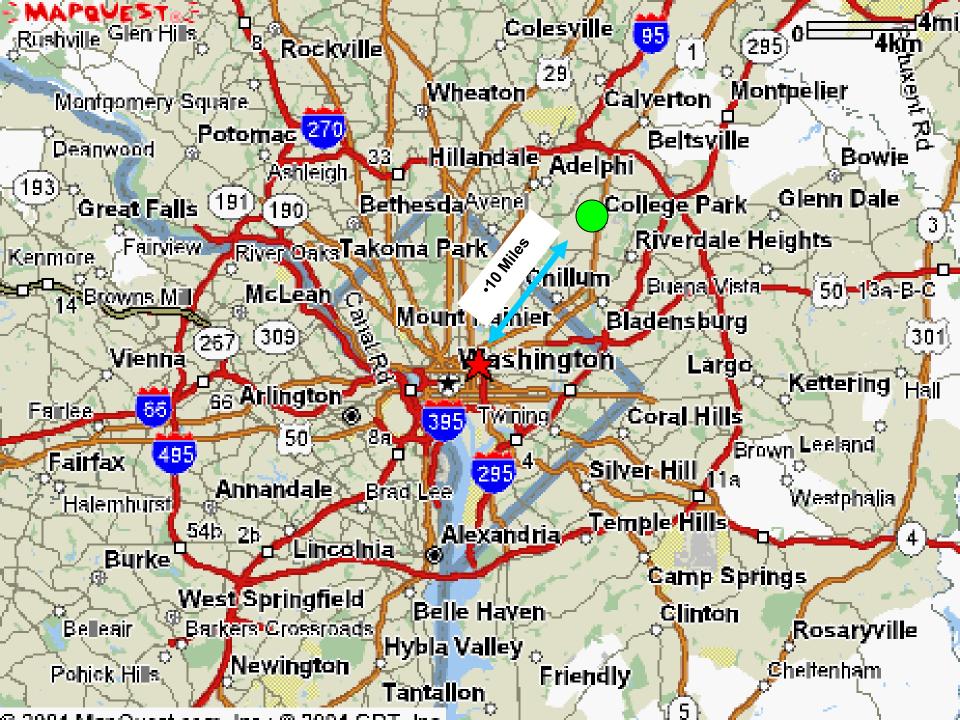


Food Safety Risk Analysis Programs At JIFSAN

Jianghong Meng and Juliana M. Ruzante
Joint Institute for Food Safety & Applied Nutrition
University of Maryland, USA



The Joint Institute for Food Safety and Applied Nutrition

- Established in 1996.
- A collaborative effort between the University of Maryland and the U. S. Food and Drug Administration.
- A multidisciplinary research, education and outreach program - domestic and international in scope.







A Shared Vision and Goal

Government

International Community

Industry



Research

Education

Outreach

Bring together resources and ideas for development of sound food safety strategies

http://www.jifsan.umd.edu



JIFSAN Core Programs

Research

International Training

FoodRisk.org Online Database Workshops/ Symposia



Why International Training?

- When food production facilities adopt GAPs/GMPs programs as well as HACCP protocols.
 - Decrease the probability of the consumer receiving contaminated food
 - With the safety of the source improved, food safety control can be focused at the contamination occurring in the distribution chain and at the consumer.
- Create a win-win situation for export and import countries



International Food Safety Training Center

- Good Agricultural Practices (GAP)
- Good Aquacultural Practices (GAqP)
- Commercially Sterile Packaged Foods (CSPF)
- World Trade Organization Sanitary/Phytosanitary (WTO/SPS)
 Leadership Development for China
- Food Safety Risk Analysis Professional Development Training Program





U.S. Food and Drug Administration



Commissioner's Special Citation Award

For leadership in fostering effective partnerships in international food safety capacity building programs to improve the safety of foods imported into the U.S. and consumed globally

JIFSAN Group
2007



Food Safety Risk Analysis Professional Development

- Know and understand the terminology
- Understand how food safety and other health decisions are made utilizing risk analysis
- Know systematic approaches, tools and techniques to address specific food safety problems
- Have the knowledge to participate in the risk management decision process
- Understand how to communicate effectively about risk with peers, managers, and stakeholders



- Overview of Risk Analysis
- Food Safety Risk Management
- Food Safety Risk Communication
- Food Safety Risk Assessment
- Quantitative risk assessment methods: probabilistic methods
- Quantitative risk assessment methods: model building





