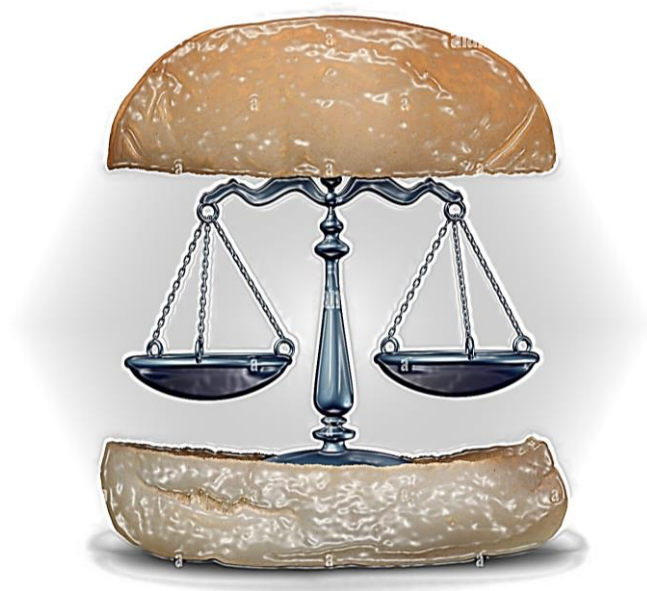


National and International Hygiene Regulations



1. General Aspects

1.1. Fundamental Definitions

- **Food Safety:** The guarantee that food does not cause harm to the consumer. It is based on innocuousness (absence of biological, chemical, and physical hazards), wholesomeness (adequate hygiene throughout the food chain), and fairness (protection against fraud and deception).
- **Food Hygiene (Codex Alimentarius):** "All conditions and measures necessary to ensure the safety and wholesomeness of food at all stages of the food chain."

1.2. Classification of Food Hazards

Hazard Type	Examples	Health Effects
Biological	<i>Salmonella</i> , <i>Listeria</i> , <i>E. coli</i> , Hepatitis A	Foodborne illness, gastroenteritis, septicemia
Chemical	Pesticides, heavy metals (Pb, Hg), mycotoxins	Acute poisoning, chronic effects, cancer
Physical	Glass, metal, bones, plastic	Injuries, digestive obstructions
Allergens	Gluten, peanuts, crustaceans, milk	Allergic reactions, anaphylactic shock
Radiological	Cesium-137, Iodine-131	Cancer, hematological disorders

1.3. Fundamental Principles

- **Farm to Fork:** Food safety must be ensured at all stages, from primary production to the final consumer.
- **Precautionary Principle:** In cases of scientific uncertainty about a serious risk, provisional management measures may be adopted.
- **Traceability Principle:** The ability to trace the path of a food product at all stages (production, transformation, distribution).

1.4. Stakeholders in Food Safety

- **Food Business Operators (FBOs):** Primary responsible parties.
- **Competent Authorities:** Official control bodies.
- **Standardization Bodies:** Codex, ISO, IANOR (Algeria).
- **Analysis Laboratories.**
- **Consumers:** Ultimate target of protection.

2. Law and Administration

2.1. Hierarchy of Norms in Food Law

- **International Law:** WTO/SPS Agreements, Codex Alimentarius.
- **Regional Law:** EU Regulations (influence through trade).
- **National Law:** Laws, decrees, ministerial orders (Algeria).
- **Voluntary Standards:** ISO standards, Algerian Standards (NA), private schemes (BRC, IFS).

2.2. Competent Administrations in Algeria

Institution	Role
Ministry of Commerce and Export Promotion	Quality control, conformity checks, fraud repression
Ministry of Health, Population and Hospital Reform	Sanitary safety, public health protection
Ministry of Agriculture and Rural Development	Primary production (ONAB, veterinary services)
IANOR (Algerian Institute of Standardization)	Development and adoption of Algerian standards (NA)
CACQE (Algerian Council for Accreditation of Quality and Environment)	Accreditation of laboratories and certification bodies
National Laboratories (LNQCA, INSP, regional centers)	Analytical control

2.3. Official Control (Risk-Based)

- **Inspection:** On-site verification of premises, practices, and documents.
- **Audit:** Systematic and independent examination of control systems.
- **Sampling and Analysis:** Analytical verification of conformity.
- **Traceability Check:** Verification of the ability to trace products (one step back/one step forward).

