



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

### MINUTES OF THE 49<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 9 February 2021**

**(Agreed on 09/02/2021)**

*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, Holger Zorn

■ Hearing Experts:

Not Applicable

■ European Commission and/or Member States representatives:

None

■ EFSA:

FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Simone Lunardi, Sandra Rainieri

■ Others:

Tasking grant: National Food Institute, Technical University of Denmark  
Elsa Nielsen, Karin Norby



## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Lieve Herman (from 14:00 till 16:00), Pier Sandro (from 12:00 – 13:00).

## 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 lipase from a genetically modified *Aspergillus niger* agg. (strain FL100SC) ([EFSA-2015-00447](#))

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

### 4.2. Evaluation of the food enzyme trypsin from porcine pancreatic glands ([EFSA-2015-00338](#))

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.

### 4.3. Evaluation of the food enzyme trypsin and chymotrypsin from pig pancreas ([EFSA-2014-00163](#))

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.

### 4.4. Evaluation of the food enzyme triacylglycerol lipase from *Candida rugosa* AE-LAY ([EFSA-2015-00291](#))

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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**4.5. Evaluation of the food enzyme glucoamylase from a genetically modified *Aspergillus niger* (strain NZYM-BE) ([EFSA-2013-00896](#))**

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 glucoamylase from *Rhizopus oryzae* (strain CU634-1775) ([EFSA-2016-00535](#))**

The WG discussed additional information received 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 chymosin, pepsin and gastricsin from stomachs (abomasum) of kids (young goats) ([EFSA-2017-00045](#))**

The WG discussed additional information received 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 phospholipase A2 from *Streptomyces violaceoruber* AS-10 ([EFSA-2016-000132](#))**

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 mucorpepsin from *Rhizomucor miehei* ([EFSA-2015-00761](#))**

The WG discussed the draft opinion and will continue the assessment at a future WG meeting.

**4.10. Evaluation of the food enzyme lactase from *Aspergillus oryzae* strain GL 470 ([EFSA-2016-00579](#))**

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 on the feedback received from the EC on the recommendations for the application EFSA-2018-00115.

## 6. Next meeting

The meeting will take place between 9 and 10/03/2021 via tele (due to the Covid-19 restrictions).



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

### MINUTES OF THE 48<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 12 - 13 January 2021**

**(Agreed on 13/01/2021)**

*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:

None

■ EFSA:

FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Simone Lunardi, Sandra Rainieri

■ Others:

Tasking grant: National Food Institute, Technical University of Denmark

Elsa Nielsen, Karin Norby



## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Claudia Bolognesi (1<sup>st</sup> day), Pier Sandro Cocconcelli (2<sup>nd</sup> day from 15:00 till the end of the meeting), Lieve Herman (1<sup>st</sup> day afternoon), Henk Van Loveren (1<sup>st</sup> day), Alicja Mortensen (1<sup>st</sup> day), Christina Tlustos (all days).

## 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 D-psicose 3-epimerase from *Corynebacterium glutamicum* (strain FIS002) ([EFSA-2018-00115](#))

The WG discussed additional information received and needs further information from the applicant.

### 4.2. 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 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 *Bacillus subtilis* (DP-Ezd31) ([EFSA-2015-00839](#))

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

### 4.4. Evaluation of the food enzyme maltogenic $\alpha$ -amylase produced by a genetically modified strain of *Saccharomyces cerevisiae* (strain M17906) ([EFSA-2020-00456](#))

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



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

**4.5. Evaluation of the food enzyme alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-KE) ([EFSA-2012-00898](#))**

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

**4.6. Evaluation of the food enzyme glucan 1,4-alpha-glucosidase and alpha amylase from a genetically modified strain of *Aspergillus niger* (NZYM-BX) ([EFSA-2013-00877](#))**

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

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

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

**4.8. Evaluation of the food enzyme cyclomalto-dextrin glucanotransferase from *Geobacillus stearothermophilus* strain (strain AE-KCGT) ([EFSA-2016-00081](#))**

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 cyclomalto-dextrin glucanotransferase from *Paenibacillus macerans* (strain AE-CGT) ([EFSA-2016-00082](#))**

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 3-Phytase from *Aspergillus niger* (strain PHY93-08) ([EFSA-2016-00575](#))**

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 tannase from *Aspergillus oryzae* (strains NBRC 110971 and 11-5) ([EFSA-2016-00272](#))**

The WG discussed the way of evaluation of this application and needs additional information from the applicants.

## 5. Any Other Business

The WG discussed the data provided by AMFEP and EFFA on the volatile flavouring substances and preparations *via* distillation.



## 6. Next meeting

The meeting will take place between 9 and 10/02/2021 via tele (due to the Covid-19 restrictions).



