascular Health Score) that is calculated from VALID DENSITY, TOTAL DENSITY, RBC Filling % (higher values reflect better health) and PBR (lower values are better).

Preparing for Your GlycoCheck Assessment
For the most accurate results, the following guidelines should be followed:

1. Do not eat for 4 hours prior to testing.
2. Do not exercise for 12 hours prior to testing.
3. Do not consume alcohol for 24 hours prior to testing.
4. Drink at least 1 quart of water one hour before your test.
5. Do not drink caffeine the day of your test.
6. Rest for 15-20 minutes before your test (to reduce stress level).

What is the GlycoCheck Test?
GlycoCheck is non-invasive test, using a video microscope camera placed under the tongue. It evaluates your microvascular system down to the smallest capillaries and reflects your entire body’s health. The video microscope shows live movement of your red blood cells as they travel through your microvessels.

Research confirms that under-the-tongue measurements are indicative of the health of the entire vascular system which supplies nutrients and oxygen to the brain, eyes, heart, and kidneys.
Name: Sally Example

Date of Birth: 2/12/1965

Date of Test: 1/13/2017

**Video** - GlycoCheck™ measures and analyzes microvascular health and objectively reports your systemic MicroVascular Health Score™. The video in your report is from the video microscope placed under your tongue showing the movement of your red blood cells as they travel through your microvessels. Higher scores indicate a healthier microvascular system and a healthier glycocalyx lining in the microvessels, which is essential for good health and vitality.

<table>
<thead>
<tr>
<th>Date</th>
<th>Density Valid</th>
<th>Density Total</th>
<th>Red Blood Cell Filling %</th>
<th>Perfused Boundary Region</th>
<th>MicroVascular Health Score™</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/14/17</td>
<td>208</td>
<td>486</td>
<td>67.5%</td>
<td>2.10</td>
<td>0.42</td>
</tr>
<tr>
<td>4/14/17</td>
<td>322</td>
<td>648</td>
<td>68.1%</td>
<td>2.29</td>
<td>0.82</td>
</tr>
</tbody>
</table>

**Density Valid** - Number of blood vessels with more than 50% red blood cell content (higher number is better).

**Density Total** - Total number of blood vessels (higher number is better).

**Red Blood Cell Filling %** - Average red blood cell content of individual blood vessels (higher number is better).

**Perfused Boundary Region** - Part of glycocalyx that allows red blood cell access. A healthy glycocalyx protects the vessel wall and prevents circulating blood cells from getting too close to the vessel wall surface. When the glycocalyx is compromised, red blood cells penetrate deeper in the glycocalyx and blood vessels are more vulnerable (smaller number is better).

**MicroVascular Health Score™** - Overall score of microvascular health (higher number is better, range 0 - 5, average = 1).