



# FOOD SAFETY CHALLENGES IN THE MIDDLE EAST

Dubai Municipality Food Safety Conference, February 2006

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# DOES FOOD SAFETY MAKE NEWS HEADLINES IN THE UAE? **YES**

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**Inspectors on high alert over tainted foodstuffs. Municipality tells supermarkets to remove these products**

*Gulf News, February 20, 2005*

**Demand grows for organic food products**

*Gulf News, February 22, 2005*

**Some restaurant workers pose grave health risks**

*Gulf News, February 12, 2006*

# "SOME RESTAURANT WORKERS POSE GRAVE HEALTH RISKS"

*Gulf News*, February 12, 2006

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- A municipal official said unhygienic living conditions of the workers was a certain path to food poisoning.
- "The workers aren't clean. They sleep on insect-ridden beds; don't get a chance to shower properly or do their laundry. Of course it affects the food quality."
- He said a culture of not training workers to be clean made things worse.

# NUMBERS DO COUNT:

## UAE --- EMPLOYEES:

- 
- 
- **Agriculture, Livestock & Fisheries** 163,192
  - **Restaurants & hotels** 89,720
    - (Many in food-related jobs)
  
  - **Government services sector** 224,633
  - **Crude oil & natural gas** 27,197
  - **Manufacturing industries** 262,812
  - **Water, gas & electricity** 32,363
  - **Real estate & business services** 58,654
    - **SOURCE: *United Arab Emirates Yearbook 2004***



# NUMBERS DO COUNT:

## UAE FOOD IMPORTS:

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**BEEF:** 30,000 MT US\$ 10 million

India (73%), Australia (10%), New Zealand (4%)

**POULTRY:** 136,000 MT US\$11.7 million

Brazil (58%), France (13%), Denmark (13%)

**FRESH VEGETABLES:** 530,260 MT US\$4 million

Pakistan (23%), India (22%), Iran (12%)

**POWDERED MILK:** 60,000 MT US\$0.2

Netherlands (30%), New Zealand (22%), Denmark (8%)



# NUMBERS DO COUNT: DUBAI & FOOD:

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- ❖ **130 Food processing facilities**  
**HACCP is important**
- ❖ **~1500 Restaurants**  
**Most have a "C" grade**
- ❖ **Food imports, exports and re-exports**  
**Food laws and regulations**



# NUMBER OF RETAIL STORES IN THE UAE (2003):

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- 3,000 Convenience stores
- 900 Grocery stores
- 450 Supermarkets
- 226 Gas marts
- 95 Superstores
- 45 Hypermarkets

**A CONSUMER'S GUIDE TO  
PROTECTING YOUR HEALTH  
AND THE ENVIRONMENT**



**IS OUR  
FOOD  
SAFE?**

**Warren Leon and  
Caroline Smith DeWaal**  
with the Center for Science in the Public Interest



# A SAFE FOOD SUPPLY IS CRITICAL IN THE MIDDLE EAST TO ENSURE:

- High quality **PUBLIC HEALTH**
- Competitive **FOOD EXPORT MARKETS**
- Safe food **IMPORTS**
- Development of new growth industries ---  
**TOURISM, BIOTECHNOLOGY**

# “FROM FARM TO FORK”

- *UAE imports food from more than 90 countries*
- **FOOD SAFETY DEPENDS ON:**
  - GAP and GMP in food exporting countries
  - Good inspection systems in UAE and GCC
  - Safe distribution, storage, and sale of food
  - Consumer awareness of food safety in the home, shops, restaurants, street food

# US FDA: REJECTED FOOD

## 2005

[www.fda.gov/ora/oasis/ora\\_ref\\_cntry.html](http://www.fda.gov/ora/oasis/ora_ref_cntry.html)

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- |              |                    |                             |
|--------------|--------------------|-----------------------------|
| ■ AZERBAIJAN | Fruit juice        | Unsafe color                |
| ■ IRAN       | Pistachio candy    | No English                  |
| ■ IRAN       | Tuna fish in oil   | No process                  |
| ■ JORDAN     | Beans with salt    | Nutr. label                 |
| ■ LEBANON    | Tahina             | Salmonella                  |
| ■ OMAN       | Caramel candy      | Labeling                    |
| ■ PAKISTAN   | Soft drink         | Unsafe color                |
| ■ TURKEY     | Cookies            | Unsafe color                |
| ■ <i>UAE</i> | <i>Mango drink</i> | <i>List ingred. % juice</i> |

