

Food Safety and People with Lower Immunity

Trade Consultation Forum

5 Jun 2018

Food Safety and People with Lower Immunity

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- Immunity is one's ability to defend against infection
- There are groups more susceptible to foodborne disease due to their lower immunity

People with Lower Immunity

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- Pregnant women
 - ▣ Hormonal and immunological changes during pregnancy result in weakening of mother's immune system and hence she is more prone to foodborne disease
 - ▣ The developing foetus is susceptible to foodborne pathogens that may not cause symptoms in the mother

- Young children and infants
 - ▣ The immune system is not well developed and the protection afforded by resident gut flora may not be as effective as that in adults
 - ▣ The stomach of newborns is less acidic than that of adults; bacteria and other pathogens survive relatively easier in newborns.

People with Lower Immunity (con't)

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□ Elderly

- The natural defences against or ability to withstand an infection decline gradually as people age
- Weakened immunity due to certain chronic diseases, such as diabetes, or its therapy

People with Lower Immunity (con't)

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- Due to immunological disorders
 - HIV infection
 - Some chronic diseases (e.g. cancer)
 - Immunosuppressive therapy, such as drugs given to prevent transplant rejection

Risk of “Superbugs”

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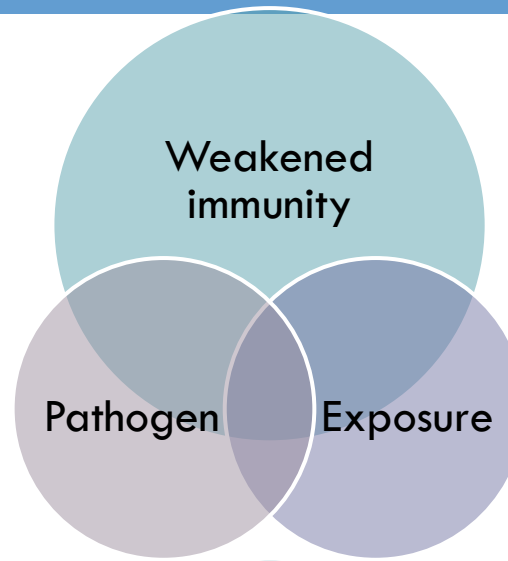
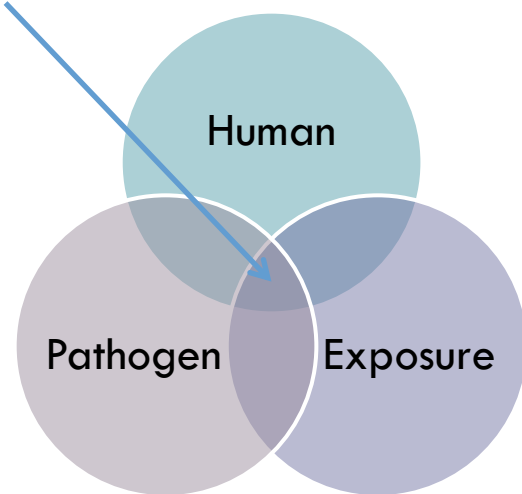
- “Superbugs”: Microorganisms that develop antimicrobial resistance (AMR)
- Raw or undercooked foods are more likely to carry microorganisms, including “superbugs”, than thoroughly cooked foods.
- Pathogens that are “superbugs” are even more dangerous to susceptible populations
 - Antimicrobials that are effective for treatment would be limited



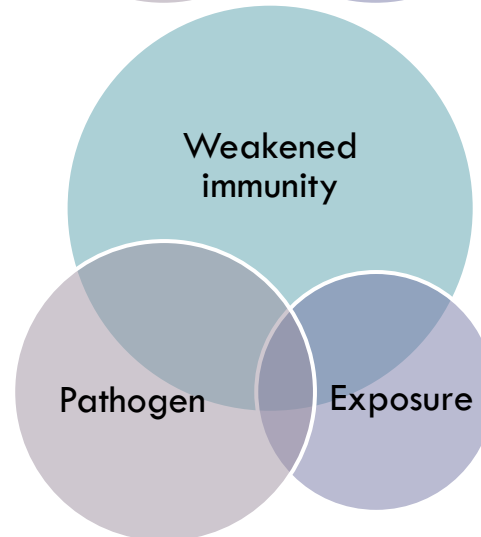
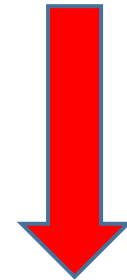
Reducing Risk of Foodborne Illness

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Foodborne illness



Higher risk due to host factors



Reducing risk by limiting exposure

Food Safety for People at Risk

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- Strict observance on food safety and hygiene !

