



WORKSHOP C:

A BETTER USE OF THE HYGIENE AND FOOD SAFETY REGULATORY FRAMEWORK FOR SMALL FOOD PRODUCERS



COLDIRETTI



FROM HACCP TO GOOD AGRICULTURAL PRACTICES: ASSUMPTIONS AND GOALS

(HOW TO MAKE NASA ENGINEERS AND BRUNELLO'S WINEMAKERS MEET)

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FOOD RISK MANAGEMENT IN EUROPE

THE EXAMPLE OF ZOOONOTIC CONTAMINANT AGENTS AFFECTING A WIDE ARRAY OF AGRO-FOODS

Figure CA1. Notification rates of reported confirmed cases of human campylobacteriosis in the EU, 2006-2010

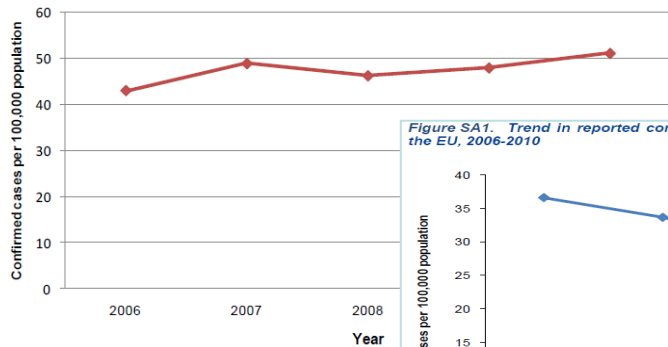


Figure SA1. Trend in reported confirmed cases per 100,000 population of human salmonellosis in the EU, 2006-2010

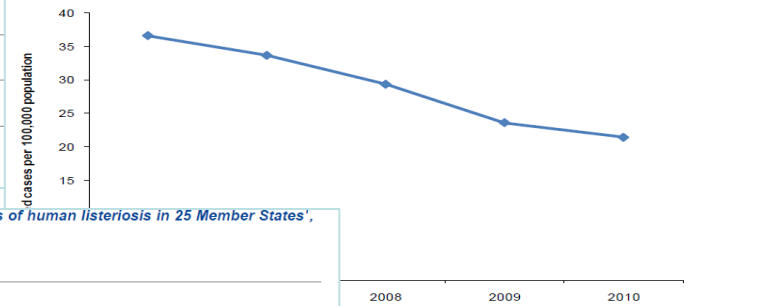


Figure LI1. Notification rates of reported confirmed cases of human listeriosis in 25 Member States, 2006-2010

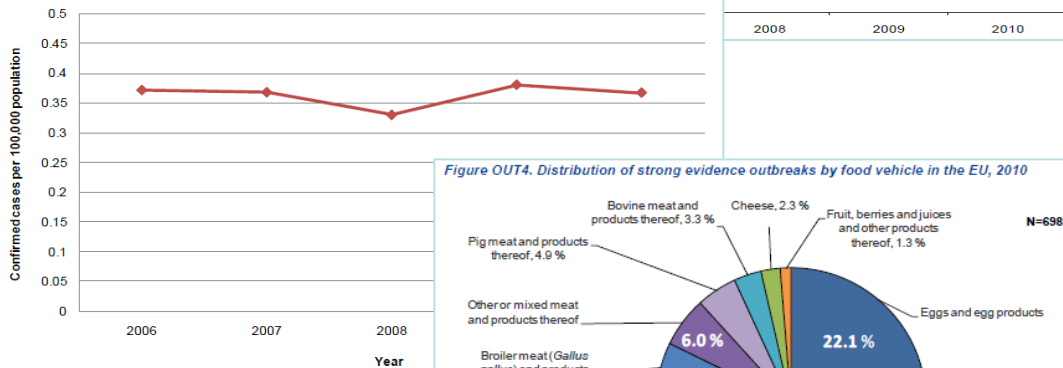
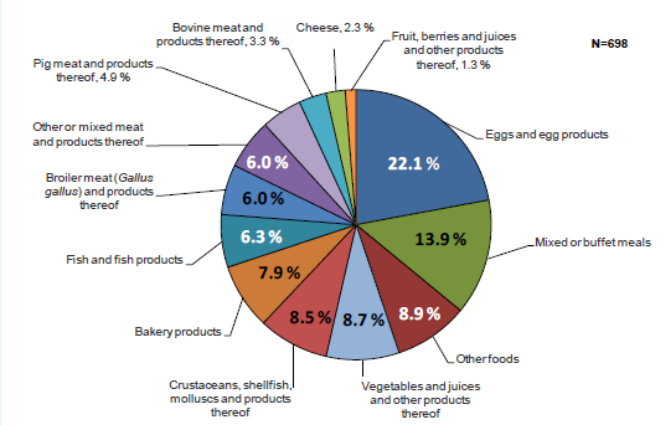


