

Perspectives on Global Trends in Food Quality and Safety

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Agriculture and Environment



Australian Government
Department of Agriculture,
Fisheries and Forestry



assisting Australian food businesses to be profitable and sustainable
in the **global food industry**

Outline

- Background
- Food Safety and Quality

What is happening globally

- Northern Hemisphere
- Southern Hemisphere
- Implications for government and supporters



People get sick and die from eating food: often the sickness and deaths can be prevented.

Food borne illness is increasing and will continue to increase in the developed and developing world.

(Bernard 2003; Desmarchelier, 2003; Käferstein 2003; Mortimore 2003; Pearson 2003; and Spriegel, 2003)

THE INTERNATIONAL BESTSELLER

'A shocking exposé ... could make a difference to the way we eat. For ever.'

Evening Standard



FAST FOOD NATION

ERIC SCHLOSSER

What the All-American Meal
is Doing to the World

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

—MICHAEL POLLAN

THE END OF FOOD

PAUL ROBERTS

Author of the best-selling THE END OF OIL

Collapse

How Societies Choose
to Fail or Survive



JARED
Diamond

The Bestselling Author of *Guns, Germs and Steel*



The Naked Truth:

LAMBS SUFFER AND DIE
IN LIVE EXPORT.

SEE MORE

SaveTheSheep.com

ANNALISE BRAAKENSIEK FOR

PETA

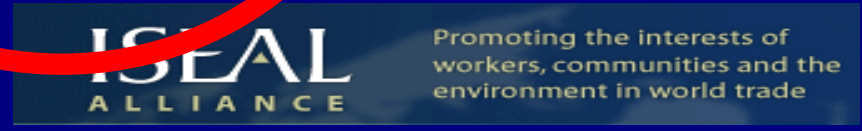
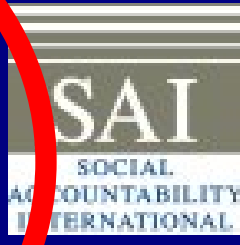
Environmentally friendly eggs look a little different.



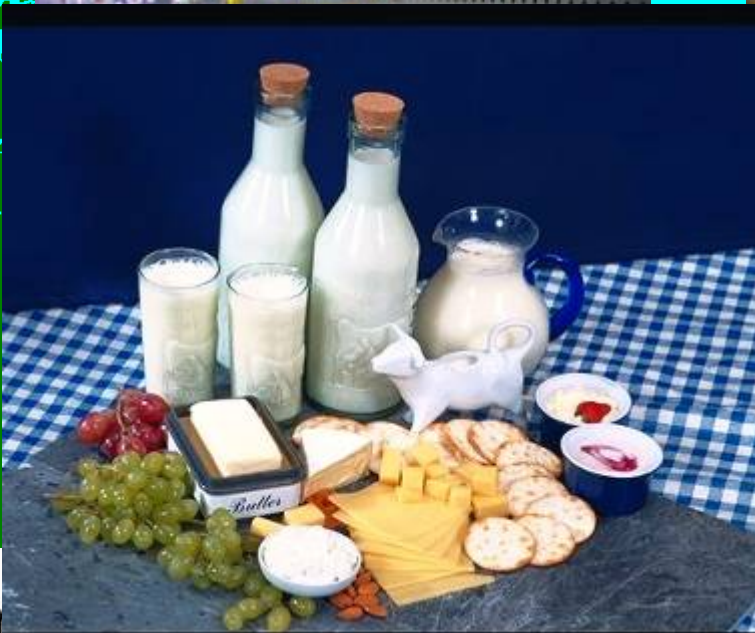
When you buy these eggs you are buying a completely renewable resource, in a completely biodegradable sound pack – even the inks and dyes used are vegetable based. You are also contributing towards a massive tree planting program in an arid area (14,000 trees so far). Water is recycled through our water treatment plant and a recycling program turns chicken's waste into valuable compost to fertilise surrounding land adding vital nutrients to depleted soil.

No wonder these eggs are Egg Corp Assured quality guaranteed.

