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

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_
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:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Livestock &amp; Fisheries</td>
<td>163,192</td>
</tr>
<tr>
<td>Restaurants &amp; hotels</td>
<td>89,720</td>
</tr>
<tr>
<td>(Many in food-related jobs)</td>
<td></td>
</tr>
<tr>
<td>Government services sector</td>
<td>224,633</td>
</tr>
<tr>
<td>Crude oil &amp; natural gas</td>
<td>27,197</td>
</tr>
<tr>
<td>Manufacturing industries</td>
<td>262,812</td>
</tr>
<tr>
<td>Water, gas &amp; electricity</td>
<td>32,363</td>
</tr>
<tr>
<td>Real estate &amp; business services</td>
<td>58,654</td>
</tr>
</tbody>
</table>

**SOURCE:** *United Arab Emirates Yearbook 2004*
NUMBERS DO COUNT:

UAE FOOD IMPORTS:

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:

- **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):

- 3,000 Convenience stores
- 900 Grocery stores
- 450 Supermarkets
- 226 Gas marts
- 95 Superstores
- 45 Hypermarkets
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
<table>
<thead>
<tr>
<th>Country</th>
<th>Item</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZERBAIJAN</td>
<td>Fruit juice</td>
<td>Unsafe color</td>
</tr>
<tr>
<td>IRAN</td>
<td>Pistachio candy</td>
<td>No English</td>
</tr>
<tr>
<td>IRAN</td>
<td>Tuna fish in oil</td>
<td>No process</td>
</tr>
<tr>
<td>JORDAN</td>
<td>Beans with salt</td>
<td>Nutr. label</td>
</tr>
<tr>
<td>LEBANON</td>
<td>Tahina</td>
<td>Salmonella</td>
</tr>
<tr>
<td>OMAN</td>
<td>Caramel candy</td>
<td>Labeling</td>
</tr>
<tr>
<td>PAKISTAN</td>
<td>Soft drink</td>
<td>Unsafe color</td>
</tr>
<tr>
<td>TURKEY</td>
<td>Cookies</td>
<td>Unsafe color</td>
</tr>
<tr>
<td>UAE</td>
<td>Mango drink</td>
<td>List ingred. % juice</td>
</tr>
</tbody>
</table>
EU: FOOD REJECTIONS 2005

RAPID ALERT SYSTEM:

- **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:

<table>
<thead>
<tr>
<th>Item</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scallops (frozen)</td>
<td>Filthy</td>
</tr>
<tr>
<td>Hard fruit candy</td>
<td>Unsafe color additive/misbranding</td>
</tr>
<tr>
<td>Cherry tomatoes</td>
<td>Filthy</td>
</tr>
<tr>
<td>Garlic crushed puree</td>
<td>Insanitary</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Adulteration</td>
</tr>
<tr>
<td>Pistachios</td>
<td>Aflatoxin</td>
</tr>
<tr>
<td>Conch meat</td>
<td>Filthy</td>
</tr>
</tbody>
</table>

[http://www.fda.gov/ora/import/default.htm](http://www.fda.gov/ora/import/default.htm)
WHY ARE SOME FOOD COMPANIES ON REJECTION LISTS OF EU, US REGULATORY AGENCIES?

- They are
  - IGNORANT
  - FILTHY

- Both IGNORANT and FILTHY
<table>
<thead>
<tr>
<th>Code</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1731</td>
<td>South-central Asia</td>
</tr>
<tr>
<td>1010</td>
<td>South-eastern Asia</td>
</tr>
<tr>
<td>999</td>
<td>Western Europe</td>
</tr>
<tr>
<td>756</td>
<td>Southern America</td>
</tr>
<tr>
<td>753</td>
<td>Eastern Asia</td>
</tr>
<tr>
<td>749</td>
<td>Western Asia</td>
</tr>
<tr>
<td>747</td>
<td>Southern Europe</td>
</tr>
<tr>
<td>465</td>
<td>Northern Europe</td>
</tr>
<tr>
<td>271</td>
<td>Eastern Europe</td>
</tr>
<tr>
<td>265</td>
<td>Northern Africa</td>
</tr>
<tr>
<td>247</td>
<td>Western Africa</td>
</tr>
<tr>
<td>181</td>
<td>Northern America</td>
</tr>
</tbody>
</table>
EU: NOTIFICATIONS BY HAZARD TYPE: 2004

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

- 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

EU: “TOP 10” COUNTRIES NOTIFIED FOR MYCOTOXINS

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

Food professionals must know the food laws and regulations of:

- Their country
- Countries exported to and imported from
- Codex Alimentarius
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)

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)

- 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

“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 (June 6, 2005)
CODEX COMMITTEE REPORTS
TRANSLATED INTO ARABIC
(2003-2005)

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)

ALI NORM 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:

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:

- Near East Regional Meeting on Food Safety
  - Amman, Jordan, March 5-6, 2005
  - 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

- Food Safety and Agricultural Health Standards: Challenges and Opportunities for Developing Country Exports (OECD)
COLLEGE OF FOOD AND AGRICULTURE, UNITED ARAB EMIRATES UNIVERSITY

- 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
  - AGRI BUSINESS AND CONSUMER SCIENCE
  - HUMAN NUTRITION AND HEALTH

- www.cfa.uaeu.ac.ae
"No, those aren’t my diplomas. They’re my regulations.”