Food Innovation

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Food Safety AUTHORITY OF IRELAND

Food Safety Authority of Ireland

- Government agency responsible for coordinating the enforcement of food law in Ireland
- Statutory body since 01 January 1999, established under the Food Safety Authority of Ireland Act, 1998
- Independent science based agency under the aegis of the DoH
- Transparent and accountable
- No policy remit or research budget
- Remit from the farm gate onwards

Food of non- animal origin

Food contact materials

Food of animal origin

Food Information for Consumers

Nutrition and health claims

Food Improvement Agents

General Food Law

Contaminants

Microbiological criteria

Hygiene of Foodstuffs

Food hygiene

Novel Food

Food supplements

Irradiation

GMOs

Foods for Specific groups

Fortified foods

EU Law

Article 1

Subject matter

This Regulation lays down rules on food additives used in foods with a view to ensuring the effective functioning of the internal market whilst ensuring a high level of protection of human health and a high level of consumer protection, including the protection of consumer interests and fair practices in food trade, taking into account, where appropriate, the protection of the environment.

Brexit

- Approximately 12,000 EU laws transferred to UK statute book

"Many EU regulations may need adjusting as they are transferred, and the bill proposes the broad use of existing "Henry VIII powers" that allow ministers to amend legislation without full parliamentary scrutiny."

- GMO
- Irradiated food Regulations (*in review after 20 years*)
- Novel food
- Food additives
- Nutrition & Health claims
- Food supplements
- Food contact materials
- Nanotechnology

efsa
European Food Safety Authority

Calendar english (en)

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EFSA to give scientific advice on sugar added to food

Five European countries have asked EFSA to provide scientific advice on the daily intake of added sugar in food. EFSA aims to establish a science-based cut-off value for the intake of added sugar that is not linked to adverse health effects.

Story

Feed additives: join the discussion groups

EFSA in 2016: ensuring food safety for European consumers

EFSA to give scientific advice on sugar added to food

Renewal of EFSA's Management Board – call for applications

HIGHLIGHTS

all news

EFSA chairs network of EU agencies

Conference on Xylella fastidiosa: finding answers to a global problem

EVENTS

go to calendar

APR 05 2017

114th Plenary meeting of the Panel on Genetically Modified...

APR 26 2017

112th Plenary meeting of the BIOHAZ Panel

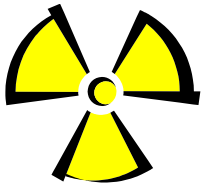
Parma

Advances in Food Science & Technology

Pasteurisation

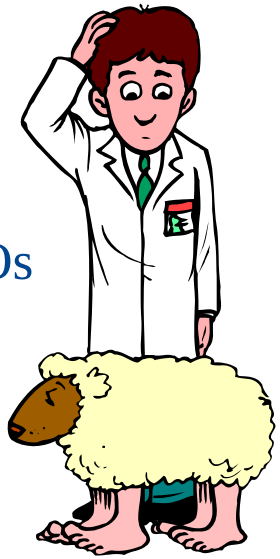
UV Treatment
Vitamin D

Ionising
Radiation



Edible packaging

GMOs

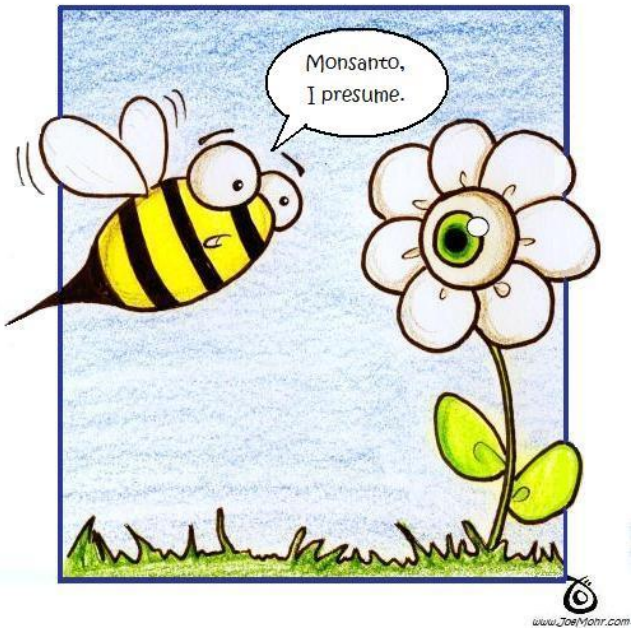


Functional Food

Animal Cloning

Nanotechnology

Genetically Modified Food



GMOs/GM Products

Pharmaceuticals

- recombinant hep B vaccine produced by GM baker's yeast
- Insulin, 1982 - USA
- Antithrombin – 2006, EU