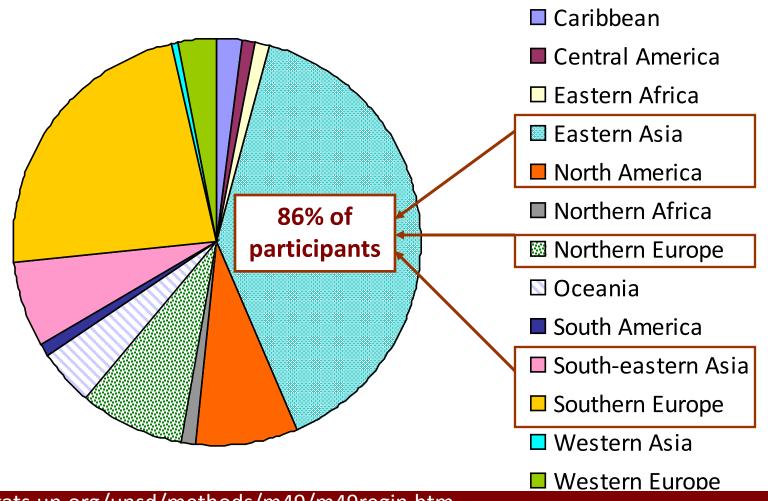
- Quantitative risk assessment methods: probabilistic methods and model building
 - One week training course
 - New course developed to address real needs using case studies and practical exercises
 - Based on @Risk Software
 - One computer per participant
 - Participants must have basic understanding of Excel and basic statistic concepts
 - The goal is to build capacity on Quantitative Risk Assessment

