MIMUTES OF THE 30TH MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Tele-web conference, 16 April 2020

(Agreed on 16 April 2020)

Participants

- Working Group Members:
  Christina Tlustos

- Hearing Experts\textsuperscript{1}:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Yi Liu, Ivana Nikodinoska

- Others:
  Not Applicable

\textsuperscript{1} As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf.
1. Scientific topic(s) for discussion

1.1. Input data for estimating the dietary exposure to food enzymes used in egg processing and refined sugar production (EFSA-Q-2020-00168)

The WG finalised the food categories and technical factors. An open call-for-data is to be launched in the coming days.

1.2. Discussion whether modified lecithin should be included in the egg processing or to be kept as separate process (EFSA-Q-2020-00168)

The WG decided to keep the modified egg lecithin as a separate process, since this process is only relevant for certain food enzymes used in egg processing and modified lecithin can be from egg lecithin and other sources such as soya lecithin.

2. Any Other Business

None
This meeting, originally scheduled as a physical meeting, was converted into a teleconference to avoid traveling to EFSA in line with the measures established to reduce the risk of coronavirus infection.

Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  Catherine Evrevin

- EFSA:
  FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Simone Lunardi, Joaquim Maia, Ivana Nikodinoska, Irene Nuin, Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Elsa Nielsen (all days), Henk Van Loveren (1st day morning).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence1 and the Decision of the Executive Director on Competing Interest Management2, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion


The WG discussed additional data received during the pre-notification phase and revised the draft opinion accordingly. It will be scheduled in the Panel for discussion and possible re-adoption.


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   The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.


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    The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.
5. Any Other Business

5.1. Ad-hoc meeting with AMFEP members on joint dossiers

A technical meeting with AMFEP about joint dossiers took place on 16 March 2020. More information is available [here](#).

5.2. Explanatory note on protein hydrolysates in infant formulae from NUTRI

Draft document prepared by the NUTRI Unit was discussed. Provided that technical information is available, possibility of collaboration between the two WGs was identified.

6. Next meeting

The meeting will take place from 05/05/2020 till 06/05/2020 via tele (due to the Covid-19 restrictions).
SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 28th MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Tele-meeting, 25 - 26 February 2020

(Agreed on 10/03/2020)

This meeting, originally scheduled as a physical meeting, was converted into a teleconference to avoid traveling to EFSA in line with the measures established to reduce the risk of coronavirus infection.

Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn
- Hearing Experts:
  Not Applicable
- European Commission and/or Member States representatives:
  Catherine Evrevin
- EFSA:
  FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Simone Lunardi, Joaquim Maia, Ivana Nikodinoska, Irene Nuin, Sandra Rainieri
- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from: Elsa Nielsen (1st day morning), Henk Van Loveren (1st day morning), Claudia Bolognesi (1st day afternoon).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting, which includes item 4.17.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme lysophospholipase from a genetically modified *Aspergillus niger* (NZYM-LP) (EFSA-2014-00919)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.2. Evaluation of the food enzyme glucan, 1,4-alpha-glucosidase from a genetically modified *Trichoderma reesei* (DP-Nzh38) (EFSA-2016-00177)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme phospholipase A1 from a genetically modified *Aspergillus niger* (strain NZYM-FP) (EFSA-2019-00639)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.4. Evaluation of the food enzyme dextranase from *Chaetomium erraticum* (AE-DX) (EFSA-2015-00685)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

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4.5. Evaluation of the food enzyme OBT-001 from a genetically modified strain of *Escherichia coli* (strain BL21(DE3)) ([EFSA-2019-00444](#))

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.6. Evaluation of the food enzyme isomaltulose synthase from *Protaminobacter rubrum* Z12A ([EFSA-2015-00620](#))

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.7. Evaluation of the food enzyme D-allulose 3-epimerase from a genetically modified strain of *Escherichia coli* (strain K-12 W3110) ([EFSA-2019-00445](#))

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.8. Evaluation of the food enzyme lactoperoxidase from bovine milk ([EFSA-2017-00041](#))

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.9. Evaluation of the food enzyme chymosin and pepsin from stomachs of lambs and kids (young goats) ([EFSA-2017-00044](#))

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.10. Evaluation of the food enzyme chymosin and pepsin from stomachs of calves and cows ([EFSA-2016-00658](#))

Not discussed due to the lack of time.

4.11. Evaluation of the food enzyme chymosin, pepsin and gastricin from stomachs (abomasum) of kids (young goats) ([EFSA-2017-00045](#))

Not discussed due to the lack of time.

5. Any Other Business

5.1. Joint dossiers

The general discussion on the way of proceeding with joint dossiers took place. The strategy for these dossiers will be presented to the applicants during the ad-hoc meeting in March 2020.
6. Next meeting

The meeting will take place from 31/03/2020 to 01/04/2020 via tele.
SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 27TH MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Parma, 19 February 2020

(Agreed on 19 February 2020)

Participants

- Working Group Members:
  Christina Tlustos

- Hearing Experts¹:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Yi Liu

- Others:
  Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf
1. Scientific topic(s) for discussion

1.1. Input data for estimating the dietary exposure to food enzymes used in fats and oils processing for interesterification (EFSA-Q-2020-00168)

The WG finalised the food categories and technical factors. An open call-for-data is to be launched in coming days.

2. Any Other Business

None
Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  Cathrine Evrevin, Jiri Sochor, Marina Marini

- EFSA:
  FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Simone Lunardi, Joaquim Maia, Irene Nuin, Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from: Elsa Nielsen (1st day morning).

2. Adoption of agenda

The agenda was adopted without changes, except for the addition of item 4.17.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting, which includes item 4.17.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme triacylglycerol lipase from a genetically modified strain of Hansenula polymorpha (strain DP-Jzk33) (EFSA-2015-00374)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.2. Evaluation of the food enzyme 4-alpha-D-\{(1\rightarrow 4)a-D-glucano\} trehalose trehalohydrolase/(1\rightarrow 4)-alpha-D-glucan 1-alpha-D-glucosylmutase from Arthrobacter ramosus (EFSA-2016-00135-136)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme cyclomaltodextrin glucanotransferase from Bacillus circulans (EFSA-2016-00523)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.4. Evaluation of the food enzyme alpha-amylase from a genetically modified strain of Pseudomonas fluorescens (BD15754) (EFSA-2016-00200)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.5. Evaluation of the food enzyme Phospholipase C produced by a genetically modified strain of *Bacillus licheniformis* (strain NZYM-VR) (EFSA-2019-00442)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.6. Evaluation of the food enzyme catalase from porcine livers (EFSA-2016-00101)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.7. Evaluation of the food enzyme catalase from hog (pig) liver (EFSA-2017-00406)

The WG partially discussed the draft opinion and needs further discussion.

