Your Title Here

Your Name Here

April 13, 2024

1 Data summary

We received csv file with 204 question numbers/opinions to include.

Below is an example of the data that are to be extracted:

- Administrative Data of the Opinion: Applicant company, their country of origin, DOI of the opinion, plus 10 other fields.
- **General Information**: Trade names, common names, form of the food (whole food, extract, etc.).
- **Identity**: This depends on the category. For example, for animals: genus, species, subspecies, part used; for chemicals: common name, IUPAC name, CAS number, molecular formula, etc.
- Production Process: List of main production steps.
- Main Composition of the Novel Food: Carbohydrates, proteins, fats, minerals, water, vitamins.
- **Proposed Uses and Use Levels**: Proposed uses (whole foods, supplements, etc.), target population (general, infants, children, etc.), food category (FoodEx / FAIM).
- **Nutritional Information**: Nutritionally disadvantageous / nutritionally advantageous components.
- Availability of ADME (Absorption, Distribution, Metabolism, and Excretion) Studies.
- Availability of Toxicological Studies and Their Outcome.
- Allergenicity Assessment: Unlikely, low, possible, certainty.

We have received from EFSA csv file with list of 207 question numbers to include. Types of articles are as follows:

type of article	count
opinion	198
guidance	4
public consultation	3
data gaps statement	1

That means we have to extract 198 opinions.

Out of that 198 opinions, we received JATS files for 194 of them. However, 71 of the files only contain FRONT part with administrative information about the articles, but no content part.

JATS availability	count
full JATS file	123
only front JATS file	71
no JATS file	4

The structure of the opinions can be divided into five groups.

Group A

most common group



Group B

panel in footnote, abstract on the first page



Group C

summary, keywords on the first page, panel members on the last



Group D

panel members first, summary after



Group E



The distribution in the groups is as follows:

group	count
A	142
В	32
С	4
D	14
E	6

2 Extraction rules

2.1 DOI

in article-meta - article-id - pub-id-type="doi"

2.2 Adoption date

Traditional foods - dont have adoption date, instead they have XX. Novel foods - have adoption date.

front - notes -fn-group - v nejake z nich je Adopted group6 - ADOPTED: in fn-group

2.3 Publication Date

in article-meta - pub-date - pub-type="epub"

2.4 Question Number

```
question number je taky v jedne fn-group  < front > \\ < notes > \\ < fn-group > \\ < fn \ id="efs26305-note-1002" \ \mathbf{xml:lang}="en" > \\  \\ < bold > Question \ number: </bold > \\ EFSA-Q-2020-00491 \\  <math display="block"> </fn > \\ </fn-group > \\ </front >
```

2.5 Scientific Panels

Usually NDA, for traditional foods EFSA, sometimes also GMO.

group 3 - v title: Panel on dietetic products, nutrition and allergies group 6 - articlemeta: contrib-group: collab(collab-type="authors"): NDA

look into collab - some panel there? (gmo, nda) - \dot{i} added - no panel there? - look into title - \dot{i} some panel there - \dot{i} added - \dot{i} no panel there - \dot{i} panel='EFSA'

ve formátu **Group 2** je to až někde úplně dole: v body \rightarrow pak najít sekci s tímto titlem

2.6 Scientific Officer

EFSA provided us with list of possible scientific officers.

2.7 Mandate type

-order matters

- guidance always has guidance in the title traditional food always have notification of XX as traditional food
 - extension of use new dossier the remaining ones
 - nutrient source can be added

2.8 Novel Food Name

- v title v article meta \rightarrow article-title

2.9 Category

One NF can fall under multiple categories. Categories as per Regulation Article 3 of 2015/2283. Traditional food guidelines specify following categories

Categories are defined in specific european regulations. Each regulation defines its own set of categories.

