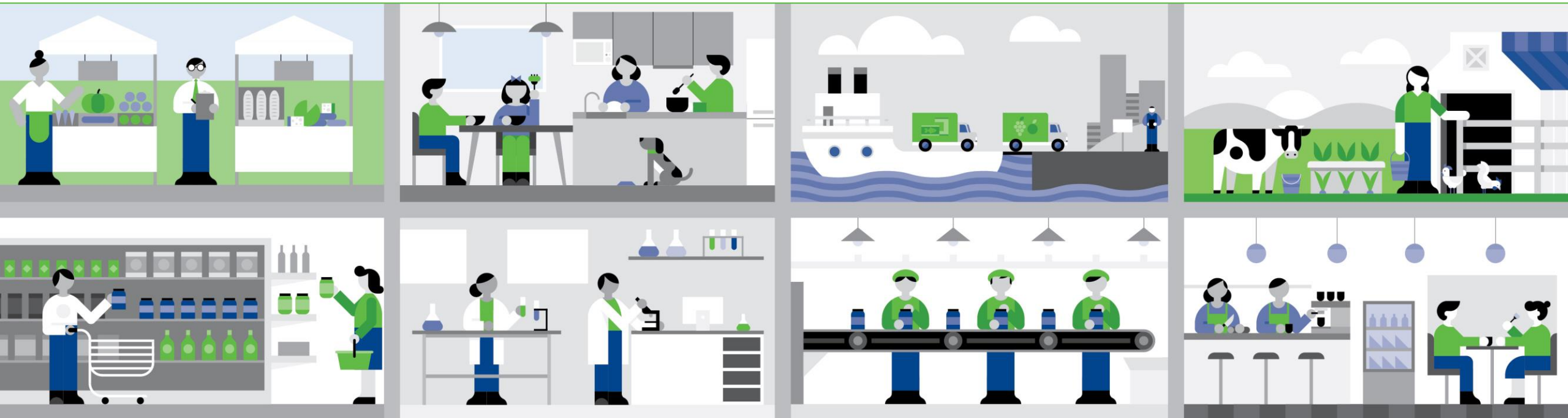


Food and the Circular Economy: A Regulatory Perspective

Presented by Dr. Mary Lenahan, Acting Senior Technical Executive, Biological Safety

Red Room, UCD Student Centre

30th March 2023



Presentation overview

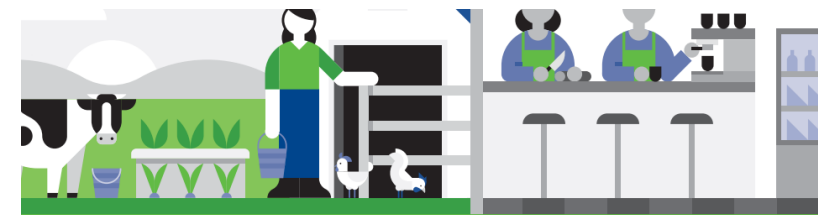
- Who is the FSAI?
- The EU Farm to Fork (F2F) strategy
- Role of food legislation in sustainable food systems
- Food Safety Management System
- FSAI resources



Who is FSAI?

- The Food Safety Authority of Ireland (FSAI) was established under the Food Safety Authority of Ireland Act, 1998
- Statutory, independent and science-based body
- National responsibility for co-ordinating the enforcement of food safety legislation in Ireland through service contracts with official agencies
- Manage risks in the food chain
- Respond effectively to any national or international food incident or crisis
- Ensure the safety, integrity and authenticity of the food chain
- Detect and prevent breaches of food law
- Taking action to protect consumers

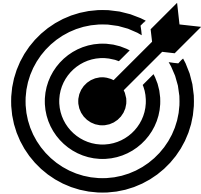
www.fsai.ie





FSAI Vision:

Safe and trustworthy food for everyone



FSAI Mission:

We protect consumers and raise compliance through partnership, science and food law enforcement

2021 in FSAI in numbers.....



