# ADVISORY COMMITTEE ON NOVEL FOODS AND PROCESSES

# MINUTES OF THE ONE HUNDRED AND FOURTIETH MEETING HELD ON 12<sup>th</sup> FEBRUARY 2020

ACNFP Secretariat 6<sup>th</sup> Floor Clive House 70 Petty France London SW1H 9EX

Members are required to declare any personal interest in matters under discussion. Where Members have a particularly close association with any item, the Chairman will limit their involvement in the discussion. In cases where an item is to be discussed in their absence, a Member may make a statement before leaving.

#### ACNFP/140/Min

MINUTES OF THE HUNDRED AND FOURTIETH MEETING OF THE ADVISORY COMMITTEE ON NOVEL FOODS AND PROCESSES, HELD ON 12<sup>TH</sup> FEBRUARY 2020, AT EDWARDIAN I, ST. JAMES' COURT, A TAJ HOTEL, 54 BUCKINGHAM GATE, WESTMINSTER, LONDON, GREATER LONDON, UNITED KINGDOM, SW1E 6AF

## ATTENDANCE

| Committee       | Professor Peter Gregory<br>Dr Anton Alldrick<br>Dr Camilla Alexander-White<br>Dr David Mela<br>Dr Hamid Ghoddusi<br>Dr Lesley Stanley<br>Dr Mark Berry<br>Dr Mark Berry<br>Dr Maureen Wakefield<br>Dr Rohini Manuel<br>Mrs Rebecca McKenzie<br>Ms Clare Nicholson<br>Ms Nichola Lund<br>Professor Chris Ritson<br>Professor Clare Mills<br>Professor Clare Mills<br>Professor Harry McArdle<br>Professor Huw Jones<br>Professor John Mathers<br>Professor Susan Duthie<br>Professor Susan Duthie | Chairman<br>Member<br>Member<br>Member<br>Member (Afternoon via Skype)<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member<br>Member |
|-----------------|--|--|
| Assessor        | Mr Paul Tossell  | Allergy and Intolerance Team Leader<br>(Attended via Skype)  |
| Observers (FSA) | Ms Elena Fesenko<br>Ms Jane Ince<br>Mr Adam McDowell<br>Ms Siobhan Watts<br>Dr Sabrina Roberts<br>Mr Hoa Chang<br>Mr Andrew Dodd<br>Dr Amie Adkin<br>Dr Chun-Han Chun<br>Ms Chloe Thomas   | Science-Strategy & Research<br>Science Strategy Assurance Team<br>FSA Wales<br>Food Standards Scotland<br>Senior GM Policy Advisor<br>GM Policy Advisor<br>Novel Foods Policy Advisor (Skype)<br>Head of Risk Assessment<br>Head of Science Strategy Assurance<br>Exposure Assessment team   |

### Secretariat

Mrs Ruth Willis Mr Richard Uchotski Dr Elspeth Ransom Mr Francisco Matilla-Garcia Ms Bethan Davies Ms Aisling Jao Ms Beth Rendle Technical Secretary Secretariat Secretariat Secretariat Coordinator Secretariat Hub Secretariat Administrative Hub Secretariat Administrative Hub

## 1. Apologies and announcements

Apologies for non-attendance were received from the Observer for Northern Ireland, and Dr Paul Turner from the Science Council.

The Chair welcomed representatives from the FSA, the Observers from the devolved administrations and the Secretariat.

Jane Ince and Elena Fesenko were also welcomed to the meeting who presented papers ACNFP-140-02 and ACNFP-140-03 respectively.

The Chairman reminded Members of the need to announce any commercial interests in the business of the Committee, prior to the discussions on each item

## 2. Meeting Minutes for 139<sup>th</sup> Meeting

## ACNFP/139/MINS

The Committee agreed that the minutes were a true record of the 139<sup>th</sup> meeting of the ACNFP held on 29<sup>th</sup> November 2019, subject to amendments.

## 3. Matters Arising

## ACNFP/140/MA

At the previous meeting the Committee reviewed the traditional food dossier herbal infusion made from Coffea Leaves NF 2018\_0740. The summary was subject to a 10-day consultation with one comment received. Due to the timeline for response to the EU the Committee's opinion for consultation was shared with policy colleagues to inform risk management decisions. Members were asked by correspondence if they would like to update the opinion to reflect the comment received at consultation on previous use, so this can be finalised by Chair's action.

The Committee completed a horizon scanning exercise at the previous meeting and a document summarizing the discussions had been circulated to the Committee for comment. The Secretariat will use the final document to inform which topics it may be useful to consider in more depth at future meetings.

Members were thanked for their contributions to the item considering the ways of working in assessing insect dossiers. The points raised were noted and the views of the Committee will be used by the Secretariat to inform the handling of future insect dossiers.

The Committee previously reviewed the Committee's Terms of Reference and code of practice. The views shared with the Secretariat were taken on board and a refined version is being produced for final review by members at a future meeting.