3. Food Legislation

3.1. International Regulatory Systems

A. The Codex Alimentarius (1963 – FAO/WHO)

- **Role:** International collection of standards, guidelines, and codes of practice.
- **WTO Recognition (1994):** The SPS Agreement recognizes Codex as the international reference for food safety.
- **Key Texts:** CAC/RCP 1-1969 (General Principles of Food Hygiene — foundation of HACCP); Guidelines on claims, nutritional labeling, and contaminants.
- **Main Committees:** CCFH (hygiene), CCGP (general principles), CCFA (additives), CCPR (pesticides), etc.
-

B. The WTO SPS Agreement (1995)

- **Objective:** Regulates sanitary measures to protect health without creating unjustified trade barriers.
- **Principles:** Scientific justification, harmonization (Codex reference), equivalence, non-discrimination, transparency.
- **Link with Codex:** A member basing its measures on Codex standards is presumed compliant with the SPS Agreement.

C. The European Hygiene Package (Reference/Influence on Algeria)

Regulation	Subject
Reg. (EC) 178/2002	General Food Law: principles, traceability, withdrawal/recall, creation of EFSA
Reg. (EC) 852/2004	General hygiene: mandatory HACCP, Good Hygiene Practices (GHP), Annexes I & II
Reg. (EC) 853/2004	Specific rules for animal products (meat, milk, eggs, fish), EU approvals
Reg. (EU) 2017/625	New framework for official controls (replaces 882/2004 & 854/2004)
EFSA	European Food Safety Authority (Parma, Italy): scientific risk assessment

3.2. National Regulation (Algeria)

A. Fundamental Legal Texts of Algeria

Text	Subject
Law n° 09-03 of February 25, 2009	Consumer protection and fraud repression. Defines consumer rights, operator obligations, infractions, and sanctions.
Executive Decree n° 13-278 of August 7, 2013	Conditions for granting the national conformity mark ("TEDJ" mark).
Interministerial Order of October 27, 2011	Hygiene conditions for placing food on the market (premises, equipment, personnel, storage, transport, waste, pests, mandatory HACCP).
Law n° 04-04 of June 23, 2004	Standardization framework (organization of IANOR, development of Algerian standards NA).

B. Sector-Specific Regulations

Sector	Regulatory Text
Primary production	Law n° 08-16 on agricultural orientation
Slaughtering	Executive Decree n° 91-53 on slaughterhouses and meat inspection
Milk and dairy products	Executive Decree n° 93-74 (definition, composition, hygiene)
Bottled waters	Executive Decree n° 04-156 (capping, treatment, conditioning)
Food additives	Ministerial Order of January 24, 2002 (authorized lists and maximum levels)
Materials in contact	Interministerial Order on packaging safety
Imported goods	Decree n° 05-468 on control of imported foodstuffs
Collective catering	Ministerial Order of June 10, 1997 (hygiene in collective kitchens)

C. The HACCP System in Algerian Law

Legal Obligation: The Interministerial Order of October 27, 2011 makes HACCP (or an equivalent risk control system) **mandatory** for all food manufacturing, processing, and packaging companies above a certain threshold.

The 7 HACCP Principles (Codex — see also Part 2, Section 3.1 for detailed implementation steps):

Principle	Description
1 – Hazard Analysis	Identify all potential biological, chemical, and physical hazards at each step
2 – CCP Determination	Determine Critical Control Points using the Codex decision tree
3 – Critical Limits	Establish critical limits (temperature, pH, time, chlorine level, etc.)
4 – Monitoring	Set up a monitoring system for each CCP (frequency, responsibility)
5 – Corrective Actions	Define actions when a deviation occurs (product isolation, process correction)
6 – Verification	Establish verification procedures (internal audits, microbiological tests)
7 – Documentation	Maintain a documentation and recording system (HACCP plan, records)

D. Traceability in Algerian Law

All food operators must:

- Identify all suppliers of raw materials and ingredients.
- Maintain records allowing identification of production batches.
- Keep information on product distribution.
- Be able to carry out a rapid **withdrawal/recall** of non-compliant products.
- Inform competent authorities in case of placing a dangerous product on the market.

E. Comparison of Regulatory Systems

Criterion	Algeria	European Union	United States
Framework Text	Law 09-03 + specific orders	Reg. 178/2002 (General Food Law)	FSMA 2011
HACCP	Mandatory (2011 Order)	Mandatory (Reg. 852/2004)	HARPC (FSMA)
Approval/Registration	Commercial registration + specific approvals	EU approval (for animal products)	FDA registration
Traceability	Required, developing framework	Strict requirement (Art. 18, Reg. 178/2002)	Record-keeping rules (FSMA)
Official Control	CACQE + line ministries	Reg. 2017/625, EFSA	FDA, USDA-FSIS
Reference Standards	Algerian Standards (NA), Codex	EU regulations, Codex	FDA standards, Codex

4. Deontology (Professional Ethics)

4.1. Definition and Foundations

Deontology (Greek deon = duty) refers to the set of moral rules and duties governing a profession. In food safety, it is based on:

- **Ethics of responsibility:** Each professional is responsible for the consequences of their actions on public health.
- **Ethics of care:** Taking care of vulnerable consumers.
- **Ethics of justice:** Ensuring equitable access to safe food.
- **Ethics of truth:** Not deceiving, not defrauding, informing loyally.