171 Investigations



227 Risk assessments



154 Food alerts and
food allergen alerts



13 Protected
disclosures



59 Enforcement orders



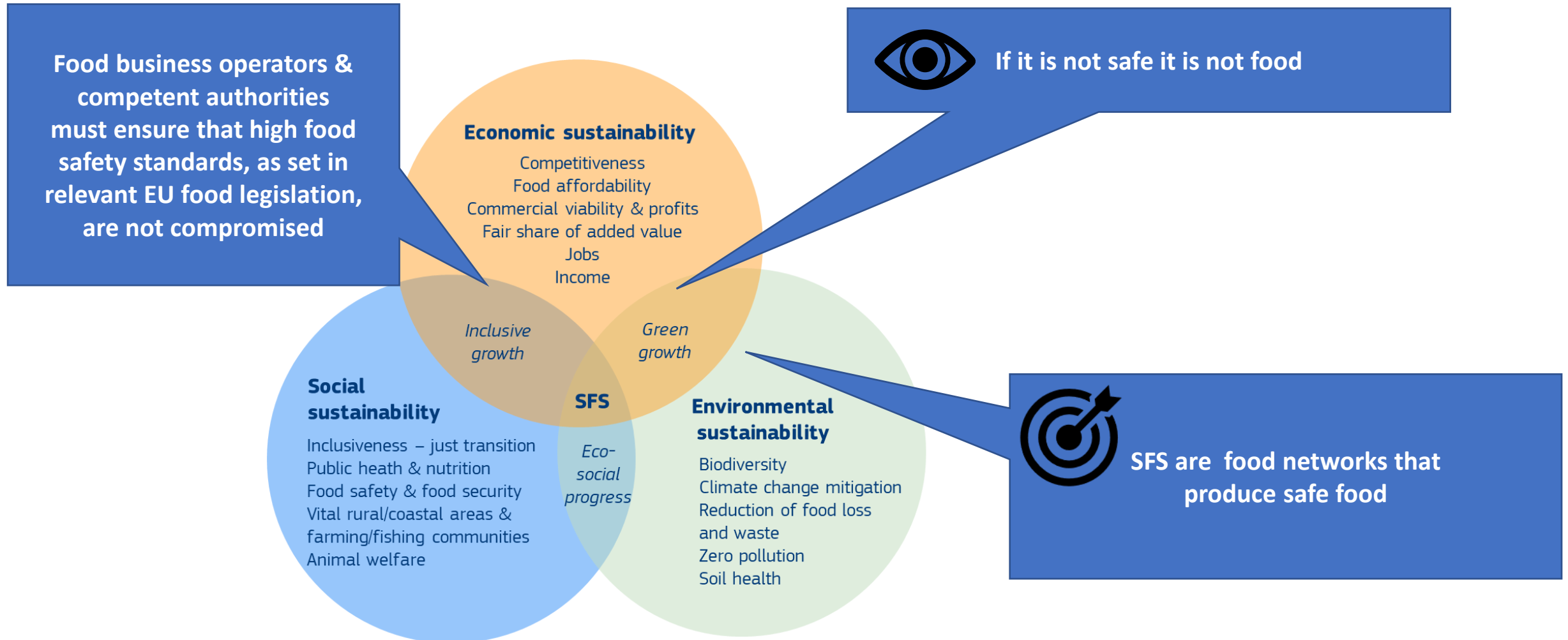
European Union (EU) Farm to Fork (F2F) Strategy

- Published in May 2020 for a fair, healthy and environmentally-friendly food system
- F2F at heart of the **EU Green Deal** which sets out how to make Europe the first climate-neutral continent by 2050
- Addresses **challenges of sustainable food systems**
- Will enable the transition to a sustainable EU food system that safeguards **food security** and ensures access to **healthy diets** sourced from a **healthy planet**

[f2f_action-plan_2020_strategy-info_en.pdf \(europa.eu\)](#)



Role of food legislation in sustainable food systems (SFS)



Ensure food safety risks are identified early and proactively addressed.....

The Law of Unintended Consequences

An adage or idiomatic warning that an intervention in a complex system tends to create unanticipated and often undesirable outcomes.

Robert K. Merton, American Sociologist



[The Dilemma of Unintended Consequences of Public Policy on Health Care - MedAxiom](#)

Key driver for shaping food safety in Europe

Bovine Spongiform Encephalopathy (BSE) Crisis ~1980-2000

1989 – first cases (n=15) in Ireland



- Attacks the brain and central nervous system of cattle and eventually causes death
- Spread by cattle eating feed that contained contaminated Meat and Bone Meal (MBM)
- New variant Creutzfeldt-Jakob Disease (vCJD) - rare & fatal form of dementia
- Long incubation period (4-6 yrs)
- MBM was incorporated into cattle feed until it was banned (1990 – 2001)

General Principles of Food Law: Regulation (EC) No 178 of 2002



- The **central** piece of European food and feed law
- Establishes **definitions** relevant to all subsequent legislation
- Contains general **obligations** for
 - **Food and feed** businesses
 - **Competent authorities**