Food

- Chymosin to coagulate cheese (early 1990s)
- Riboflavin
- GM salmon - USA

GM Food/Feed Authorisation

Regulation EC No 1829/2003

Draft Decision

3 months

Member States (SCoPAFF)

No Decision

Appeals Committee

No Decision

DG SANTE

Final Decision

Applicant

Positive/ Negative Decision

Positive Decision

Dossier

Competent Authority

14 days

Dossier

EFSA

6 months ±

Safety Opinion

DG SANTE

Reasons for voting NO or ABSTAINING - 2017

1. No agreed national position
2. Negative public opinion
3. Political reasons
4. Risk of harm to the national agri-food industry
5. Uncertainties in risk assessment
6. Safety concerns for the environment
7. Precautionary principle
8. Lack of comprehensive data on long-term potential impact of GMOs

Issues for Ireland?

- Ireland currently does not grow GM cr
- No real demand for GM food

- Feed use in 2016 – 4.9m T
- Home grown – 2.1m T
- **Imports 2.8m T**

Significant proport ed is:
Soybean, Maiz Dried distillers grains, Maize gluten feed. I p

EU - (non-GM)
N 2m T (31% GM)

What if the UK embraces GM technology?

GM Animals

Enviropigs

Express phytase in saliva and excrete ~ 75% less Phosphorous

GM salmon

Grow 3 times faster

AquAdvantage Salmon approved Nov 2015

Glofish

Flourescent Zebra fish developed in Taiwan

GM goats

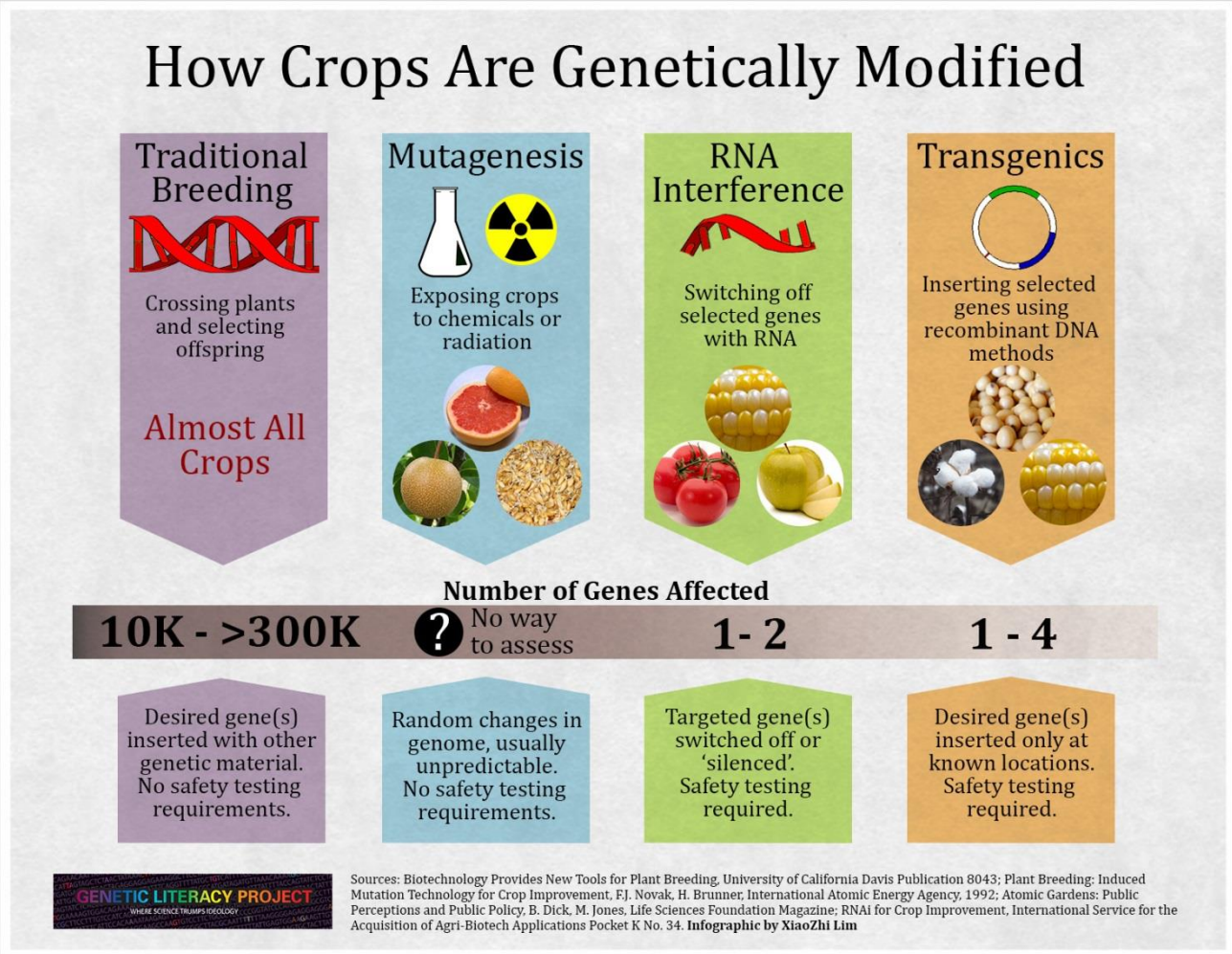
Spider silk in goats milk

Anti-thrombin in goats milk

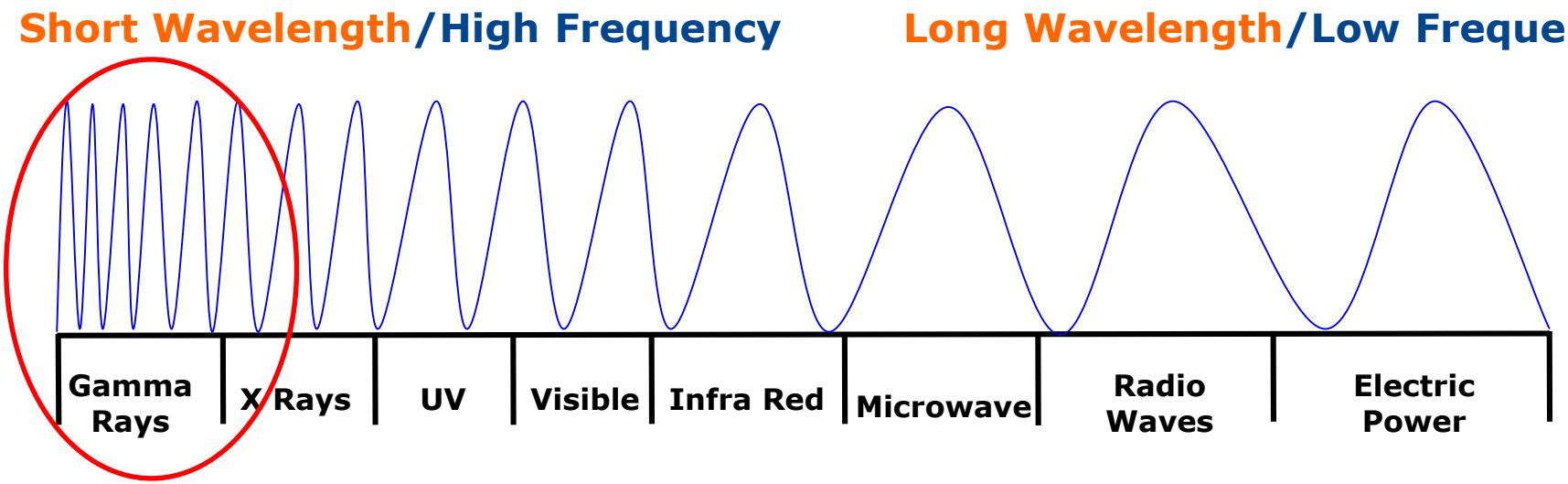
GM cow

Increased casein in milk improving cheese production

How will Third Country UK deal with new techniques?

