

Pupillography sleep analysis

SPECIFIC TARGETS:

Detection of daytime sleepiness and reduced concentration as well as detection of their causes. Providing specific recommendations for optimising sleep health and regenerative ability.

INHALTE:

- Determination of the drowsiness index (rPUI) by measuring the pupil width and its fluctuations under resting conditions
- Quantification of daytime sleepiness in everyday life (ESS questionn.)
- Query of individual sleeping habits according to sleep medical standards
- Advice on the elimination or prevention of daytime sleepiness
- QR Code: Results digitally available

SPECIAL REQUIREMENTS:

Do not wear contact lenses for measurement, glasses must be removed

TIME REQUIRED:

20 minutes per person corresponding to 3 participants per hour

ORGANISATION:

Space requirement: $\geq 6 \text{ m}^2$, electricity supply: 230 V

Please provide 1 table and 2 chairs

PREVENTION PRINCIPLE:
Prevention and detection of daytime sleepiness and health risks



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BACKGROUND:

Sleep problems and sleep disorders are on the rise in the modern professional world. According to current studies, one in three people sleep insufficiently. The proportion is particularly high among working people, especially those who work irregular hours or in shifts: here, about one in two complains of poor sleep quality. Unhealthy sleeping behaviour increases the health risk in different ways: In the long run, it leads to increased stress, reduced concentration and reduced performance. From the point of view of accident prevention, the detection of daytime sleepiness is of central importance.

PROCESS:

The basic physiological principle of the scientifically recognized measuring method pupillography is based on the fact that the pupil width is controlled by the autonomic nervous system. During the measurement, the participants wear special glasses that measure the pupil diameter and its fluctuations over the entire measurement period of at least 5 minutes. In this way, the degree of sleepiness is quantified and evaluated. During the consultation, the personal conditions and habits that can cause or favour daytime sleepiness are also recorded.

RESULTS:

The causes of daytime sleepiness are multifactorial. Lack of sleep, difficulties in falling and staying asleep, especially lack of sleep hygiene, are considered the main causes. Indications of sleep-related breathing disorders and movement disorders during sleep can also be identified. The consultation concentrates on the individually relevant areas, whereby the optimisation of sleep hygiene and dealing with acute daytime sleepiness are usually the main focus. The participants receive printouts with their current measurement results, explanations and specific recommendations.

