



**MINUTES OF THE 11<sup>TH</sup> PLENARY MEETING  
OF THE SCIENTIFIC PANEL ON  
FOOD ADDITIVES, FLAVOURINGS, PROCESSING AIDS  
AND MATERIALS IN CONTACT WITH FOOD  
Held in Parma on 26-28 April 2005**  
(The minutes were adopted on 7 June 2005 by written procedure)

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FOOD ADDITIVES, FLAVOURINGS, PROCESSING AIDS  
AND MATERIALS IN CONTACT WITH FOOD (AFC)  
Held in Parma on 26-28 April 2005**

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**PARTICIPANTS**

Panel Members:

Robert Anton (1<sup>st</sup> and 2<sup>nd</sup> day), Susan Barlow (chair); Dimitrios Boskou; Laurence Castle; Riccardo Crebelli; Wolfgang Dekant; Karl-Heinz Engel; Werner Grunow (2<sup>nd</sup> vice chair)(from 2<sup>nd</sup> day); Catherine Leclercq (1<sup>st</sup> and 2<sup>nd</sup> day); Wim C. Mennes; Maria Rosaria Milana (1<sup>st</sup> and 2<sup>nd</sup> day), Kettil Svensson; Paul Tobback; Fidel Toldrá.

Experts

Jean-Claude Lhuguenot (3<sup>rd</sup> day); Jørn Gry (1<sup>st</sup> and 2<sup>nd</sup> day);

Apologies

Stephen Forsythe, Marina Heinonen; John Christian Larsen (1<sup>st</sup> vice chair); Iona Pratt; Ivonne Rietjens

EFSA

Torben Hallas-Møller (scientific co-ordinator of AFC Panel), Dimitrios Spyropoulos (assistant scientific co-ordinator of AFC Panel); Anne Theobald (assistant scientific co-ordinator of AFC Panel); Lourdes Suarez Gonzalez (assistant scientific co-ordinator of AFC Panel); Maud Pâques (administrative secretary of AFC Panel); Ilse Koenig (administrative assistant of AFC Panel); Anita Janelm (Institutional and International Affairs) (3<sup>rd</sup> day).

Commission

Almut Bitterhof;

**1. WELCOME, APOLOGIES FOR ABSENCE**

The Chair welcomed the members and others attending from EFSA and the Commission.  
Apologies were noted.

**2. ADOPTION OF THE AGENDA**

The agenda was adopted.

**3. DECLARATIONS OF INTEREST**

These are noted under the specific item on phthalates (item 10.2-.4), semicarbazide (item 11.1) and poultry treatment (item 11.2)

#### **4. MATTERS ARISING FROM THE 10<sup>TH</sup> PLENARY MEETING ON 22-23 FEBRUARY 2005**

Action points were noted. The minutes were adopted and can be seen on [http://www.efsa.eu.int/science/afc/afc\\_meetings/807\\_en.html](http://www.efsa.eu.int/science/afc/afc_meetings/807_en.html)

Concerning the item on Neotame (item 7.2 of the minutes) the Panel was informed that the petitioner will be responding to the Panel's request for further information.

#### **5. GENERAL INFORMATION FROM EFSA AND THE COMMISSION**

The Secretariat welcomed the Members to the first plenary meeting to be held in Parma. They were informed that ClubAir would stop its direct flights Brussels-Parma as from 2 May.

The Members were informed about the draft new Regulations on food additives, food enzymes and on food flavourings and of the discussions on these in the working groups on food additives and on flavourings, which had met in the week before. Especially it was stressed that it would be important that updated guidelines for submission of dossiers on food enzymes should be in place when the Regulation comes into force. The additive working group had therefore already now decided to initiate this work and would discuss a first draft at their next meeting.

#### **6. FEEDBACK FROM RECENT MEETINGS OF THE SCIENTIFIC COMMITTEE**

The chair informed Members of the 11<sup>th</sup> and 12<sup>th</sup> meetings of the Scientific Committee (SC) held on 28 February to 1 March and 14-15 April 2005. Main issues were the evaluation of EFSA, which has begun and will consider, among other topics, the workload and configuration of the Panels, and a further discussion on botanicals and botanical preparations, for which there is now a mandate and soon a Working Group of the SC will be set up. Members views were sought on the draft opinion of the SC on substances that are both genotoxic and carcinogenic.