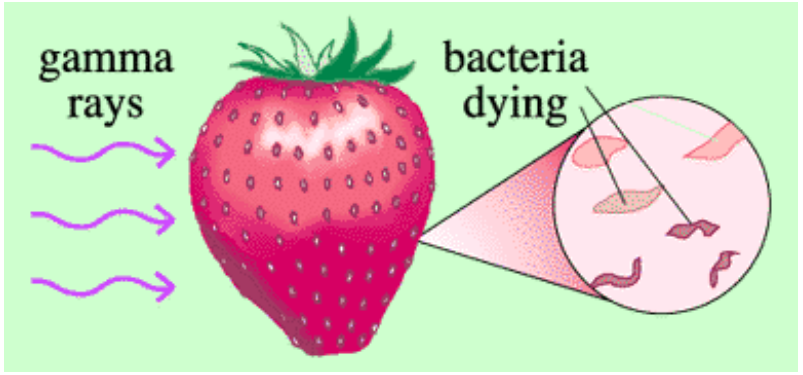


Irradiated Food



Radura Symbol

Ionising Radiation



1. >60 types of food
2. >40 countries
3. Kills pests and pathogens in food
4. Prevents/delays natural processes (germination/sprouting)

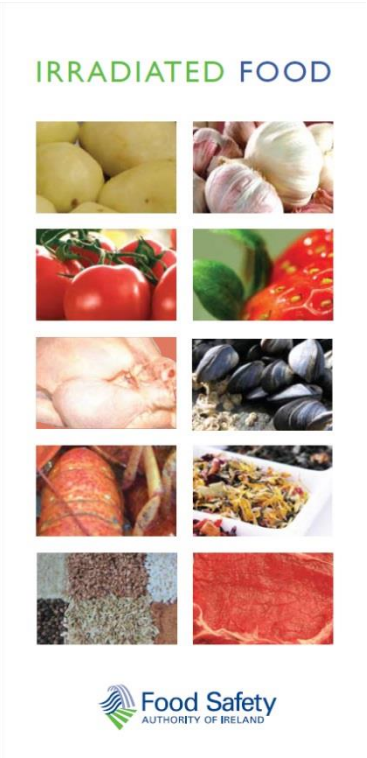
It **supplements** (not replace!) good hygiene

Irradiated Foods in the EU

- **EU wide**
  - Dried aromatic herbs, spices and vegetable seasonings

- **Member States**
  - Potatoes & strawberries (Belgium)
  - Onions & frozen frogs legs (France)
  - Poultry & fish (UK)
  - Pulses & dried vegetables (Netherlands)

******No food irradiation facility in Ireland******



Food Additives
Regulation 1333/2008/EC

- Food additives play an important role in today's complex food supply

- Consumer Demand: "*Convenience alongside higher standards of safety and wholesomeness at affordable prices*"

Definitions

'**Food Additive**' means any substance:

- **Not** normally consumed as a food in itself,
- Intentionally added for a **technological purpose** in the manufacture, processing, preparations, treatment, packaging, transport or storage of food,
- That **becomes** directly or indirectly a **component of the food**, including its by-products
- Does not present a health hazard at the level proposed
- Must have advantages and benefits to the consumer

Food Additives?

