ADVISORY COMMITTEE ON ANIMAL FEEDINGSTUFFS

63rd Meeting of ACAF on 26 February 2014

Presentation Paper Dr Christer Hogstrand - Vice Chairman of the FEEDAP Panel

EFSA's FEEDAP Panel: Consumer exposure

Secretariat February 2014

ACAF/14/02



European Food Safety Authority

EFSA's FEEDAP Panel: Consumer exposure.

Dr. Christer Hogstrand Vice-Chair of the FEEDAP Panel

Meeting of the Advisory Committee on Animal Feedingstuffs London, 26 February 2014

Legal basis



Regulation (EC) No 178/2002

- General principles / requirements of Food Law
- Establishment of EFSA

DECISION CONCERNING THE ESTABLISHMENT AND OPERATIONS OF THE SC AND PANELS

(MB 17 October 2002; MB 11 September 2007)

Mandate of the FEEDAP Panel: to assess the safety for the target species, the user/worker, the consumer of products of animal origin and the environment, and the efficacy of biological and chemical products/substances intended for deliberate addition/use in animal feed





Regulation (EC) No. 1831/2003 on additives for use in animal nutrition.

Establish a **Community procedure for authorising the placing on the market and use of feed additives** and to lay down the rules for the supervision and labelling of feed additives and pre-mixtures

Regulation (EC) No. 429/2008 for preparation and presentation of applications.

EFSA Guidance documents





How the process works





The FEEDAP Panel



One Chair: Kristen Serjsen (Denmark)

Two Vice-Chairs: Guido Rychen (France) Christer Hogstrand (Sweden)

Elected at the first plenary meeting

Term: 3-years, Max 3 mandates





Year

Risk assessment of feed additives



(1) HAZARD IDENTIFICATION

(3) EXPOSURE ASSESSMENT

Occurrence data x Food consumption

EXPOSURE

Relevant food groups, adults and specific groups of the population, time trends

(2) HAZARD CHARACTERISATION

Toxicokinetic variability (ADME), acute/sub/chronic toxicity, human data, genotoxicity, mode/mechanism of action, doseresponse for critical effect, derivation of a health based guidance value





Relates exposure to a chemical in a given population with toxicological effects (health based guidance value/margin of exposure), and concludes with the likelihood of adverse effects.



Aim:

To assess the safety of the use of the additives related to consumer exposure to food products derived from animals given feed or water containing or treated with the additive and containing residues of the additive or its metabolites



Safety for the consumer





Metabolism studies



Metabolic pathways are assumed to be similar within a species



Toxicity data used:



Toxicokinetics

 absorption, distribution, metabolism and excretion



Toxicology

- Mutagenicity/genotoxicity
- Carcinogenicity
- Reproductive effects (e.g. impaired fertility, developmental changes)
- Other:Immunotoxicity

Consumer Exposure

worst case scenario



Worst case scenario

✓ Concentrations of total relevant residues in tissues/ products

 Theoretical daily adult human consumption figures (g wet tissue/products)

	Mammals	Birds	Fish	
Muscle	300	300	300*	
Liver	100	100	-	
Kidney	50	10	-	
Fat	50**	90***	-	
+ Milk	1500	-	-	
+ Eggs	-	100	-	
*: Muscle and skin in natural proportions **: For pigs 50 g of fat and skin in natural proportions ***: Fat and skin in natural proportions				

Consumer Exposure Refined exposure scenario



 Data from the EFSA Comprenhensive European Food Consumption Database, values represent the high intake (95th percentile) of consumers only for each food item

Chronic Intake vs. Acute Intake

Chronic	Toddlers	Adults
Muscle	90	290
Liver	-	60
Kidney	-	15
Fat	-	30
Milk	1050	1500
Eggs	35	70
Honey	-	30
Fish	65	125
Seafood	-	75

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Recommendations? Thanks a lot for your attention

Questions?