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

### MINUTES OF THE 47<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 8 January 2021**

**(Agreed on 08/01/2020)**

*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:

José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Coconcelli, Boet Glandorf, Lieve Herman, Laurence Vernis

■ Hearing Experts:

Not Applicable

■ European Commission and/or Member States representatives:

None

■ EFSA:

FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz (Chair), Ana Gomes

■ Others:

Not Applicable





## 1. Welcome and apologies for absence

EFSA 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 protease 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 a further discussion is needed at the future WG meeting.

## 5. Any Other Business

None

## 6. Next meeting

The meeting will take place between 12 and 13/01/2021 via tele (due to the Covid-19 restrictions).

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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



FOOD INGREDIENTS AND PACKAGING UNIT

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

MINUTES OF THE 46<sup>th</sup> MEETING OF THE WORKING GROUP ON  
ENZYMES 2018-2021

**Tele-web conference, 7 January 2021**

**(Agreed on 10/01/2021)**

### Participants

- Working Group Members:  
Pier Sandro Cocconcelli, Boet Glandorf, Lieve Herman, Laurence Vernis
- Hearing Experts:  
Not Applicable
- European Commission and/or Member States representatives:  
None
- EFSA:  
FIP Unit: Jaime Aguilera (Chair), Simone Lunardi
- 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 phospholipase A2 from the genetically modified *Streptomyces violaceoruber* (strain AS-10) ([EFSA-2016-00132](#))

The WG discussed additional information received. More discussions are needed.

### 4.2. Evaluation of the food enzyme glucoamylase and alpha amylase from the genetically modified *Aspergillus niger* (NZYM-BX) ([EFSA-2013-00877](#))

The WG discussed the draft opinion. More discussions are needed.

### 4.3. Evaluation of the food enzyme glucoamylase from the genetically modified *Aspergillus niger* (NZYM-BE) ([EFSA-2013-00896](#))

The WG discussed the draft opinion. More discussions are needed.

## 5. Any Other Business

None

## 6. Next meeting

The meeting will take place 08/01/2021 via tele.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 45<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 18 - 19 November 2020**

**(Agreed on 19/11/2020)**

*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:

None

■ EFSA:

FIP Unit: Jaime Aguilera, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Simone Lunardi, Ivana Nikodinoska, 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 (2<sup>nd</sup> day pm).

## 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 protease complex consisting of trypsin, chymotrypsin, elastase and carboxypeptidase from pig pancreas ([EFSA-2015-00066](#))

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

### 4.2. Evaluation of the food enzyme endo-1,3(4)-beta-glucanase from a genetically modified *Bacillus subtilis* (DP-Ezm28) ([EFSA-2015-00828](#))

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

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

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

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

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

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

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



The WG discussed additional information received 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. Input data for estimating the dietary exposure to food enzymes (EFSA-2020-00168)**

The WG agreed the 2020 edition with input data for five additional food manufacturing processes. It will be scheduled in the Panel for discussion and possible adoption.

**4.7. Evaluation of the food enzyme trypsin and chymotrypsin from porcine pancreatic glands (EFSA-2015-00372)**

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

**4.8. Evaluation of the food enzyme glucan 1, 4- $\alpha$ -maltohydrolase produced from a genetically modified strain of *Bacillus subtilis* (strain ROM) (EFSA-2020-00583)**

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 from a genetically modified strain of *Kluyveromyces lactis* (CIN) (EFSA-2015-00085)**

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 from a genetically modified strain of *Kluyveromyces lactis* (CHY) (EFSA-2015-00129)**

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 acylglycerol lipase from *Penicillium camemberti* (AE-LG) (EFSA-2014-00668)**

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

None

## 6. Next meeting

The meeting will take place between 12 and 13/01/2021 via tele (due to the Covid-19 restrictions).



FOOD INGREDIENTS AND PACKAGING UNIT

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

### MINUTES OF THE 44<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 11 November 2020**

**(Agreed on 11 November 2020)**

#### Participants

- Working Group Members:  
Christina Tlustos
- Hearing Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Yi Liu, Ivana Nikodinoska, Irene Nuin
- Others:  
Not Applicable

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<sup>1</sup> 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 two food processes ([EFSA-Q-2020-00168](#))

The WG discussed input data for “Dietary fibre production” and “Tea processing as Herbal and Fruit Infusion processing”. A new call-for-data will be launched soon.

## 2. Any Other Business

None





FOOD INGREDIENTS AND PACKAGING UNIT

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

### MINUTES OF THE 43<sup>rd</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 03 November 2020**

**(Agreed on 11 November 2020)**

#### Participants

- Working Group Members:  
Christina Tlustos
- Hearing Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Yi Liu
- Others:  
Not Applicable

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<sup>1</sup> 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. Annex B - Process-specific technical data used in exposure assessment of food enzymes ([EFSA-Q-2020-00168](#))

The WG added several food processes to the Annex B for which the input data is ready to be used for dossier evaluation.

