

***GLOBAL FOOD
SAFETY STANDARDS***

**R. H. SCHMIDT
FOOD SCI. & HUM. NUT.
UNIVERSITY OF FLORIDA**

GLOBAL STANDARDS - ALPHABET SOUP

O ISO

- ISO MEANS EQUAL
- INTERNATIONAL ORG. OF STANDARDS
 - ISO 9000
 - ISO 14000
 - ISO 22000

O FSOS

- FOOD SAFETY OBJECTIVES

O GFMS

- GLOBAL FOOD MANAGEMENT SYSTEMS

O GFSI

- GLOBAL FOOD SAFETY INITIATIVE

O NSF

- NATIONAL SANITATION FOUNDATION

O AIB

- AMERICAN INSTITUTE OF BAKING

O OTHERS

- OH THAT HE ENJOYS READING STUFF

FOOD SAFETY OBJECTIVES

(FSOs)

- **INTERNATIONAL LIFE SCIENCES INSTITUTE (ILSI)**
- **INTERNATIONAL COMMISSION ON MICROBIOLOGICAL SPECIFICATIONS FOR FOODS (ICMSF)**
- **WORLD TRADE ORG.**
 - **APPROPRIATE LEVEL OF PROTECTION (ALOP)**
- **WHAT ARE FSOs**
 - **SETTING HAZARD LEVELS AND REDUCTION TARGETS FOR SPECIFIC FOOD SECTORS**
 - **BASED UPON RISK ASSESSMENT**

[HTTP://EUROPE.ILSI.ORG/PUBLICATIONS/REPORT+SERIES/FOODSAFETYOBJECTIVES.HTM](http://europe.ilsil.org/publications/report+series/food+safety+objectives.htm)

APPROPRIATE LEVEL OF PROTECTION (AOLP)–

***“THE LEVEL OF PROTECTION DEEMED
APPROPRIATE BY THE MEMBER (COUNTRY)
ESTABLISHING A SANITARY OR PHYTOSANITARY
MEASURE TO PROTECT HUMAN, ANIMAL OR
PLANT LIFE OR HEALTH WITHIN ITS TERRITORY.”
WTO (1995)***

FOOD SAFETY OBJECTIVE –

***“THE MAXIMUM FREQUENCY
AND/OR CONCENTRATION
OF A MICROBIOLOGICAL
HAZARD IN A FOOD AT THE
TIME OF CONSUMPTION THAT
PROVIDES THE APPROPRIATE
LEVEL OF HEALTH
PROTECTION.”***

ICMCF (2002)

SOME HYPOTHETICAL EXAMPLES

- **AN AMOUNT OF *STAPHYLOCOCCAL ENTEROTOXIN* IN CHEESE NOT EXCEEDING 1 µG/100 µG**
- **A FREQUENCY OF *SALMONELLA ENTERITIDIS* IN EGGS NOT EXCEEDING 1 EGG PER 100,000**
- **A CONCENTRATION OF TOTAL AFLATOXINS IN RAW PEANUTS NOT EXCEEDING 15 µG/KG**
- **A CONCENTRATION OF *SALMONELLAE* IN POWDERED MILK BELOW 1 CFU/100 G.**

GLOBAL FOOD SAFETY INITIATIVE (GFSI)

- **DRIVEN BY THE CIES FOOD
BUSINESS FORUM**

WHAT IS CIES?

- **COMITÉ INTERNATIONAL
D'ENTREPRISES À SUCCURSALES
(CIES – INTERNATIONAL
COMMITTEE OF FOOD RETAIL
CHAINS)**
 - **FOUNDED IN 1953**
 - **BY THE INTERNATIONAL RETAIL
ASSOCIATION (AIDA) AT THEIR
CONGRESS IN BELGIUM**

WWW.CIESNET.COM

CIES - THE FOOD BUSINESS FORUM

- **RETAIL DRIVEN, GLOBAL FOOD BUSINESS NETWORK OF OVER 175 MAJOR FOOD RETAILING COMPANIES FROM 50 COUNTRIES AND AN EQUAL NUMBER OF THEIR SUPPLIERS WORLDWIDE.**
- **INTERFACE BETWEEN INTERNATIONAL RETAILERS AND SUPPLIERS**

WHY GLOBAL FOOD SAFETY INITIATIVE?