Figure OUT4. Distribution of strong evidence outbreaks by food vehicle in the EU, 2010



In Europe evidence regarding Zoonotic agents prevalence and trends are not clear, as well as those regarding contaminants in general.

Most of them **are likely** to be controlled over time, with the reduction of Salmonella (EFSA; 2010). Others seem to increase (Campylobacter), but do not represent an immediate food safety/public health issue.

Good Agricultural Practices (GAP) will remain a stable feature and requirement for food safety at EU level in the next years and decades.

The logic model: ASSUMPTIONS AND GOALS

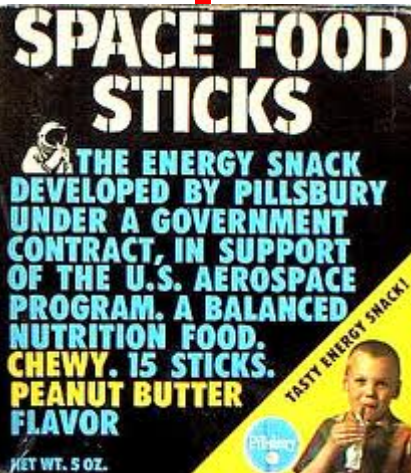
- ✓ *“PREVENTING IS BETTER THAN CURING...”*
- ✓ Early intervention in the food supply chain can be the best choice to limit spreading of pathogens and contaminants. Role of farmers is fundamental in this case
- ✓ Elimination or reduction of pathogenic agents (i.e. Salmonella, Campylobacter, E. Coli o157, Lysteria) at the beginning of the food chain.
- ✓ Limiting cross contamination with pathogens from raw to ready-to-eat food.
- ✓ Indirect solution to bacteria resistance, limiting the use of antibiotics and the bacteria to be treated later on (i.e. during conservation and processing or before consumption).

HACCP

HOW TO AVOID
GETTIN“LOST IN
TRANSLATION”?



FROM ENGINEERS.....
.....TO FOOD INDUSTRY

A central graphic containing a fork and knife crossed, a clock face, two beakers with colored liquids, and a triangular warning sign with an exclamation mark.

“ART. 7-8
Reg.
852/2004”

[.....]

- ✓ FOR “REAL FARMERS”
- ✓ “ON THE FIELD”
- ✓ UNDER EVER CHANGING CONDITIONS

The Italian agricultural sector: an OUTLOOK

- ✓ **Specificity of Italian agricultural productions - PDO, products linked to the territories....**
- ✓ **“Food districts” with geo-local well accrued knowledge, relationships marked by trust and proximity, integrated food chains**
- ✓ **Average SAU per farm (8 hectares in 2010, increasing)**
- ✓ **Average Age of the farmers (only 2,5% has less than 30 years, 18,6% less than 45 years, 25.000 new farms in 2011)**
- ✓ **90% are individual societies (2011)**