Further details can be found in the minutes from the SC meeting:

[http://www.efsa.eu.int/science/sc\\_committee/sc\\_meetings/catindex\\_en.html](http://www.efsa.eu.int/science/sc_committee/sc_meetings/catindex_en.html)

#### **7. FOOD ADDITIVES**

##### **7.1. An enzyme preparation based on thrombin:fibrinogen derived from cattle and/or pigs as a food additive for reconstituting food.**

The rapporteur introduced the changes following the receipt of the information requested from the petitioner at the last meeting. The draft opinion was discussed and a number of revisions were agreed to the text and subject to these revisions the opinion was adopted.

The enzyme preparation consists of thrombin (EC 3.4.21.5) and fibrinogen, both obtained from blood plasma. The thrombin:fibrinogen preparation is applied to meat where thrombin transforms fibrinogen to fibrin that interacts with collagen enabling the binding of meat pieces in re-constituted meat. It is intended also to be applied on poultry, fish and seafood.

As the preparation is derived from edible parts of animals and as no enzyme activity will remain after cooking and ingestion of the treated meat the Panel concluded the use of this thrombin:fibrinogen, derived from cattle and/or pigs, as a food additive for reconstituting food is not of concern from the safety point of view.

The Panel noted that any labelling requirements would be dealt with by the risk managers.

The full opinion can be found at

[http://www.efsa.eu.int/science/afc/afc\\_opinions/946\\_en.html](http://www.efsa.eu.int/science/afc/afc_opinions/946_en.html)

## **8. SUBSTANCES USED AS NUTRIENT SOURCES**

### **8.1. Tocopheryl acid succinate (TAS)**

This opinion had been adopted in principle at the last meeting, but the final adoption of the text was deferred to this meeting. The changes decided at the last meeting were introduced and the Panel adopted the opinion.

The Panel had been asked to advice on the safety and bioavailability of D- $\alpha$ -tocopheryl acid succinate (TAS) as a source of vitamin E in foods for particular nutritional purposes (PARNUTS), foods intended for the general population and food supplements.

Based on the submitted data the Panel concluded TAS, as a source of vitamin E is not of concern from the safety point of view for the requested uses.

The full opinion can be found at

[http://www.efsa.eu.int/science/afc/afc\\_opinions/925\\_en.html](http://www.efsa.eu.int/science/afc/afc_opinions/925_en.html)

## **9. FLAVOURINGS**

### **9.1. Flavouring group evaluations**

The opinions on the following flavouring group evaluations were introduced by the Flavis Chair. There was extensive discussion of these drafts. A number of substantive changes to the text were agreed, together with a number of editorial changes. The Chair of the Flavourings Working Group, the Flavis Secretariat and the Panel Secretariat would revise the documents.

#### **9.1.1. *FGE13 Furfuryl and furan derivatives with and without additional side-chain substituents and heteroatoms from chemical group 14***

The opinion was adopted.

The Panel was asked to evaluate 18 flavouring substances in the Flavouring Group Evaluation FGE.13, using the procedure as referred to in the Commission Regulation EC No 1565/2000.

The biotransformation of the four esters of furfuryl alcohol in the present Flavouring Group Evaluation leads to the formation of furfural, a reactive hepatotoxic aldehyde. Furfural is

then oxidised to furoic acid, which can be conjugated with glycine yielding innocuous and readily excreted products. Also, the candidate substance ethyl furfuracrylate can be biotransformed to furoic acid. However, the furan ring of the candidate substance furoic acid and the furan moieties of the two candidate furoate esters may be completely oxidised to CO<sub>2</sub>, with the opening of the furan ring and production of reactive intermediates. Therefore it cannot be predicted that these eight flavouring substances included in subgroup 1 are metabolised to innocuous products.

