

#### 100 INGESTION OF NUTMEG (*MYRISTICA FRAGRANS*)

Hentschel H<sup>1</sup>, Greyer H<sup>1</sup>, Stein U<sup>2</sup>. *Poisons Information Centre Erfurt, Nordhäuser Strasse 74, D-99089 Erfurt*<sup>1</sup>; *Department of Legal Medicine Erfurt, Institute of Legal Medicine, Friedrich-Schiller-University Jena*<sup>2</sup>, Germany

**Objective:** In the past the majority of nutmeg abuse was reported by prisoners, college students, and adolescents as a substitute for other drugs. Never before have myristicin concentrations been determined in human specimens. We report a series of seven poisoning cases and one fatal case after ingestion from 1996-1998. In two cases myristicin was measured by means of HPLC. **Case series:** Except in one case nutmeg powder or seeds were abused. Doses of 20-80 g of powder (approx. 280-1100 mg/kg) were ingested. In one case 19 nutmegs (approx. 133 g) were eaten. CNS disorders, tachycardia, mydriasis, nausea, and vomiting were reported up to 20 hours after ingestion. A myristicin blood level of 2 µg/mL was measured 8 hours after ingestion of 2-3 tablespoonfuls of nutmeg powder (approx. 14-21 g, 280-420 mg/kg, respectively). Life-threatening situations were never observed in these cases and the treatment was always symptomatic. **Fatal Case:** The cause of death of a 55-year-old woman could not be solved by autopsy, but the stomach content has had a conspicuous nutmeg-like odor. HPLC analysis of postmortem serum revealed a myristicin level of 4 µg/mL. Furthermore flunitrazepam (72 ng/mL) was found. **Conclusion:** Ingestion of more than 15-20 g nutmeg (both powder and seeds) induces gastrointestinal, cardiovascular and central nervous symptoms after several hours. In such cases myristicin is detectable in the blood. The estimated dose ingested in the fatal case is 560-840 mg/kg (39-59 g/70 kg).