4.8. Evaluation of the food enzyme lysozyme from hen's egg (EFSA-2015-00395)

Not discussed due to the lack of time.

4.9. EC mandate to EFSA for scientific and technical assistance regarding the JECFA Public consultation on the evaluation of enzyme preparations used in foods (EFSA-2020-00026)

The WG revised the draft document and endorsed the technical report. This output will be published in the EFSA Journal.

5. Any Other Business

None.

6. Next meeting

The meeting will take place from 25/02/2020 to 26/02/2020 in Parma.
SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 25th MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Tele-web conference, 29 November 2019

(Agreed on 03/12/2019)

Participants

- Working Group Members:
  Andrew Chesson (Chair, via TC), Pier Sandro Cocconcelli (via TC)

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  None

- EFSA:
  FIP Unit: Ana Gomes (via TC), Natalia Kovalkovicova (via TC)

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion


The WG discussed draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

5. Any Other Business

None.

6. Next meeting

The meeting will take place from 22/01/2020 to 23/01/2020 in Parma.

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SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 24th MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Parma, 20 - 21 November 2019

(Agreed on 21/11/2019)

Participants

- **Working Group Members:**
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn

- **Hearing Experts:**
  Not Applicable

- **European Commission and/or Member States representatives:**
  None

- **EFSA:**
  FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes (via TC), Natalia Kovalkovicova, Yi Liu, Simone, Lunardi, Joaquim Maia, Irene Nuin, Sandra Rainieri

- **Others:**
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from: Pier Sandro Cocconcelli (1\textsuperscript{st} day afternoon).

2. Adoption of agenda

The agenda was adopted without changes, except for the addition of item 4.17.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\textsuperscript{1} and the Decision of the Executive Director on Competing Interest Management\textsuperscript{2}, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting, which includes item 4.17.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme endo-1,4-beta-xylanase/beta-glucanase from \textit{Disporotrichum dimorphosporum} (DXL) (\texttt{EFSA-2014-00355-356})

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.2. Evaluation of the food enzyme glucan 1,4-alpha-maltohydrolase from a genetically modified \textit{Bacillus licheniformis} (DP-Dzr50) (\texttt{EFSA-2016-00096})

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme endo 1,4-beta xylanase from a genetically modified strain of \textit{Aspergillus acidus} (RF 7398) (\texttt{EFSA-2014-00165})

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.4. Evaluation of the food enzyme amylase from \textit{Bacillus amyloquefaciens} (strain BANSC) (\texttt{EFSA-2014-00730})

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

\textsuperscript{1} http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

4.5. Evaluation of the food enzyme xylanase from a genetically modified Trichoderma reesei (RF5703) (EFSA-2014-00410)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.


The WG discussed the document and made relevant changes. It will be scheduled in the Panel for discussion and possible adoption.

4.7. Evaluation of the food enzyme beta-galactosidase from a genetically modified Escherichia coli (BglA MCB3) (EFSA-2015-00622)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.8. Evaluation of the food enzyme endo-1,4-beta-xylanase from a genetically modified strain of Bacillus subtilis (DP-Ezd31) (EFSA-2015-00839)

The WG discussed additional information received and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.9. Evaluation of the food enzyme xylanase from a genetically modified Trichoderma reesei (RF5427) (EFSA-2014-00735)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.10. Evaluation of the food enzyme polygalacturonase from Talaromyces cellulolyticus/Talaromyces pinophilus (EFSA-2016-00528)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.11. Evaluation of the food enzyme lipase from a genetically modified Aspergillus niger (NZYM-DB) (EFSA-2015-00234)

The WG discussed the draft opinion and further input from dietary exposure is needed.


The WG discussed the draft opinion and further input from dietary exposure is needed.

4.13. Evaluation of the food enzyme protease complex consisting of trypsin, chymotrypsin, elastase and carboxypeptidase from pig pancreas (EFSA-2015-00066)

The WG discussed the draft opinion in the context of a possible common strategy for performing risk assessment of the food enzymes derived from edible parts of animals. The discussion will be continued in the future.

The WG discussed the draft opinion in the context of a possible common strategy for performing risk assessment of the food enzymes derived from edible parts of animals. The discussion will be continued in the future.

4.15. **Evaluation of the food enzyme trypsin from porcine pancreatic glands** ([EFSA-2015-00338](https://efsasearch.ifsapa.com/en/efsajournal/))

The WG discussed the draft opinion in the context of a possible common strategy for performing risk assessment of the food enzymes derived from edible parts of animals. The discussion will be continued in the future.


The WG discussed the draft opinion in the context of a possible common strategy for performing risk assessment of the food enzymes derived from edible parts of animals. The discussion will be continued in the future.


The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

5. **Any Other Business**

EFSA reported discussion and activities from the participation to the EC meeting of the working party of governmental experts on food enzymes on 11/11/2019.

6. **Next meeting**

The meeting will take place from 22/01/2020 to 23/01/2020 in Parma.
Participants

- Working Group Members:
  José Manuel Barat Baviera, Claudia Bolognesi, Alicja Mortensen, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  None

- EFSA:
  FIP Unit: Jaime Aguilera (Chair), Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence
The Chair welcomed the participants.
No apologies were received.

2. Adoption of agenda
The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members
In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme polygalacturonase from *Talaromyces cellulolyticus* / *Talaromyces pinophilus* (EFSA-2016-00528)
The WG discussed the draft opinion, which needs further discussion. The draft opinion will be discussed at a future WG meeting.