## 2. Any Other Business

None



FOOD INGREDIENTS AND PACKAGING UNIT

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

### MINUTES OF THE 42<sup>nd</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 22 October 2020**

**(Agreed on 22 October 2020)**

#### Participants

- Working Group Members:  
Andrew Chesson, Jose Baviera Barat, Christina Tlustos, Holger Zorn
- Hearing Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Magdalena Andryszkiewicz, Yi Liu, Ivana Nikodinoska, Irene Nuin
- Others:  
Not Applicable

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<sup>1</sup> 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 “interesterification of fats and oils” ([EFSA-Q-2020-00168](#))

The WG discussed the feedback received on the interesterification of fats and oils and agreed on the approach to be followed.

### 1.2. Evaluation of the food enzyme triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* agg. (FL105SC) ([EFSA-Q-2015-00561](#))

Not discussed due to the lack of time.

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

The WG discussed technical and exposure parts of the draft opinion. The discussion will be continued in the future.

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

Not discussed due to the lack of time.

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

Not discussed due to the lack of time.

## 2. Any Other Business

None



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

### MINUTES OF THE 41<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 13 - 14 October 2020**

**(Agreed on 14/10/2020)**

*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, Ursula Gundert-Remy (item 4.1), Lieve Herman, Henk Van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Dominique Turck (item 4.1), 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, Elsa Nielsen, Ivana Nikodinoska, Irene Nuin, Sandra Rainieri

■ Others:

Not Applicable



## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Boet Glandorf (on 13/10 between 11:00 and 13:00), Alicja Mortensen (on 14/10 from 15:00 till the end of the meeting).

## 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 protease complex consisting of trypsin, chymotrypsin, elastase and carboxypeptidase from pig pancreas ([EFSA-2015-00066](#))

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

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

The WG discussed 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 *Leuconostoc citreum* (strain NRRL B-30894) ([EFSA-2016-00209](#))

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

### 4.4. Evaluation of the food enzyme glucose oxidase from *Aspergillus niger* (strain NZYM-KA) ([EFSA-2016-00134](#))

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

### 4.5. Evaluation of the food enzyme endo-1,3(4)-beta-glucanase from a genetically modified *Bacillus subtilis* (DP-Ezm28) ([EFSA-2015-00828](#))

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



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.

**4.6. Evaluation of the food enzyme beta-galactosidase from a genetically modified strain of *Aspergillus oryzae* (DP-Bzg59) ([EFSA-2016-00141](#))**

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 tannase from *Aspergillus niger* (strain AE-TAN) ([EFSA-2016-00034](#))**

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 phospholipase from a genetically modified strain of *Aspergillus oryzae* (NZYM-PP) ([EFSA-2014-00921](#))**

The WG discussed the draft opinion and will continue the assessment at a future WG meeting.

**4.9. Evaluation of the food enzyme triacylglycerol lipase from *Mucor javanicus* (AE-LM) ([EFSA-2015-00692](#))**

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 acylglycerol lipase from a genetically modified strain of *Penicillium camemberti* (AE-LGS) ([EFSA-2015-00757](#))**

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 chymosin from a genetically modified strain of *Aspergillus niger* DSM 32805 ([EFSA-2019-00125](#))**

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

None

## 6. Next meeting

The meeting will take place between 18 and 19/11/2020 via tele (due to the Covid-19 restrictions).



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

## MINUTES OF THE 40<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 1 October 2020**

**(Agreed on 01/10/2020)**

*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, Elsa Nielsen, Ivana Nikodinoska, Irene Nuin, Sandra Rainieri
- Others:  
Not Applicable





## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Lieve Herman (in the morning), Claudia Bolognesi (in the afternoon), Henk Van Loveren (in the afternoon), Elsa Nielsen (all 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 Independence<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 dextranase from *Chaetomium gracile* (EFSA-2015-00231)

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

### 4.2. Evaluation of the food enzyme Phospholipase A2 from a genetically modified strain of *Trichoderma reesei* (RF8793) (EFSA-2014-00411)

The WG discussed 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 *Penicillium roqueforti* (AE-LRF) (EFSA-2014-00545)

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.

### 4.4. Evaluation of the food enzyme beta-amylase from *Bacillus flexus* (AE-BAF) (EFSA-2015-00691)

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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**4.5. Evaluation of the food enzyme maltogenic  $\alpha$ -amylase produced from a genetically modified *Saccharomyces cerevisiae* (strain M17906) ([EFSA-2020-00456](#))**

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 beta-galactosidase from *Kluyveromyces lactis* (AE-KL) ([EFSA-2014-00669](#))**

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 beta-galactosidase from *Bacillus circulans* (AE-LT) ([EFSA-2014-00670](#))**

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 beta-galactosidase from a genetically modified strain of *Aspergillus niger* (TOL) ([EFSA-2014-00853](#))**

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 mannan endo-1,4-beta-mannosidase from a genetically modified *Trichoderma reesei* (RF6232) ([EFSA-2015-00094](#))**

The WG discussed additional information received 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

None

## 6. Next meeting

The meeting will take place between 13 and 14/10/2020 via tele (due to the Covid-19 restrictions).