- FOOD SAFETY IS TOP OF MIND WITH CONSUMERS**
- FOOD SAFETY IS TOP OF MIND WITH CEOs**
- FOOD SAFETY NEEDS TO BE ENHANCED**
- CONSUMER PROTECTION ENSURED**
- CONSUMER TRUST IN FOOD NEEDS TO BE STRENGTHENED**
- DEFINING THE LIMITS OF RETAILER LIABILITY (DUE DILIGENCE)**
- HARMONIZING THE REQUIREMENTS OF FOOD SAFETY SYSTEMS**
- TO IMPROVE COST EFFICIENCY THROUGHOUT THE FOOD SUPPLY CHAIN.**

***GLOBAL FOOD SAFETY
INITIATIVE
MISSION STATEMENT – To
STRENGTHEN CONSUMER
CONFIDENCE IN THE FOOD THEY
BUY IN RETAIL OUTLETS***

OBJECTIVES:

- TO IMPLEMENT A SCHEME TO BENCHMARK FOOD SAFETY MANAGEMENT STANDARDS (FOR PRIVATE LABEL PRODUCTS) WORLD-WIDE**
- TO IMPROVE COST EFFICIENCY THROUGHOUT THE FOOD SUPPLY CHAIN**
- ENSURE WORLD-WIDE INTEGRITY IN THE QUALITY AND THE ACCREDITATION OF FOOD SAFETY AUDITORS**
 - PROMOTE THE SYSTEM OF THIRD PARTY AUDITING OF FOOD SAFETY MANAGEMENT**
 - FACILITATE MUTUAL RECOGNITION BETWEEN STANDARD OWNERS**
 - COMMON ACCEPTANCE OF GFSI RECOGNISED STANDARDS BY RETAILERS AROUND THE WORLD.**
- PROVIDE A UNIQUE INTERNATIONAL STAKEHOLDER PLATFORM FOR NETWORKING, KNOWLEDGE EXCHANGE AND SHARING OF BEST FOOD SAFETY PRACTICES AND INFORMATION.**
 - BENCHMARK FOOD SAFETY AND FARM ASSURANCE STANDARDS**

GFSI - KEY ELEMENTS

- **FOOD SAFETY MANAGEMENT SYSTEM**
- **GOOD PRACTICES**
 - **AGRICULTURAL (GAP)**
 - **MANUFACTURING (GMP)**
 - **DISTRIBUTION (GDP)**
- **HACCP**

GFSI - WHAT IS INCLUDED?

INCLUDED

- **FOOD SAFETY**

EXCLUDED

- **PRODUCT QUALITY**
- **ENVIRONMENT**
- **SOCIAL/ ETHICAL**
- **ANIMAL WELFARE**
- **SUSTAINABILITY**
- **BIOTECHNOLOGY**
- **INNOVATIVE
PROCESSES**

BENEFITS FOR FOOD RETAILERS

- **SIMPLER, CHEAPER AND BETTER STANDARDS IN FACTORIES**
- **IMPROVED INFORMATION ON COMPLIANCE**
- **IMPROVED ABILITY TO DEAL WITH ENFORCEMENT CHALLENGES**
- **HELP FACTORIES CONCENTRATE ON THE IMPROVEMENT OF PRODUCTS FOR CUSTOMERS**

BENEFITS FOR FOOD INDUSTRY

- **REDUCES THE NUMBER OF AUDITS THAT ARE CURRENTLY UNDERTAKEN AT MANUFACTURERS**
- **SETS REQUIREMENTS FOR FOOD SAFETY SCHEMES**
- **IMPROVE COST EFFICIENCY THROUGHOUT THE FOOD SUPPLY CHAIN**

GUIDANCE DOCUMENT

- **FOURTH EDITION AVAILABLE**
- **DOCUMENT CAN BE DOWNLOADED FROM: WWW.CIESNET.COM**

***STANDARDS IN COMPLIANCE
WITH
THE GUIDANCE DOCUMENT***

- **BRITISH RETAIL CONSORTIUM (BRC) -
GLOBAL FOOD STANDARD**
- **DUTCH HACCP CODE**
- **EUROPEAN FOOD SAFETY INSPECTION
SERVICE (EFSIS) STANDARD**
- **INTERNATIONAL FOOD STANDARD (IFS)**
- **SAFE QUALITY FOOD (SQF)
STANDARDS**

BRC GLOBAL FOOD STANDARD

- **INTRODUCED IN 1998**
- **ATTEMPT TO REDUCE THE NUMBER OF TECHNICAL AUDITS FOR SUPPLIERS**
- **8067 CERTIFICATES IN 2007**
- **BRITISH RETAILERS**

[HTTP://WWW.BRC.ORG.UK/STANDARDS/](http://www.brc.org.uk/standards/)