# EU: FOOD REJECTIONS 2005

## RAPID ALERT SYSTEM:

[http://europa.eu.int/comm/food/food/rapidalert/reports/week42-2005\\_en.pdf](http://europa.eu.int/comm/food/food/rapidalert/reports/week42-2005_en.pdf)

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■ AZERBAIJAN	Hazelnuts	Aflatoxins
■ IRAN	Pistachio nuts	Aflatoxins
■ INDIA (via UAE)	Chili powder	Aflatoxins
■ LEBANON	Pickled turnips	Unauth. col.
■ PAKISTAN	Peanuts	Aflatoxins
■ SYRIA	Pistachio sweets	Aflatoxins
■ TURKEY	Hazelnut kernels	Aflatoxins



# U.S. FOOD REJECTED BY FDA:

Scallops (frozen)	Filthy
Hard fruit candy	Unsafe color additive/ misbranding
Cherry tomatoes	Filthy
Garlic crushed puree	Insanitary
Tomatoes	Adulteration
Pistachios	Aflatoxin
Conch meat	Filthy
<a href="http://www.fda.gov/ora/import/default.htm">http://www.fda.gov/ora/import/default.htm</a>	

# WHY ARE SOME FOOD COMPANIES ON REJECTION LISTS OF EU, US REGULATORY AGENCIES?



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- They are
- **IGNORANT**
- **FILTHY**
- *Both* **IGNORANT** *and* **FILTHY**



# **EU:** NOTIFICATIONS BY ORIGIN OF PRODUCT (2004)

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- 1731 South-central Asia
- 1010 South-eastern Asia
- 999 Western Europe
- 756 Southern America
- 753 Eastern Asia
- **749** **Western Asia**
- 747 Southern Europe
- 465 Northern Europe
- 271 Eastern Europe
- **265** **Northern Africa**
- 247 Western Africa
- 181 Northern America



# **EU:** NOTIFICATIONS BY HAZARD TYPE: 2004

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■ Mycotoxins	<b>881</b>
■ Chemical contamination (other)	<b>636</b>
■ Microbiological contamination	<b>515</b>
■ Residues of veterinary medical products	<b>142</b>
■ Heavy metals	<b>96</b>
■ Not determined / other	<b>59</b>
■ Parasitic infestation	<b>57</b>
■ Pesticide residues	<b>48</b>
■ Foreign bodies	<b>40</b>
■ Radiation	<b>23</b>





# EU: Continued

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■ Labeling absent/incomplete/incorrect	20
■ Pathogenic micro-organisms	19
■ Packaging defective / incorrect	18
■ Organoleptic changes	12
■ Food additives	11
■ Adverse effects / allergic reaction	9
■ Biotoxins (other)	9
■ GMO / Novel food	9
■ Feed additives	7
■ Threats / extortion / bioterrorism	1

[http://europa.eu.int/comm/food/food/rapidalert/report2004\\_en.pdf](http://europa.eu.int/comm/food/food/rapidalert/report2004_en.pdf)