HACCP SYSTEM (NASA), CREATED FOR DIFFERENT SITUATIONS, DOES NOT PRODUCE EXPECTED RESULTS IN THE AGRICULTURAL SECTOR

ITS EFFICACY AND ADVANTAGES ARE COMPROMISED DUE TO DIFFICULTIES IN APPLYING IT



**NEED FOR
“HARD” FOOD
SAFETY
MEASURES
(i.e.
CHEMICAL,
PHYSICAL, ...)**

**NEED FOR
“SOFT” FOOD
SAFETY
MEASURES
(SIMPLIFIED
HACCP)**



- LONG FOOD CHAINS
- HIGH NUMBER OF LINKS
- ‘MASS’ PRODUCTION OF PRIMARY INGREDIENTS
- RISKS OF CROSS CONTAMINATION
- OPPORTUNISTIC BEHAVIORS /FRAUDS/CHEATING OF HIGH N° OF ACTORS

**... do we
get the
same
RESULT?**

- ✓ SHORT FOOD CHAINS
- ✓ LOW NUMBER OF LINKS
- ✓ LIMITED PRODUCTION OF PRIMARY INGREDIENTS
- ✓ LOW RISK OF CROSS-CONTAMINATION
- ✓ PROXIMITY CONTROL OF THE FOOD CHAINS AND REPUTATION MECHANISMS/TRUST AMONG ACTORS

GOAL: FOOD SAFETY

THE GOAL IS FOOD SAFETY!!.....NOT the instruments and processes to achieve it !