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

### MINUTES OF THE 39<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 23 - 24 September 2020**

**(Agreed on 24/09/2020)**

*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, Elsa Nielsen, Ivana Nikodinoska, Irene Nuin, Sandra Rainieri
- Others:  
Not Applicable



## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Lieve Herman (23/09/2020), Pier Sandro Cocconcelli (24/09/2020) and Elsa Nielsen (all days).

## 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 alpha-amylase from a genetically modified strain of *Bacillus amyloliquefaciens* (DP-Czb53) ([EFSA-2016-00204](#))

The WG discussed additional information received and finalised the draft opinion. It will be sent the Panel for possible adoption via written procedure.

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

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.

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

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

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

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**4.5. Evaluation of the food enzyme dextranase from *Chaetomium gracile* (EFSA-2015-00231)**

The WG discussed additional information received and a further discussion is needed at the future WG meeting.

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

The WG discussed additional information received 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 phospholipase A2 from a genetically modified strain of *Trichoderma reesei* (RF8793) (EFSA-2014-00411)**

The WG discussed additional information received and a further discussion is needed at the future WG meeting.

**4.8. Evaluation of the food enzyme beta-galactosidase from *Kluyveromyces lactis* (AE-KL) (EFSA-2014-00669)**

Not discussed due to the lack of time.

**4.9. Evaluation of the food enzyme beta-galactosidase from *Bacillus circulans* (AE-LT) (EFSA-2014-00670)**

Not discussed due to the lack of time.

**4.10. Evaluation of the food enzyme beta-galactosidase from a genetically modified strain of *Aspergillus niger* (TOL) (EFSA-2014-00853)**

Not discussed due to the lack of time.

**4.11. Evaluation of the food enzyme phospholipase from a genetically modified strain of *Aspergillus oryzae* (NZYM-PP) (EFSA-2014-00921)**

Not discussed due to the lack of time.

**4.12. Evaluation of the food enzyme triacylglycerol lipase from *Mucor javanicus* (AE-LM) (EFSA-2015-00692)**

Not discussed due to the lack of time.

**4.13. Evaluation of the food enzyme acylglycerol lipase from a genetically modified strain of *Penicillium camemberti* (strain AE-LGS) (EFSA-2015-00757)**

Not discussed due to the lack of time.

**4.14. Evaluation of the food enzyme beta-galactosidase from a genetically modified strain of *Bacillus subtilis* (DP-Ezg29) (EFSA-2015-00838)**

Not discussed due to the lack of time.



**4.15. Evaluation of the food enzyme beta-galactosidase from a genetically modified strain of *Aspergillus oryzae* (DP-Bzg59) ([EFSA-2016-00141](#))**

Not discussed due to the lack of time.

**4.16. Evaluation of the food enzyme chymosin from a genetically modified strain of *Aspergillus niger* DSM 32805 ([EFSA-2019-00125](#))**

Not discussed due to the lack of time.

## 5. Any Other Business

None

## 6. Next meeting

The meeting will take place on 01/10/2020 via tele (due to the Covid-19 restrictions).



FOOD INGREDIENTS AND PACKAGING UNIT

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

### MINUTES OF THE 38<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 18 September 2020**

**(Agreed on 18 September 2020)**

#### Participants

- Working Group Members:  
Christina Tlustos
- Hearing Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Yi Liu, Ivana Nikodinoska
- Others:  
Not Applicable

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<sup>1</sup> 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 milk/dairy processing ([EFSA-Q-2020-00168](#))

The WG discussed the milk/dairy processing and decided to divide the process into several sub-categories.

## 2. Any Other Business

None





FOOD INGREDIENTS AND PACKAGING UNIT

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

## MINUTES OF THE 37<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 14 September 2020**

**(Agreed on 18 September 2020)**

### Participants

- Working Group Members:  
Christina Tlustos
- Hearing Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Yi Liu
- Others:  
Not Applicable

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<sup>1</sup> 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 refined sugar production ([EFSA-Q-2020-00168](#))

The WG discussed the feedback received from the call-for-data on by-products produced during refined sugar production (e.g. beet molasses, cane sugar syrup), and finalised the input data.

## 2. Any Other Business

None



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

### MINUTES OF THE 36<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 15 July 2020**

**(Agreed on 15/07/2020)**

#### Participants

■ Working Group Members:

Andrew Chesson (Chair), José Manuel Barat Baviera, Claudia Bolognesi, Pier Sandro Cocconcelli, Boet Glandorf, Henk Van Loveren, Alicja Mortensen, Laurence Vernis, Christina Tlustos, Holger Zorn

■ Hearing Experts<sup>1</sup>:

Not Applicable

■ European Commission and/or Member States representatives:

Not Applicable

■ EFSA:

FIP Unit: Yi Liu, Sandra Rainieri, Jaime Aguilera, Ana Gomes, Ivana Nicodinoska, Irene Nuin.

■ Others:

Not Applicable

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<sup>1</sup> 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.