EUROPEAN FOOD INSPECTION STANDARD (EFIS)

- **MEAT AND LIVESTOCK
STANDARDS**

**HTTP://V2.MLC.ORG.UK/ABOUT/COMMERCI
AL/EFIS.HTML/?I**

IFS

- **GERMAN RETAIL STANDARD**
- **PUBLISHED IN 2002**
- **NOW ACCEPTED BY FRENCH,
ITALIAN AND POLISH RETAILERS**
- **8414 CERTIFICATES IN 2007**

SQF

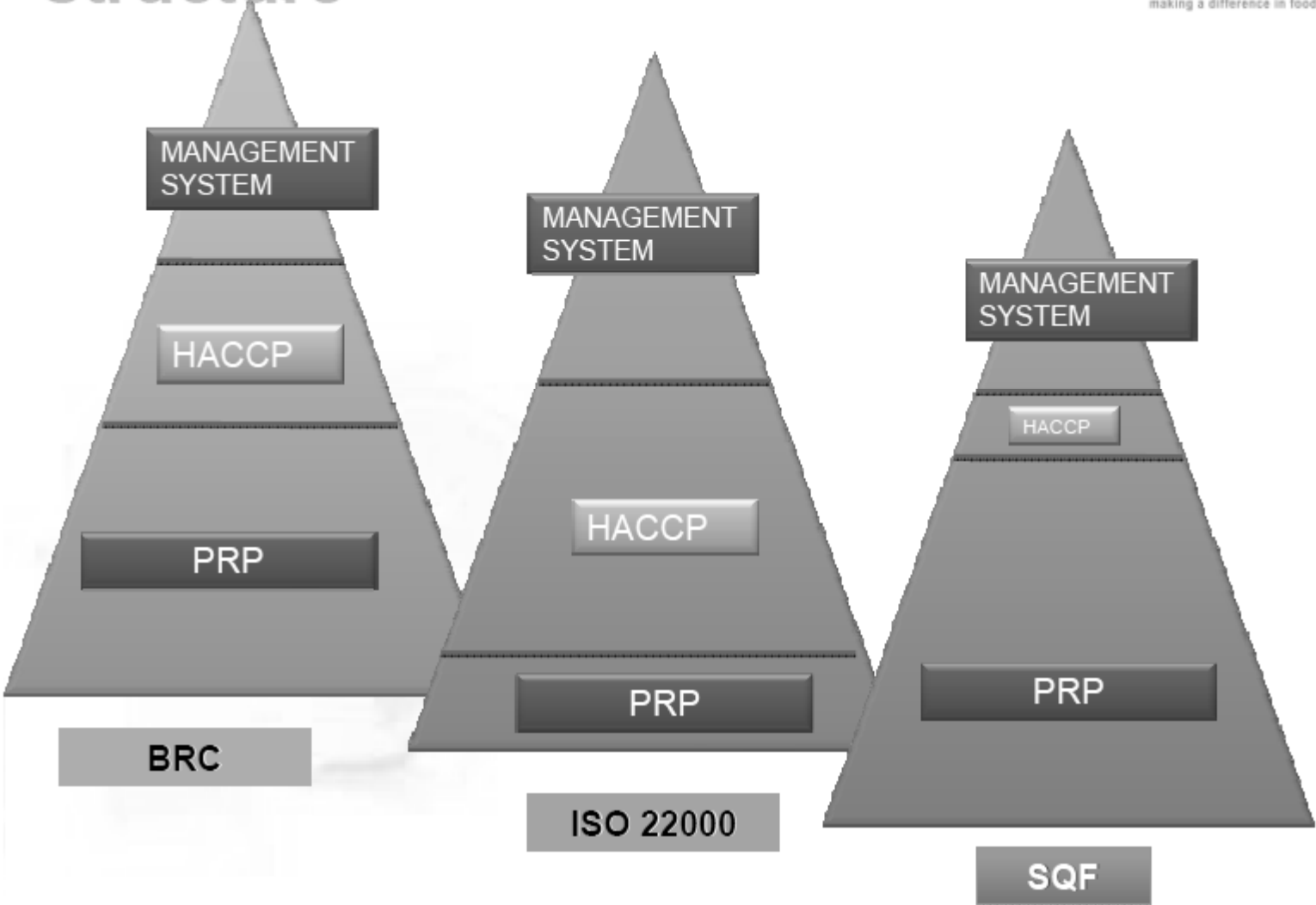
- **ORIGINATED IN WESTERN AUSTRALIA IN 1995**
- **CURRENTLY OWNED BY FOOD MARKETING INSTITUTE (FMI), USA**
- **> 8000 CERTIFICATES IN 2007**

[HTTP://WWW.SQFI.COM/](http://www.sqfi.com/)

WHAT ABOUT ISO?