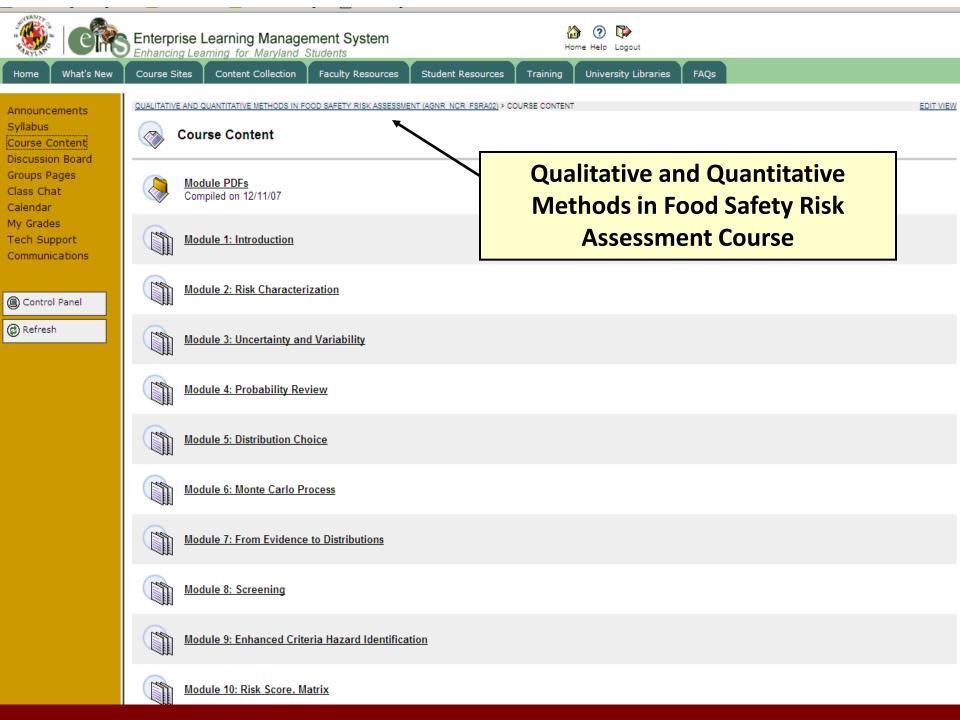


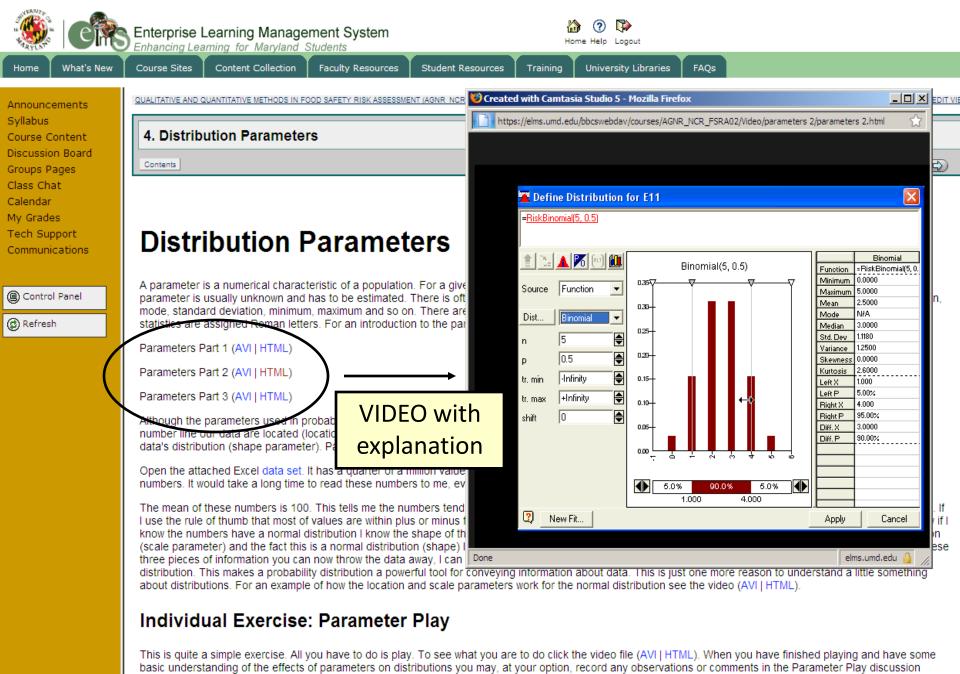
Number of Participants

- JIFSAN has trained:
 - Online: 330 students from 24 countries*
 - Summer integrated program: 457, from 16 countries**
 - Customized in-country: Nicaragua, Mexico, Thailand Croatia (online) and Norway (online 2009)
- 25% of students are from other countries than US
 - 70% of non-US participants take online courses

FL PAPPLIED NUT Regions represented according to UN Statistical division* (does not include US and Customized trainings)







topic. Entries are not required but you are encouraged to share what you have learned with your colleagues in class.

Information Management

JIFSAN manages two information management

resources on food safety

LINESTITUTE for FOOD OF

APPLIED NUTRI





www.FoodRisk.org

- A comprehensive online resource for food safety risk analysis
- Started in 2000 as the 'Food Safety Risk Analysis Clearinghouse'
- Goal is to assist professionals in the area of food safety risk analysis by providing resources, research tools, models and relevant links
- Host the Interagency of Risk Assessment Consortium (IRAC)



www.FoodRisk.org Outreach

FoodRisk.org Statistics (July, 2007 – January, 2009)

- Number of visitors: ~6,500/month
- Number pages per visit: 3
- About 75% get to FoodRisk.org through search engines and 13% direct traffic
- Keyword search: wide range most of them associated with type of hazards and aspects of risk analysis

THE TOTAL POOD OF THE TOTAL PO

www.FoodRisk.org Outreach

FoodRisk.org reaches about 100 countries worldwide





www.FoodRisk.org Outreach

Visits by city

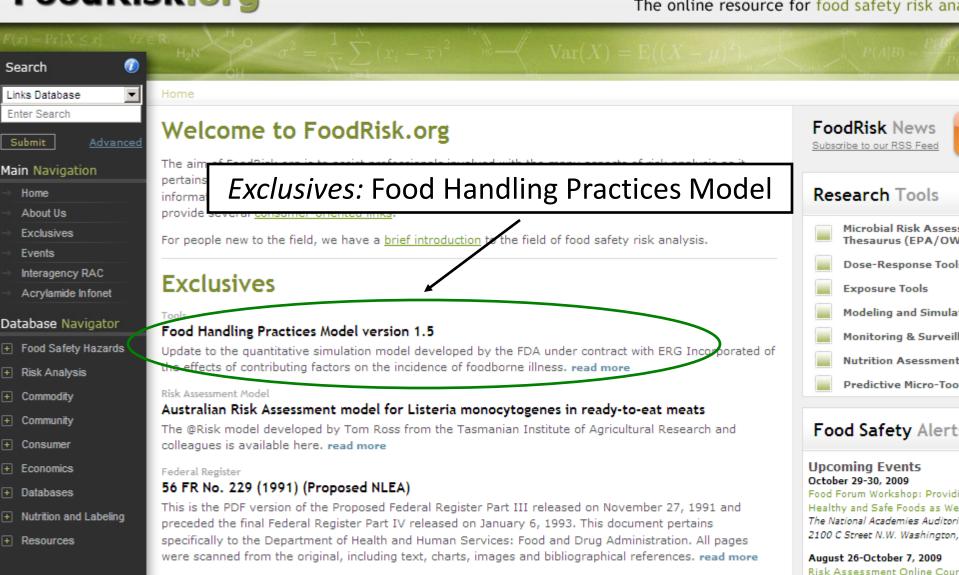


FoodRisk.org

Database

EcoSure 2007 Cold Temperature Database

The online resource for food safety risk and



EcoSure, the food safety & quality assurance division of Ecolab, has updated the 1999 Audits International

cold temperature data base. In addition to an undated data set, the new data belo determine whether