## 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<sup>2</sup> and the Decision of the Executive Director on Competing Interest Management<sup>3</sup>, 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. Call-for-data: progress and plan ([EFSA-Q-2020-00168](#))

Debriefing on the clarification teleconferences related to the call for data on refined sugar production and flavouring production was provided.

### 4.2. Evaluation of the food enzyme mucorpepsin from *Rhizomucor miehei* ([EFSA-Q-2016-00030](#))

The WG discussed the draft opinion and needs further discussion and additional information from the applicant.

## 5. Any Other Business

The update of the guidance on the submission of dossiers on food enzymes has been discussed.

## 6. Next meeting

The meeting will take place from 23/09/2020 till 24/09/2020 via tele (due to the Covid-19 restrictions).

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>3</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 35<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-meeting, 30 June - 1 July 2020**

**(Agreed on 15/07/2020)**

*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<sup>1</sup>:

Not Applicable

■ European Commission and/or Member States representatives:

Panagiotis Daskaleros, Catherine Evrevin

■ EFSA:

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

■ Others:

Not Applicable

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<sup>1</sup> 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.

## 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<sup>2</sup> and the Decision of the Executive Director on Competing Interest Management<sup>3</sup>, 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-cyclodextrin glucoamylase from a genetically modified strain of *Escherichia coli* K12 (WCM105xpCM703) ([EFSA-2016-00530](#))

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

### 4.2. Evaluation of the food enzyme beta-cyclodextrin glucoamylase from a genetically modified strain of *Escherichia coli* K12 (WCM105xpCM6420) ([EFSA-2016-00531](#))

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

### 4.3. Evaluation of the food enzyme isoamylase from *Pseudomonas amylofermentans* ([EFSA-2016-00524](#))

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

### 4.4. Evaluation of the food enzyme triacylglycerol lipase from *Rhizopus oryzae* (strain AE-TL) ([EFSA-2014-00112](#))

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.

### 4.5. Evaluation of the food enzyme triacylglycerol lipase from *Candida cylindracea* (strain AE-LAYH) ([EFSA-2014-00113](#))

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>3</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



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 alpha-amylase from *Microbacterium imperiale* (strain AE-AMT) ([EFSA-2014-00544](#))**

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 beta-galactosidase from a genetically modified strain of *Pichia pastoris* (strain X33 (pAEV008)) ([EFSA-2017-00545](#))**

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 pectate lyase from *Bacillus subtilis* (strain 11096) ([EFSA-2016-00207](#))**

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 triacylglycerol lipase from *Aspergillus niger* (strain AE-L) ([EFSA-2015-00276](#))**

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 lactase from *Aspergillus oryzae* (strain GL 470) ([EFSA-2016-00579](#))**

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 mucorpepsin from *Rhizomucor miehei* strain DSM 29547 ([EFSA-2015-00761](#))**

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.

**4.12. Evaluation of the food enzyme serine protease complex consisting of trypsin and chymotrypsin from pancreas of pigs ([EFSA-2015-00372](#))**

Not discussed due to the lack of time.



## 5. Any Other Business

### 5.1. **EC mandate to update the ENZ science guidance**

EFSA has just received an EC request to revise the CEF "Guidance document on the submission of a dossier on food enzymes".

### 5.2. **Call-for-data: extension of deadline**

EFSA recently received requests to extend the deadline for the following calls for input data: oils and fats processing for interesterification, refined sugar production (molasses as by-product) and transfer of food enzyme TOS during flavouring production.

### 5.3. **ENZ WG meeting calendar 2021**

WG agreed on the dates of the WG meetings in 2021.

## 6. Next meeting

The meeting will take place from 23/09/2020 till 24/09/2020 via tele (due to the Covid-19 restrictions).





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

## MINUTES OF THE 34<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 04 June 2020**

**(Agreed on 09 June 2020)**

### Participants

- Working Group Members:  
Claudia Bolognesi, Andrew Chesson, Ursula Gundert-Remy, Alicja Mortensen; Christina Tlustos, Dominique Turck, Henk Van Loveren.
- Hearing Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Yi Liu, Sandra Rainieri, Irene Nuin.
- Others:  
Not Applicable

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<sup>1</sup> 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.

## 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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

### 1. 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 and needs further additional information from the applicant.

## 5. Any Other Business

None

## 6. Next meeting

Next meeting will take place on 30/06/2020 and 01/07/2020 via tele (due to the Covid-19 restrictions).



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

## MINUTES OF THE 33<sup>rd</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-meeting, 28 May 2020**

**(Agreed on 28/05/2020)**

*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, José Manuel Barat Baviera, Christina Tlustos, Holger Zorn
- Hearing Experts:  
Not Applicable
- European Commission and/or Member States representatives:  
None
- EFSA:  
FIP Unit: Magdalena Andryszkiewicz, Yi Liu (Chair), Irene Nuin
- 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 and needs additional information from the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 4.2. Evaluation of the food enzyme cellulase from *Talaromyces cellulolyticus*/*Talaromyces pinophilus* ([EFSA-2015-00370](#))

The WG discussed the technical dossier and needs additional information from the applicant.