- **ISO FOOD SAFETY MANAGEMENT SYSTEMS –REQUIREMENTS FOR ORGANIZATIONS THROUGHOUT THE FOOD CHAIN**
 - **[HTTP://WWW.CIESNET.COM/PFILES/PROGRAMMES/FOODSAFETY/WHAT%20IS%20ISO%2022000%20SEPTEMBER%202007.PDF](http://www.ciesnet.com/pfiles/programmes/foodsafety/what%20is%20iso%2022000%20september%202007.pdf)**
- **OVER 4000 COMPANIES IN 93 COUNTRIES (2007)**
- **NOT GFSI RECOGNIZED**
 - **DRAFT ISO 22000 STANDARD DID NOT MEET RETAILERS' REQUIREMENTS**
- **ISO RESPONSE**
 - **PAS 2200 - FOR RETAIL SECTOR**
- **WHAT IS CURRENT STATUS?**
 - **DAMIFIKNOW!**
 - **PAS 220 HAD “FAVORABLE RESPONSE” AT 2009 CIES CONFERENCE**
 - **[HTTP://BUSINESSASSURANCE.COM/INTERNATIONAL-ACCEPTANCE-OF-FOOD-SAFETY-STANDARD-ISO-22000-SET-TO-GROW/](http://businessassurance.com/international-acceptance-of-food-safety-standard-iso-22000-set-to-grow/)**
 - **POSSIBLE IN SPRING 2009**

Summary of the standard structure



GFSI

Standard	BRC Global standard –	Dutch HACCP Code	SQF 2000 Level 3 Level 2???	IFS	ISO 22000 Not yet GFSI
Published	1998	1995	1994	2002	2005
Certificates issued 2007	8067	“Over” 2000	“Over” 8000	8414	“Over” 4000
Used by	All British retailers?	Dutch retailers?	American retailers? Australian retailers?	German, French, Italian and Polish retailers	93 countries Not all food processors
Other	Developed by the retailers to reduce number of audits	Developed by Dutch National Board of Experts	Acquired by FMI in 2003, originated in Western Australia	Developed by German retailers	Will require PAS 2200:2008 to be used in conjunction during audit

Strengths

ISO 22000	BRC	SQF
Strong focus on the development of a HACCP system	Improved focus on HACCP in version 5	Well defined PRP's
Well defined requirements for communication	Pre-requisite programmes clearly described	More guidance than BRC on facility requirements, better than PAS 2200
Scope includes support industries to the food manufacturing sector	Incident management clearly defined	Strong focus on business continuity planning and site security
Objectives intended to integrate food safety as a business activity	Control of operations highlights the need for food safety to have daily focus	Validation of PRP's required
	Address laboratory testing of product	Allows for a progressive approach to system development with recognition at each level.

Weaknesses

ISO 22000	BRC	SQF
No specific requirements for adequacy of PRP's – read between the lines...	Some fundamental requirements overstated. Fundamental requirements imply certain requirements of secondary importance	HACCP requirements one page – even less than Codex...
Tone of the standard does not promote understanding that FSMS should be maintained	Preventive action not defined	Preventive action not defined
Day to day process control related to food safety omitted	Quality aspects may dilute the focus on food safety	Requires a certified SQF practitioner involvement – extra cost?

***ONCE CERTIFIED, ACCEPTED
EVERYWHERE?***

***PROOF WILL BE IN THE
PUDDING.***

GFSI IN THE US???

WAL MART

○ ADOPTED GFSI IN 2008

- **[HTTP://WWW.FOODPRODUCTIONDAILY.COM/QUALITY-SAFETY/WAL-MART-ADOPTS-GFSI-STANDARDS](http://www.foodproductiondaily.com/quality-safety/wal-mart-adopts-gfsi-standards)**

○ THE FOUR SCHEMES RECOGNIZED BY WAL MART:

- **INTERNATIONAL FOOD STANDARD (IFS)**
○ PARIS, FRANCE
- **SAFE QUALITY FOOD (SQF)**
○ ARLINGTON, VA, USA
- **BRITISH RETAIL CONSORTIUM (BRC)**
○ LONDON, UK
- **DUTCH HAZARD ANALYSIS CRITICAL CONTROL POINTS FOOD SAFETY SYSTEM (DUTCH HACCP)**
○ APELDOORN. THE NETHERLANDS