July 12-15, 2009

online

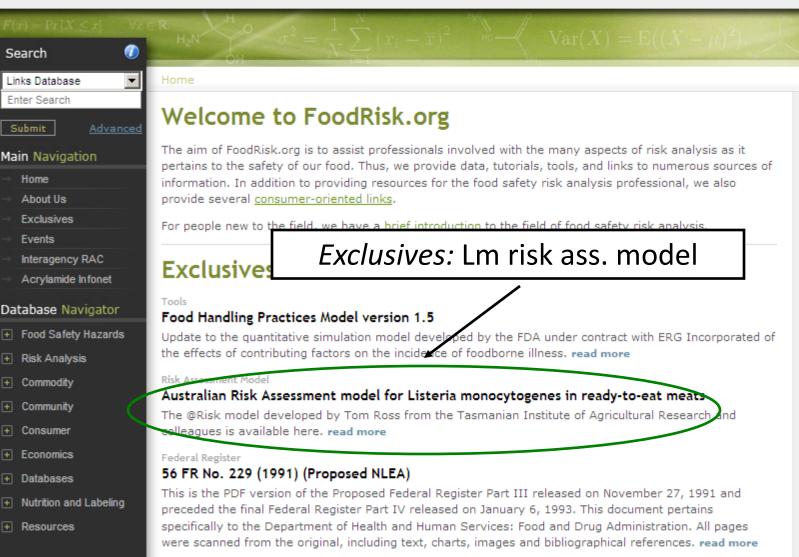
International Association for F

FoodRisk.org

Database

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FoodRisk News

Subscribe to our RSS Feed

Research Tools

Microbial Risk Assess

Thesaurus (EPA/OW

Dose-Response Tool

Exposure Tools

Modeling and Simula

Monitoring & Surveill

Nutrition Asessment

Predictive Micro-Too

Food Safety Alert

Upcoming Events October 29-30, 2009

Food Forum Workshop: Providi Healthy and Safe Foods as We The National Academies Auditori 2100 C Street N.W. Washington,

August 26-October 7, 2009

Risk Assessment Online Cour online

July 12-15, 2009

International Association for F



The online resource for food safety risk analysis



Report [PDF, 89 KB]

The stochastic model was developed using @Risk. To view the complete model you must have the @Risk software installed in your computer. For a free mal or to purchase this program go to http://www.palisade.com/risk/.

@Risk Version [Excel, 107 KB]

If you do not have @Risk installed in your computer you can still view the model; however you will not be able to see the @Risk functions used by the model.

Model View (swap version) [Excel, 117 KB]