In addition to the above mentioned pathways, 5-hydroxymethylfurfuraldehyde can be bioactivated to 5-[(sulfoxy)methyl] furfural, through sulphonation of its allylic hydroxyl functional group, catalyzed by sulphotransferases. The resulting ester has been demonstrated to induce genotoxic effects.

Based on the general knowledge on the metabolism of sulphur-containing compounds, the flavouring substances bearing a free thiol group can be considered reactive per se interacting with endogenous sulphur-containing substances, e.g. glutathione and proteins, thus triggering adverse effects. The candidate furfuryl and furan monosulphides are expected to undergo oxidation mainly to the corresponding sulfoxides and sulphones. Alternatively they can be conjugated with glutathione, giving rise to mixed disulphides, which can be oxidised to thiosulphinates or thiosulphones or reduced to free thiols. Similar metabolic pathways may be predicted for the candidate disulphides and very likely for the trisulphide. Given the reactivity of thiol groups, whether free or resulting from di(tri)sulphide, and their importance in cell physiology, it cannot be excluded that all the nine flavouring substances included in subgroup 2 of the present Flavouring Group Evaluation interfere with normal cell function and therefore, they cannot be predicted to be metabolised to innocuous substances.

Short-term and long-term toxicity studies are available for two flavouring substances included in subgroup 1, and for three related supporting substances, including furfural. They indicate that the liver is the critical target for their toxicity. Recently EFSA has established an ADI value of 0.5 mg/kg bw for furfural and the furfural component of furfural diethyl acetal.

No toxicity data are available on flavouring substances included in subgroup 2; however results from toxicity studies on 16 supporting substances have been reported. Many of the available studies were performed either with a single dose level or multiple dose levels that produced no effects; the dose producing no adverse effects ranged between 0.45 and 10 mg/kg/day.

Data on genotoxicity were available on two flavouring substances and on five structurally related substances. Overall, except for the flavouring substance 5-hydroxymethylfurfuraldehyde, the *in vitro* and *in vivo* data available do not give rise to concern with respect to genotoxicity of the remaining eight flavouring substances included in subgroup 1. Based on *in vitro* data on the mutagenic activity of a sulphate conjugate of **5-hydroxymethylfurfuraldehyde**, there is sufficient evidence to raise concern about a genotoxic potential. **Accordingly, the Procedure cannot be applied for this substance pending submission of *in vivo* genotoxicity data.**

The lack of data on the sulphur-containing flavouring substances included in subgroup 2, or on the structurally related substances, does not allow to conclude on their genotoxicity.

It was considered that on the basis of the default Maximised Survey-derived Daily Intakes (MSDIs) approach, to estimate the per capita intakes of the flavouring substances in Europe, the 17 flavouring substances which could be taken through the Procedure would not give rise to safety concerns at the estimated levels of intake arising from their use as flavouring substances.

When the estimated intakes were based on the modified Theoretical Added Maximum Daily Intake (mTAMDI) approach, based on the normal use levels reported by industry, they

ranged from 75 to 3700 microgram/person/day for the 16 flavouring substances from structural class II. Thus, the intakes for nine of the flavouring substances were above the threshold of concern for structural class II of 540 microgram/person/day. The estimated intakes of two flavouring substances assigned to structural class III, based on the mTAMDI are 150 microgram/person/day, which is above the threshold of concern for structural class III of 90 microgram/person/day.

Thus for 10 of the 17 flavouring substances taken through the Procedure, the intakes, estimated on the basis of the mTAMDI, exceed the relevant threshold for their structural class, to which the flavouring substance has been assigned. Therefore, for these 10 substances more reliable exposure data are required. On the basis of such additional data, these flavouring substances should be reconsidered along the steps of the Procedure.

The full opinion can be found at

[http://www.efsa.eu.int/science/afc/afc\\_opinions/catindex\\_en.html](http://www.efsa.eu.int/science/afc/afc_opinions/catindex_en.html)

#### 9.1.2. *FGE.14 Phenethyl alcohol, aldehyde, esters, and related phenylacetic acid esters from chemical group 15*

The opinion was adopted.

