SCIENTIFIC PANEL ON FOOD ENZYMES (FEZ) 3rd Working Group meeting on Chemical

Characterisation and Dietary Exposure (CHEXP)



04 and 06 November 2025 14:00-18:00 / 09:00-13:00 MINUTES - Agreed on 06 November 2025

Location: Webconference

Attendees:

Working Group Members:

Ralf Greiner, Yrjö Roos, Holger Zorn, Gabriele Gadermaier, José Manuel Barat Baviera (Chair)

Hearing Experts¹:

Not Applicable

Applicants participating in a technical hearing²:

Not Applicable

European Commission and/or Member States representatives:

Not applicable

o EFSA:

Food Ingredients and Packaging (FIP) Unit: Magdalena Andryszkiewicz, Daniele Cavanna, Cristina Fernàndez-Fraguas, Yi Liu, Valentina Tokić, Alessandro Manghi, Irene Bonino

Others:

Not applicable

Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Yi Liu for 4th November until 16.00h.

The agenda was adopted without changes.

Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting and the preparatory meetings listed under agenda item "Preparatory meeting/s with Risk Assessment". No conflicts of interest related to the issues discussed in these meetings have been identified during the screening process, and no interests were declared orally by the Working Group members at the beginning of these meetings.

III. Agreement of the minutes of the previous Working Group meeting held

¹ As defined in Article 34 of the document "Implementing Rule of the Management Board of the European Food Safety Authority laying down the rules on selection, appointment and operations of the Scientific Committee, Scientific Panels and of their https://www.efsa.europa.eu/sites/default/files/paneloperation.pdf

² As defined in the "EFSA's Catalogue of support initiatives during the life cycle of applications for regulated products": https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/sp.efsa.2021.EN-6472

https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/independence-policy-2024.pdf

⁴ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/decision-ed-on-competing-interest-management-2024.pdf

MEETING MINUTES – 04 and 06 November 2025 3rd Working Group meeting on CHEXP



Not applicable.

IV. Feedback from the FEZ Panel plenary meeting

The working group was informed that 11 opinions were adopted at the last FEZ Panel plenary meeting.

V. Feedback from the European Commission

None.

VI. Update on applications, new mandates

None

VII. Scientific topic(s) for discussion

a. Draft opinion on the food enzyme lipase from a genetically modified strain of Aspergillus oryzae (NZYM-PH). Applicant: Novozymes A/S (EFSA-Q-2015-00664)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

b. Draft opinion on the food enzyme protein-glutaminase from *Chryseobacterium* proteolyticum (AE-PG). Applicant: Amano Enzyme Inc. (<u>EFSA-Q-2015-00695</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

c. Draft opinion on the food enzyme endo-1,4-β-glucanase from a genetically modified *Trichoderma reesei* strain AR-715 as a new food enzyme. *Applicant: AB Enzymes GmbH* (EFSA-Q-2023-00422)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

 Draft opinion on the food enzyme cellulase, glucanase and xylanase produced with *Trichoderma reesei* AR-999 strain - data package. Applicant: AB ENZYMES (<u>EFSA-0-2023-00194</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

It was concluded that additional information is required in order to proceed with the safety assessment of this food enzyme. A request for additional information will be sent to the

MEETING MINUTES – 04 and 06 November 2025 3rd Working Group meeting on CHEXP



applicant. Upon receival of ADR, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

e. Draft opinion on the food enzyme β-glucanase from *Trichoderma reesei* strain TG-M5-337 - data package. Applicant: Shin Nihon Chemical Co., Ltd (<u>EFSA-Q-2023-00295</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

f. Draft opinion on the food enzyme leucyl aminopeptidase from *R. oryzae* (AE-PER). Applicant: Amano Enzyme Inc. (EFSA-Q-2014-00354)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

g. Draft opinion on the extension of use of the food enzyme leucyl aminopeptidase from a non-genetically modified *Rhizopus oryzae* strain AE-PER. Applicant: Amano Enzyme Inc. (<u>EFSA-Q-2023-00002</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

h. Draft opinion on the food enzymes leucyl aminopeptidase, oryzin, and aspergillopepsin I from Aspergillus oryzae AE-PR - data package. Applicant: Amano Enzyme Inc. (<u>EFSA-Q-2023-00220</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

 Draft opinion on the food enzyme prolyl oligopeptidase from a genetically modified Aspergillus niger strain NZYM-MR as a new food enzyme. Applicant: Novozymes A/S (<u>EFSA-Q-2024-00638</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

MEETING MINUTES – 04 and 06 November 2025 3rd Working Group meeting on CHEXP



j. Draft opinion on the food enzyme alpha amylase from a non-genetically modified Aspergillus oryzae strain CCTCC M2023235 as a new food enzyme. Applicant: SUNTAQ INTERNATIONAL LIMITED (<u>EFSA-Q-2024-00451</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 14th plenary meeting on 11–13 November 2025 for further discussion and possible adoption.