**So buy the egg that isn't just good for you
but good for the planet!**



GLOBALG.A.P



Fonten



WOW

8



Food safety issues and product integrity

- provision of safe food
- biological and chemical contamination
- protection of customers integrity
- taste factors
- taste factors
- provision of safe food
- protection of customers integrity and duty of care
- biological and chemical contamination

Food Production

- waste management
- water use and pollution
- worker welfare
- sustainable production systems
- water use and pollution
- waste management
- ethical trade
- sustainable production systems

Development and cost of food assurance systems

- product traceability
- segregation of non-conforming product
- supplier based QA
- market access
- product traceability
- segregation of non-conforming product
- market access

Food constituents

- allergens
- carcinogens
- country of origin
- food preservatives

Food safety and product integrity

- ▲ microbial contamination
- ▲ HACCP based QA systems
- ▲ industry based QA systems
- ▲ high ethical claims - ethical / fair trading

Food production

- ▲ sustainable production systems
- ▲ recyclable packaging
- ▲ conservation and biodiversity
- ▲ transgenic material (GMO)
- ▲ carbon credits

Development and cost

- ▲ cost of insurance and legal liability
- ▲ use of prescriptive Codes of Practice

Food constituents

- ▲ energy / sugar content
- ▲ vaccines and antibiotics
- ▲ hormones and growth promoters
- ▲ food colourings
- ▲ vulnerable consumer groups

▲ **trending upwards** ▲

Food safety and product integrity

- ▼ taste factors
- ▼ hormone and growth promotants

Food production

- ▼ animal welfare
- ▼ worker welfare

Development and cost

- ▼ customer based QA programs
- ▼ cost of multiple audits

Food constituents

- ▼ fats and cholesterol
- ▼ in home food storage and preparation
- ▼ transgenic material (GMO)
- ▼ flavour enhancers
- ▼ salt
- ▼ probiotics

Factors

▼ **trending downwards** ▼

Food safety and product integrity

- ▲ duty of care
- ▲ HACCP based QA systems

Food production

- ▲ sustainable production systems
- ▲ conservation and biodiversity
- ▲ recyclable packaging
- ▲ salinity and land degradation

Development and cost

- ▲ product traceability
- ▲ supplier based QA systems
- ▲ customer based QA systems
- ▲ cost of insurance and legal liability



trending upwards



Food constituents

- ▲ energy / sugar content
- ▲ vaccines and antibiotics
- ▲ hormones and growth promoters
- ▲ food colourings
- ▲ vulnerable consumer groups

Food safety and product integrity

▼ malicious contamination

Food production

- ▼ ethical trading
- ▼ equitable sharing of value
- ▼ animal welfare
- ▼ protecting indigenous property rights

Development and cost

- ▼ market access
- ▼ use of outcomes based QA systems
- ▼ harmonisation of public and private QA systems

Factors

- ▼ harmonisation of regional QA systems
- ▼ use of prescriptive QA systems
- ▼ cost of multiple audits

▼ **trending downwards** ▼

Food constituents

- ▼ carcinogens
- ▼ provenance
- ▼ in home food storage and preparation
- ▼ flavour enhancers
- ▼ transgenic material (GMO)
- ▼ vitamins and minerals

Food safety issues and product integrity

- provision of safe food
- restricting microbial contamination
- HACCP based quality assurance system
- meeting consumers desired taste
- protecting customers integrity
- provision of safe food
- meeting consumers desired taste
- minimising malicious contamination
- protecting customers integrity
- high ethical claims

Food Production

- ethical trading
- sustainable production systems
- conservation and biodiversity
- worker welfare
- water use and pollution
- waste management
- sustainable production systems

Development and cost of food assurance systems

- ability to segregate non-conforming product
- product traceability
- product traceability
- ability to segregate non-conforming product

Food constituents

- allergens
- ethical/fair trade
- country of origin
- provenance
- food energy content
- vulnerable consumer groups
- food preservatives
- food colourings
- country of origin
- saturated fats and cholesterol
- allergens
- hormones and growth promoters
- food preservatives

Food safety and product integrity

- ▲ meeting consumers desired taste
- ▲ HACCP based quality assurance system
- ▲ delivering functional foods

Food production

- ▲ more equitable sharing of value in the supply chain

Development and cost

- ▲ harmonisation of QA systems within a supply chain

Food constituents

- ▲ vitamins and minerals
- ▲ vulnerable consumer groups
- ▲ in-home food storage and preparation
- ▲ flavour enhancing compounds
- ▲ eco-labelling
- ▲ genetically modified organisms