The Panel was asked to evaluate ten flavouring substances in the Flavouring Group Evaluation FGE.14, using the procedure as referred to in the Commission Regulation EC No 1565/2000.

All ten flavouring substances are expected to be metabolised to innocuous substances.

Overall, the data available are not sufficient to evaluate the genotoxicity adequately, however, the data available on candidate and supporting substances do not give rise to concern with respect to genotoxicity of the ten candidate substances in this flavouring group evaluation. Consideration was given to ethanol and acetaldehyde, two potential hydrolysis products of the acetals. Because of the natural occurrence in food and the endogenous formation in humans of considerably larger amounts of these compounds, their formation from hydrolysis of the acetals was not considered to be of safety concern with respect to genotoxicity at their estimated levels of intakes, based on the MSDI approach.

It was noted that where toxicity data were available they were consistent with the conclusions in the present flavouring group evaluation using the Procedure.

It is considered that on the basis of the default Maximised Survey-derived Daily Intakes (MSDIs) approach, to estimate the per capita intakes of the flavouring substances in Europe, these ten substances would not give rise to safety concerns at levels of intake arising from their use as flavouring substances.

When the estimated intakes were based on the modified Theoretical Added Maximum Daily Intake (mTAMDI) approach based on the normal use levels reported by industry, they ranged from 1600 to 3700 microgram/person/day for the ten flavouring substances from structural class I. Thus, the intakes were above the threshold of concern for structural class I of 1800 microgram/person/day, except for one candidate substance. The one substance, which has an mTAMDI intake below the threshold of concern for structural class I, is also expected to be metabolised to innocuous products.

Thus, for nine of the ten flavouring substances considered in this opinion the intakes, estimated on the basis of the mTAMDI, exceed the relevant threshold for the structural class to which the flavouring substance has been assigned. Therefore, for these nine substances

more reliable exposure data are required. On the basis of such additional data, these flavouring substances should be reconsidered along the steps of the Procedure.

The full opinion can be found at

[http://www.efsa.eu.int/science/afc/afc\\_opinions/catindex\\_en.html](http://www.efsa.eu.int/science/afc/afc_opinions/catindex_en.html)

## 9.2. Smoke flavouring guidance paper

Some minor amendments were made to the Panel's Guidance on Smoke Flavourings with clarification concerning the information requested concerning derived smoke flavour products.

The updated guidance can be found at

[http://www.efsa.eu.int/science/afc/afc\\_guidance/680\\_en.html](http://www.efsa.eu.int/science/afc/afc_guidance/680_en.html)

## 10. FOOD CONTACT MATERIALS

### 10.1. Possibility to apply for DEHA the TRF (Total Reduction Factor = DRF x FRF) of 5

The draft opinion was extensively discussed and the opinion was adopted with minor changes.

The Panel had been asked by the Commission whether or not, for the substance di(2-ethylhexyl) adipate (DEHA) used as plasticizer in flexible PVC films, a Total Reduction Factor (TRF) of 5 could be used for all food packaging applications.

The current procedure for estimating consumer exposure to substances migrating from food contact materials into food assumes a person consumes 1 kg of packaged food daily. However, in the case of fat, it has been demonstrated that the total daily fat consumption by European adults does not exceed 200 g. To take account of this, migration values into fatty foods are corrected by a Fat (Consumption) Reduction Factor (FRF), variable from 1 to 5.

Migration of substances from food contact materials into fatty foods can be estimated using the fat simulant, olive oil. Olive oil is known to extract higher quantities of migrants than do many fatty foods themselves. To take account of this, migrant values obtained using olive oil (Simulant D) are corrected by applying a reduction factor, known as the DRF, variable from 1 to 5. The Total Reduction Factor (TRF) is obtained by multiplying the DRF by the FRF and cannot exceed a value of 5.

The Panel concluded that the studies presented of migration from plasticized PVC films, provided too limited a basis to demonstrate that a Total Reduction Factor (TRF) of 5 could be used for DEHA in all food packaging applications.