Swap version

+ Resources

Risk Profiles

+ Commodity

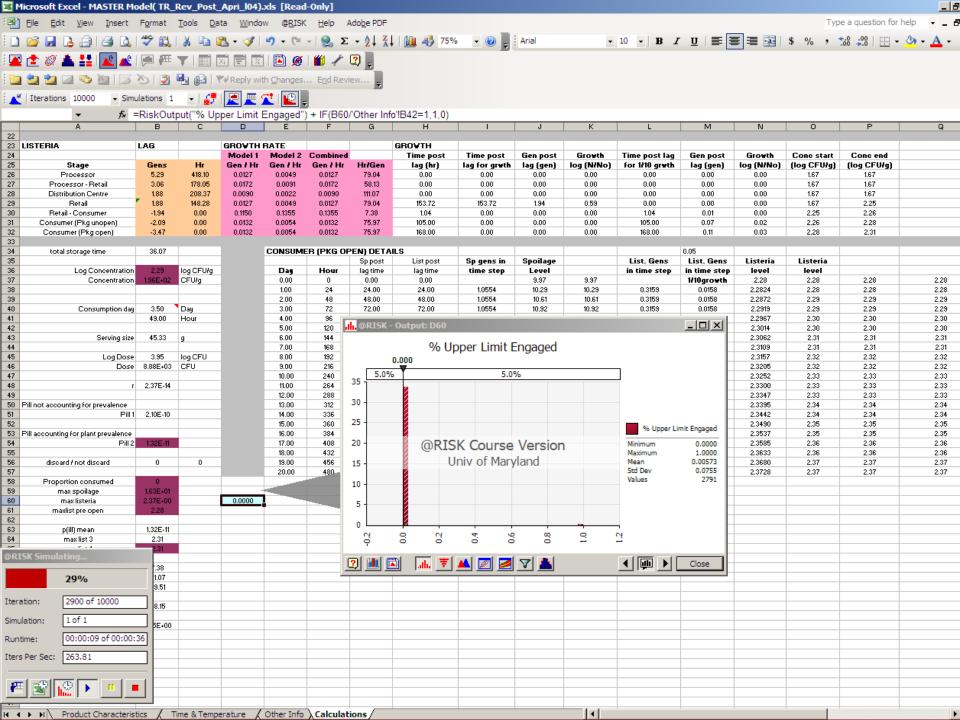
Community

Consumer

Economics

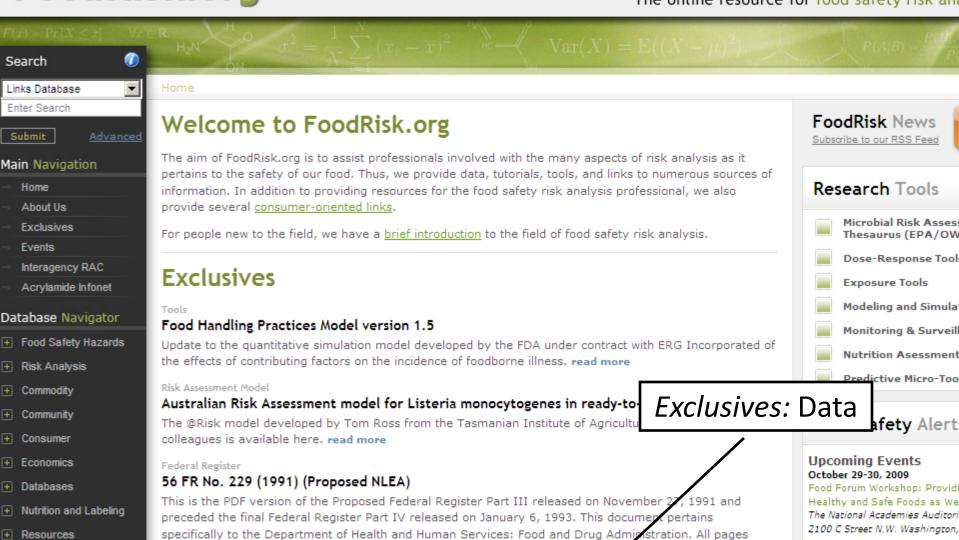
Databases

+ Nutrition and Labeling



FoodRisk.org

The online resource for food safety risk and



EcoSure 2007 Cold Temperature Database

re, the food safety & quality assurance division of Ecolab, has updated the 1999 Audits International cold temperature data base. In addition to an undated data set, the new data bein determine whether

were scanned from the original, including text, charts, images and bibliographical references. read more

Food Forum Workshop: Providi Healthy and Safe Foods as We The National Academies Auditori 2100 C Street N.W. Washington,

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International Association for F