Key Articles of Reg 178/2002

Article	Topic addressed
Article 2 & 3	Definitions
Article 6	Risk analysis
Article 7	Precautionary principle
Article 8	Protection of consumer interests
Article 9 & 10	Transparency – public consultation & information
Article 11 & 12	Import & Export
Article 14	Food Safety Requirements ('Unsafe Food')
Article 16	Presentation of food (Misleading Labels/Claims etc)
Article 17	General Responsibilities (compliance and enforcement)
Article 18	Traceability
Article 19	Withdrawal and Notification

Unsafe food (Article 14)

Food shall not be placed on the market if it is unsafe:

Unsafe food is defined as food which is:

Injurious to health

or

Unfit for human consumption

Article 14 of Regulation 178/2002 - Unsafe food

In determining if food is **unsafe**, consideration to be given to:

- Normal conditions of use by the consumer
- Stage of production, processing and distribution
- Information provided to the consumer (including labelling or other information generally available) concerning the avoidance of specific health effects from a particular food or category of foods (e.g. allergens)



How to control the risk of unsafe food?

- Legal requirement (Regulation 852/2004) for all food businesses to have a **food safety management system** (FSMS) based on the principles of HACCP
- All food business must have in place prerequisite programmes (PRPs)
- Good hygiene/manufacturing practices (GHP/GMP) necessary to maintain a hygienic environment
- Hazard Analysis and Critical Control Point (**HACCP**) to identify and control **hazards** (i.e. microbiological, chemical or physical) that could pose a danger to the preparation of safe food

□ **The 7 HACCP principles boil down to -**

- What could go wrong?
- How can I prevent it?
- Make sure I am doing it!

...And it's about putting extra focus & resources on things that are critically important i.e. the Critical Control Points (CCPs)

□ **GHP/GMP/PRPs...**

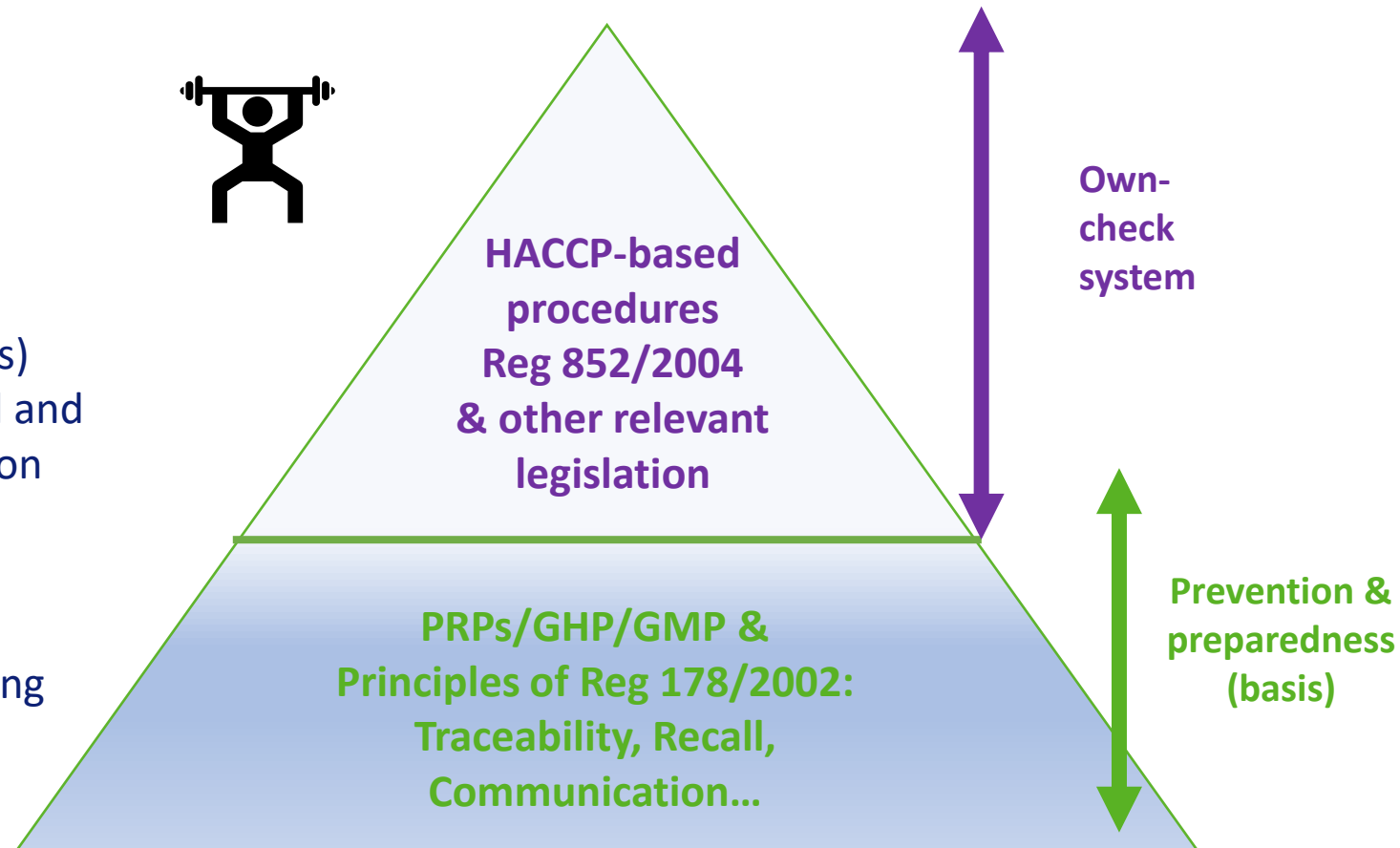
The **foundation** for the HACCP based procedures, because the majority of hazards are controlled by implementing GHP/GMP/PRPs