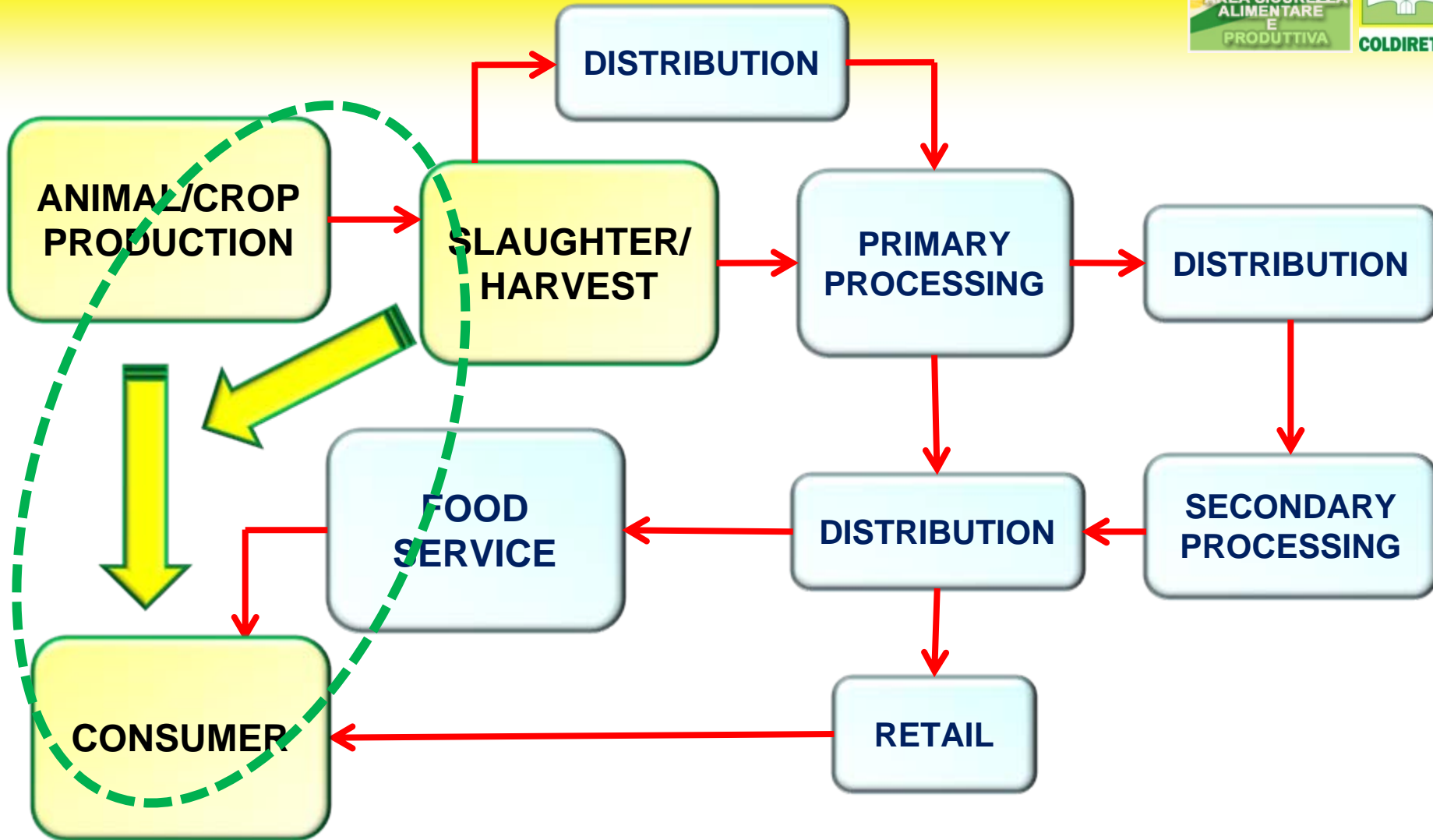


THE PARADIGM OF COMPLEXITY: A SOLUTION TO A WELL-DEFINED PROBLEM (RISK) IS LIKELY TO CREATE UNPREDICTED PROBLEMS AT THE BEGINNING

The **MORE INVASIVE IS THE SOLUTION**, the **MORE LIKELY THIS WILL HAPPEN**

SOME EXAMPLES

- HEATING AS A MEANS OF MICROBIAL DECONTAMINATION >> FURANS, FURFURAL, ADVANCED GLYCATION ENDPRODUCTS (AGEs) ... DAMAGING EFFECTS *discovered much later....*
- DDT vs. INSECTS DAMAGE (plants and crops) >> CANCER AND GENETIC DEFECTS...*discovered much later ...*
- IRRADIATION OF VEGETABLES TO AVOID GERMINATION >>.....*discovered later ...*



**SHORT FOOD CHAINS:
LESS CRITICAL CONTROL POINTS (CCPs),
LESS RISKS AND UNCERTAINTES**

(adapted from Serper, 2005)

**SAFETY...
BUT WHAT
ABOUT
QUALITY OF
FOODS?**

SO WHAT...?

**QUALITY
AND FOOD
SAFETY**

**VERTICALLY
INTEGRATED FOOD
CHAIN
ONE PART CONTROLS
SPECIFICATIONS OF
THE FOOD SAFETY
REQUIREMENTS**

LONG FOOD CHAINS

**HACCP
ART. 7- 8 Reg.
852/2004**

**SHORT FOOD
CHAIN
LIMITED NUMBER OF
PARTIES ADOPT
COLLABORATIVE
BEHAVIORS TO
ACHIEVE FOOD
SAFETY
REQUIREMENTS TO A
“Simplified World”**