The general applicable reduction factors (DRF) set in Directive 85/572/EEC for fish, meat and poultry are currently 3 and 4. The Panel concluded, however, that in the special cases presented, for fresh meat, poultry and fish with less than 20% fat and intended to be over wrapped on trays using plasticized PVC films and then stored for up to four days under refrigerated conditions, followed by 4 h at 25°C, application of a simulant D reduction factor



of 5 could be justified, provided the migration with simulant D is determined after a contact period of 10 days at 20°C.

In line with the remarks from the former Scientific Committee on Food, when expressing its opinion on the introduction of a Fat (Consumption) Reduction Factor (FRF) ([http://europa.eu.int/comm/food/fs/sc/scf/out149\\_en.pdf](http://europa.eu.int/comm/food/fs/sc/scf/out149_en.pdf)), the Panel wished to express that it is its task to evaluate concentrations in foodstuffs, and consequent exposure, as part of the risk assessment process. In the Panel's work the migration into foodstuffs takes priority over any simulations using model foods (simulants), if data for foodstuffs are available. It is within the responsibility of the Commission to ensure that, if food simulants are used to test materials for compliance with migration limits, then the simulants and their associated conventions are reliable.

The full opinion can be found at  
[http://www.efsa.eu.int/science/afc/afc\\_opinions/catindex\\_en.html](http://www.efsa.eu.int/science/afc/afc_opinions/catindex_en.html)

## **10.2 – 10.4 Phthalates**

The Chair indicated that she had an indirect interest in phthalates and would therefore vacate the Chair in favour of the 2<sup>nd</sup> Vice Chair. Following consultation with the Deputy Executive Director, it was decided that although this was not a conflict of interest the Chair should not participate in the discussion. Interests (advising national authorities or conducting studies on phthalates) were also declared by the following Members; Laurence Castle, Wim Mennes; Maria Rosaria Milana and Kettil Svensson. None of these were considered conflicts of interest by the 2<sup>nd</sup> Vice Chair and all were invited to participate in the discussion.

### **10.2. Di-butyl phthalate (DBP) REF No 74880**

The rapporteur introduced the changes to the draft opinion and there was extensive discussion of the draft. A number of changes to the text were requested, together with a number of editorial changes. The opinion was adopted in principle, subject to completion of the review of all 5 phthalates (DBP, BBP, DEHP, DIDP and DINP), when the opinions on all 5 will be published together.

### **10.3. Butylbenzyl phthalate (BBP) REF No 74560**

The rapporteur introduced the changes to the draft opinion and there was extensive discussion of the draft. A number of changes to the text were requested, together with a number of editorial changes. The opinion was adopted in principle, subject to completion of the review of all 5 phthalates (DBP, BBP, DEHP, DIDP and DINP), when the opinions on all 5 will be published together.

### **10.4. Bis(2-ethylhexyl) phthalate (DEHP) REF No 74640**

The rapporteur introduced the changes to the draft opinion and there was extensive discussion of the draft. A number of changes to the text were requested, together with a number of editorial changes. The opinion was adopted in principle, subject to completion of the review of all 5 phthalates (DBP, BBP, DEHP, DIDP and DINP), when the opinions on all 5 will be published together.

## 10.5. 8<sup>th</sup> list of substances for food contact materials

The draft opinion on the following substances was modified and adopted:

Ref. No.:	47500
Name of the substance:	N,N'-dicyclohexyl-2,6-naphthalene dicarboxamide
CAS number:	153250-52-3
Classified in list:	3
Restriction:	5 mg/kg food
Ref. No.:	67360 and 47600
Name of the substance:	Mono-n-dodecyltin tris(isooctyl mercaptoacetate) and Di-n-dodecyltin bis(isooctyl mercaptoacetate)
CAS number:	067649-65-4 and 084030-61-5
Classified in list:	3
Restriction:	0.05 mg/kg food (as sum of mono-n-dodecyltin tris(isooctyl mercaptoacetate), di-n-dodecyltin bis(isooctyl mercaptoacetate), mono-dodecyltin trichloride and di-dodecyltin dichloride) expressed as the sum of mono- and di-dodecyltin chloride