- Preserve quality
  -Preservatives (kill microorganisms)
  -Antioxidants (retard oxidation)

- Impart and enhance taste and appearance
  -Acids
  -Colours

- Provide consistency and texture
  -Emulsifiers
  -Stabilisers

- Meet specific nutritional requirements
  -Sweeteners

E Numbers

Food Additives – Regulatory Framework

- **Regulation (EC) No 1333/2008** on food additives
- **Regulation (EU) No 231/2012** laying down specifications for food additives
- **Regulation (EC) No 1331/2008** establishing a **common authorisation procedure** for food additives, food enzymes and flavourings.
- **Regulation (EU) No 257/2010** setting up a programme for the re-evaluation of approved food additives

Food Supplements – Directive 2002/46/EC

Article 2

For the purposes of this Directive:

(a) 'food supplements' means foodstuffs the purpose of which is to supplement the normal diet and which are concentrated sources of nutrients or other substances with a nutritional or physiological effect, alone or in combination, marketed **in dose form**, namely forms such as capsules, pastilles, tablets, pills and other similar forms, sachets of powder, ampoules of liquids, drop dispensing bottles, and other similar forms of liquids and powders designed to be taken in measured small unit quantities;

Food Supplements

- The labelling, presentation and advertising **must not** attribute to food supplements the property of preventing, treating or curing a human disease, or refer to such properties.

- The labelling, presentation and advertising of food supplements **must not** include any mention stating or implying that a balanced and varied diet cannot provide appropriate quantities of nutrients in general

- FSAI must be notified by the importer

- New FSAI guidance for tolerance levels of vitamins & minerals

Must indicate:

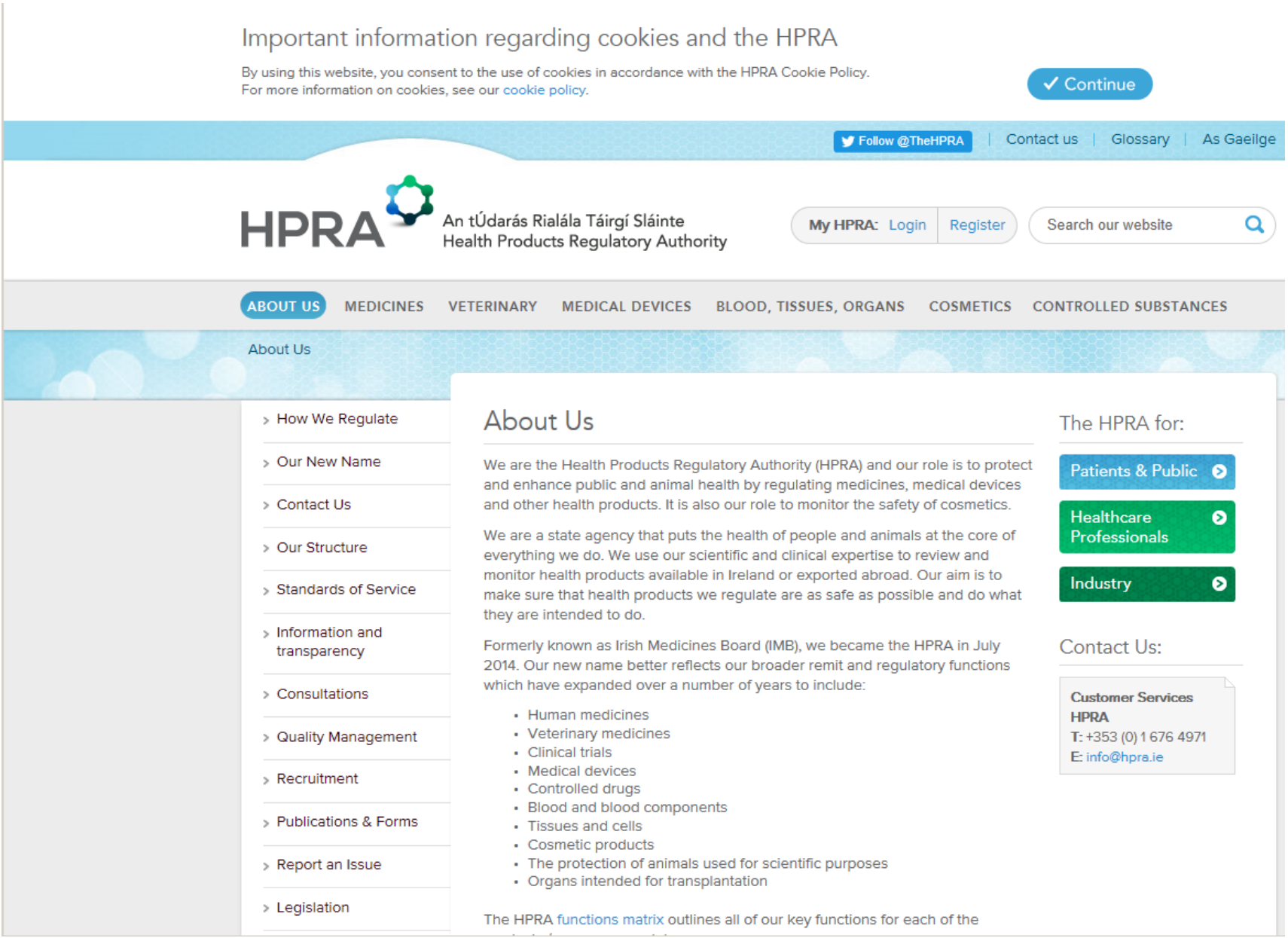
(a) the names of the categories of nutrients or substances that characterise the product or an indication of the nature of those nutrients or substances;