- 5 Keys to Food Safety
 - 1. Choose (Choose safe raw materials)
 - 2. Clean (Keep hands and utensils clean)
 - 3. Separate (Separate raw and cooked food)
 - 4. Cook (Cook thoroughly)
 - 5. Safe Temperature (Keep food at safe temperature)

□ <https://goo.gl/u25g4K>





CHOOSE – Avoid high risk food too !

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Examples of Food Choice :

HIGHER RISK:

1. Raw / Undercooked foods
2. Unwashed fruit and vegetables
3. Refrigerated ready-to-eat food with a long shelf life (> 5 days)

Food type	Food to Avoid 	Lower Risk Choice 
Dairy Products	<ul style="list-style-type: none"> • Cheeses made from unpasteurised milk 	<ul style="list-style-type: none"> • Pasteurised milk • Cheeses made from pasteurised milk
Meat and Poultry	<ul style="list-style-type: none"> • Undercooked or raw meat and poultry • Cold meats 	<ul style="list-style-type: none"> • Thoroughly cooked meat and poultry • Cold meats reheated thoroughly
Seafood	<ul style="list-style-type: none"> • Undercooked or raw seafood e.g. sashimi • Refrigerated smoked seafood • Precooked seafood 	<ul style="list-style-type: none"> • Thoroughly cooked seafood • Smoked seafood and precooked seafood reheated thoroughly • Canned fish and seafood
Fruits and Vegetables	<ul style="list-style-type: none"> • Unwashed fresh fruits and vegetables, including lettuce/salads 	<ul style="list-style-type: none"> • Thoroughly washed fresh vegetables and fruits • Cooked vegetables
Eggs	<ul style="list-style-type: none"> • Food that contain raw/undercooked eggs 	<ul style="list-style-type: none"> • Use pasteurised egg for recipes that call for raw or undercooked eggs • Fully cooked eggs

To facilitate at-risk consumers ...

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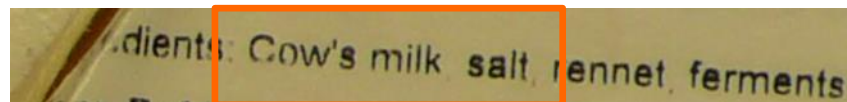
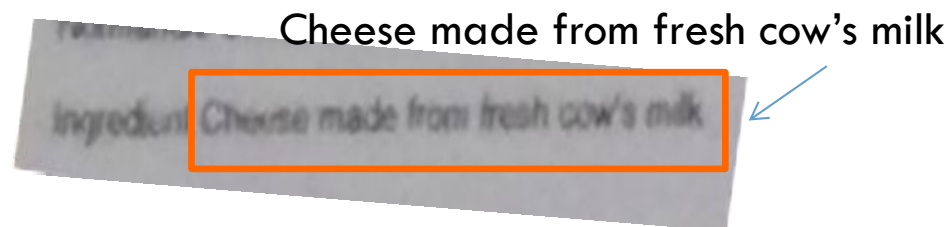
- Product labels should include information on safe handling practices and storage.
- Recommend to provide additional warning or information for people with lower immunity.
- Some examples...

Cheese - Raw milk or Pasteurised milk

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- Recommend to provide clear label for consumers on whether the cheese is made from raw milk

Dairy Products	<ul style="list-style-type: none">• Cheeses made from unpasteurised milk 	<ul style="list-style-type: none">• Pasteurised milk• Cheeses made from pasteurised milk 
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Cheese Products –

Advice to susceptible populations

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- Read food labels and choose cheeses carefully before consumption. Hard and extra hard cheeses are generally safe.
 - Avoid soft cheeses (e.g. Feta, Brie, Camembert) and blue cheeses (e.g. Danish blue, Gorgonzola and Roquefort).
 - For other types of cheeses, choose only those made from pasteurised milk.
 - Do not eat if in doubt.

