

Biological exposure tests

Biological exposure tests (BET) are based on the detection of a substance from a given compartment and serve to determine the concentration of a given toxic substance in the body.

Their founder was Prof. Jaroslav Teissiger, founder of NzP, who collaborated with our first Nobel laureate, Jaroslav Heyrovsky (polarography). In his experimental work, he investigated the presence of toxic metals in the human body.

Distribution

- **Direct exposure tests** are based on the detection of a given nox or the product of its biotransformation in the body (e.g. lead in blood - plumbemia, styrene - mandelic acid in urine).
- **Indirect exposure tests** are based on the finding of the substance to which noxa binds (e.g. mercapturates in urine after exposure to alkylating agents).
- **False exposure tests** are based on the detection of a substance that is changed or affected by the effect of noxia (e.g. increased concentration of the enzyme AchE after exposure to organic solvents or decreased concentration of 5-ALA-dehydrogenase after exposure to Pb).

Links

Source

- BENCKO, Vladimír, et al. *Hygiena : Učební texty k seminářům a praktickým cvičením*. 2. přepracované a doplněné vydání edition. Karolinum, 2002. 205 pp. ISBN 80-7184-551-5.