5. Any Other Business
None.


Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  None

- EFSA:
  FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes (via TC), Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Irene Nuin, Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Henk van Loveren (on the 2\textsuperscript{nd} day afternoon) and Pier Sandro Cocconcelli (on the 2\textsuperscript{nd} day afternoon).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme alpha-amylase from \textit{Aspergillus oryzae} (DP-Bzb41) (EFSA-2016-00176)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.2. Evaluation of the food enzyme alpha-amylase from a genetically modified strain of \textit{Bacillus licheniformis} (DP-Dzb25) (EFSA-2016-00202)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme alternansucrase from \textit{Leuconostoc citreum} (NRRL B-30894) (EFSA-2016-00209)

The WG discussed and finalised the draft opinion on the basis of the available data, the applicant did not provide the additional information requested by EFSA. The opinion will be scheduled in the Panel for discussion and possible adoption.

4.4. Evaluation of the food enzyme xylose isomerase from a genetically modified strain of \textit{Streptomyces rubiginosus} (DP-Pzn37) (EFSA-2016-00203)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption in the future.

4.5. **Evaluation of the food enzyme xylanase from Bacillus pumilus (BLXSC)** ([EFSA-2014-00844](EFSA-2014-00844))

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.6. **Evaluation of the food enzyme endo-1,4-β-xylanase from Trichoderma reesei (MUCL 49755)** ([EFSA-2017-00085](EFSA-2017-00085))

The WG discussed the draft opinion together with additional information received and needs further discussion. The draft opinion will be discussed at a future WG meeting.

4.7. **Evaluation of the food enzyme lipase from a genetically modified strain of Aspergillus niger (NZYM-DB)** ([EFSA-2015-00234](EFSA-2015-00234))

The WG discussed the draft opinion together with additional information received to identify possible common strategy for performing risk assessment of the food enzymes used in oils and fats processing. The discussion will be continued in the future.

4.8. **Evaluation of the food enzyme tricylglycerol lipase from a genetically modified Aspergillus niger agg. (strain FL108SC)** ([EFSA-2016-00099](EFSA-2016-00099))

The WG discussed the draft opinion together with additional information received to identify possible common strategy for performing risk assessment of the food enzymes used in oils and fats processing. The discussion will be continued in the future.

4.9. **Evaluation of the food enzyme amylase from Bacillus amyloquefaciens (strain BANSC)** ([EFSA-2014-00730](EFSA-2014-00730))

The WG discussed the draft opinion together with additional information received and needs further clarification from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.10. **Evaluation of the food enzyme cellulase from Penicillium funiculosum (DP-Lzc35)** ([EFSA-2016-00098](EFSA-2016-00098))

The WG discussed additional information received and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.11. **Evaluation of the food enzyme protease complex consisting of trypsin, chymotrypsin, elastase and carboxypeptidase from pig pancreas** ([EFSA-2015-00066](EFSA-2015-00066))

The WG used the draft opinion as an example to discuss a possible common strategy for performing risk assessment of the food enzymes derived from edible parts of animals. The discussion will be continued in the future.

4.12. **Evaluation of the food enzyme isoamylase from Pseudomonas amyloferosa** ([EFSA-2016-00524](EFSA-2016-00524))

The WG discussed additional information received and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

5. Any Other Business
5.1. **Proposal to assess dietary exposure in grain processing**

The WG discussed and agreed on the assessment approach for the applications indented for grain processing.

6. **Next meeting**

The meeting will take place from 20/11/2019 to 21/11/2019 in Parma.
SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 21TH MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Dublin, 4 - 5 September 2019

(Agreed on 20 09 2019)

Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  None

- EFSA:
  FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes (via TC), Natalia Kovalkovicova (via TC), Yi Liu, Joaquim Maia (via TC), Irene Nuin (via TC), Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: PS. Cocconcelli (on the 1st day afternoon and on the 2nd day afternoon), H. Zorn (on the 1st day afternoon and on the 2nd day morning).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme endo-1,4-beta-xylanase and beta-glucanase from *Disporotrichum dimorphosporum* (DXL) (EFSA-2014-00355-356)

The WG discussed additional information received and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.2. Evaluation of the food enzyme cellulase from a genetically modified strain of *Trichoderma reesei* (DP-Nzc36) (EFSA-2015-00454)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme triacylglycerol lipase from a genetically modified strain of *Hansenula polymorpha* (DP-Jzk33) (EFSA-2015-00374)

The WG discussed additional information received and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.4. Evaluation of the food enzyme glucan 1,4-alpha-glucosidase from a genetically modified strain of *Trichoderma reesei* (DP-Nzh63) (EFSA-2016-00173)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.


4.5. **Evaluation of the food enzyme 4-Phytase from a genetically modified strain of *Trichoderma reesei* (DP-Nzt55) (EFSA-2015-00665)**

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.6. **Evaluation of the food enzyme triacylglycerol lipase from a genetically modified strain of *Trichoderma reesei* (RF10625) (EFSA-2016-00212)**

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.7. **Evaluation of the food enzyme triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* agg. (FL100SC) (EFSA-2015-00447)**

The WG discussed the draft opinion together with additional information received to identify possible common strategy for performing risk assessment of the food enzymes used for oils and fats processing. The discussion will be continued in the future.

4.8. **Evaluation of the food enzyme beta-galactosidase from *Bacillus circulans* (strain M3-1) (EFSA-2016-00210)**

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.9. **Evaluation of the food enzyme beta-galactosidase from *Sporobolomyces singularis* (YIT 10047) (EFSA-2016-00529)**

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.10. **Evaluation of the food enzyme alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzb52) (EFSA-2016-00093)**

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.11. **Evaluation of the food enzyme alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzb45) (EFSA-2016-00143)**

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.


The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.13. **Evaluation of the food enzyme glucan, 1,4-alpha-glucosidase from a genetically modified strain of *Trichoderma reesei* (DP-Nzh38) (EFSA-2016-00177)**
The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

5. Any Other Business

5.1. **European Flavour Association (EFFA) position regarding intake data needed to perform dietary and toxicological assessment of the enzyme**

The WG acknowledged EFFA position paper and will take it into consideration in the future.

5.2. **EC register of food enzymes**

The WG discussed the proposal provided by the Commission and provided further comments that will be forwarded to the Commission.

