

Top 5 Lessons Learned

1. It is of great importance to **study the exposome** as a non-genetic driver of **human health** and disease and the development of **low-grade gut inflammation**.
2. New concepts and sensitive methods needed, such as **exposomics, adductomics, non-targeted biomonitoring,** and stable isotope assisted **LC-HRMS based metabolomics**.
3. **Validation of biomarkers** needed (i) analytical and (ii) relationship of biomarkers and the effect on humans.
4. There is a massive **lack of authentic standards** for biomarkers and for the identification of xenobiotics (as a basis for reliable testing).
5. The **human exposome is vast**, highly dynamic and driven by lifestyle and season.