## 4. Roasted Sacha inchi Seeds NF2018/0704

#### ACNFP/140/01

A notification was received for authorisation of roasted *Sacha inchi* seeds as a traditional food. The applicant is seeking authorisation to use roasted *Sacha inchi* seeds as a snack in the food category: Legumes, Oilseeds and Spices. The views of the Committee were sought to support policy colleagues' consideration of the dossier.

The Committee were content that the evidence presented showed the product had been used in Peru for a long time and had been commercialized in recent years. However, despite the information provided on the trading practices of the product, information on the frequency, and quantity, of consumption in third countries was not present, making it difficult to understand the pattern of traditional consumption and how this would relate to potential consumption in a European population.

The Committee commented on the inconsistencies between batches seen in the data on the levels of saponins and alkaloids and highlighted that control of temperature and duration of roasting may be important in ensuring that the content of anti-nutritional factors including lectin were reduced sufficiently in the final product.

Similarly, the Committee recognized that the roasting process is said to not exceed 120 C and 30 minutes of exposure to avoid the formation of acrylamide but noted that the specification of the product did not include maximum levels of acrylamide. Members pointed out that the application lacked a complete fatty acid profile that would include the content of erucic acid, which would help evaluate the product. The Committee also raised concern over the two test batches in which mercury was detected, and how similarly contaminated batches would be handled in the future.

Under the traditional food authorisation process there is no requirement to provide toxicological studies. However, a peer-reviewed publication reporting two toxicology studies was provided by the applicant and evaluated by the Committee. In the Committee's view the two studies described were not relevant for the product under evaluation, as the substance tested was a defatted cake made from the powder obtained by press-filtering crude sacha inchi oil, not the whole seed for which approval was being sought. Therefore, this sample material was not representative of the product that would be consumed and would not allow evaluation of any toxic elements present in other parts of the seed. An acute toxicity study on "roasted seeds of sacha inchi" was also described. It is not typically a requirement to perform an acute toxicity study for a novel foods application as an LD50 value does not add value to the risk assessment but, given that it was performed, it provides additional reassurance that the roasted seed is not acutely toxic.

The Committee highlighted the high levels of potassium and potential for heavy metals such as cadmium to be present in the seed. This is particularly relevant for this application in which the product is expected to be grown in a variety of soils with different properties. No specification for maximum levels of these components in the final product was given by the applicant and it was recommended to risk managers to consider how potential soil-derived contaminants would be kept consistently under maximum EU allowance levels if authorised. This is particularly the case for cadmium, which was measured above the limit of detection in the analyses provided. It was suggested that by comparing expected intake of cadmium from the product in a quantitative risk assessment using the EU derived tolerable weekly intake (TWI) for cadmium derived by EFSA in 2009 could provide additional assurance that this was within safe levels.

The Committee found the information regarding food allergy and the potential allergenicity to be insufficient to address the allergenic potential of this seed given its high protein content. While members noted that no allergic reactions have been reported to sacha inchi through the traditional use, given the overall nutritional parallelism with other tree nuts further consideration would be needed. Members highlighted that sacha inchi is closely botanically related to castor beans, whose albumin protein is known to be a strong allergen. The Committee considers it is possible that the seed will cause reactions in people allergic to tree nuts and could cause de novo sensitisation when introduced to the UK population. Further information comparing the protein sequence information from castor beans and sacha inchi would provide an evidence base to understand if risk management measures may be required.

Action: The Committee's advice will be used to inform risk management decisions by policy colleagues in relation to this food.

## 5. Areas of Research Interest

#### ACNFP/140/03

The Committee were introduced to the FSA's work on areas of research interest, a cross-government initiative designed to better signpost the FSA's research priorities for funders and researchers. Committee input was sought on a series of research questions / areas identified to ensure these meet the FSA's needs.

Members suggested that these were an interesting and useful set of questions. Clarification was sought on how the list of areas was to be used and any prioritisation within the questions given the wide scope of issues covered. It was commented that some of the questions were very specific while others were generic and how this would be managed was questions.

Representatives from Science Strategy and Assurance Team explained the purpose of the areas of research interest was intended to help highlight cross cutting themes to facilitate better working between departments and researchers. The document was designed to work at two levels with higher strategic questions that were less likely to change over time and more detailed sub questions to explore specific aspects coming through in the area. These were to communicate the FSA's interests. Initial discussions had suggested that food allergy, digital and big data, consumer and food business behaviour should be prioritised in the short term. However, the intention was that this would be a live document that can be updated over time. It was flagged that it may be useful to consider other factors in structuring the questions such as which were already being addressed in the research community and which were new. Other lenses for considering the questions could be the timescale on which they would be addressed, the size of the knowledge gap the question was seeking to address or the scale of impact. Consideration should be given to the separation of risk management and risk assessment and whether the questions are seeking to address the needs of both groups.