6. Next meeting

The meeting will take place from 01/10/2019 to 02/10/2019 in Parma.
Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  Cathrine Evrevin (DG SANTE)

- EFSA:
  FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme maltogenic amylase from a genetically modified strain of *Escherichia coli* (BLASC) (EFSA-2015-00446)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.2. Evaluation of the food enzyme chitinase from a genetically modified strain of *Streptomyces violaceoruber* (pChi) (EFSA-2015-00621)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme xylose isomerase from a genetically modified strain of *Streptomyces rubiginosus* (DP-Pzn37) (EFSA-2016-00203)

The WG discussed additional information received and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.4. Evaluation of the food enzyme alpha, alpha trehalase from a genetically modified strain of *Trichoderma reesei* (DP-Nzs51) (EFSA-2016-00142)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

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4.5. **Evaluation of the food enzyme triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* agg. (strain FL108SC) ([EFSA-2016-00099](#))**

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.6. **Evaluation of the food enzyme β-galactosidase from *Sporobolomyces singularis* (strain YIT 10047) ([EFSA-2016-00529](#))**

The WG discussed the legal framework and risk assessment strategy. The discussion will be continued in the future.

4.7. **Evaluation of the food enzyme protease complex consisting of trypsin, chymotrypsin, elastase and carboxypeptidase from pancreas of pigs ([EFSA-2015-00066](#))**

The WG discussed the draft opinion to identify possible common strategy for performing risk assessment of the food enzymes derived from edible parts of animals. The discussion will be continued in the future.

5. **Any Other Business**

5.1. **On-going dossier overview**

The WG was informed about the current status of the applications including the ones for the discussion at the future WG meeting.

5.2. **On-going call-for-data**

The WG was informed on the recently published calls-for-data for the wine and coffee processes.

6. **Next meeting**

The meeting will take place from 04/09/2019 to 05/09/2019 in Dublin.
SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 19TH MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Parma, 7 - 8 May 2019

(Agreed on 21 05 2019)

Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Laurence Vernis, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Claudia Roncancio Peña, Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received for: Claudia Bolognesi (2 days), Christina Tlustos (2 days) Christine Horn (on the 1st day), Irene Nuin (on the 1st day).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme alpha-amylase from a genetically modified B. licheniformis (DP-Dzb44) (EFSA-2015-00836)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.2. Evaluation of the food enzyme glucan 1,4-alpha-maltotetrahydrolase from a genetically modified B. licheniformis (DP-Dzf24) (EFSA-2015-00448)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme from L-Ascorbate oxidase from C. pepo/C. moschata (EFSA-2015-00825)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.4. Evaluation of the food enzyme inulinase from a genetically modified A. oryzae (MUCL 44346) (EFSA-2015-00337)

The WG discussed molecular part of the draft opinion and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.5. Evaluation of the food enzyme cyclomaltodextrin glucanotransferase from a genetically modified *E. coli* K12 (WCM105xpCM703) (EFSA-2016-00530)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.6. Evaluation of the food enzyme cyclomaltodextrin glucanotransferase from a genetically modified *E. coli* K12 (WCM105xpCM6420) (EFSA-2016-00531)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.7. Evaluation of the food enzyme *alpha*-amylase from *A. oryzae* (DP-Bzb41) (EFSA-2016-00176)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.8. Evaluation of the food enzyme alternansucrase from *L. citreum* (NRRL B-30894) (EFSA-2016-00209)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.9. Evaluation of the food enzyme lipase from a genetically modified *A. niger* (EFSA-2015-00234)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.10. Evaluation of the food lysophospholipase from a genetically modified *A. niger* (NZYM-LP) (EFSA-2014-00919)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.11. Evaluation of the food isoamylase from *P. amyloderamosa* (MU 1174) (EFSA-2016-00524)

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

The WG discussed the draft opinion and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.


The WG finalised discussion on the scientific statement on the characterisation of microbial strains used as production organisms of food enzymes. It will be scheduled in the Panel for discussion and possible adoption.

5. Any Other Business

5.1. **Joint dossiers**

The WG was introduced to the applications submitted in the form of joint dossiers and discussed whether existing approaches to assessment could be applied. Further discussion was considered necessary.

5.2. **Future calls for data**

New calls for data will be launched for coffee processing and wine production.

6. Next meeting

The meeting will take place from 18/06/2019 to 19/06/2019 in Brussels.
SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 18TH MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

TELE-conference, 09 April 2019

(Agreed on 29 April 2019)

Participants

- Working Group Members:
  Claudia Bolognesi, Jose Manuel Barat Baviera, Holger Zorn, Pier-Sandro Cocconcelli and Andrew Chesson (Chair)

- Hearing Experts¹:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Jaime Aguilera, Christine Horn

- Others:
  Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf.
1. Scientific topic(s) for discussion

1.1. Beta-galactosidase from *Sporobolomyces singularis* ([EFSA-Q-2016-00529](#))

   The WG discussed the dossier and further discussion is needed at a future WG meeting.

1.2. Isomaltulose synthase from *Protaminobacter rubrum* (Z 12 A) ([EFSA-Q-2015-00620](#))

   The WG discussed all parts of the dossier and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

2. Any Other Business

   None
Participants

- Working Group Members:
  Andrew Chesson, Pier Sandro Cocconcelli, Lieve Herman, Laurence Vernis

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Jaime Aguilera (Chair), Ana Gomes, Sandra Rainieri

- Others:
  Not Applicable

1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from Boet Glandorf.

2. Adoption of agenda

The agenda was adopted without changes.
3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Characterisation of microbial strains used as production organisms of food enzyme (EFSA-Q-2019-00018)

The WG continued discussions on the scientific statement on the characterisation of microbial strains used as production organisms of food enzymes and decided that further discussion is needed.

5. Any Other Business

Not Applicable

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Participants

- Working Group Members:
  Christina Tlustos

- Hearing Experts\(^1\):
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Christine Horn, Yi Liu
  DATA Unit: Davide Arcella

- Others:
  Not Applicable

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\(^1\) As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: [http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf](http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf)
1. Scientific topic(s) for discussion


The WG discussed the broad spectrum of food categories and variable amount of food enzyme-TOS that may be present in food ingredients produced during grain processing. It is agreed that an open call-for-data is needed.