## 5. Any Other Business

### 5.1. Input data for estimating the dietary exposure to food enzymes used vegetable oil production ([EFSA-2020-00168](#))

The WG discussed the probability of food enzyme total organic solids (FE-TOS) removal during the extraction and purification steps involved in vegetable oil production. A call-for-data will be launched to establish the extent of FE-TOS transfer into final foods.

## 6. Next meeting

The meeting will take place on 04/06/2020 via tele (due to the Covid-19 restrictions).

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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 32<sup>nd</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-meeting, 13 May 2020**

**(Agreed on 13/05/2020)**

*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:  
Claudia Bolognesi, Andrew Chesson, Lieve Herman, Alicja Mortensen, Christina Tlustos, Laurence Vernis, Holger Zorn
- Hearing Experts:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: 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. No apologies for absence.

## 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 mucorpepsin from *Rhizomucor miehei* (MMR 164) ([EFSA-2014-00851](#))

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 mucorpepsin from *Rhizomucor miehei* ([EFSA-2016-00030](#))

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. Next meeting

The meeting will take place from 30/06/2020 till 01/07/2020 via tele (due to the Covid-19 restrictions).

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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 31<sup>st</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-meeting, 5 - 6 May 2020**

**(Agreed on 06/05/2020)**

*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

For item 4.5: Ursula Gundert-Remy

■ Hearing Experts:

Not Applicable

■ European Commission and/or Member States representatives:

Catherine Evrevin, Jiri Sochor

■ EFSA:

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

For item 5.1, FIP Unit: Alessandra Giarola, Federica Lodi, Ana Rincon, Claudia Roncancio-Pena, Camilla Smeraldi, Giorgia Vianello

■ Others:

Not Applicable



## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Elsa Nielsen (1<sup>st</sup> day), Henk Van Loveren (2<sup>nd</sup> day afternoon), Ursula Gundert-Remy (1<sup>st</sup> day and 2<sup>nd</sup> 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 beta-galactosidase from *Sporobolomyces singularis* (YIT 10047) ([EFSA-2016-00529](#))

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 alpha-amylase from a genetically modified strain of *Bacillus amyloliquefaciens* (DP-Czb53) ([EFSA-2016-00204](#))

The WG discussed 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 A2 from a genetically modified strain of *Aspergillus niger* (PLA) ([EFSA-2015-00043](#))

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.

### 4.4. Evaluation of the food enzyme phospholipase A2 from a genetically modified strain of *Streptomyces violaceoruber* (strain AS-10) ([EFSA-2016-00132](#))

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)





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.

**4.5. 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 and needs further discussion and additional information from the applicant.

**4.6. Evaluation of the food enzyme phospholipase A2 from a genetically modified strain of *Trichoderma reesei* (RF8793) (EFSA-2014-00411)**

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 cyclomalto-dextrin glucoamylase derived from *Geobacillus stearothermophilus* (EFSA-2015-00230)**

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. Collaboration on cross-cutting issues with Food Additives team**

A discussion was held with the EC and the FIP Food Additives team on the legal framework and how to ensure a consistent assessment of enzymes used in manufacture of food additives, flavourings, novel foods, protein hydrolysates for infant formulae.

## 6. Next meeting

The meeting will take place from 30/06/2020 till 01/07/2020 via tele (due to the Covid-19 restrictions).



FOOD INGREDIENTS AND PACKAGING UNIT

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

### MINUTES OF THE 30<sup>TH</sup> 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<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Yi Liu, Ivana Nikodinoska
- Others:  
Not Applicable

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<sup>1</sup> 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



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

### MINUTES OF THE 29<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-meeting, 31 March - 1 April 2020**

**(Agreed on 01/04/2020)**

*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 (all days), Henk Van Loveren (1<sup>st</sup> 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 cyclomalto-dextrin glucanotransferase from *Paenibacillus illinoisensis* strain 107 (EFSA-2016-00523)

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.

### 4.2. Evaluation of the food enzyme 4-alpha-D-((1→4)-alpha-D-glucano)-trehalose trehalohydrolase/(1→4)-alpha-D-glucan 1-alpha-D-glucosylmutase from *Arthrobacter ramosus* (EFSA-2016-00135/136)

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.

### 4.3. Evaluation of the food enzyme xylanase from a genetically modified strain of *Trichoderma reesei* (strain RF5427) (EFSA-2013-00876/2014-00735)

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 produced by a genetically modified strain of *Bacillus licheniformis* (strain NZYM-VR) (EFSA-2019-00442)

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



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

**4.5. Evaluation of the food enzyme endo-1,4- $\beta$ -xylanase from *Trichoderma reesei* (MUCL 49755) ([EFSA-2017-00085](#))**

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 alternansucrase from *Leuconostoc citreum* (strain 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.