Strong FSMS need a strong foundation

PRPs/GHP/GMP include where appropriate:

1. Premises and structure
2. Plant and equipment
3. Technical maintenance and calibration
4. Cleaning and sanitation
5. Zoning (e.g. physical separation of activities)
6. Procedures to control and prevent physical and chemical contamination from the production environment
7. Supplier control
8. Services
9. Storage, distribution and transport (including temperature control)
10. Waste management
11. Pest control
12. Personnel hygiene and fitness to work
13. Training and supervision
14. Working instructions



Commission Notice on the implementation of food safety management systems covering Good Hygiene Practices and procedures based on the HACCP principles, including the facilitation/flexibility of the implementation in certain food businesses
[2022/C 355/01; published on 16.9.2022](#)

The 7 Principles of HACCP



Hazard Analysis e.g. Survival of pathogenic *E. coli* (STEC) due to inadequate cooking of a beef burger



Critical control points (CCP) i.e. the cooking step



Critical limits i.e. $\geq 75^{\circ}\text{C}$ at the core or equivalent (e.g. $\geq 70^{\circ}\text{C}$ for 2 mins)



Monitoring i.e. Periodically check that the correct temperature has been reached



Corrective action e.g. Cook for longer, i.e. until correct temperature is reached

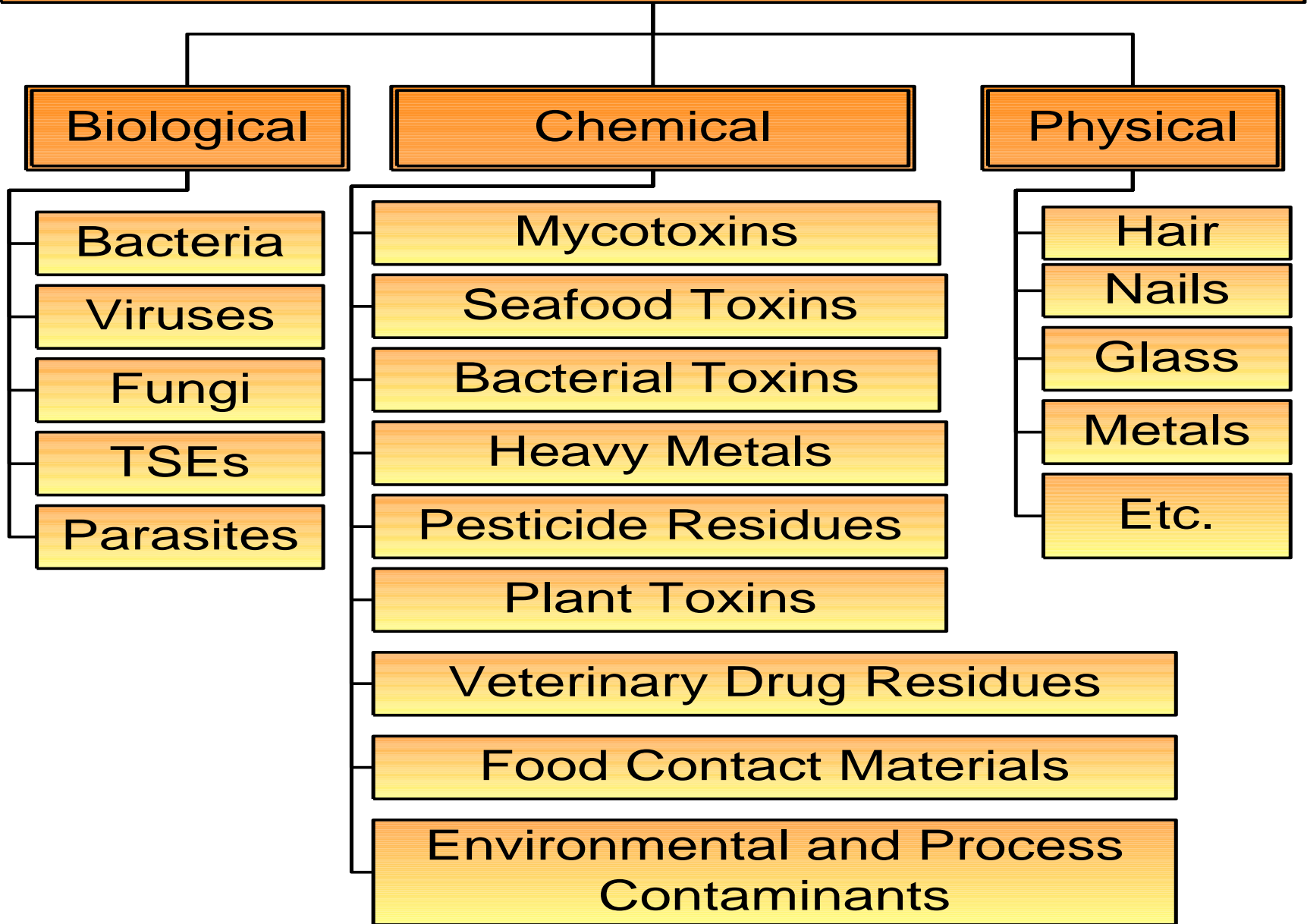


Verification Check periodically that staff are monitoring CCPs and taking corrective actions



Document Keep monitoring records

Hazards in Food



Food Allergens – The 4th Hazard!

- **Fourteen** of the most common European allergens are covered by EU labelling legislation
- But customers may have other allergens
- Regulation (EU) No 1169/2011 on the provision of food information to consumers (FIC)

<http://data.europa.eu/eli/reg/2011/1169/2018-01-01>



Compliance with relevant Food Legislation.....

- Microbiological criteria for foodstuffs

- Product specific legislation (e.g. poultry meat, bottled water, milk & milk products etc..)

- Additives
- Flavourings
- Contaminants
- Pesticide residues
- Materials and articles in contact with food (e.g. packaging)

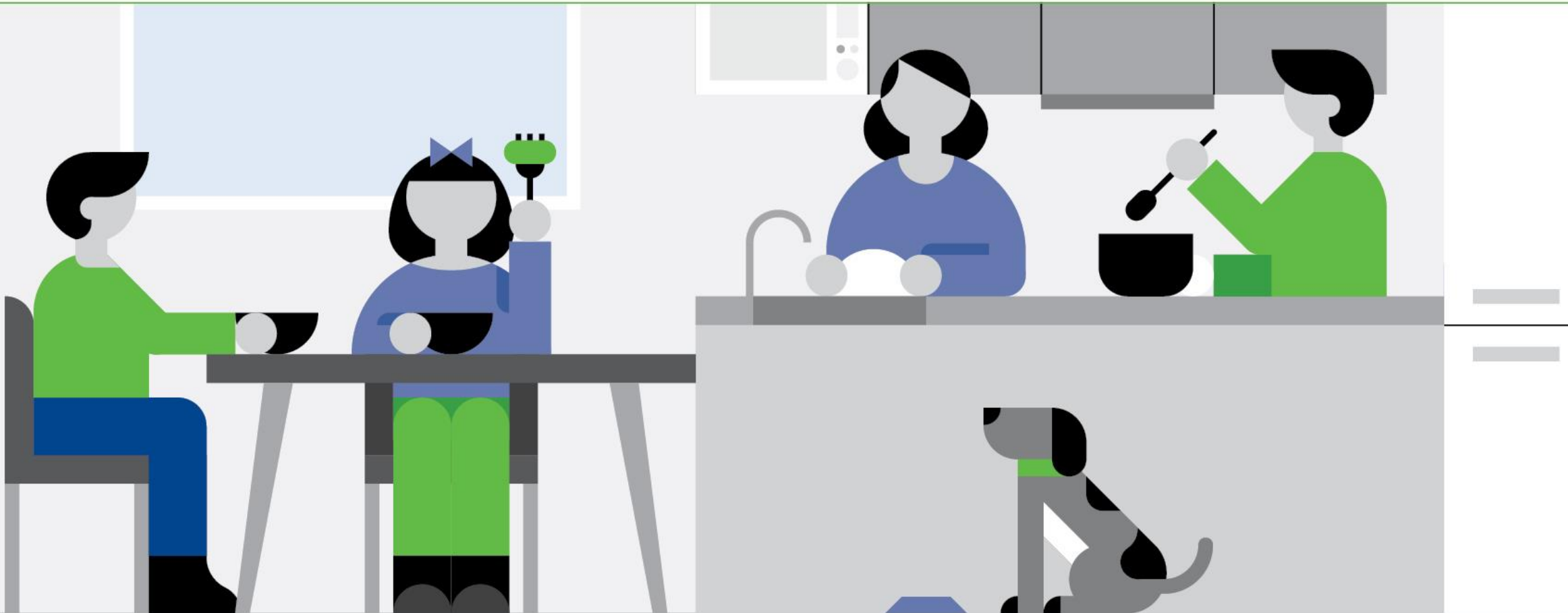
- Food fortification
- Nutrition & Health Claims
- Food supplements