2. Any Other Business

None
Participants

- Working Group Members:
  Andrew Chesson (Chair), Claudia Bolognesi, Alicja Mortensen, Holger Zorn

- Hearing Experts¹:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Irene Nuin, Sandra Rainieri

- Others:
  Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf.
1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from Holger Zorn.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^2\) and the Decision of the Executive Director on Competing Interest Management\(^3\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme endo-1,4-beta-xylanase and beta-glucanase from \textit{D. dimorphosporum} (DXL) (EFSA-2014-00355-356)

The WG discussed the additional data received and needs further additional information from the applicant. Once the additional information is received, the revised draft opinion will be discussed at a future WG meeting.

5. Any Other Business

None

6. Next meeting(s)

The meeting will take place between 2/04/2019 and 4/04/2019 in Parma.


SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 14TH MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

Parma, 20 - 21 March 2019

(Agreed on 1 April 2019)

Participants

- Working Group Members:
  Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Alicja Mortensen, Christina Tlustos, Laurence Vernis, Holger Zorn

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Claudia Roncancio Peña, Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Irene Nuin, Joaquim Maia, Sandra Rainieri

- Others:
  Not Applicable
1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Evaluation of the food enzyme endo-1,4-beta-xylanase and beta-glucanase from D. dimorphosporum (DXL) (EFSA-2014-00355-356)

The WG discussed the additional information received and is awaiting the receipt further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.2. Evaluation of the food enzyme alpha-amylase from Aspergillus niger (DP-Azb60) (EFSA-2016-00273)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Evaluation of the food enzyme alpha-amylase from B. circulans/P. alginolyticus (EFSA-2016-00521-522)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.4. Evaluation of the food enzyme phospholipase C from a genetically modified P. pastoris (PRF) (EFSA-2016-00201)

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.5. **Evaluation of the food enzyme glucan 1,4-alpha-maltotetrahydrolase from a genetically modified *Bacillus licheniformis* (DP-Dzr46) (EFSA-2016-00095)**

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.


The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.7. **Evaluation of the food enzyme xylanase from a genetically modified *Bacillus licheniformis* (NZYM-CE) (EFSA-2015-00064)**

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.8. **Evaluation of the food enzyme xylanase from *Trichoderma reesei* (RF5703) (EFSA-2014-00410)**

The WG discussed the additional information received and needs further additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.9. **Evaluation of the food enzyme endo-1,4-β-xylanase from *Trichoderma reesei* (MUCL 49755) (EFSA-2017-00085)**

The WG discussed the additional information received. Once the dietary exposure assessment is complete, the draft opinion will be further discussed at a future WG meeting.

4.10. **Characterisation of microbial strains used as production organisms of food enzyme (EFSA-2019-00018)**

The WG continued discussion on the scientific statement on the characterisation of microbial strains used as production organisms of food enzymes and decided that further discussion is needed.

5. **Any Other Business**

None

6. **Next meeting**

The meeting will be take place from 7/05/2019 to 8/05/2019 in Parma.
SCIENTIFIC PANEL ON FOOD CONTACT MATERIALS, ENZYMES AND PROCESSING AIDS (CEP)

MINUTES OF THE 13TH MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

TELE-conference, 13 March 2019

(Agreed on 27 March 2019)

Participants

- Working Group Members:
  Andrew Chesson, Jose Manuel Barat Baviera, Christina Tlustos, Holger Zorn

- Hearing Experts¹:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Magdalena Andryszkiewicz, Christine Horn, Natalia Kovalkovikova, Yi Liu, Irene Nuin, Sandra Rainieri

- Others:
  Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf.
1. Scientific topic(s) for discussion

1.1. **Approach to assess the dietary exposure to food enzymes used for GOS and FOS production** ([EFSA-Q-2018-00585](#))
   The WG discussed and agreed on the approach for performing dietary exposure assessment to food enzymes used to produce galactooligosaccharides (GOS) and fructooligosaccharides (FOS).

1.2. **Beta-galactosidase from GM *E. coli*** ([EFSA-Q-2015-00622](#))
   The WG discussed the technical and exposure assessment parts of the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

1.3. **Beta-galactosidase from *B. circulans* (strain M3-1)** ([EFSA-Q-2016-00210](#))
   The WG discussed additional information received on the technical and exposure assessment and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

1.4. **Beta-galactosidase from *Sporobolomyces singularis*** ([EFSA-Q-2016-00529](#))
   The WG discussed the technical and exposure assessment parts of the dossier and further discussion is needed at a future WG meeting.

1.5. **Inulinase from GM *A. oryzae* (MUCL 44346)** ([EFSA-Q-2015-00337](#))
   The WG discussed the technical and exposure assessment parts of the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

1.6. **Cyclomaltodextrin glucanotransferase from *B. circulans*** ([EFSA-Q-2016-00523](#))
   The WG discussed the technical and exposure assessment parts of the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

2. Any Other Business

None
Participants

- Working Group Members:
  Andrew Chesson, Pier Sandro Cocconcelli, Boet Glandorf, Laurence Vernis

- Hearing Experts:
  Not Applicable

- European Commission and/or Member States representatives:
  Not Applicable

- EFSA:
  FIP Unit: Jaime Aguilera (Chair), Irene Nuin, Sandra Rainieri

- Others:
  Not Applicable

1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from Lieve Herman.

2. Adoption of agenda

The agenda was adopted without changes.
3. Declarations of Interest of Working Groups members

In accordance with EFSA’s Policy on Independence\(^1\) and the Decision of the Executive Director on Competing Interest Management\(^2\), EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Characterisation of microbial strains used as production organisms of food enzyme (EFSA-Q-2019-00018)

The WG continued discussions on the scientific statement on the characterisation of microbial strains used as production organisms of food enzymes and decided that further discussion is needed.

5. Any Other Business

Not Applicable

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Participants

- Working Group Members:
  Andrew Chesson, Jose Manuel Barat Baviera, Laurence Vernis, Laurence Vernis, Holger Zorn
- Hearing Experts:
  None

- European Commission and/or Member States representatives:
  None

- EFSA:
  FIP Unit: Magdalena Andryszkiewicz, Christine Horn, Yi Liu, Sandra Rainieri

Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from Christina Tulstos.