**4.7. Evaluation of the food enzyme inulinase from the genetically modified strain of *Aspergillus oryzae* (MUCL 44346) ([EFSA-2015-00337](#))**

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 alpha-amylase from *Geobacillus stearothermophilus* (DP-Gzb47) ([EFSA-2016-00145](#))**

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 chymosin and pepsin from stomachs of calves and cows ([EFSA-2016-00658](#))**

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, pepsin and gastricsin from stomachs (abomasum) of kids (young goats) ([EFSA-2017-00045](#))**

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 mannan endo-1,4-beta-mannosidase ( $\beta$ -mannanase) from a genetically modified strain of *Trichoderma reesei* (RF6232) ([EFSA-2015-00094](#))**

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 28<sup>th</sup> 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 (1<sup>st</sup> day morning), Henk Van Loveren (1<sup>st</sup> day morning), Claudia Bolognesi (1<sup>st</sup> 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**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.



FOOD INGREDIENTS AND PACKAGING UNIT

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

## MINUTES OF THE 27<sup>TH</sup> 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 Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Yi Liu
- Others:  
Not Applicable

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<sup>1</sup> 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



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

## MINUTES OF THE 26<sup>th</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Parma, 22 - 23 January 2020**

**(Agreed on 23/01/2020)**

### 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 (1<sup>st</sup> 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 Independence<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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- $\{(1\rightarrow4)\alpha\text{-D-glucano}\}$ trehalose trehalohydrolase/ $(1\rightarrow4)\text{-alpha-D-glucan}$ 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 glucoamylase 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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**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.





FOOD INGREDIENTS AND PACKAGING UNIT

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

MINUTES OF THE 25<sup>th</sup> 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 beta-galactosidase from a genetically modified *Escherichia coli* (BgIA MCB3) ([EFSA-2015-00622](#))

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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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 24<sup>th</sup> 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 Coconcelli (1<sup>st</sup> 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 *Disporotrichum dimorphosporum* (DXL) ([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 *Bacillus licheniformis* (DP-Dzr50) ([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 *Aspergillus acidus* (RF 7398) ([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 *Bacillus amyloquefaciens* (strain BANSC) ([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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.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.
- 4.6. Process specific technical data used in exposure assessment of food enzyme – 2019 update ([EFSA-2018-00585](#))**
- 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.
- 4.12. Evaluation of the food enzyme triacylglycerol lipase from a genetically modified *Aspergillus niger* agg. (strain FL108SC) ([EFSA-2016-00099](#))**
- 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.



**4.14. Evaluation of the food enzyme trypsin and chymotrypsin from pig pancreas (EFSA-2014-00163)**

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)**

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.

**4.16. Evaluation of the food enzyme trypsin and chymotrypsin from porcine pancreatic glands (EFSA-2015-00372)**

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.

**4.17. Evaluation of the food enzyme D-psicose 3-epimerase from *Corynebacterium glutamicum* (strain FIS002) (EFSA-2018-00115)**

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.



FOOD INGREDIENTS AND PACKAGING UNIT

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

MINUTES OF THE 23<sup>rd</sup> MEETING OF THE WORKING GROUP ON  
ENZYMES 2018-2021

**Tele-web conference, 15 October 2019**

**(Agreed on 24/10/2019)**

### 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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.

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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)





FOOD INGREDIENTS AND PACKAGING UNIT

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

## MINUTES OF THE 22<sup>nd</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Parma, 1 - 2 October 2019**

**(Agreed on 02/10/2019)**

### 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, 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<sup>nd</sup> day afternoon) and Pier Sandro Cocconcelli (on the 2<sup>nd</sup> 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 *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 *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 *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 *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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**4.5. Evaluation of the food enzyme xylanase from *Bacillus pumilus* (BLXSC) (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- $\beta$ -xylanase from *Trichoderma reesei* (MUCL 49755) (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)**

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)**

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)**

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)**

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)**

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 amyloclavata* (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 21<sup>TH</sup> 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. Coconcelli (on the 1<sup>st</sup> day afternoon and on the 2<sup>nd</sup> day afternoon), H. Zorn (on the 1<sup>st</sup> day afternoon and on the 2<sup>nd</sup> 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**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.

**4.12. Evaluation of the food enzyme endo-1,3(4)-beta-glucanase from a genetically modified strain of *Bacillus subtilis* (DP-Ezm28) ([EFSA-2015-00828](#))**

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.





FOOD INGREDIENTS AND PACKAGING UNIT

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

## MINUTES OF THE 20<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Parma, 18 - 19 June 2019**

**(Agreed on 02 07 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:  
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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**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  $\beta$ -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 19<sup>TH</sup> 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 Coconcelli, 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 1<sup>st</sup> day), Irene Nuin (on the 1<sup>st</sup> 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 Independence<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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-maltotetraohydrolase 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.

<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**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 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. amyloclavata* (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.