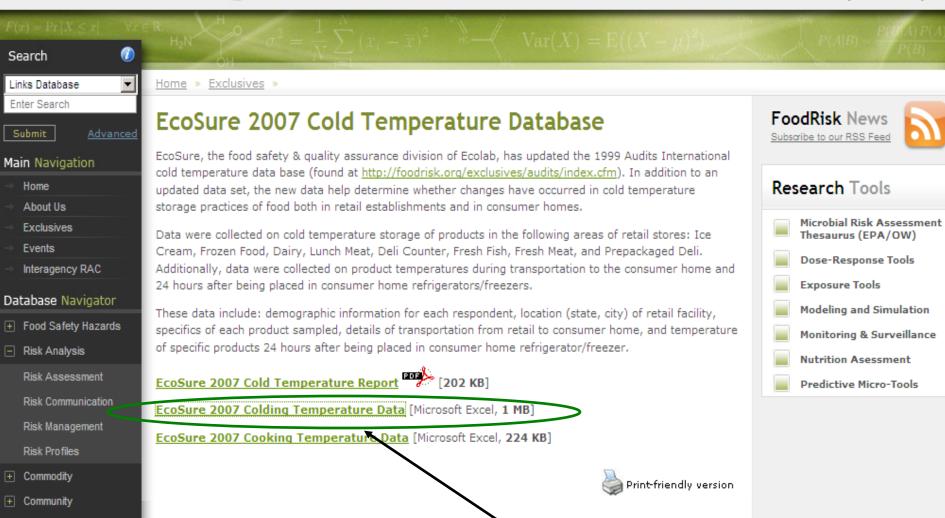
+ Consumer
+ Economics

Databases

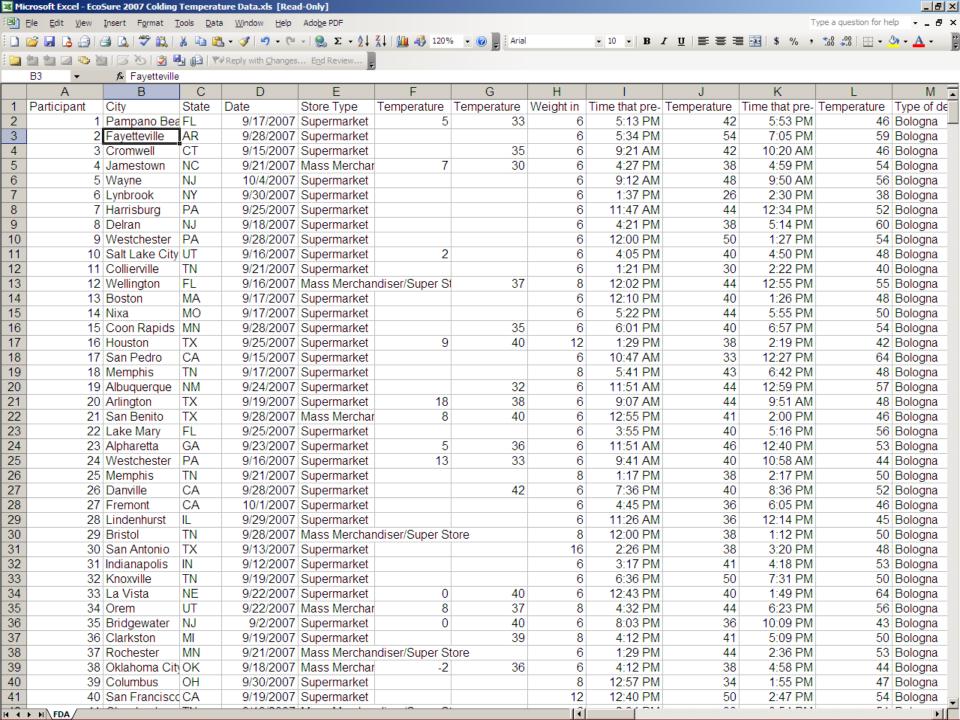
Resources

Nutrition and Labeling

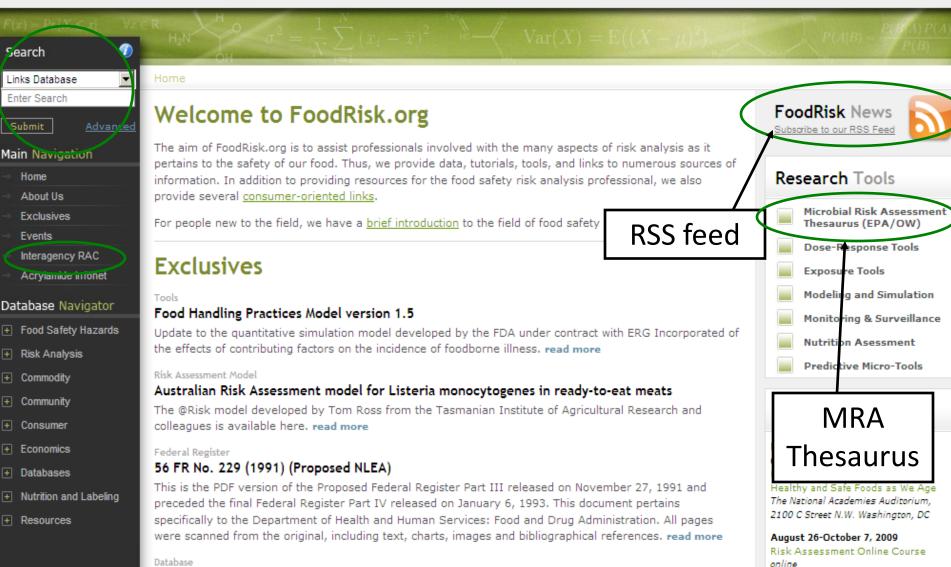
The online resource for food safety risk analysis



EcoSure 2007 Colding Temperature data.xls







EcoSure 2007 Cold Temperature Database
EcoSure, the food safety & quality assurance div