1. Adoption of agenda

The agenda was adopted without changes.

2. Declarations of Interest of Working Groups members

1 As defined in Article 17 of the Decision of the Executive Director concerning the selection of members of the Scientific Committee, the Scientific Panels, and the selection of external experts to assist EFSA with its scientific work: http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf.
In accordance with EFSA’s Policy on Independence\textsuperscript{2} and the Decision of the Executive Director on Competing Interest Management\textsuperscript{3}, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

3. **Scientific topic(s) for discussion**

3.1. **Sugar production from sugar beet or sugar cane:** The WG discussed the steps and technologies employed in the white sugar production from sugar beet and sugar cane, and concluded that the amount of food enzyme residue in purified white sugar is different from that in molasses.

3.2. **Dextranase from Chaetomium gracile ATCC 16153 (EFSA 2015-00231).** The WG discussed the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

3.3. **Dextranase from Chaetomium erraticum strain AE-DX (EFSA 2015-00685).** The WG discussed the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4. **Any Other Business**

4.1. Not Applicable

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\textsuperscript{2} \url{http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf}

\textsuperscript{3} \url{http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf}
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 10th meeting of the Enzymes Working Group 2018-2021
Held on 28/01/2019, Tele-web conference

(Agreed on 06/02/2019)

Participants

a) Working Group Experts:
   Andrew Chesson, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Laurence Vernis

b) European Commission representative:
   DG SANTE:
   None

c) EFSA:
   FIP Unit:
   Jaime Aguilera (Chair), Ana Gomes, Sandra Rainieri
1. Welcome and apologies for absence
The Chair welcomed the participants.

2. Adoption of agenda
The agenda was adopted without changes.

3. Declarations of Interest of Working Group Members
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
4.1. Characterisation of microbial strains used as production organisms of food enzyme (EFSA-Q-2019-00018)
The WG started discussions on a scientific statement on the characterisation of microbial strains used as production organisms of food enzymes and decided that further discussion is needed. More discussions are needed.

5. AOB
None.

6. Next meeting
To be decided.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 9th meeting of the Enzymes Working Group 2018-2021
Held on 14/01/2019 – 15/01/2019, Parma (Italy)

(Agreed on 28/01/2019)

Participants

a) Working Group Experts:
Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren (absent on day-1 morning), Alicja Mortensen, Christina Tlustos, Laurence Vernis, Holger Zorn

b) European Commission representative:
DG SANTE:
None

c) EFSA:
FIP Unit:
Claudia Roncancio Peña, Jaime Aguilera, Magdalena Andryszkiewicz, Giovanni Bernasconi, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Sandra Rainieri
1. Welcome and apologies for absence

None

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Group Members

In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion

4.1. Glucose oxidase from a genetically modified *Aspergillus niger* (ZGL) ([EFSA-Q-2013-01005])

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.2. Triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* (LFS) ([EFSA-Q-2014-00325])

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.3. Beta-glucanase / Xylanase / Cellulase from *Mycothermus thermophilus* (NZYM-ST) ([EFSA-Q-2014-00795-796-797])

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.4. 4- alpha-glucanotransferase from *Bacillus pallidus* (AE-SAS) ([EFSA-Q-2016-00033])

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.5. Alpha-amylase from a genetically modified strain of *Bacillus amyloliquefaciens* (DP-Czb53) ([EFSA-Q-2016-00204])

The WG discussed the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.
4.6. Isomaltulose synthase from *Protaminobacter rubrum* (Z12A) (EFSA-Q-2015-00620)

The WG discussed the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.7. Alpha-amylase from a genetically modified strain *Pseudomonas fluorescens* (BD15754) (EFSA-Q-2016-00200)

The WG discussed the dossier and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.8. Triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* agg. (FL100SC) (EFSA-Q-2015-00447)

The WG discussed the additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

5. AOB

The WG discussed issues related to the residual food enzyme TOS in protein hydrolysates and follow-on formulae in the context of preparation of the next call for data.

6. Next meeting

The meeting will take place from 20/03/2019 to 21/03/2019 in Parma.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 8th meeting of the Enzymes Working Group 2018-2021
Held on 12/12/2018, Tele-web conference

(Agreed on 18/12/2018)

Participants

a) Working Group Experts:
   Andrew Chesson, Pier Sandro Cocconcelli, Lieve Herman, Laurence Vernis

b) European Commission representative:
   DG SANTE:
   None

c) EFSA:
   FIP Unit:
   Jaime Aguilera (Chair), Ana Gomes, Sandra Rainieri
1. **Welcome and apologies for absence**  
The Chair welcomed the participants. Apologies were received from Boet Glandorf.

2. **Adoption of agenda**  
The agenda was adopted without changes.

3. **Declarations of Interest of Working Group Members**  
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. **Scientific topics for discussion**  
4.1. **General issues regarding characterisation of production strains**  
The WG discussed the criteria to be applied for the characterisation of microbial strains used as a source of food enzymes, taking into account the existing guidance and the end use of the product. More discussions are needed.

5. **AOB**  
None.

6. **Next meeting**  
To be decided.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 7th meeting of the Enzymes WG 2018-2021
Held on 04/12/2018, Parma
(Agreed on 05/12/2018)

Participants

a) Working Group Experts:
   Andrew Chesson (Chair), Christina Tlustos

b) European Commission and/or Member States representatives:
   DG SANTE
   None

c) EFSA:
   FIP Unit:
   Yi Liu, Christine Horn

d) Hearing Expert¹:
   None

1. Welcome and apologies for absence
   The unit staff welcomed all participants.

2. Adoption of agenda
   The agenda items were adopted without change.
   Apology for absence was received from Andrew Chesson.

3. Declarations of Interest of Working Group Members
   In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
   4.1 FEIM related documents ([EFSA-Q-2018-00585](#))
   The WG discussed issues related to infant formulae and follow-on formulae in preparation of the next call for data. Further discussion is needed.