Factors

▲ trending upwards ▲

Food safety and product integrity

▼ duty of care/due diligence

Food production

▼ salinity and land degradation
▼ genetically modified organisms

Development and cost

▼ market access
▼ supplier based quality assurance systems
▼ customer based quality assurance systems
▼ harmonising QA systems within regional trading blocs
▼ rising costs of insurance and legal liability
▼ increasing cost of multiple audits

Food constituents

▼ country of origin
▼ provenance
▼ food colourings
▼ food energy content
▼ saturated fats and cholesterol
▼ carcinogens
▼ hormones and growth promotants

Factors

trending downwards

Food safety and product integrity

- ▲ restricting microbial contamination
- ▲ reducing the use of hormones/growth promotants
- ▲ delivering functional foods

Food production

- ▲ sustainable production systems
- ▲ recyclable packaging
- ▲ organics

Development and test

- ▲ reverse chain litigation

Food constituents

- ▲ vaccines and antibiotics
- ▲ in-home food storage and preparation
- ▲ genetically modified organisms
- ▲ vulnerable consumer groups
- ▲ carcinogens
- ▲ ethical/fair trade
- ▲ vitamins and minerals
- ▲ eco-labelling
- ▲ provenance

▲ **trending upwards** ▲

Factors

Food safety and product integrity

- ▼ duty of care/due diligence
- ▼ reducing pesticide limits

Food production

- ▼ worker welfare
- ▼ ethical trading
- ▼ increasing cost of multiple audits

Factors

Development

- ▼ harmonisation of public and private QA systems

Cost

trending downwards

Food constituents

- ▼ saturated fats and cholesterol
- ▼ allergens
- ▼ food preservatives
- ▼ flavour enhancing compounds
- ▼ salt
- ▼ food colourings
- ▼ sugar and artificial sweeteners

Who's afraid of genetically modified foods?

N.A. Vs Europe
Vs
Asia

Food Constituent -
Consumers

Farmers and the
value chain



IT USED TO
WAS ABOUT
OCCASIONA

MARK IRVING

HAS BECOME
AS THE WEAR
INCREASINGLY
FOOD AS A PC

GLOBAL TRADE VS FAIR TRADE

“THE MESSAGE IS: IF YOU’RE GOING TO BUY IMPORTED PRODUCTS, GET THE FAIR TRADE VERSION, WHERE IT’S AVAILABLE.”

Neil Bowker

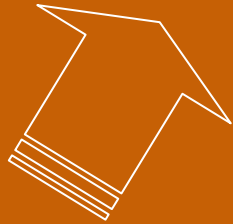
FAST FOOD VS SLOW FOOD

GOOD, CLEAN AND FAIR – IT’S THE PHILOSOPHY BEHIND THE SLOW-FOOD MOVEMENT...



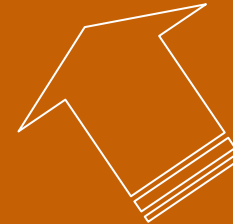
*Triple / Quad Bottom Line
Accountability*

**Organic
IFOAM**



GAPs

COPs



**SQF 2000^{CM}
& 1000^{CM}**

SA

ISEAL

GLOBALG.A.P

BRC

ISO 26000

SAI platform

FS

Eco-Label

IFS

**Quality
ISO 9000**

EMS

ISO 22000

LCA

ISO 14000

ISO 14040

ISO guide 62

ISO guide 65

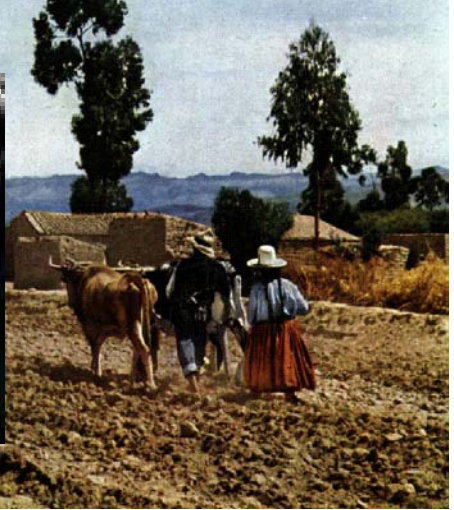
Process Certification

HACCP

Product Certification







**Where is my next meal coming fromwill it
make me sick?**

.....the ethics of how my meal was produced.

Thank You



Australian Government
Department of Agriculture,
Fisheries and Forestry