- Novel foods and ingredients
- Genetically modified organisms (GMOs)

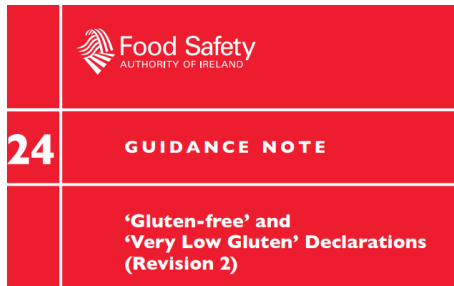
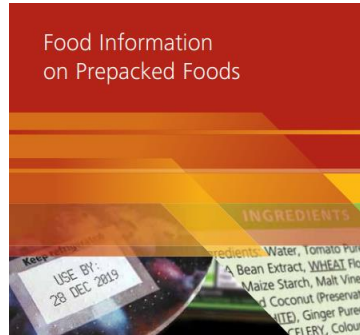
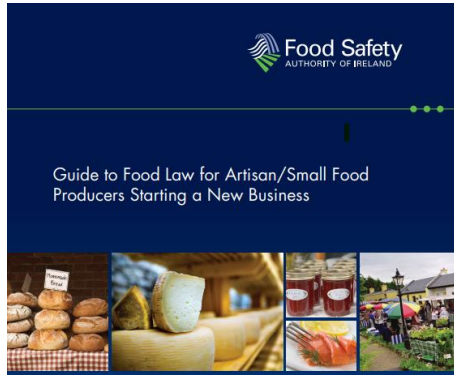
- Food information for consumers (FIC) - i.e. Labelling

- And more....
-

FSAI Information & Resources



Information and guidance for food businesses available at www.fsai.ie



Food Businesses



The FSAI provides new food businesses with a comprehensive range of background information

The FSAI's primary focus is to assist food businesses to achieve good hygiene standards and comply with the law. In this section you can find information on:

- [Starting a food business](#) - where to start and what you need to know
- [Allergens](#) - get all the information
- [HACCP](#) - what it means and how to develop your food safety management system
- [Our Safe Catering Pack](#) - helps caterers implement their food safety management system
- [Training](#) and access our [E-learning modules](#)
- [Microbiological Criteria](#) - who it applies to and how to comply
- [Shelf-life](#) - how to determine a food's shelf-life and how to declare it on the label
- [Approved food establishments](#) - access lists of establishments approved by the HSE, DAFM, LA and SFPA

If you can't find what you're looking for here have a look at our [legislation](#) and [frequently asked questions](#) sections.