VIII. Any Other Business

None.

IX. Next meeting

The next meeting will be held on 3-4 December 2025, via web conference.

SCIENTIFIC PANEL ON FOOD ENZYMES (FEZ) 2nd Working Group meeting on Chemical

2nd Working Group meeting on Chemical Characterisation and Dietary Exposure (CHEXP)



29 - 30 September 2025 14:00-18:00 / 14:00-18:00 MINUTES - Agreed on 2nd October 2025

Location: Webconference

Attendees:

o Working Group Members:

Ralf Greiner, Yrjö Roos, Holger Zorn, Gabriele Gadermaier, José Manuel Barat Baviera (Chair)

Hearing Experts¹:

Not Applicable

Applicants participating in a technical hearing²:

Not Applicable

o European Commission and/or Member States representatives:

Not applicable

o EFSA:

Food Ingredients and Packaging (FIP) Unit: Magdalena Andryszkiewicz, Daniele Cavanna, Cristina Fernàndez-Fraguas, Yi Liu, Valentina Tokić, Alexia Ollier

Others:

Not applicable

Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Yi Liu for the 29th of September.

The agenda was adopted without changes.

II. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting and the preparatory meetings listed under agenda item "Preparatory meeting/s with Risk Assessment". No conflicts of interest related to the issues discussed in these meetings have been identified during the screening process, and no interests were declared orally by the Working Group members at the beginning of these meetings.

As defined in Article 34 of the document "Implementing Rule of the Management Board of the European Food Safety Authority laying down the rules on the selection, appointment and operations of the Scientific Committee, Scientific Panels and of their Working Groups": https://www.efsa.europa.eu/sites/default/files/paneloperation.pdf

² As defined in the "EFSA's Catalogue of support initiatives during the life cycle of applications for regulated products": https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/sp.efsa.2021.EN-6472

³ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/independence-policy-2024.pdf

https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/decision-ed-on-competing-interest-management-2024.pdf



III. Agreement of the minutes of the previous Working Group meeting held

The minutes of the 1st Working Group meeting were agreed on 4th September.

IV. Feedback from the FEZ Panel plenary meeting

The working group was informed that 12 opinions were adopted at the last FEZ Panel plenary meeting.

V. Feedback from the European Commission

None.

VI. Update on applications, new mandates

None

VII. Scientific topic(s) for discussion

a. Draft opinion on the food enzyme alpha amylase from a non-genetically modified *Bacillus licheniformis* strain TTME 6280 KY as a new food enzyme (<u>EFSA-Q-2024-00216</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

 b. Draft opinion on the food enzyme alpha amylase from a genetically modified *Bacillus licheniformis* strain CCTCC M 2023118 as a new food enzyme (<u>EFSA-Q-2024-00524</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

 Draft opinion on the food enzyme AMP deaminase from a non-genetically modified Streptomyces murinus strain AE-DNTS (<u>EFSA-Q-2023-00559</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

MEETING MINUTES - 29 - 30 September 2025 2nd Working Group meeting on CHEXP



d. Draft opinion on the food enzyme cellulase from a genetically modified *Aspergillus niger* strain NZYM-EN as a new food enzyme (<u>EFSA-Q-2024-00645</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

e. Draft opinion on the food enzyme cellulase from *Aspergillus niger* - data package HBI Enzymes Inc. (<u>EFSA-O-2022-00518</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

f. Draft opinion on the food enzyme glucoamylase from a genetically modified *Aspergillus niger* strain NZYM-DM as a new food enzyme (<u>EFSA-Q-2024-00221</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

g. Draft opinion on the food enzyme lysozyme from albumen of hens' egg (Gallus gallus domesticus). Applicant: E.P.S. S.P.A. Egg Powder Specialists (EFSA-Q-2024-00309)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

b. Draft opinion on the food enzyme triacylglycerol lipase from pregastric tissues of calves, kids and lambs - data package DSM Food Specialties BV (<u>EFSA-Q-2023-00016</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

i. Draft opinion on the food enzyme triacylglycerol lipase from pregastric tissues of cattle, goat and sheep - data package Renco New Zealand (<u>EFSA-Q-2023-00029</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