SHORT FOOD CHAINS

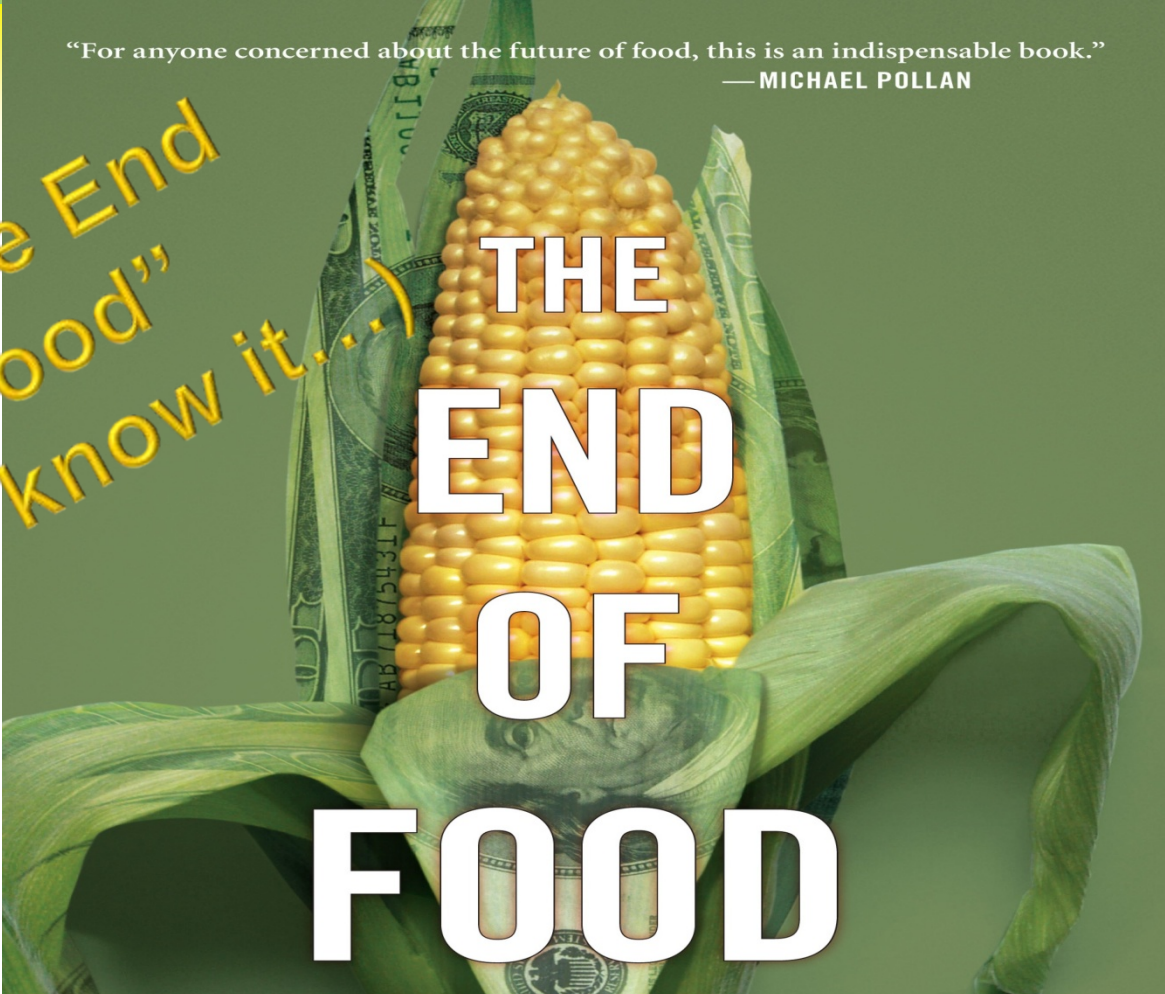
**HANDBOOK OF GOOD AGRICULTURAL
PRACTICES (GAP/GFP)**

“For anyone concerned about the future of food, this is an indispensable book.”

— MICHAEL POLLAN

“It’s The End
of Food”
(as we know it...)

THE END OF FOOD



AREA SICUREZZA
ALIMENTARE
E
PRODUTTIVA



COLDIRETTI

Long food chains have not been able to minimize a number of risks despite the heavy engineered productive processes.

Dioxins in feedingstuffs, E. Coli in sprouts, Salmonella ed MRSA in pigs, **frequently linked to long food chains** for the high number of links & interconnections.

Some common misunderstandings on Farmers' commitment as in Reg. 852/2004

- **GAP and GFP are not methods for zoonotic agents reduction and Farmers cannot be blamed for wider environmental problems (presence of pathogens).**
- **GAP and GFP can mitigate risks but cannot eliminate them**
- **HACCP is not the only approved solution.**
- **HACCP is not the only effective solution.**
- **Domestic consumers still have the final responsibility for many known hazards (i.e. cooking raw meat) and they shall be properly informed.**

The Italian CASE

from HACCP

ART. 7- 8 Reg. 852/2004

Annex I Part B Reg. 852/2004

- Guidelines for primary production (risk mitigation)
- Guidelines for processing (self control sectorial plans)
- Guidelines for documental management