EcoSure, the food safety & quality assurance division of Ecolab, has updated the 1999 Audits International cold temperature data base. In addition to an updated data set, the new data help determine whether changes have occurred in cold temperature storage practices of food both in retail establishments and in consumer homes, read more

Prosentations

Hot Topics

July 12-15, 2009

Grapevine, Texas

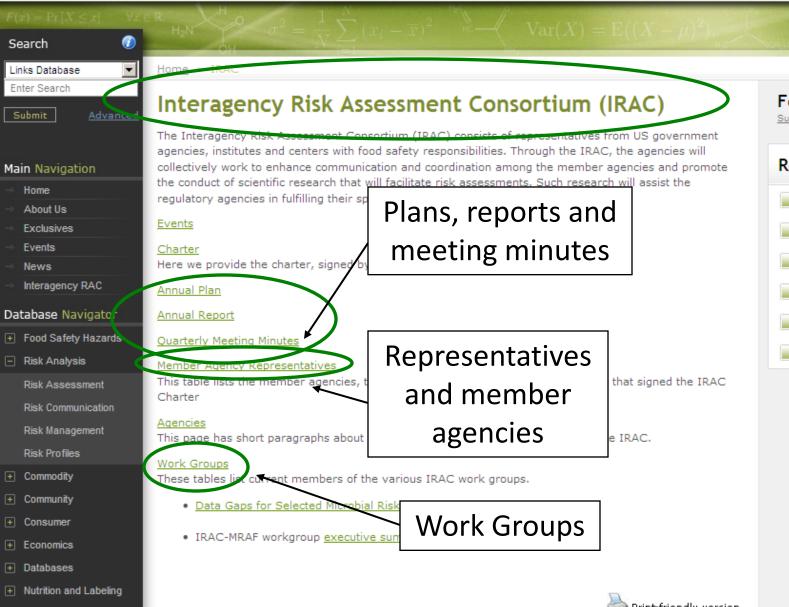
International Association for Food

Protection Annual Meeting



Resources

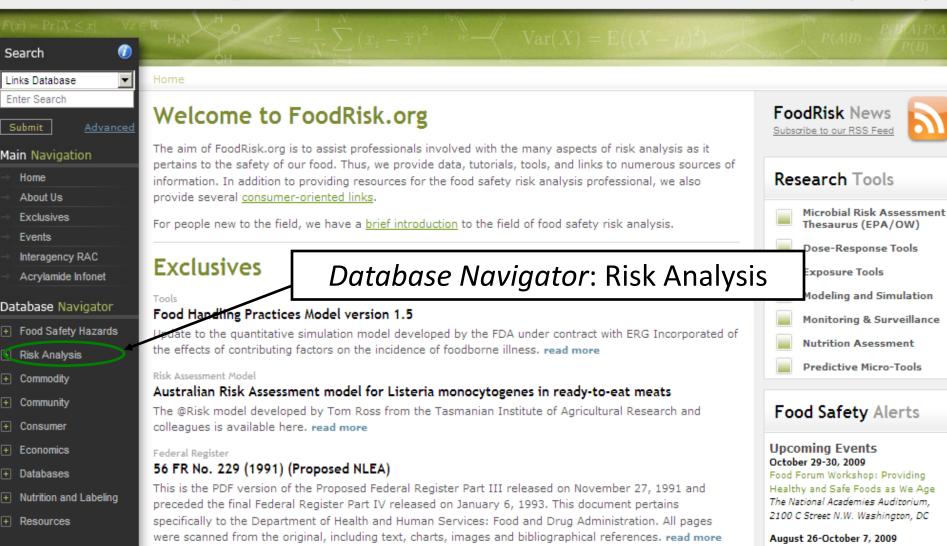
The online resource for food safety risk analysis











Database

EcoSure 2007 Cold Temperature Database

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Presentations

Hot Topics

July 12-15, 2009

Grapevine, Texas

online

Risk Assessment Online Course

International Association for Food

Protection Annual Meeting



Risk Profiles

Commodity

Community

+ Consumer
+ Economics

Databases

Resources

Nutrition and Labeling

obtainable.

Exposure Assessment

Risk Characterization

The online resource for food safety risk analysis



The qualitative and/or quantitative evaluation of the likely intake of biological, chemical, and

The qualitative and/or quantitative estimation, including attendant uncertainties, of the probability of occurrence and severity of known or potential adverse health effects in a given

physical agents via food as well as exposures from other sources if relevant.

population based on hazard identification, hazard characterization and exposure assessment.