5. AOB
   None

6. Next meetings
   It will be held on 12th December 2018 in Parma. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 6th meeting of the Enzymes Working Group 2018-2021
Held on 21/11/2018 – 22/11/2018, Parma (Italy)

(Agreed on 03/12/2018)

Participants

a) Working Group Experts:
Andrew Chesson (Chair; via TC both days), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli (absent on day-1 afternoon), Boet Glandorf (absent both days), Lieve Herman, Henk van Loveren (absent on day-1 afternoon), Alicja Mortensen, Christina Tlustos (absent on day-1, via TC on day-2 morning), Laurence Vernis, Holger Zorn

b) European Commission representative:
DG SANTE:
None

c) EFSA:
FIP Unit:
Claudia Roncancio Peña, Jaime Aguilera, Magdalena Andryszkiewicz, Giovanni Bernasconi, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia

d) Hearing Experts participating to the technical hearing on 22.11.2018:
Kensaku Uzura - Nagase & Co., Ltd.
Ruud Bremmers – Regal B.V.
1. Welcome and apologies for absence
Alicja Mortensen, who was chairing the meeting, welcomed the participants.

2. Adoption of agenda
The agenda was adopted without changes.

3. Declarations of Interest of Working Group Members
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

The WG discussed the additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.3. Glucan 1,4-alpha-maltotetraohydrolase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzf24) ([EFSA-Q-2015-00448](https://www.efsa.europa.eu/en/efsajournal/pub/29619))
The WG discussed the additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.
The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.7. Glucose isomerase from *S. murinus* (strain NZYM-GA) (EFSA-Q-2016-00032)
The WG discussed the dossier and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.8. Endo 1,4-beta xylanase from a genetically modified strain of *B. subtilis* (XAS) (EFSA-Q-2014-00293)
The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

The WG discussed additional information received and finalised the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

4.10. L-Ascorbate oxidase from *Cucurbita pepo* and *Cucurbita moschata* (EFSA-Q-2015-00825)
The WG discussed additional information with the applicant during a technical hearing and identified needs for further information. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.11. Alpha-amylase/1,4-alpha-glucan 6-alpha-glucosyltransferase from *Bacillus circulans/Paenibacillus algioniclyticus* (EFSA-Q-2016-00521/EFSA-Q-2016-00522)
The WG discussed the additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

5. AOB
The WG discussed the available information regarding the residual food enzyme TOS in oils after the degumming and interesterification processes. It was agreed to request experimental data to confirm whether the amount of residual food enzyme is indeed negligible. A letter will be sent to AMFEP.

6. Next meeting
The meeting will take place from 14/01/2019 to 15/01/2019 in Parma.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 5th meeting of the Enzymes Working Group 2018-2021

Held on 14/11/2018 (tele-meeting)

(Agreed on 19/11/2018)

Participants

a) Working Group Experts:
   Andrew Chesson (Chair), José Manuel Barat Baviera, Boet Glandorf, Lieve Herman, Alicja Mortensen, Holger Zorn

b) European Commission representative:
   DG SANTE:
   None

c) EFSA:
   FIP Unit:
   Jaime Aguilera, Magdalena Andryszkiewicz, Giovanni Bernasconi, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia

d) Hearing Expert:
   None
1. Welcome and apologies for absence
The Chair welcomed the participants. Apologies were received from Boet Glandorf.

2. Adoption of agenda
The agenda was adopted without changes.

3. Declarations of Interest of Working Group Members
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
4.1. Glucose isomerase from Streptomyces murinus (strain NZYM-GA) (EFSA-Q-2016-00032)
The WG discussed the dossier and additional information received, the opinion will be edited accordingly for a final discussion at the next meeting.

4.2. Xylose isomerase from Streptomyces rubiginosus (strain DP-Pzn37) (EFSA-Q-2016-00203)
The WG discussed the dossier and additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

5. AOB
None

6. Next meeting
The meeting will take place from 21/11/2018 to 22/11/2018 in Parma.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 4th meeting of the Enzymes Working Group 2018-2021
Held on 23/10/2018, Parma (Italy)

(Agreed on 26/10/2018)

Participants

a) Working Group Experts:
   Andrew Chesson (Chair), Christina Tlustos

b) European Commission and/or Member States representatives:
   DG SANTE
   None

c) EFSA:
   FIP Unit:
   Yi Liu, Christine Horn

d) Hearing Expert¹:
   None

1. Welcome and apologies for absence
The unit staff welcomed all participants.

2. Adoption of agenda
The agenda items were adopted without change.
Apology for absence was received by Andrew Chesson.

3. Declarations of Interest of Working Group Members
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
4.1 FEIM related documents (EFSA-Q-2018-00585)
The WG discussed issues related to milk and dairy processing, in particular, food enzymes used in the production of infant and follow-on formulae. It was decided to prepare a call for data specific to infant and follow-on formulae.

5 AOB
None

6 Next meetings
It will be held on 21-22 November 2018 in Parma. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 3rd meeting of the Enzymes Working Group 2018-2021
Held on 09/10/2018 – 10/10/2018, Parma (Italy)

(Agreed on 22/10/2018)

Participants

a) Working Group Experts:
Andrew Chesson (Chair), José Manuel Barat Baviera (absent on day 1, via TC on day-2), Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren (absent on day-2), Alicja Mortensen, Christina Tlustos (absent on day-1, via TC on day-2), Laurence Vernis (absent on day-1), Holger Zorn (absent on day-1)

b) European Commission representative:
DG SANTE:
None

c) EFSA:
FIP Unit:
Claudia Roncancio Peña, Jaime Aguilera, Magdalena Andryszkiewicz (absent all days), Giovanni Bernasconi, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia (absent all days)

d) Hearing Expert:
None
1. Welcome and apologies for absence
The Chair welcomed the participants.

2. Adoption of agenda
The agenda was adopted without changes.

3. Declarations of Interest of Working Group Members
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
4.1. Maltogenic amylase from *Escherichia coli* (BLASC) (EFSA-Q-2015-00446)
The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.2. Acetolactate decarboxylase from *Bacillus licheniformis* (strain NZYM-JB) (EFSA-Q-2016-00031)
The draft opinion was discussed in the WG and it will be scheduled in the Panel for discussion and possible adoption.