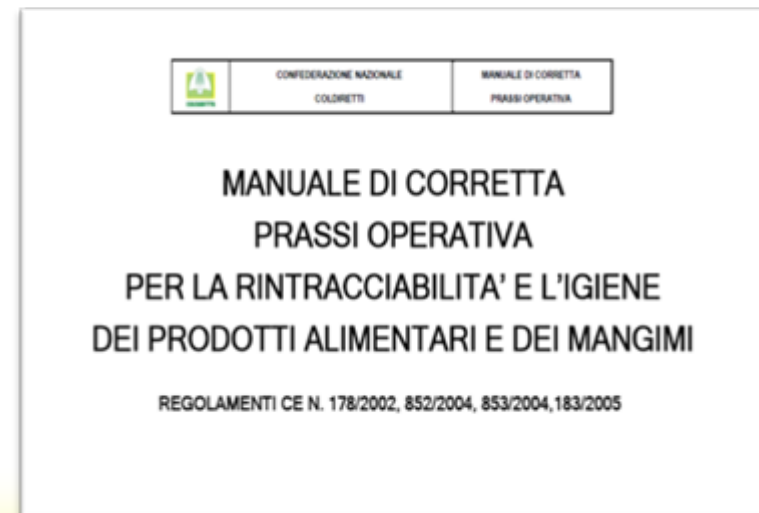


...A HACCP simplified through the use of a Good Agricultural Practices (GAP) Handbook

formally recognised by the Italian Minister of Health

http://www.salute.gov.it/imgs/C_17_pagineAre_e_1187_listaFile_itemName_6_file.pdf

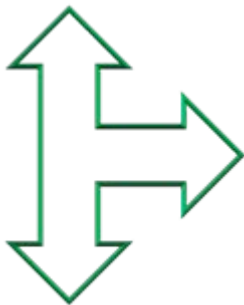
- ✓ Adoption of a simplified HACCP system.
- ✓ Adoption of general procedures for good practices usable by farms that produce and sell directly to consumers.
- ✓ Management of self-control plans for the processing sector.
- ✓ Checking of activated procedures.
- ✓ “Non conformity” process management.