4.2. Deontological Obligations of Professionals

- **Duty of competence:** Initial and continuing training, regulatory and scientific watch, intellectual honesty (recognizing limits).
- **Duty of independence and impartiality:** No conflict of interest (especially for inspectors, auditors, experts). Must declare any potential conflict.
- **Duty of transparency and information:** Honest and complete product information, declaration of non-conformities, reporting of fraud.
- **Duty of confidentiality:** Protection of trade secrets and sensitive data, but cannot be invoked to hide a public health risk.
- **Duty of reporting/whistleblowing:** Any professional observing a risk to consumer health must report it (to authorities, management, consumers via withdrawal/recall).

4.3. Food Fraud (Ethical and Legal Issues)

Type	Description	Examples
Substitution	Replacing a noble ingredient with a cheaper one	Olive oil cut with sunflower oil, horse meat declared as beef
Dilution	Adding water or a cheaper product	Milk diluted with water, honey added with glucose syrup
Concealment	Hiding undesirable ingredients	Non-declaration of allergens
False Origin	Declaring a false geographical origin	Fake PDO (Protected Designation of Origin)
Reconditioning	Reselling expired products	Erasing DLC (use-by date)
False Label	Fraudulent use of quality labels	"Organic" without certification, fake "Halal"
Chemical Adulteration	Adding unauthorized substances	Melamine in milk, formaldehyde as preservative

Major Food Scandals and Their Impact:

- **BSE ("mad cow"):** Led to creation of EFSA and Regulation 178/2002 (EU).
- **Dioxins (Belgium):** Reinforcement of feed controls.
- **Melamine (China, 2008):** Strengthened import controls.
- **Horse Meat Scandal (2013):** EU action plan against food fraud.
- **Fipronil in Eggs (2017–2019):** Strengthened pesticide residue monitoring.

4.4. Ethics of Risk Communication in Food Safety

Principle	Description	Errors to Avoid
Clarity	Use accessible language, avoid jargon	Undefined technical terms
Precision	Give exact, verified, quantified information	Approximations, unsourced data
Consistency	Maintain a stable and coherent discourse	Contradictions between institutions
Proportionality	Calibrate message to actual risk level	Panic creation or risk minimization
Empathy	Acknowledge legitimate public concerns	Inhuman discourse, lack of consideration for victims
Rapidity	Communicate quickly in a crisis	Official silence fostering rumors

4.5. Professional Codes of Conduct in Food Safety

Code of Conduct for Food Safety Auditors (GFSI Schemes: BRC, IFS, SQF)

- **Independence:** Cannot audit a company with recent commercial ties.
- **Impartiality:** Audit based on objective evidence, no favoritism.
- **Confidentiality:** Collected information cannot be disclosed to third parties.
- **Competence:** Maintain qualifications, audit only within expertise.
- **Integrity:** Refuse any gift, advantage, or pressure influencing conclusions.

Ethical Obligations of Scientific Experts

- Mandatory declaration of interests (links with food industry).
- Management of conflicts of interest (exclusion if confirmed conflict).
- Data transparency (availability of evaluation data).
- Scientific rigor (best available data, recognition of uncertainties).

4.6. Legal and Deontological Responsibility

Type of Responsibility	Legal Basis	Possible Sanctions
Criminal	Endangering others, deception, fraud, involuntary manslaughter	Imprisonment, criminal fines, professional ban
Civil	Damage caused by a defective product to a consumer	Damages and interest (compensation)
Administrative	Non-compliance with regulations by operators	Administrative closure, withdrawal of approval, fines
Disciplinary	Breach of professional deontological obligations	Warning, suspension, disqualification from professional order
Product Liability	Council Directive 85/374/EEC (defective products)	Compensation without needing to prove manufacturer's fault

4.7. The Whistleblower in Food Safety

A whistleblower is a person who, in good faith and disinterestedly, reports facts constituting a serious risk to public health. **EU Directive 2019/1937** protects whistleblowers against retaliation (dismissal, demotion, harassment) for reporting violations of food law.