(b) the portion of the product recommended for daily consumption;

(c) a warning not to exceed the stated recommended daily dose;

(d) a statement to the effect that food supplements should not be used as a substitute for a varied diet;

(e) a statement to the effect that the products should be stored out of the reach of young children



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About Us

We are the Health Products Regulatory Authority (HPRA) and our role is to protect and enhance public and animal health by regulating medicines, medical devices and other health products. It is also our role to monitor the safety of cosmetics.

We are a state agency that puts the health of people and animals at the core of everything we do. We use our scientific and clinical expertise to review and monitor health products available in Ireland or exported abroad. Our aim is to make sure that health products we regulate are as safe as possible and do what they are intended to do.

Formerly known as Irish Medicines Board (IMB), we became the HPRA in July 2014. Our new name better reflects our broader remit and regulatory functions which have expanded over a number of years to include:

- Human medicines
- Veterinary medicines
- Clinical trials
- Medical devices
- Controlled drugs
- Blood and blood components
- Tissues and cells
- Cosmetic products
- The protection of animals used for scientific purposes
- Organs intended for transplantation

The HPRA functions matrix outlines all of our key functions for each of the

The HPRA for:

Patients & Public

Healthcare Professionals

Industry

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Novel Food

- Food or ingredient (or technology) not on the EU market to a significant degree prior to 15th May 1997
- Pre-authorisation assessment required by a Member State
- Substantial equivalence opinion possible
- Regulation (EC) No 258/97 applies until January 1st 2018 when Regulation (EU) 2015/2283 comes into effect

Innovation in the EU?

Insect protein

Vitamin D mushrooms

Sustainable products - GMMs

Plant sterols

In-vitro meat

New Novel Food Regulation

REGULATIONS

REGULATION (EU) 2015/2283 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 25 November 2015

on novel foods, amending Regulation (EU) No 1169/2011 of the European Parliament and of the Council and repealing Regulation (EC) No 258/97 of the European Parliament and of the Council and Commission Regulation (EC) No 1852/2001

- Central authorisation system
- Simpler procedure for traditional foods from 3rd countries
- Data protection provisions also - 5 year protection (after authorisation) on newly developed scientific evidence
- Nanomaterials specified as novel food – require authorisation
- Insects specified as novel food – require authorisation

Current Authorisation Process

EFSA

Opinion

DG SANCO

Draft Decision

Member States (QMV)

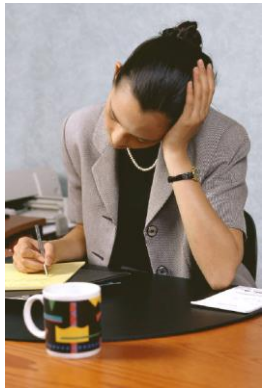
Decision

Reasoned objection

60 days

DG SANCO + MS

No objection
+ve Opinion



Applicant

90 days

Safety Assessment

Food Safety Authority of Ireland

Competent Authority

Dossier

New Authorisation Process

EFSA

Opinion

DG SANCO

Draft Decision

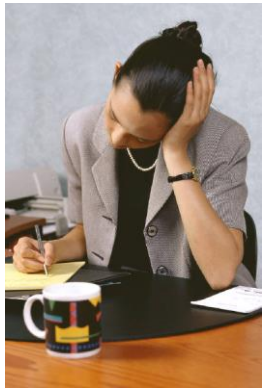
Member States (QMV)

Decision

DG SANCO

+ MS

Dossier



Applicant

FOOD CONTACT MATERIALS

FRAMEWORK REGULATION (1935/2004)

What does it apply to?

