

COMMITTEE ON TOXICITY OF CHEMICALS IN FOOD, CONSUMER PRODUCTS AND THE ENVIRONMENT

EFSA Scientific Opinion on Statistical Significance and Biological Relevance

Issue

1. The Scientific Committee of the European Food Safety Authority (EFSA) has issued a scientific opinion on statistical significance and biological relevance. COT members have agreed that it would be useful to discuss this opinion.

Introduction

2. The EFSA opinion was developed to assist the EFSA Scientific Panels and Committee in assessment of biologically relevant effects. The opinion is presented in Annex A.

3. The opinion discusses a number of statistical considerations, including:

- the distinction between biological relevance and statistical significance,
- null hypothesis versus equivalence testing
- multiple testing
- significance test versus confidence intervals

4. A number of conclusions and recommendations are made, which could be of relevance to the evaluations conducted by the COT.

Questions on which the views of the Committee are sought

5. Members are invited to consider EFSA opinion and advise on the implications for the working of the COT.

**Secretariat
October, 2011**

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**EFSA Scientific Opinion on Statistical Significance and
Biological Relevance**

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Note: For copyright reasons the paper in the Annex is not included in the published version on the COT website. The bibliographic details are listed above.