MEETING MINUTES - 29 - 30 September 2025 2nd Working Group meeting on CHEXP



j. Draft opinion on the extension of use of the food enzyme triacylglycerol lipase from a non-genetically modified *Rhizopus arrhizus* strain AE-TL(B) (<u>EFSA-Q-2024-00664</u>)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

 k. Draft opinion on the food enzyme endo-1,4-beta-xylanase, IUBMB 3.2.1.8 from Aspergillus luchuensis DP-Azd103 - data package Genencor International B.V. (EFSA-Q-2023-00225)

The WG discussed the draft scientific opinion, and in particular assessed technical/chemical characterisation and dietary exposure.

After amendments, the draft opinion will be presented at the next 13th plenary meeting on 7-9 October for further discussion and possible adoption.

I. Draft opinion on the food enzyme papain from *Carica papaya* (<u>EFSA-Q-2021-00173</u>)

Not discussed due to the lack of time.

m. Draft opinion on the food enzyme papain from Carica papaya - data package
 Nagase (Europe) GmbH (<u>EFSA-Q-2023-00226</u>)

Not discussed due to the lack of time.

 n. Draft opinion on the food enzyme papain enzymatic complex from Carica papaya data package Enzybel International SA (<u>EFSA-Q-2023-00275</u>)

Not discussed due to the lack of time.

o. Draft opinion on the food enzyme papain from *Carica papaya* as a new food enzyme (EFSA-Q-2023-00441)

Not discussed due to the lack of time.

VIII. Any Other Business

None.

IX. Next meeting

The next meeting will be held on 4th and 6th November 2025, via web conference.

SCIENTIFIC PANEL ON FOOD ENZYMES (FEZ)

1st Working Group meeting on Chemical Characterisation and Dietary Exposure (CHEXP)



03 - 04 September 2025 14:00-18:00 / 14:00-18:00 MINUTES - Agreed on 4th September 2025

Location: Webconference

Attendees:

o Working Group Members:

Ralf Greiner, Yrjö Roos, Holger Zorn, José Manuel Barat Baviera (Chair)

Hearing Experts¹:

Not Applicable

Applicants participating in a technical hearing²:

Not Applicable

o European Commission and/or Member States representatives:

Not applicable

o EFSA:

Food Ingredients and Packaging (FIP) Unit: Magdalena Andryszkiewicz, Daniele Cavanna, Cristina Fernàndez-Fraguas, Yi Liu, Jeroen Pasch, Valentina Tokić, Alexia Ollier

Others:

Not applicable

I. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Gabriele Gadermaier for both days and from Holger Zorn for 17-18h on 4th September.

The agenda was adopted without changes.

II. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting and the preparatory meetings listed under agenda item "Preparatory meeting/s with Risk Assessment". No conflicts of interest related to the issues discussed in these meetings have been identified during the screening process, and no interests were declared orally by the Working Group members at the beginning of these meetings.

As defined in Article 34 of the document "Implementing Rule of the Management Board of the European Food Safety Authority laying down the rules on the selection, appointment and operations of the Scientific Committee, Scientific Panels and of their Working Groups": https://www.efsa.europa.eu/sites/default/files/paneloperation.pdf

² As defined in the "EFSA's Catalogue of support initiatives during the life cycle of applications for regulated products": https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/sp.efsa.2021.EN-6472

³ https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/independence-policy-2024.pdf

https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/decision-ed-on-competing-interest-management-2024.pdf



III. Agreement of the minutes of the previous Working Group meeting held

Not applicable.

IV. Feedback from the FEZ Panel plenary meeting

The working group was informed that nine opinions were adopted at the last FEZ Panel plenary meeting.

V. Feedback from the European Commission

None.

VI. Update on applications, new mandates

None

VII. Scientific topic(s) for discussion

a. Draft opinion on the food enzyme α -galactosidase from the non-genetically modified Aspergillus tubingensis strain AGS614. Applicant: Shin Nihon Chemical Co., Ltd (EFSA-Q-2016-00578)

The WG discussed the draft scientific opinion.

The WG considered that additional information is needed from the applicant in order to proceed with the scientific assessment of this application. Therefore, a request for additional information will be sent to the applicant.

b. Draft opinion on the updated safety evaluation of the food enzyme phospholipase A2 from the genetically modified *Trichoderma reesei* strain RF8793. *Applicant: AB Enzymes GmbH* (EFSA-Q-2023-00574)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at the next 12th plenary meeting on 11-12 September for further discussion and possible adoption.

c. Draft opinion on the food enzyme endo 1,4-β-xylanase from the genetically modified Bacillus licheniformis strain NZYM-FX. Applicant: Novozymes A/S (<u>EFSA-0-2024-00453</u>)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at the next 12th plenary meeting on 11-12 September for further discussion and possible adoption.