Looking at the topics included in more detail, Members noted the inclusion of big data and while recognising this as a priority, highlighted the opportunity for the FSA to show leadership in how this information is curated and managed to make it accessible for wider use. The focus in this area should be on how to undertake this work and the development of best practice approaches.

Members supported the inclusion of digital tools, digital innovation and understanding consumers and behaviour of food businesses to reflect the evolving food chain. The applicability of this to support province and traceability was recognised.

Other areas flagged by members for inclusion were new foods entering the EU. They predicted that there would be new foods and protein sources entering the UK food chain that had not been consumed before and that these may represent new concern from a food allergy perspective. It was also flagged that while specific mention had been made of microplastics, consideration may be needed of other physical forms of products such as nanomaterials. Members also observed that little consideration had been given to 'environmental considerations' and the impact of the food system in the context of climate change. This should be considered as a potential additional area for consideration.

The Committee considered the communication of risk and the channels to communicate these risks. The Committee recommend that research should be undertaken to better understand risk communication in a new media age, with an emphasis on understanding the psychology of consumers. They suggest that the aim would be to have the FSA as a trusted social media source, that is visible, where consumers can receive accurate information.

The Committee queried if one of the intentions behind the development of the document was to leverage funding from other funders. It was flagged that while this area should reflect FSA priorities and interest, consideration should also be given to whether these would be well understood by other funders such as research councils.

Finally, the Committee raised points regarding research on food allergy. They welcomed the idea that allergy was going to be a research priority for the FSA but raised points over how allergy research should be considered. The Committee commented that currently food allergy research focuses heavily on children. However, there are issues with hypersensitivity, de novo sensitisation and the loss of tolerance in adults. They recommended that this age bracket is considered as a priority. Further

to this, the Committee asked whether the FSA would consider championing food allergy in government, to raise its profile with other potential funders.

Action: Further comments were welcomed by correspondence. The comments from the Committee will be used by the FSA to inform the development of the document ahead of its publication.

## 6. Follow Up on the Allergy Workshop

## ACNFP/140/04

At the previous ACNFP meeting, a workshop was held to discuss food allergy and allergenicity risk assessment of new foods entering the market as novel foods or GMO's. The Secretariat sought input from the Committee to identify the key learnings from the session and how these could inform future ACNFP assessments.

Members contrasted the data provided and methodologies for accessing traditional foods entering a new population compared to the assessment of GM products. It was recognised that the assessments were different, with the GM stipulating use of genetic and proteomic sequencing in these assessments. The Committee noted that where the GM document approach to risk assessment is stronger, the approach could be adapted more widely in risk assessment process, especially traditional foods where the risk of a new food entering the population in the UK could be better understood by sequence the proteins in the product.

The Committee explored the role of the allergenicity assessment in relation to foods entering a new population. They commented that the current approaches are effective in considering the potential for those with existing food allergies to react to the new foods. However, consideration of whether a new food could be a new food allergen is challenging. The potential for the current methodologies to be predictive was debated. It was recognised that the methods are not predictive, but their value lies in informing risk management decisions to lessen any potential for allergic responses to the new foods. This was felt to be an important application of the precautionary principle given the level of food allergy in the UK population.

The Committee also indicated that guidelines around food allergy and allergenicity for Novel Foods could be improved, and this was an area to consider for further work.

Action: The Comments have been captured by the Secretariat and will be used to inform future work in this area.

# 7. EFSA Consultation- Whole Genome Sequencing ACNFP/140/05

The European Food Standards Agency issued a public consultation on the guidance required for whole genome sequencing analysis of microorganisms intentionally use in the food chain as part of EU authorisation systems. The Committee reviewed this document with a view to considering whether to respond to the EFSA consultation as part of promoting consistency in reporting of this data to regulators.

In general, the Committee welcomed the document and the additional information that this approach could provide for assessments. The Committee commended the nonprescriptive approach of the document to bioinformatics methodologies which will allow for use with future advances in sequencing and annotation approaches. The committee also noted that transcriptomics and proteomics were not far behind, and the use of these data could be used to build on this assessment.

The Committee commented that the applicant should be asked to specify the origin of the DNA, if it is chromosomal or plasmid DNA. Given plasmid DNA is a potential route for gene sharing this was felt to be an omission.

The Committee queried whether it would not be best to assess the entire fully annotated genome. This would ensure that whole genome sequence analysis is objective and transparent, overcoming potential issues with applicants preselecting and potentially missing genes of potential concern.

Action: The Comments on the guidance have been collated and were used as basis to provide feedback to the EFSA consultation on behalf of the ACNFP.

## 8. Items for Information

## 8.1 Novel Food Policy Update

The Committee was given an oral update on the issues under consideration in the EU on novel foods.

Oral

Oral

## 9.2 GM Policy Update

The Committee was given an oral update on the issues under consideration in the EU of GM issues.

## 9. Date of next meeting:

The next meeting is scheduled for 29<sup>th</sup> April 2020. The venue is to be confirmed.