

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.