MEETING MINUTES - 03 - 04 September 2025 1st Working Group meeting on CHEXP



d. Draft opinion on the food enzyme phospholipase D from the non-genetically modified Streptomyces netropsis strain DSZM 40093. Applicant: Chemi S.p.a. (<u>EFSA-O-2016-00536</u>)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at the next 12th plenary meeting on 11-12 September for further discussion and possible adoption.

e. Draft opinion on the food enzyme mannan endo-1,4-β-mannosidase from the nongenetically modified *Aspergillus niger* strain ACH 12-525. *Applicant: Shin Nihon Chemical Co., Ltd* (EFSA-0-2023-00242)

The WG discussed the draft scientific opinion.

The WG considered that additional information is needed from the applicant in order to proceed with the scientific assessment of this application. Therefore, a request for additional information will be sent to the applicant.

f. Draft opinion on the food enzyme cellulase from the non-genetically modified Aspergillus niger strain AC 4-984. Applicant: Shin Nihon Chemical Co., Ltd (EFSA-Q-2023-00240)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at the next 12th plenary meeting on 11-12 September for further discussion and possible adoption.

g. Draft opinion on the food enzyme subtilisin from the genetically modified *Bacillus* paralicheniformis strain APGKY. Applicant: Kerry Ingredients & Flavours Ltd (EFSA-Q-2024-00552)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at a forthcoming plenary meeting for further discussion and possible adoption.

h. Draft opinion on the food enzyme containing invertase and exo-β-glucosidase activities from the non-genetically modified *Aspergillus tubingensis* strain IN 319. *Applicant: Shin Nihon Chemical Co., Ltd* (EFSA-O-2016-00577)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at the next 12th plenary meeting on 11-12 September for further discussion and possible adoption.

i. Draft opinion on the food enzyme arabinan endo-1,5- α -L-arabinanase from the nongenetically modified *Aspergillus aculeatinus* strain CBS 148915. *Applicant: Soufflet Biotechnologies* (EFSA-Q-2023-00241)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at the next 12^{th} plenary meeting on 11-12 September for further discussion and possible adoption.

j. Draft opinion on the food enzyme D-psicose 3-epimerase from the genetically modified *Escherichia coli* strain K-12 W3110-TKO CDX-088. *Applicant: Tate & Lyle Ingredients France S.A.S.* (EFSA-O-2024-00310)

The WG discussed the draft scientific opinion.

After amendments, the draft opinion will be presented at the next 12th plenary meeting on 11-12 September for further discussion and possible adoption.

MEETING MINUTES - 03 - 04 September 2025 1st Working Group meeting on CHEXP



k. Draft opinion on the food enzyme chymosin from the genetically modified Trichoderma reesei strain DP-Nyj88. Applicant: Genencor International B.V. (EFSA-Q-2023-00907)

The WG discussed the draft scientific opinion.

EFSA will invite the applicant to clarify some information provided in the dossier . The draft opinion will be presented at the next 12^{th} plenary meeting on 11-12 September for further discussion and possible adoption.

I. Draft opinion on the food enzyme glucan 1,4-α-maltohydrolase from the genetically modified *Trichoderma reesei* strain DP-Nyn90. *Applicant: Genencor International B.V.* (EFSA-Q-2024-00014)

Not discussed due to the lack of time.

m. Draft opinion on the extension of use of the food enzyme triacylglycerol lipase from the non-genetically modified *Rhizopus arrhizus* strain AE-TL(B). *Applicant: Amano Enzyme Inc.* (EFSA-Q-2024-00664)

Not discussed due to the lack of time.

n. Draft opinion on the food enzyme lysozyme from albumen of hens' egg (Gallus gallus domesticus). Applicant: E.P.S. S.P.A. Egg Powder Specialists (EFSA-Q-2024-00309)

Not discussed due to the lack of time.

 Draft opinion on the food enzyme bromelain from Ananas comosus (EFSA-Q-2016-00867)

The involved experts considered that additional information is needed from the applicant in order to proceed with the scientific assessment of this application. Therefore, a request for additional information will be sent to the applicant.

VIII. Any Other Business

None.

IX. Next meeting

The next meeting will be held on 29-30 September 2025, via web conference.