- COVID-19 - Re-opening a food business
- Starting a Food Business
- Brexit
- HACCP
- Training
- Microbiological Criteria
- Shelf-Life
- Butchers
- Food Reformulation
- MenuCal
- Food Contact Materials
- Approved Food establishments
- Food Donation
- Import of Products of

Approved Food Establishments



Approved establishments handling products of animal origin for each competent authority in Ireland

[View lists of approved establishments](#)

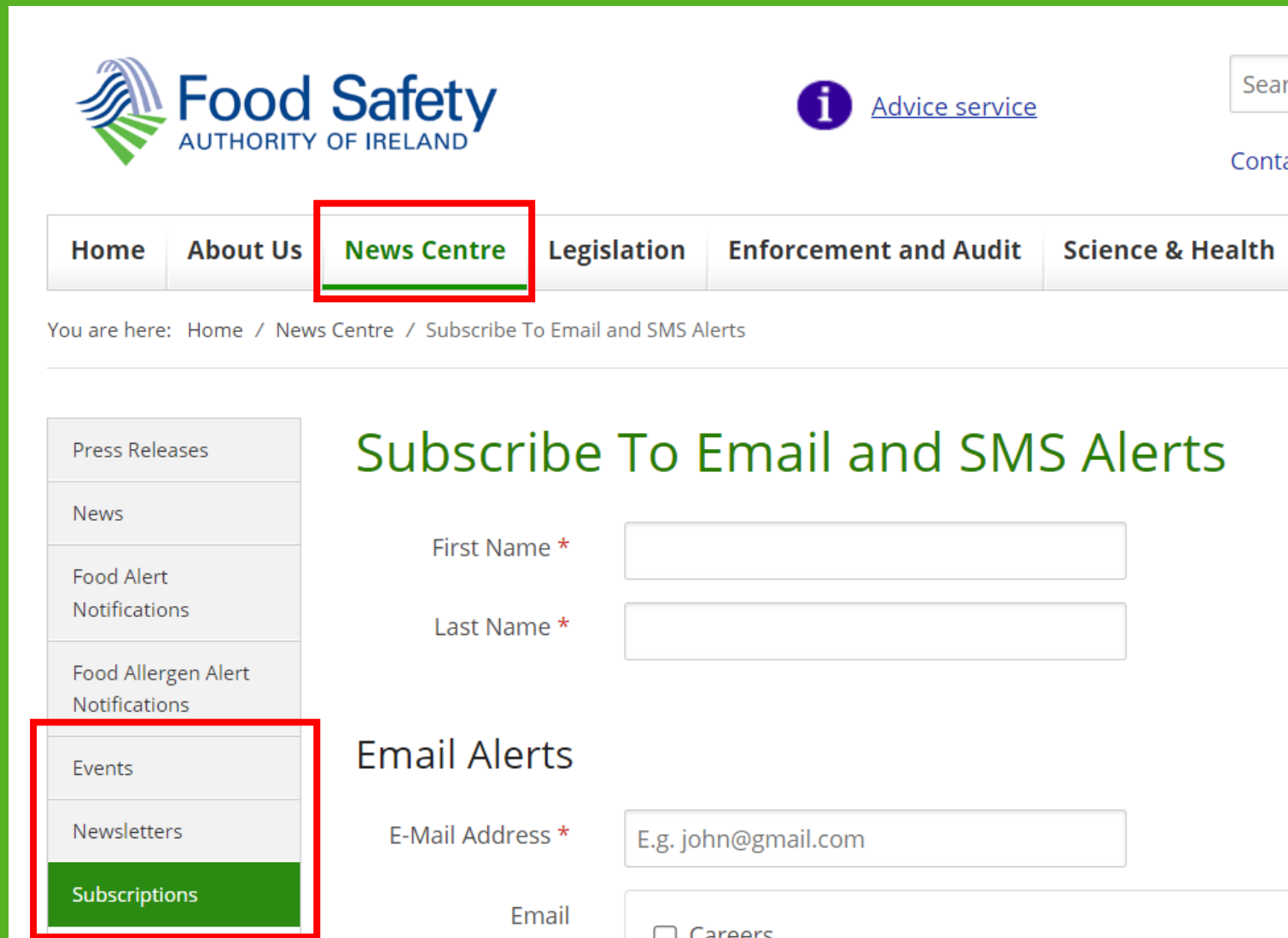
Food Labelling



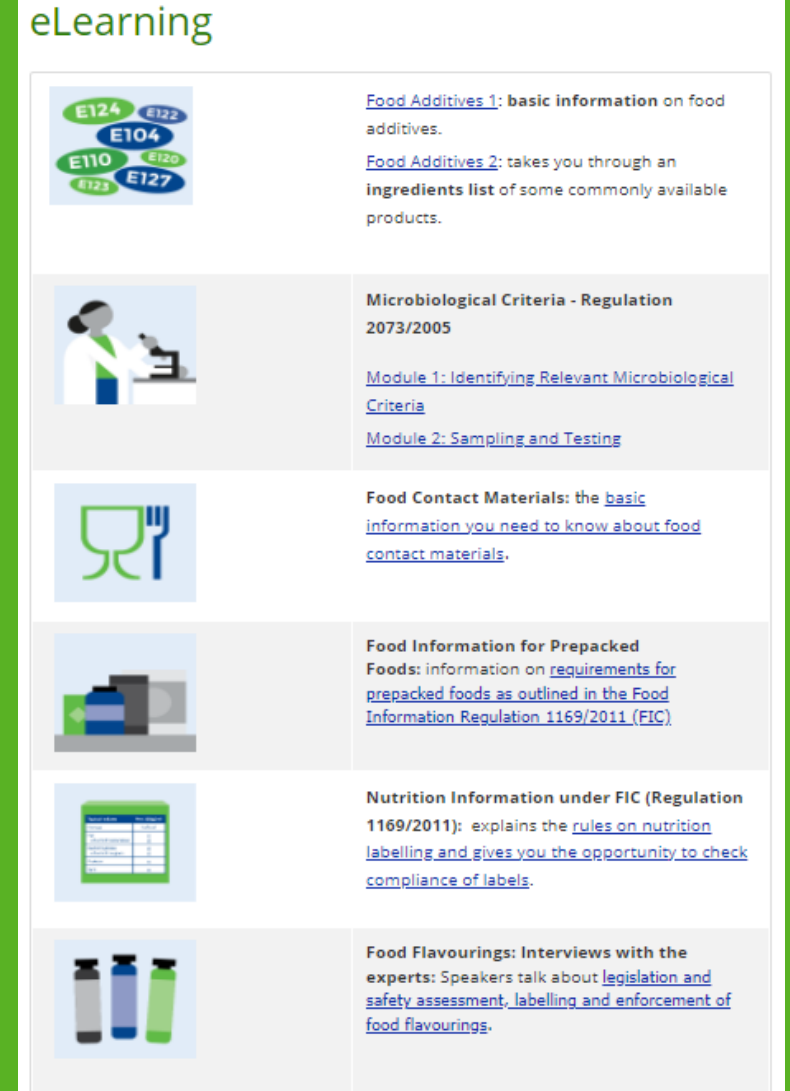
Information on the [Food Information to Consumers](#) (FIC) Regulation

Legislation

Information regarding



The screenshot shows the FSAI website's navigation menu with 'News Centre' highlighted in a red box. Below the menu, the breadcrumb trail reads 'You are here: Home / News Centre / Subscribe To Email and SMS Alerts'. The main heading is 'Subscribe To Email and SMS Alerts'. On the left, a sidebar menu lists 'Press Releases', 'News', 'Food Alert Notifications', 'Food Allergen Alert Notifications', 'Events', 'Newsletters', and 'Subscriptions', with 'Subscriptions' highlighted in a red box. The main content area contains a form with fields for 'First Name *', 'Last Name *', and 'E-Mail Address *' (with the example 'E.g. john@gmail.com').