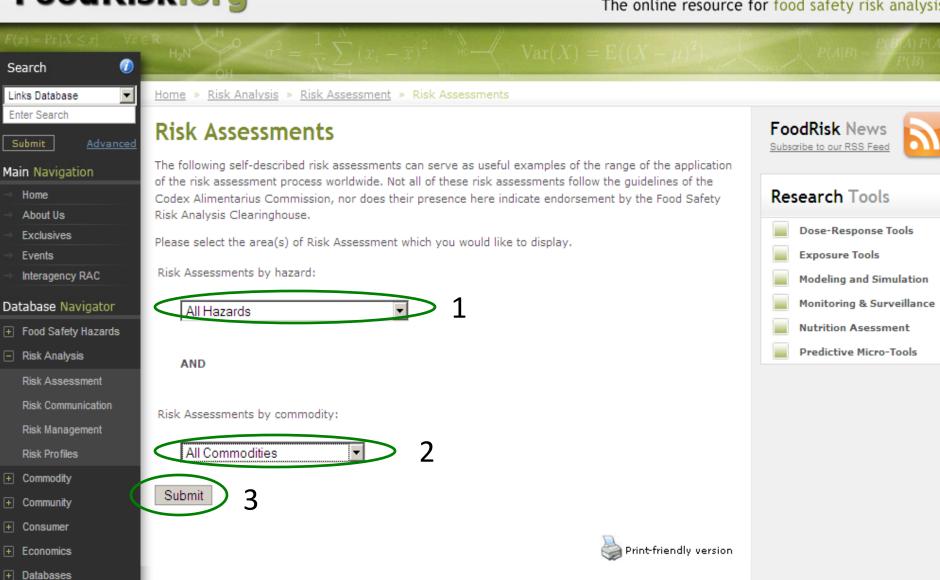
Print-friendly version



Nutrition and Labeling

Resources

The online resource for food safety risk analysis







Hot Topics

a Model for Ranking FD

r Report on the Development of



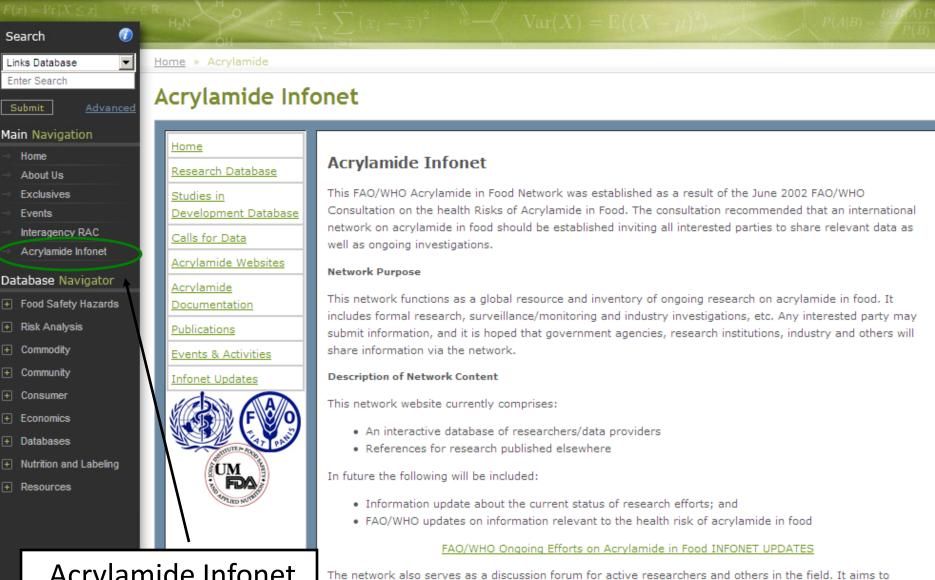


Consumer Storage Practices for Refrigerated Ready-to-Eat Foods

about the size because the second and second and second and the second and the second and second as the second and second as the second as the

National Survey of U.S. adults using a web-enabled panel survey approach. The purpose of the survey was





Acrylamide Infonet

identify gaps and overlaps in available research/information, and make suggestions for how these could be addressed. Information on these aspects will be posted on this network website.

Click here to view the research database page



Potential tools for FoodRisk.org

• 'iRisk': on-line tool for comparing food safety risks



- Analytic web publisher: allow user to see models developed in Analytica
- CRAF: Campylobacter risk assessment
 Framework



Summary

- JIFSAN is uniquely positioned to provide research, education and outreach in the area of food safety
- JIFSAN has a history of successful training programs worldwide
- JIFSAN is always interested in opportunities to work with academia, industry, government, international and national organizations to fulfill its mission and improve food safety globally