# EU: "TOP 10" COUNTRIES NOTIFIED FOR *MYCOTOXINS*

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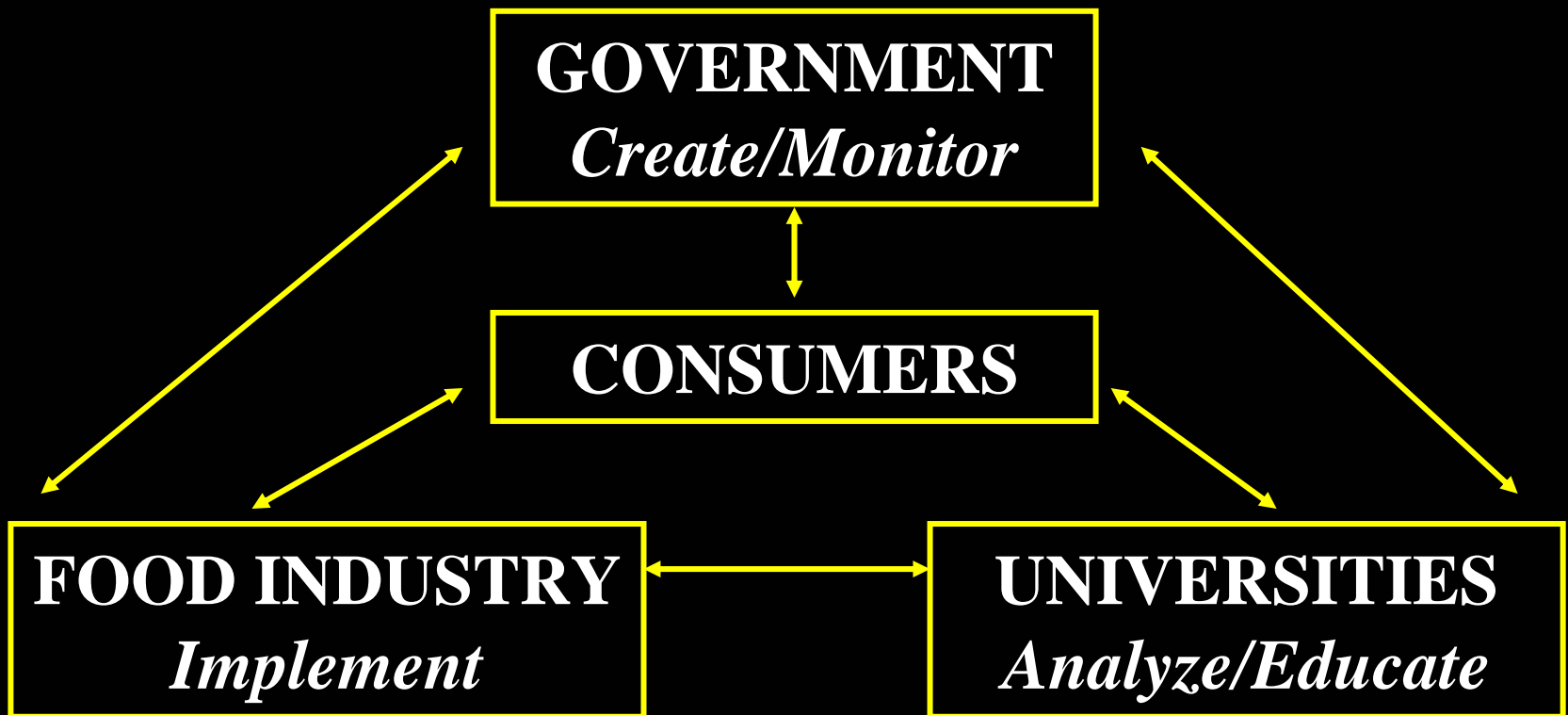
- 1. IRAN Nuts, nut products and snacks
- 2. CHINA Same
- 3. TURKEY Same
- 4. TURKEY Fruit and vegetables
- 5. USA Nuts, nut products and snacks
- 6. ARGENTINA Same
- 7. INDIA Same
- 8. EGYPT Same
- 9. BRAZIL Same
- 10. SUDAN Same

[http://europa.eu.int/comm/food/food/rapidalert/report2004\\_en.pdf](http://europa.eu.int/comm/food/food/rapidalert/report2004_en.pdf)

# FOOD LAWS & REGULATIONS

- *Food professionals must know the food laws and regulations of:*
  - Their country
  - Countries exported to and imported from
  - Codex Alimentarius

# FOOD LAWS & REGULATIONS





***The Design and Implementation of  
Food-Safety Programs in the UAE.***

**Under The Patronage of  
H.E. Dr. Hadeef Bin Jouan Al-Dhahiri**  
*Vice, Chancellor of the UAE University*

*The Department of Agribusiness and  
Consumer Science,*

***In collaboration with***

*The Department of Food Science and the  
Municipalities and Agriculture  
Department – Al-Ain Agriculture*

***College of Food Systems  
United Arab Emirates University***

*Organizes*

***A Symposium on***

***The Design and Implementation of  
Food-Safety Programs in the UAE***

**Monday, May 2nd 2005**

**Al-Ain Hilton**

**Al Ain, United Arab Emirates**



# CODEX DOCUMENTS AVAILABLE OVER THE INTERNET





# UAE ATTENDANCE AT CODEX COMMITTEE MEETINGS (2004-2006)

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## ■ PRESENT:

