2014 Section B Q3

(a) Outline a HACCP system that should be followed when preparing and barbequing food. Refer to potential hazards and the corresponding control measures that should be implemented.

Preparing food

Potential hazards:

- Contamination of food with physical contaminants e.g. hair
- Cross-contamination between raw meat and other foods. -
- Multiplication of bacteria caused from a rise in temperature (above 5 degrees).

Control measures:

– Keep all ingredients until just before use.

- Follow good personal hygiene practices e.g. tie hair up, wash hands regularly etc.
- Use separate preparation equipment for raw meat and other foods to avoid cross-contamination.
- Avoid having food out of the fridge for too long as bacteria thrive at room temperature.

Barbecuing food:

Potential Hazards:

- Survival of bacteria
- Cross contamination
- Food poisoning

Control measures:

– Ensure a core temperature of approx. 72 degrees has been reached so all pathogenic bacteria are killed.

- Place cooked food on a different plate from raw meat or what was used for the raw meat as it will contain bacteria
- Avoid reheating but heat above 100 degrees if necessary to kill off bacteria.

(b) Assess grilling / barbequing as a method of cooking. Refer to: cooking / underlying principle, guidelines to follow in order to ensure palatability of food and effect on the nutritive value of food.

Barbecuing: Food is quickly cooked over radiant heat e.g. Burning charcoal or quickly cooked under radiant heat e.g. electric/gas grill

Cooking/Underlying Principle: Heat seals the surface of the food, helping to retain nutrients, moisture and flavour.

Guidelines: Food needs to be turned in order to cook every side and therefore takes a bit longer to cook. Pre-heat the grill/barbecue to ensure food cooks properly and to help seal the surface quickly. Use thin pieces of meat to ensure that it cooks fully through.
Use a tong to turn the food so it cooks evenly.

Effect on the nutritive value: Food turns brown due the Maillard reaction from cooking proteins and carbohydrates.

(c) Differentiate between toxic food poisoning and infectious food poisoning.

Toxic: Illness caused by eating food containing pathogenic bacteria that produces exotoxins. Exotoxins are difficult to destroy.

Infectious: Illness caused by eating food containing pathogenic bacteria that produces endotoxins. Endotoxins are easily destroyed by normal cooking temperatures.