



آیت نمبر 25-28

قرآنی دعائیں

سورۃ غلط

رَبِّ اشْرَحْ لِي صَدْرِي ۝ وَيَسِّرْ لِي أَمْرِي ۝
وَاحْلُلْ عُقْدَةً مِّنْ لِّسَانِي ۝ يَفْقَهُوا قَوْلِي ۝

پروردگار، میرا سینہ کھول دے، اور میرے کام کو میرے لیے
آسان کر دے اور میری زبان کی گرہ سلجھا دے تاکہ لوگ میری
بات سمجھ سکیں

رَبِّ زِدْنِي عِلْمًا

MY LORD! INCREASE ME IN KNOWLEDGE.

FOOD SAFETY AND QUALITY MANAGEMENT

DHND

YEAR-V

Session: 2015-2020

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LEARNING OUTCOMES

- PLOs – Program Learning Outcomes
- CLOs – Course Learning Outcomes

CDC: 10 MOST IMPORTANT PUBLIC HEALTH PROBLEMS

- **Alcohol related harms**
- **Food safety**
- Healthcare associated infections
- **Heart disease and stroke**
- HIV
- Motor vehicle injury
- **Nutrition, physical activity and obesity**
- Prescription drug overdose
- Teen pregnancy
- Tobacco use

MAJOR INFECTIONS

- More than **250** different **infections** and **intoxications** are associated with foodborne illness
- By far, the majority of illness are caused by
 - *Escherichia coli* - **E. coli infection**
 - *Salmonella enterica* - **Salmonellosis**
 - *Listeria monocytogenes* - **Listeriosis**
 - *Campylobacter jejuni* - **Campylobacteriosis**
 - *Clostridium botulinum* - **Botulism**

SOME BACTERIA DISEASES

Bacteria / Disease	Common Sources
<i>Campylobacteriosis</i>	Contaminated water; unpasteurized milk; undercooked meat, poultry and seafood
<i>Botulism</i>	Improperly processed, home-canned and commercially canned foods; vacuum packed or tightly wrapped foods
<i>Escherichia coli</i>	Un-chlorinated water, raw or rare ground beef; unwashed produce; unpasteurized milk
<i>Salmonella</i>	Raw or undercooked poultry, eggs, meat and seafood; unpasteurized milk
<i>Staphylococcus aureus</i>	Prepared foods left too long at room temperature. Meat, poultry, egg products and such mixtures as tuna, chicken, potato and egg salad; cream filled pastries

FOUR STEPS TO FOOD SAFETY

- Clean
- Separate
- Cook
- Chill

FIGHT BAC!



Keep Food Safe From Bacteria™



CLEAN

Personal Hygiene

- Wash hands in warm, soapy water
 - 20-second scrub
- Wash before and after preparing food in the kitchen.
- Cover coughs and sneezes



Kitchen

- Clean and sanitize all surfaces and utensils in hot water.
- Change dish towels often
- Dispose of garbage promptly



SEPARATE



- **Separate cooked and ready-to-eat foods from raw foods.**
- **Do not taste and cook with the same spoon.**
- **Never use the same utensil, cutting board, or plate for raw and cooked foods.**
 - **This step prevents cross-contamination which occurs when harmful bacteria spread from one food to another.**

COOK

Cooking raw meat, poultry, seafood, and eggs to a safe internal temperature can kill harmful bacteria.

- **Use a thermometer to check food temperatures.**
- **Do not taste uncooked or partially cooked dishes.**
- **Reheat foods thoroughly to 165 degrees F.**

CHILL

- Do not allow foods to sit out longer than 2 hours.
 - Divide larger amounts of food into small portions to chill faster.
- Refrigerators should be kept at 40 degrees Fahrenheit or below.
- Freezers should be kept at 0 degrees or below
- Thaw foods in refrigerator, cold water or the refrigerator
- When in doubt “Throw it Out!”



INFECTIONS AND ITS SYMPTOMS

How does foodborne illness occur?

- Contaminated foods carry **microbes** into the body
- Some microbes can **overcome** the body's **defenses** and cause infections

What are its typical primary symptoms?

- **Nausea**
- **Vomiting**
- **Abdominal cramps**
- **Diarrhea**

RISKS

- Improper refrigeration and storage
- Poor personal hygiene
- Cross-contamination
- Contaminated food sources
- Undercooking
- Other time and temperature mistakes

THERE ARE 8 CRITICAL BUT SIMPLE STEPS TO ENSURE FOOD SAFETY AT HOME

- Wash hands **often**
- Wash **raw** produce before cutting, cooking or eating
- Wash **utensils** and cutting boards after each use
- Keep kitchen surfaces **clean**
- Keep raw **meat** and ready-to-eat foods separate
- Cook food to proper **temperatures**
- Refrigerate food promptly to below **40°F**
- Pay close attention to **use-by dates**

PROPER HAND WASHING TECHNIQUES

- Warm **soapy** water is necessary to kill the unseen germs that may be on hands.
- The primary function of soap is to remove **dirt** and **pathogens** from hands, but the **point** is that **scrub** to release them from hands, and then **rinse** to send them down the drain.
- It is important to wash all **surfaces** of hands, up to **wrists**, between **fingers** and especially under **fingernails**.

PROPER HAND WASHING TECHNIQUES

- To estimate **20** seconds, clean hands through
- When rinsing, use the same **agitation** used for washing.
- It is very important not to re-contaminate hands by using a **dirty** cloth to dry them...even cloths that seem to be clean may **harbor** harmful bacteria. Always use a **paper** towel or clean cloth towel to dry your hands – or let them air dry.

NOT ONLY IS IMPORTANT TO WASH HANDS PROPERLY, BUT ALSO TO WASH THEM FREQUENTLY

Always Wash Hands Before:

- **Prepare** food
- **Eat** meals
- **Feed** children

Always Wash Hands After:

- **Handle** raw foods (including meats, eggs, and fresh fruits and vegetables)
- **Switch** food-preparation tasks
- Use the **restroom** or change a diaper
- **Cough** or sneeze
- **Handle** garbage, dirty dishes or cigarettes
- **Use** the phone
- **Play** with a pet
- **Touch** a cut or sore

CROSS CONTAMINATION

- **Cross-Contamination is the transfer of harmful substances or disease-causing micro-organisms to food by hands, food-contact surfaces, sponges, cloth towels and utensils that touch raw food and then touch ready-to-eat foods. Cross-contamination can also occur when raw food touches or drips onto cooked or ready-to-eat foods.**
- **Keeping raw and ready-to-eat foods separate helps reduce the risk of cross-contamination.**
- **Ready-to-eat foods do not require additional preparation or cooking. They include:**
 - **All food that has already been cooked**
 - **Raw, washed, cut fruits and vegetables**

CLASS ACTIVITY

COLLECT AND PRESENT RECENT DATA FROM WHO, CDC, FDA, FAO

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