Materials and articles:

- Already in contact with food
- Intended to be brought in contact with food
- Expected to come into contact with food or transfer their components to foods (normal and foreseeable use)

- Doesn't only mean packaging…..also utensils, pipes in food machinery, conveyer belts etc….!

GMP Regulation (EC) No 2023/2006

Also

SPECIFIC MEASURES (Article 5(i))

Materials

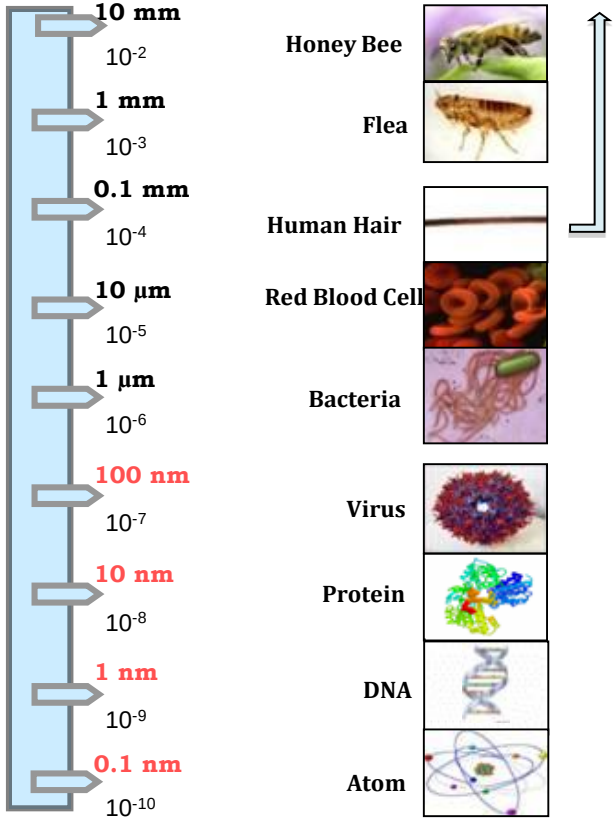
- Ceramics
- Regenerated cellulose film
- Plastics
- Recycled plastics
- Active and intelligent Materials

Substances

- Nitrosamines
- BADGE, BFDGE & NOGE

Nanotechnology

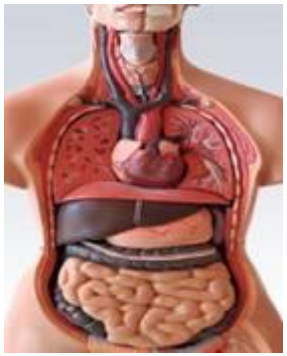
- Nanomaterials have dimensions between 1-100 nanometers
- Nanomaterials can have different physical and chemical properties compared to their macro counterparts
- Increased bioavailability?
- Antimicrobial activity?
- Sensory properties?
- Smart packaging?



Visible Range

Nanoparticle: ***a structure ≤100 nm in at least one dimension***

Applications of Nanotechnology



Medical

Recreation

Cosmetics

Industrial

Technology

Fuel

Cloned Animals

(c) **Cloned animals**

‘means animals produced by means of a method of asexual artificial reproduction with the aim of producing a genetically identical or nearly identical copy of an individual animal’

(d) **Descendants of cloned animals**

‘means animals produced by means of sexual reproduction, in cases in which at least one of the progenitors is a cloned animal’

What is a nutrition or health claim?

Pictures
Graphics
Symbols
Advertising
Labelling

Includes verbal sales pitch

Food Safety
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