The screenshot shows the 'eLearning' section of the website. It features a grid of course cards. The first card is titled 'Food Additives' and includes a graphic with E-numbers (E124, E122, E104, E110, E120, E123, E127) and two links: 'Food Additives 1: basic information on food additives.' and 'Food Additives 2: takes you through an ingredients list of some commonly available products.' The second card is 'Microbiological Criteria - Regulation 2073/2005' with an icon of a person at a microscope and two links: 'Module 1: Identifying Relevant Microbiological Criteria' and 'Module 2: Sampling and Testing'. The third card is 'Food Contact Materials: the basic information you need to know about food contact materials.' with an icon of a fork and glass. The fourth card is 'Food Information for Prepacked Foods: information on requirements for prepacked foods as outlined in the Food Information Regulation 1169/2011 (FIC)' with an icon of a kitchen appliance. The fifth card is 'Nutrition Information under FIC (Regulation 1169/2011): explains the rules on nutrition labelling and gives you the opportunity to check compliance of labels.' with an icon of a nutrition label. The sixth card is 'Food Flavourings: Interviews with the experts: Speakers talk about legislation and safety assessment, labelling and enforcement of food flavourings.' with an icon of three bottles.



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**If in doubt - email
your query to the
FSAI Advice Line:
info@fsai.ie**

