

Total Body Impedence - Measurement of fluid content of body tissues and compartments.



How it is performed: Application of electrodes on the body.

Hematocrit. The proportion between blood cells and blood plasma, which is affected by the hydration status of the individual



How it is performed: blood drop taken from a finger by a painless minor puncture.

Hemoglobin. Measurement of the haemoglobin content in the blood. The Hemoglobin variation can be correlated, indirectly, with the activation of a protective mechanisms against stress.



How it is performed: blood drop taken from a finger by a painless minor puncture.



Urine Specific Gravity

A further way to monitor body fluid balance.

How it is performed: Collection of a sample of urine.

Post Dive Doppler Recording

To monitor Post-Dive circulating bubbles.



How it is performed: Precordial doppler recording.

Measure of vascular reactivity

This is an indirect index of Nitric Oxide's presence, Nitric Oxide is a chemical compound, produced by our organism, that helps protect from damages caused by gas bubbles



How it is performed: Probe positioned on a finger.

Pre dive Total Body vibration - This studies the possibility to deplete the body from pre-existing gas micronuclei in order to optimize decompression and minimize post-Dive circulating bubbles.



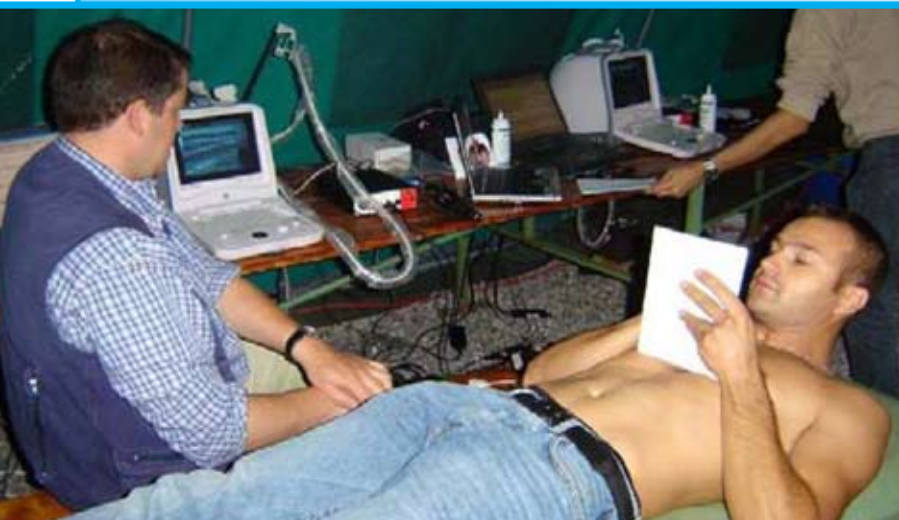
How it is performed: The diver will be vibrated by means of a special mattress.

Flow Mediated Dilation - This monitors the effect of diving on the production of Nitric Oxide and of its variations, as a consequence of diving and decompression stress.



How it is performed: by blood pressure measurement and non-invasive ecographic imaging of the brachial artery's diameter.

Post Dive Echocardiograph - To visualize possible gas bubbles in the heart cavities.



How it is performed: Positioning of echographic probes on the thorax