REGULATION (EC) No 258 /97 from 27 January 1991

- (a) foods and food ingredients containing or consisting of genetically modified organisms within the meaning of Directive 90 /220 /EEC;
- (b) foods and food ingredients producted from, but not containing, genetically modified organisms;
- (c) foods and food ingredients with a new or intentionally modified primary molecular structure;
- (d) foods and food ingredients consisting of or isolated from micro-organisms, fungior algae;
- (e) foods and food ingredients consisting of or isolated from plants and food ingredients isolated from animals, except for foods and food ingredients obtained by traditional propagating or breeding practices and having a history of safe food use;
- (f) foods and food ingredients to which has been applied a production process not currently used, where that process gives rise to significant changes in the composition or structure of the foods or food ingredients which affect their nutritional value, metabolism or level of undesirable substances.

commission recommendation 97/618/EC from 29 July 1997

- (a) pure chemicals or simple mixtures from non-GM sources;
- (b) complex NF from non-GM source;
- (c) GM plants and their products;

- (d) GM animals and their products;
- (e) GM microorganisms and their products;
- (f) foods produced using a novel process.

REGULATION (EU) 2015/2283 from 25 November 2015, Article 3

- (i) food with a new or intentionally modified molecular structure, where that structure was not used as, or in, a food within the Union before 15 May 1997;
- (ii) food consisting of, isolated from or produced from microorganisms, fungi or algae;
- (iii) food consisting of, isolated from or produced from material of mineral origin;
- (iv) food consisting of, isolated from or produced from plants or their parts, except when the food has a history of safe food use within the Union and is consisting of, isolated from or produced from a plant or a variety of the same species obtained by:
 - traditional propagating practices which have been used for food production within the Union before 15 May 1997; or
 - non-traditional propagating practices which have not been used for food production within the Union before 15 May 1997, where those practices do not give rise to significant changes in the composition or structure of the food affecting its nutritional value, metabolism or level of undesirable substances;
- (v) food consisting of, isolated from or produced from animals or their parts, except for animals obtained by traditional breeding practices which have been used for food production within the Union before 15 May 1997 and the food from those animals has a history of safe food use within the Union;
- (vi) food consisting of, isolated from or produced from cell culture or tissue culture derived from animals, plants, micro-organisms, fungi or algae;
- (vii) food resulting from a production process not used for food production within the Union before 15 May 1997, which gives rise to significant changes in the composition or structure of a food, affecting its nutritional value, metabolism or level of undesirable substances;
- (viii) food consisting of engineered nanomaterials as defined in point (f) of this paragraph;
- (ix) vitamins, minerals and other substances used in accordance with Directive 2002/46/EC, Regulation (EC) No 1925/2006 or Regulation (EU) No 609/2013, where:
 - a production process not used for food production within the Union before 15 May 1997 has been applied as referred to in point (a) (vii) of this paragraph; or

- they contain or consist of engineered nanomaterials as defined in point (f) of this paragraph;
- (x) food used exclusively in food supplements within the Union before 15 May 1997, where it is intended to be used in foods other than food supplements as defined in point (a) of Article 2 of Directive 2002/46/EC;

3 Results from p1

Here is where your conclusion goes.

4 Implementation

Two main classes:

JATS Opinion

- encompass the formal parts of the opinion, abstract the inner structure of the opinions into common interface
- it will abstract the formal things about the article: DOI, Title, EFSA Question, adoption date, publication date, URL, authors(panels)
- also it will abstract the different headings from different types of opinion and match them to the same structure

Opinion

- the scientific opinion itself, it will accept JATS opinion in constructor
- it will have subclass for each category, which will contain the category specific information
- it will extract NF Name, Applicant, Country of origin, NF code, type of mandate, regulation, outcome, common name, trade names, food form
- also proposed uses + target population
- availability of ADME studies
- allergenicity
- food category for FOODS
- for Microorganisms: type, genus, species, strain, QPS(?)
- for **Plants**: type, common name, botanical name, genus, species, part used
- for **Animals**: genus, species, subspecies, part used
- for Cell or Tissue: genus, species, cell type
- for **Chemicals**: common name, IUPAC name, CAS notation, SMILES, molecular formula, InChi