

## 水产—研究报告

### 基于蒙特卡罗的水产品中甲醛定量风险评估

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#### 摘要:

通过开展水产品中的甲醛定量风险评估工作,量化中国普通居民食用水产品途径的甲醛膳食风险水平。运用基于蒙特卡罗模拟的@risk软件,以风险商表征食用水产品途径的甲醛膳食风险。评估结果表明,中国普通居民通过食用鲜活水产品及干制水产品途径摄入甲醛的风险商平均值和各百分位数风险商均小于1,且通过食用干制水产品途径的甲醛膳食风险商平均值和各百分位数均比食用鲜活水产品途径的甲醛膳食风险商平均值和各百分位数要低1个数量级。因而,中国普通居民仅通过食用水产品途径的甲醛膳食暴露尚不存在健康风险,但是仍需加强对鲜活水产品中甲醛的控制和监测,从而进一步降低中国普通居民食用水产品途径的甲醛膳食风险水平。

**关键词:** @risk

### Primary Study on Quantitative Risk Assessment of Dietary Formaldehyde in Aquatic Product by Monte Carlo Simulation

#### Abstract:

Conduct quantitative risk assessment to evaluate the risk level of formaldehyde by means of aquatic products' dietary consumption. Hazard quotient was employed to characterize the dietary risk of formaldehyde via eating aquatic products with the application of @risk software basing on Monte Carlo simulation. The results showed that the average and each percentile of the hazard quotient of general population through consuming both aquatic products and dried fishery products were all less than 1. Moreover, the average and every percentile of hazard quotient by dietary consumption of dried fishery products was almost one order of magnitude lower than that by dietary consumption of fresh aquatic products. Therefore, to the general population, the dietary exposure of formaldehyde only by aquatic products' consumption was unlikely to bring about severe health risk. But the control and monitoring of formaldehyde in fresh aquatic products should be strengthened to further reduce the dietary formaldehyde risk level of the general population.

**Keywords:** @risk

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