



## Micro Trace Minerals GmbH

30+ years of clinical & environmental  
laboratory diagnostics

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### News September 2012

- Look at our seminar calendar 2013: [www.microtrace.de/de/workshops/](http://www.microtrace.de/de/workshops/)
- E.Blaurock-Busch presents new information on Clinical Metal Toxicology at the ICIM (International College of Integrative Medicine) conference, held in Washington, DC on March 15, 2013. This is the summary of her lecture:  
[http://tracemin.com/fileadmin/uploads/pdf/en/ICIM\\_Workshop\\_proposal\\_Washington\\_DC\\_March\\_2013.pdf](http://tracemin.com/fileadmin/uploads/pdf/en/ICIM_Workshop_proposal_Washington_DC_March_2013.pdf)
- For conference information: <http://integrativemedicineconference.com/category/advanced-metal-toxicology-march-14>
- **NEW:** We activated our USA laboratory, Trace Minerals International Ltd in Boulder, Colorado, which we founded in 1984. Check our website [www.tracemin.com](http://www.tracemin.com). Contact us for more information.

- **Metals in Saliva**

The metal concentration in saliva reflects the abrasion of dental metals. Researchers stated that amalgam metals of fillings and crowns are released into saliva. Ingestion of mercury and other metals can lead to symptoms of chronic metal overexposure. *See attached sample report.*

Metals such as mercury or tin are neurotoxic. Amalgam can contain more than 50% mercury, about 20% or more of silver, and 10% of tin and copper. Long term ingestion can lead to deposits in organ sites. Exposure can be confirmed with a urine provocation test (DMSA or DMPS) or a hair mineral analysis. Prof. Dr. med. Gerhard et al, University of Heidelberg, Germany demonstrated a correlation between the metal concentration in saliva (mercury, gold, molybdenum) and oral symptoms such as metal taste, dry mouth, bleeding and inflammation of the dental cavity, including herpes. [www.microtraceminerals.com/en/diagnostic-humans/saliva-amalgam/](http://www.microtraceminerals.com/en/diagnostic-humans/saliva-amalgam/) or [www.tracemin.com/en/diagnostic-humans/saliva-amalgam/](http://www.tracemin.com/en/diagnostic-humans/saliva-amalgam/)

- **Alzheimer, Amyloid Proteins and Zinc**

Zinc is an essential trace element in human biology, but is neurotoxic at high concentrations. Several studies show that zinc promotes aggregation of  $\beta$ -amyloid protein, the main component of the senile plaques typically found in Alzheimer's disease brains. In other neurological disorders where neurons appear to be dying by apoptosis (gene-directed cell death), chelatable zinc accumulates in the perikarya of neurons before, or during degeneration. Neuropathological changes mediated by endogenous or exogenous stressors may be relevant factors affecting abnormal zinc metabolism. This paper reviews current investigations that suggest a role of zinc in the etiology of Alzheimer's disease.

<http://www.sciencedirect.com/science/article/pii/S0165017397000027>