- **Nutrition and Foods for Special Dietary Uses** *(Germany)* *(Dubai Municipality = DM)*
- **Food Additives & Contaminants** *(Netherlands)* *(DM)*
- **Methods of Analysis & Sampling** *(Hungary)* *(2 DM)*
- **Hygiene** *(Argentina)* *(2 DM; 2 Ministry of Agr. & Fisheries)*
- **Meat & Poultry Hygiene** *(New Zealand)* *(2 DM; UAEU)*
- **Residues of Veterinary Drugs in Foods** *(USA)* *(DM)*
- **Milk and Milk Products** *(New Zealand)*, *(2 DM)*
- **Near East** *(Jordan)*, *(2 DM; 2 ESMA; 2 Sharjah Municipality)*



# UAE ATTENDANCE AT CODEX COMMITTEE MEETINGS (2004-2006)

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## ■ **ABSENT:**

- **Food Import & Export Inspection and Certification** *(Australia)*
- **Food Derived from Biotechnology** *(Japan)*
- **Pesticide Residues** *(Netherlands)*
- **Food Labelling** *(Malaysia)*
- **Fish & Fishery Products** *(South Africa)*
- **General Principles** *(France)*
- **Fresh Fruit and Vegetables** *(Mexico)*
- **Fats & Oils** *(UK)*
- **Processed Fruits and Vegetables** *(USA)*





# **BEWARE: LANGUAGE DIFFICULTIES IN ARABIC**

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- **“There is a difficulty of describing modern scientific achievements in the Arabic language. In some cases, the scientific or technical terms do not exist; in others there may be a bewildering array of alternatives, making harmonization of a ‘popular’ scientific and technological vocabulary a top priority.”**
- *FROM: Can Egypt Join the Knowledge Economy*  
[www.scidev.net](http://www.scidev.net) (June 6, 2005)

# **CODEX COMMITTEE REPORTS TRANSLATED INTO *ARABIC* (2003-2005)**



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## **2005:**

- Executive Committee of the CAC

## **2004:**

- Codex Alimentarius Commission
- Executive Committee of the CAC

## **2003:**

- Executive Committee of the CAC
- Codex Alimentarius Commission
- Executive Committee of the CAC
- FAO / WHO Coordinating Committee for the Near East



# **CODEX COMMITTEE REPORTS NOT TRANSLATED INTO *ARABIC* (2005)**

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## **ALINORM 05**

- **Pesticides**
- **General Principles**
- **Methods of Analysis and Sampling**
- **Food Hygiene**
- **Fish and Fishery Products**
- **Fats and Oils**
- **Meat and Poultry Hygiene**
- **Food Import & Export Inspection & Certification**



## **(Continued:**

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### **FAO/WHO Coordinating Committee for:**

- **Latin America and the Caribbean**
- **North America and the South West Pacific**
- **Europe**
- **Asia**
- **Africa**
- **Nutrition and Foods for Special Dietary Uses**
- **Residues of Veterinary Drugs in Foods**
- ***Ad hoc* Intergovernmental Task Force on Fruit and Vegetable Juices**



# RECENT EMPHASIS ON CAPACITY BUILDING:

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- **Near East Regional Meeting on Food Safety**
  - Amman, Jordan, March 5-6, 2005
  - [www.fao.org/es/ESN/food/meetings\\_neareast\\_en.stm](http://www.fao.org/es/ESN/food/meetings_neareast_en.stm)
- **FAO/WHO Global Forum of Food Safety Regulators:  
*Capacity Building and Technical Assistance – New  
Approaches and Building Alliances***
  - <ftp://ftp.fao.org/docrep/fao/meeting/004/y1897e.pdf>
- ***Food Safety and Agricultural Health Standards:  
Challenges and Opportunities for Developing Country  
Exports* (OECD)**
  - [www.oecd.org/dataoecd/41/46/34410813.pdf](http://www.oecd.org/dataoecd/41/46/34410813.pdf)



# **COLLEGE OF FOOD AND AGRICULTURE, UNITED ARAB EMIRATES UNIVERSITY**

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- **CAN ASSIST IN TRAINING AND RESEARCH IN  
FOOD SAFETY:**
- **EXPERTISE AT ALL POINTS IN THE FOOD  
CHAIN IN THE DEPARTMENTS OF:**
  - **ARID LAND AGRICULTURE**
  - **FOOD SCIENCES**
  - **AGRIBUSINESS AND CONSUMER SCIENCE**
  - **HUMAN NUTRITION AND HEALTH**
- **[www.cfa.uaeu.ac.ae](http://www.cfa.uaeu.ac.ae)**



Benita Epstein Cartoons

*"No, those aren't my diplomas.  
They're my regulations."*

**Nature  
Biotechnology,  
Vol. 17,  
May 1999**