MANUALE DI CORRETTA PRASSI OPERATIVA PER LA RINTRACCIABILITA' E L'IGIENE DEI PRODOTTI ALIMENTARI E DEI MANGIMI

REGOLAMENTI CE N. 178/2002, 853/2004, 853/2004, 1831/2005

HANDBOOK



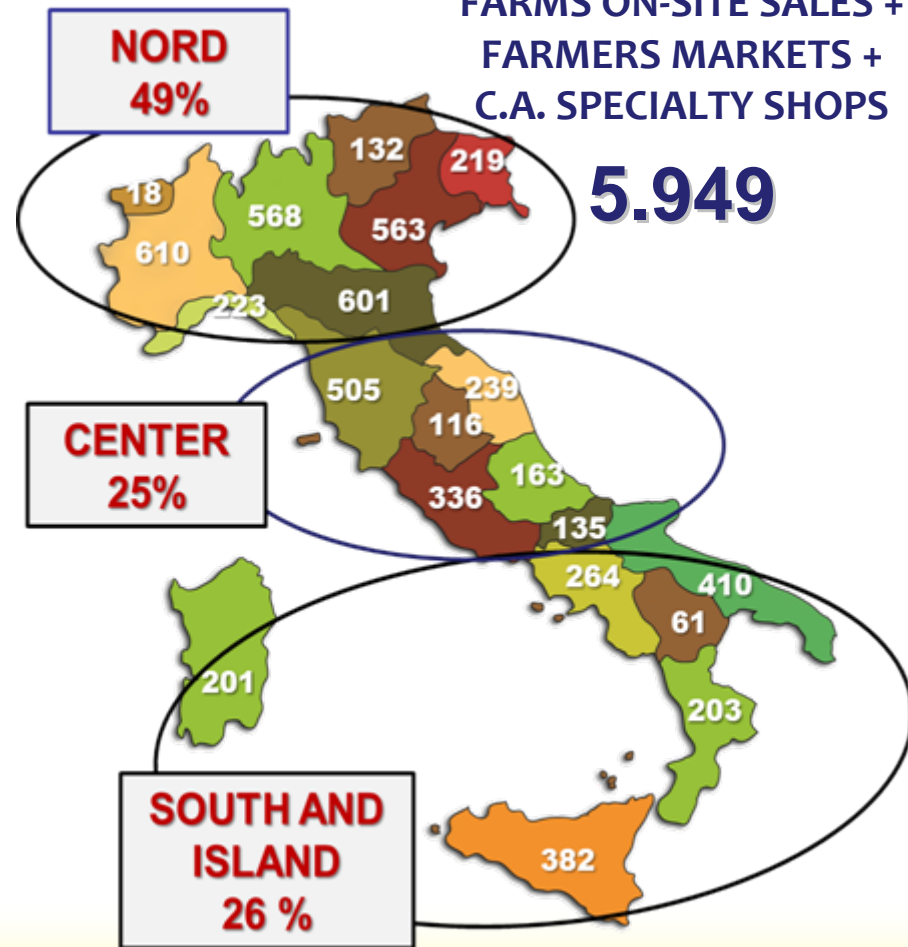
SHORT CHAINS

CONSULTANT



Campagna Amica DIRECT-SALES POS

FARMS ON-SITE SALES + FARMERS MARKETS + C.A. SPECIALTY SHOPS



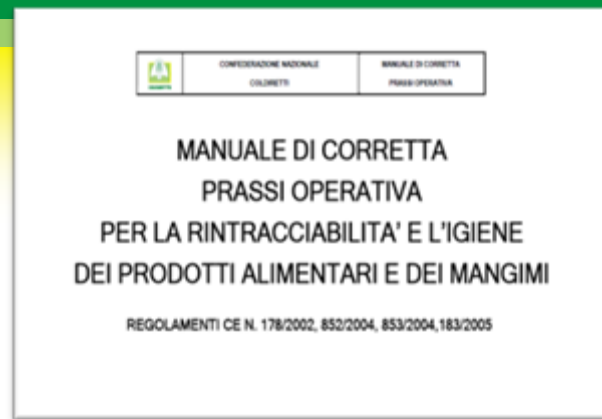
3rd April 2012

The Italian GAP HANDBOOK



- ✓ **Simplification allows to focus on TRULY RELEVANT critical points, identifying the most suitable pragmatic approach to managing risks “in the farm”.**
- ✓ **Use of biological processes for the containment of contamination, without need for “technological solutions”.**
- ✓ **Responsibility and freedom for Farmers and their consultants to adapt to the specific situation (owners and managers of the process – self-control)**
- ✓ **Promotion of a real risk management “culture” over risk management “rituals” (bureaucracy).**

NEXT STEPS



- ✓ The re-emerging interest of consumers for alternative and short food chains (direct selling, farmers markets, etc) offers the opportunity to **further improve the present HACCP simplified schemes** as intended by the EU legislation, and to create new ones.
- ✓ Coldiretti is taking further action to improve and update the GAP Handbook in light of the accrued experience.

CONCLUSIONS

- ✓ Ordinary functioning of modern long food chains can generate a sequence of errors/risks due to complexity of food production cycles. That is where the “normal incidents” take place (Perrow)
- ✓ Long food chains, due to complexity, number of interactions of biotic agents, contact materials, vectors, present a natural trade-off between FOOD SAFETY AND QUALITY of the final product: the higher the safety, the lower the quality due to processing mitigation measures
- ✓ Correct risk management procedures in small companies in short food chains can minimize food safety risks and preserve food quality of high added value agricultural systems, such as ITALY.

THIS HAS A POSITIVE IMPACT ON:

- ✓ Lower risk probability
- ✓ Lower risk spreading
- ✓ Limited exposure of population in case of food crisis outbreak.

**...OH, BY THE WAY... USUALLY NASA
ASTRONAUTS DRINK BRUNELLO LIKE THIS!!**



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**THANK YOU
FOR
YOUR
ATTENTION!**

Confederazione Nazionale Coldiretti

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