- Store cheese products strictly in accordance with the instructions on the labels.

Raw Seafood

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Seafood		
	<ul style="list-style-type: none">• Undercooked or raw seafood e.g. sashimi• Refrigerated smoked seafood• Precooked seafood	<ul style="list-style-type: none">• Thoroughly cooked seafood• Smoked seafood and precooked seafood reheated thoroughly• Canned fish and seafood



Raw



1. Cold Smoked:
undercooked
2. Long shelf life



1. Filter feeder
2. Raw



Raw Seafood

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- Warning for at-risk population for raw seafood, e.g. raw oysters
 - Eating raw oyster instead of cooked ones increases the chance of food poisoning. Susceptible groups of individuals (e.g. pregnant women, children, elderly and persons with compromised immune systems or liver diseases) should avoid consuming raw or partially cooked oysters.

- May provide for unpackaged seafood too.

Salads

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- Susceptible groups (including pregnant women, children, the elderly and people with low immunity) are advised not to eat pre-prepared or pre-packaged salads in general.
 - ▣ Some may also contain ingredients, e.g. raw sprout, smoked seafood, or deli meat etc., which are of higher risk to at-risk populations.
- If salad is wanted, they are advised to prepare their own salad and consume it as soon as possible.

Fruits and Vegetables	<ul style="list-style-type: none">• Unwashed fresh fruits and vegetables, including lettuce/salads	<ul style="list-style-type: none">• Thoroughly washed fresh vegetables and fruits• Cooked vegetables
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Egg Products



- Choose pasteurised eggs or egg products or dried egg powder to prepare dishes not requiring heat treatment.
- Include warning for at-risk population for raw egg ingredients.

Consumer Advisory:

Risk of consuming raw or undercooked food

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- Consumer advisory:
 - ▣ Food product description/ingredients, e.g. “Containing raw or undercooked ingredients”
 - ▣ Consuming raw or undercooked food may increase your risk of food borne illness, especially to susceptible populations

- Brochures, deli case or menu advisories, label statements, table tents, placards...etc.

- Similar advisory is also given in the U.S. FDA Food Code

SWEET

Mango Mousse

Smooth mango mousse atop a la cake with a mango glaze

SOUPS

* Classic Hot & Sour

Pork, mushroom, tofu, egg

Miso Soup

Seaweed, enoki, tofu, scallion, b

* Tom Yum Soup

Chicken

Vegetable

Seafood

Traditional broth, lemongrass, g straw mushroom, chili pepper.

* Korean Seafood Soup

Aromatic herb soup, scallop, shrimp, calamari mussel, Korean chili

* Hot and Spicy

v Vegetarian

No Split Checks

Minimum of \$10 per Person

10% Gratuity will be added to parties of 5 or more

Consuming Raw or Uncooked Meats,
Poultry & Seafood Products May
Increase Your Risk of Food-Borne Illness

SAUTÉED MARYLAND CRAB CAKES \$32

Jumbo lump, sautéed green beans, carrot jicama slaw, creamy mustard mayonnaise

FRESH CHEESE TORTELLINI \$16

Shiitake mushrooms, spinach, parmesan



These items are Gluten Free

We follow FDA guidelines. Consuming raw or undercooked meats, poultry, seafood, shellfish or eggs may increase your risk of food borne illness, especially if you have certain medical conditions.

COME FOR THE VIEW, STAY F

LUNCH SERVED UNTI

Pregnant woman, young children, elderly people and people who are immunocompromised should not consume this food product.

孕婦，幼兒，老人以及個人免疫功能低者，不應進食此食品。

In summary,

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- Allow consumers to make informed choices appropriate to the individual's health status and concomitant risk of acquiring foodborne illness.

- Label high risk food items, so that at-risk consumers are adequately informed with respect to the safety and true nature of these products.
 - Avoid these food items; or
 - Cook before consumption

Relevant CFS Articles

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- Food Safety and People with Lower Immunity



- *Listeria monocytogenes* in Cheese Products



- Overview of Food Safety Risks of Oysters



THANK YOU