The full opinion can be found at

[http://www.efsa.eu.int/science/afc/afc\\_opinions/960\\_en.html](http://www.efsa.eu.int/science/afc/afc_opinions/960_en.html)

For the following substance further clarification was requested and a proposal for more detailed examination of recent experimental data was discussed. It was decided to seek advice from outside experts in toxicokinetics and the discussion was deferred until the next plenary:

Ref. No.:	72081/10
Name of the substance:	Petroleum Hydrocarbon Resins (hydrogenated)
CAS number:	088526-47-0

## 11. OTHER ISSUES WITHIN THE REMIT OF THE AFC PANEL

### 11.1. Semicarbazide

For this item Kettil Svensson declared that he had been involved in one of the key studies behind the new opinion on the genotoxicity of semicarbazide (SEM). This was considered to be not in conflict and the chair decided that he could participate in the discussion.

The rapporteur presented the changes to the draft opinion and the draft was discussed and changes were suggested. The opinion was adopted, but the summary would have to be adopted by written procedure.

The best documented sources of SEM in food are from the illegal use of nitrofurazone as veterinary drug and from the breakdown of azodicarbonamide in foamed PVC gaskets used to seal glass jars and bottles. SEM has also been found in flour treated with azodicarbonamide as a dough improver, a practice that is not permitted in the EU. It has also been reported to be formed as a reaction product of the action of hypochlorite on food additives such as carrageenan and on foods such as egg white powder. Finally, SEM may be present at background levels naturally, may be formed at low levels when some foods are dried, and may also derive from as yet unidentified sources.

On the basis of the information available, migration of SEM from gaskets is the most significant source of exposure. The data on SEM concentrations in food, originating from gaskets, supplied by different countries were similar. Taking a conservative scenario for an infant of 9 months old with a body weight of 8.8 kg and eating exclusively food and drink from glass jars and bottles contaminated with SEM at an average concentration of 13 µg/kg, the intake of SEM would be 0.35 µg/kg bw/day for an average (consumers only) consumption of 234 gram per day and the intake would be 0.69 µg/kg bw/day for consumption at the 95<sup>th</sup> percentile of 464 gram per day. For an infant with a body weight of 4.5 kg and fed exclusively each day with 700 mL of ready to feed infant milk packaged in glass bottles with metal lids and PVC seals, containing SEM at an average concentration of 9 µg/kg, the intake would be 1.4 µg/kg bw/day.

Adult exposures to SEM are likely to be much lower than infant exposures, due to the lower contribution of foods packaged in glass bottles and jars to the total diet of adults, the lower contamination levels derived from the smaller gasket areas involved for that packaging, and the higher adult body weight. Taking an assumption that 1 kg of food contaminated with SEM at an average concentration of 1.0 µg/kg is consumed each day, the exposure for a 60 kg bodyweight adult would be 0.02 µg/kg bw/day.

Commission Directive 2004/1/EC prohibits the use of azodicarbonamide in food contact materials from 2<sup>nd</sup> August 2005 and so, once existing stocks of packaged foods are used up, exposure of consumers by this route will have been eliminated. The Panel was informed that industry is making significant progress on the development of new seal technology and expects to be able to meet the date of August 2005 for the ban on the use of azodicarbonamide in food contact materials.

Since EFSA issued its previous advice on SEM in October 2003, further studies on genotoxicity have become available. The Panel concluded that the weak genotoxicity exerted by SEM *in vitro* is not expressed *in vivo*. These new data allay the concern on genotoxicity *in vivo*, and the likely reductions in exposure following replacement of the most significant, currently known source of SEM in the diet (gaskets on glass jars and bottles), offer further support to the preliminary advice given by EFSA in 2003 that the risk, if any, from consumption of foods containing SEM is judged to be very small, not only for adult consumers but also for infants. In this respect, the Panel noted that SEM is a weak non-genotoxic carcinogen for which a threshold mechanism can be assumed. A large margin of at least 5 orders of magnitude exists between the dose causing tumours in experimental animals and human exposure, including that of infants. The Panel concluded that the issue of carcinogenicity is not of concern for human health at the concentrations of SEM encountered in food.