4.3. Maltogenic amylase from *Bacillus subtilis* (NZYM-OC) (EFSA-Q-2014-00922)
The draft opinion was discussed in the WG and it will be scheduled in the Panel for discussion and possible adoption.

4.4. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-SO) (EFSA-Q-2015-00046)
The draft opinion was discussed in the WG and it will be scheduled in the Panel for discussion and possible adoption.

4.5. Endo-1,4-beta-xylanase from *Trichoderma reesei* (DP-Nzd22) (EFSA-Q-2014-00667)
The WG discussed additional information received and the draft opinion. It will be scheduled in the Panel for discussion and possible adoption.

The WG discussed the additional information received and the opinion will be edited accordingly for a final discussion at the next meeting.
4.7. Xylanase from *Aspergillus oryzae* (strain NZYM-FA) ([EFSA-Q-2013-00789](#))
The draft opinion was discussed in the WG and it will be scheduled in the Panel for discussion and possible adoption.

4.8. Xylanase from *Bacillus pumilus* (BLXSC) ([EFSA-Q-2014-00844](#))
The WG discussed the additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.9. Lysophospholipase from *Trichoderma reesei* (RF7206) ([EFSA-Q-2015-00410](#))
The WG discussed the additional information received and the opinion will be edited accordingly for a final discussion at the next meeting.

5. AOB
The WG discussed the need for information regarding the edibility and consumption of plant parts, from which food enzymes are extracted.

6. Next meeting
The meeting will take place from 21/11/2018 to 22/11/2018 in Parma.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 2\textsuperscript{nd} meeting of the Food Enzymes WG 2018-2021

Held on 18/09/2018, Parma (Italy)

(Agreed on 28/09/2018)

Participants

a) Working Group Experts:
   Andrew Chesson (Chair), Christina Tlustos

b) European Commission and/or Member States representatives:
   DG SANTE
   None

c) EFSA:
   FIP Unit:
   Yi Liu, Christine Horn

d) Hearing Expert\(^1\):
   None

\(^1\) As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:
1. Welcome and apologies for absence
The unit staff welcomed all participants.

2. Adoption of agenda
The agenda items were adopted without change.
Apology for absence was received by Andrew Chesson.

3. Declarations of Interest of Working Group Members
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
4.1 FEIM related documents (EFSA-Q-2018-00585)
The WG discussed the link between diary processes and protein processes. The draft needs revision.

4.2 Ascorbate oxidase from Cucurbita pepo and Cucurbita moschata (EFSA-Q-2015-00825)
The WG discussed the exposure calculation and identified issues that need to be further discussed with other members of the WG.

5 AOB
None

6 Next meetings
The meeting will take place from 9/10/2018 to 10/10/2018 in Parma. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.
Scientific Panel on Food Contact Materials, Enzymes and Processing Aids (CEP)

Minutes of the 1st meeting of the Enzymes Working Group 2018-2021

Held on 11/09/2018 – 12/09/2018, Madrid (Spain)

(Agreed on 21/09/2018)

Participants

a) Working Group Experts:
   Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Henk van Loveren, Christina Tlustos, Laurence Vernis, Holger Zorn, Alicja Mortensen (via TC all days)

b) European Commission representative:
   DG SANTE:
   None

c) EFSA:
   FIP Unit:
   Jaime Aguilera, Magdalena Andryszkiewicz, Giovanni Bernasconi (via TC all days), Ana Gomes (via TC all days), Christine Horn (via TC all days), Natalia Kovalkovicova (via TC all days), Yi Liu, Joaquim Maia (via TC all days), Claudia Roncancio Peña

d) Hearing Expert:
   None
1. Welcome and apologies for absence
The Chair welcomed the participants.

2. Adoption of agenda
The agenda was adopted without changes.

3. Declarations of Interest of Working Group Members
In accordance with the Decision of the Executive Director on Competing Interest Management, EFSA screened the Annual Declaration of interest filled in by the experts invited for the present working group. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

4. Scientific topics for discussion
4.1. Maltogenic amylase from Escherichia coli (BLASC) (EFSA-Q-2015-00446)
The WG discussed additional information received and the opinion will be edited accordingly for a final discussion at the next meeting.

4.2. Alpha-amylase from a genetically modified strain of Trichoderma reesei (DP-Nzb48) (EFSA-Q-2015-00681)
The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.3. Acetolactate decarboxylase from a genetically modified strain of Bacillus licheniformis (strain NZYM-JB) (EFSA-Q-2016-00031)
The WG discussed additional information received and the opinion will be edited accordingly for a final discussion at the next meeting.

4.4. Xylanase from a genetically modified strain of Bacillus licheniformis (NZYM-CE) (EFSA-Q-2015-00064)
The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

4.5. 4-Phytase from a genetically modified strain of Trichoderma reesei (DP-Nzt55) (EFSA-Q-2015-00665)
The draft opinion was discussed. Additional data are needed to finalise the draft opinion and EFSA will request the applicant to provide this information. The revised draft opinion will be scheduled in a future WG meeting.
4.6. **Alpha-trehalase from a genetically modified strain of *Trichoderma reesei* (DP-Nzs51)** *(EFSA-Q-2016-00142)*

The draft opinion was discussed. Additional data are needed to finalise the draft opinion and EFSA will request the applicant to provide this information. The revised draft opinion will be scheduled in a future WG meeting.

4.7. **Glucan 1,4-alpha-glucosidase from a genetically modified strain of *Trichoderma reesei* (DP-Nzh63)** *(EFSA-Q-2016-00173)*

The draft opinion was discussed. Additional data are needed to finalise the draft opinion and EFSA will request the applicant to provide this information. The revised draft opinion will be scheduled in a future WG meeting.

4.8. **Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-OC)** *(EFSA-Q-2014-00922)*

The WG discussed additional information received and the opinion will be edited accordingly for a final discussion at the next meeting.

4.9. **Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-SO)** *(EFSA-Q-2015-00046)*

The WG discussed additional information received and the opinion will be edited accordingly for a final discussion at the next meeting.

5. AOB

None

6. **Next meeting**

The meeting will take place from 9/10/2018 to 10/10/2018 in Parma.