

EMG Muscle Tone Measurement

SPECIFIC TARGETS:

Identification and management of stress inducing factors with symptoms in the neck and shoulder area

CONTENTS:

- Measurement of the muscle tone (muscle tension) in the neck and shoulder area
- Assessment of the state of muscle tension comparing the two sides
- Learning simple techniques for direct stress management and focused muscle relaxation (biofeedback)
- QR-Code: Results and special exercises digitally available

SPECIFIC REQUIREMENTS:

Shoulder-neck area must be cleared for measurement

TIME REQUIRED:

15 minutes per person corresponding to 4 participants per hour

ORGANISATION:

Space requirement: $\geq 6 \text{ m}^2$, power socket: 230 V
Please provide 1 table and 2 chairs

PREVENTION PRINCIPLE:

Promotion of individual stress management competencies in the workplace.



EMG Muscle Tone Measurement

BACKGROUND:

Negative stress is a very common risk factor in the modern working world, which can lead to health related problems and illnesses in the long term. The musculature – as a mirror of the mind - frequently reacts by holding onto stress tension typically in the shoulder and neck region. To this are often added non-physiological sitting or working positions which place a strain on the musculature in the long term and increase muscle tension even more.

PROCESS:

The base muscle tension (muscle tone) is measured and evaluated using electromyography (EMG). Surface electrodes are attached in the region of the cervical spine and the upper edge of the shoulder. The reference points are easily accessible by opening the upper collar button.

RESULTS:

Following a short measurement time the muscle tone is determined and evaluated both individually and contralaterally. Depending on the measurement results, individual methods are identified in order to counteract or reduce muscle tension in a focused manner. The procedure also offers the benefits of a biofeedback training session, during which the tension values of the test person can be monitored on screen and can be directly impacted and checked using appropriate methods (relaxation exercises, focused muscle stretching etc.). This improves the ability to efficiently manage stress and to deal with muscle tensions in a sustained manner. The participants receive simple tips that can be easily implemented and learn fast and effective exercises for stress regulation, which can also be performed specifically in the workplace.