The full opinion can be found at

[http://www.efsa.eu.int/science/afc/afc\\_opinions/1005/afc\\_op\\_ej219\\_semicarbazide\\_en1.pdf](http://www.efsa.eu.int/science/afc/afc_opinions/1005/afc_op_ej219_semicarbazide_en1.pdf)

## 11.2. Treatment of poultry carcasses with chlorine dioxide, acidified sodium chlorite, trisodium phosphate and peroxy acids

For this item Fidel Toldrá declared that his laboratory had just signed a contract with a meat producing company. As the scope of the contract was outside the area of treatment of meat with antimicrobials it was decided that this should not be considered a conflict of interest and he could participate in the discussion.

The Plenary discussed the question which has been put to the Panel by the Commission regarding toxicological risks to public health from possible reaction products resulting from the treatment of poultry carcasses with chlorine dioxide, acidified sodium chlorite, trisodium phosphate or peroxyacids. The Panel was informed that other public health aspects, such as antimicrobial efficacy of such treatments and potential risks from residues of the treatment agents themselves, have already been addressed by the Scientific Committee on Veterinary Measures relating to Public Health ([http://europa.eu.int/comm/food/fs/sc/scv/out63\\_en.pdf](http://europa.eu.int/comm/food/fs/sc/scv/out63_en.pdf)). The Panel noted that very few data have been submitted to EFSA concerning either the identity of possible reaction products or the concentrations of such products that may be present in treated carcasses. The Panel further noted that there is potential for formation of numerous reaction products with proteins and lipids and that not only would chemical characterisation of these be difficult, but there is unlikely to be much toxicological information on any individual reaction products. In the absence of good qualitative and quantitative information on possible reaction products, the Panel will only be able to offer limited advice identifying some possible hazards and the nature of the uncertainties inherent in the use of such treatments. It will not be possible to carry out a risk assessment.

## 12. WORKING PROGRAMME

Since the last meeting of the Panel until 28 April the following questions have been received

### **Food additives :**

EFSA-Q-2005-017 Polyvinyl alcohol (PVA)

EFSA-Q-2005-031 Nisin (E 234) (reevaluation)

EFSA-Q-2005-032 Use of formaldehyde as a preservative during the manufacture and preparation of food additives

### **Nutrient sources in food supplements**

EFSA-Q-2005-033 Calcium amino acid chelate

EFSA-Q-2005-034 Copper amino acid chelate

EFSA-Q-2005-035 Chromium amino acid chelate

EFSA-Q-2005-036 Magnesium amino acid chelate

EFSA-Q-2005-037 Manganese amino acid chelate

EFSA-Q-2005-038 Zinc amino acid chelate

EFSA-Q-2005-039 Ferrous bisglycinate (iron amino acid chelate)

EFSA-Q-2005-044 Calcium ascorbate / threonate

### **Flavourings**

Q numbers to be assigned to Evaluation of 92 flavouring substances received after the establishment of the Register of Flavouring Substances

### **Food contact materials**

EFSA-Q-2005-041 Guidelines on the submission and preparation of applications for the safety evaluation of active and intelligent components to be used in active and intelligent materials intended for food contact

EFSA-Q-2005-052 1,2-Bis(triethoxysilyl)ethane

EFSA-Q-2005-053 3-aminopropyltriethoxysilane  
EFSA-Q-2005-054 Dicyclopentadiene, dimmer: 3a,4,7,7a-  
Tetrahydro-4,7-  
methanoindene: Bicyclopentadiene

**Other**

EFSA-Q-2005-069 Fluoride removal treatment of natural mineral  
waters

The updated register of questions can be seen on the EFSA website at  
[http://www.efsa.eu.int/register/qr\\_panels\\_en.html](http://www.efsa.eu.int/register/qr_panels_en.html).

### **13. ANY OTHER BUSINESS**

There was no further business.