**4.12. Evaluation of the food enzyme 4- $\alpha$ -D-{(1- $\rightarrow$ 4)- $\alpha$ -D-glucano}trehalose trehalohydrolase and (1- $\rightarrow$ 4)- $\alpha$ -D-glucan 1- $\alpha$ -D-glucosylmutase from *A. ramosus* ([EFSA-2016-00135](#); [EFSA-2016-00136](#))**

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. Statement on the characterisation of microbial strains used as production organisms of food enzyme ([EFSA-2019-00018](#))**

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 18<sup>TH</sup> 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 Experts<sup>1</sup>:  
Not Applicable
- European Commission and/or Member States representatives:  
Not Applicable
- EFSA:  
FIP Unit: Jaime Aguilera, Christine Horn
- Others:  
Not Applicable

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<sup>1</sup> 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



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

## MINUTES OF THE 17<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 8 April 2019**

**(Agreed on 16 April 2019)**

### 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 16<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Parma, 2 and 4 April 2019**

**(Agreed on 4 April 2019)**

### Participants

- Working Group Members:  
Christina Tlustos
- Hearing Experts<sup>1</sup>:  
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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<sup>1</sup> 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. Estimation of dietary exposure to food enzymes used in grain processing ([EFSA-Q-2018-00585](#))

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



FOOD INGREDIENTS AND PACKAGING UNIT

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

## MINUTES OF THE 15<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**TELE-conference, 29 March 2019**

**(Agreed on 7 April 2019)**

### Participants

- Working Group Members:  
Andrew Chesson (Chair), Claudia Bolognesi, Alicja Mortensen, Holger Zorn
- Hearing Experts<sup>1</sup>:  
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

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<sup>1</sup> 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<sup>2</sup> and the Decision of the Executive Director on Competing Interest Management<sup>3</sup>, 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 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.

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<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>3</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 14<sup>TH</sup> 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 Independence<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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 from 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.

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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)



**4.5. Evaluation of the food enzyme glucan 1,4-alpha-maltotetraohydrolase 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.

**4.6. Evaluation of the food enzyme alpha-amylase from a genetically modified *Bacillus subtilis* (NBA) ([EFSA-2014-00912](#))**

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 13<sup>TH</sup> 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 Experts<sup>1</sup>:  
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

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<sup>1</sup> 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



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

## MINUTES OF THE 12<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES 2018-2021

**Tele-web conference, 12 March 2019**

**(Agreed on 18 March 2019)**

### 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<sup>1</sup> and the Decision of the Executive Director on Competing Interest Management<sup>2</sup>, 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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<sup>1</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf)

# SCIENTIFIC PANEL ON FOOD CONTACT MATERIAL, ENZYMES AND PROECSSING AIDS (CEP)

## MINUTES OF THE 11<sup>TH</sup> MEETING OF THE WORKING GROUP ON ENZYMES

**TELE-conference, 22 February 2019**

**(Agreed on 28 February 2019)**

### Participants

- Working Group Members:  
Andrew Chesson, Jose Manuel Barat Baviera, Laurence Vernis, Laurence Vernis, Holger Zorn
- Hearing Experts<sup>1</sup>:  
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

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<sup>1</sup> 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<sup>2</sup> and the Decision of the Executive Director on Competing Interest Management<sup>3</sup>, 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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<sup>2</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/policy\\_independence.pdf](http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf)

<sup>3</sup> [http://www.efsa.europa.eu/sites/default/files/corporate\\_publications/files/competing\\_interest\\_management\\_17.pdf](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 10<sup>th</sup> 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 9<sup>th</sup> 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 *Geobacillus 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 8<sup>th</sup> 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 7<sup>th</sup> 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 Expert<sup>1</sup>:**

None

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



## **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 6<sup>th</sup> 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

### 4.1. Alpha-amylase from a genetically modified *Trichoderma reesei* (DP-Nzb48) ([EFSA-Q-2015-00681](#))

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. Maltogenic amylase from a genetically modified strain of *Escherichia coli* (BLASC) ([EFSA-Q-2015-00446](#))

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-maltotetrahydrolase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzf24) ([EFSA-Q-2015-00448](#))

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.

### 4.4. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzb54) ([EFSA-Q-2015-00666](#))

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 *B. subtilis* (NBA) ([EFSA-Q-2014-00912](#))

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.

**4.6. Lysophospholipase from a genetically modified strain of *T. reesei* (RF7206)** ([EFSA-Q-2015-00410](#))

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.

**4.9. Pullulanase from a genetically modified strain of *B. licheniformis* (DP-Dzp39)** ([EFSA-Q-2015-00667](#))

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 alginolyticus*** ([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 5<sup>th</sup> 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 4<sup>th</sup> 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 Expert<sup>1</sup>:**

None

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## **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 3<sup>rd</sup> 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.

### 4.6. Alpha-amylase from *Trichoderma reesei* (DP-Nzb48) ([EFSA-Q-2015-00681](#))

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<sup>nd</sup> 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<sup>1</sup>:**

None

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## **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 1<sup>st</sup> 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 2018 in Parma.