



Student Nutrition Program

Meat and Alternatives

October 2016

General Recommendations

- Have meat alternatives such as beans, lentils, and tofu more often
- Serve nut and seed butters and whole nuts and seeds (plain, unsalted)*
- Serve fish low in mercury such as cod, sole, haddock, salmon, tilapia, trout, canned light tuna
- Serve plain, fresh, frozen or pre-cooked meats
- Provide one serving with every breakfast and lunch meal

***Be sure to follow your school's anaphylaxis policy**



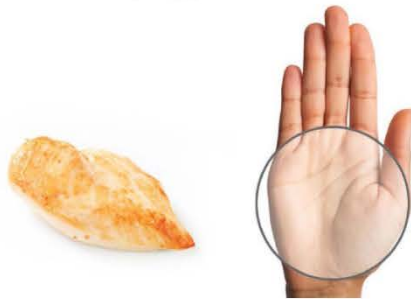
Meat and Alternatives Serving Sizes

Use these hand models to help you determine a serving size!

Meat and Alternatives

Meat and Poultry

2½ oz (75g) = Palm of hand



Nuts and seeds

1/4 cup (60 mL) = Cupped hand



Legumes

3/4 cup (175 mL) = 1 fist



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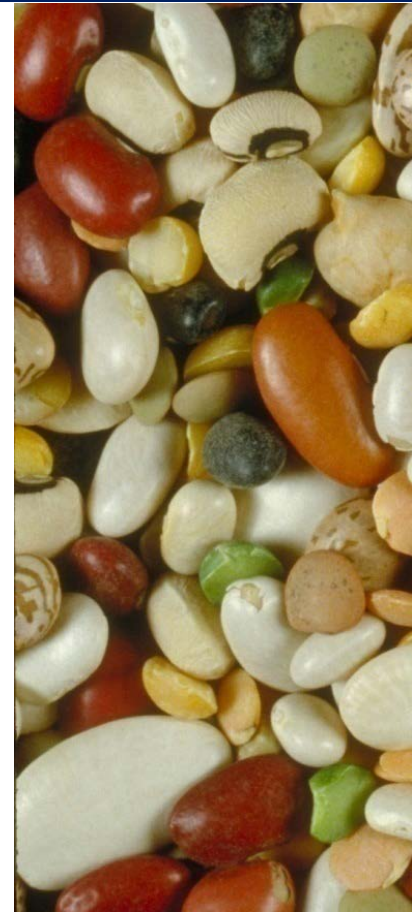
Legumes

Serving size:

- ✓ 175 mL (3/4 cup)
- ✓ ¼ cup of hummus (which is made from chickpeas)
- ✓ 30 g for roasted legumes

Includes:

- ✓ Roasted soy nuts, whole green peas
- ✓ Canned or dried legumes such as lentils, baked beans, chickpeas, black beans - **drain and rinse or buy “low sodium”**



More Alternatives to Meat

Serving sizes:

- ✓ Tofu -150 g or 175 mL ($\frac{3}{4}$ cup)
- ✓ Shelled seeds - 60 mL ($\frac{1}{4}$ cup)
- ✓ Veggie burgers, soy burgers, veggie meatballs* – 75g or 125 mL ($\frac{1}{2}$ cup)

***Can be used to meet special dietary consideration**



Eggs

Serving size: 2 eggs or 100 g whole liquid egg

- ❑ Check with staff to see if there are any students with egg allergies

Do not serve:

- ❑ Flavoured/seasoned liquid egg products
- ❑ Unpasteurized eggs
- ❑ Raw or lightly cooked eggs



Peanuts, Nuts & Seeds

- New to the 2016 guidelines
- Peanuts, nuts, nut and seed butters
- **Be sure to follow your school's anaphylaxis policy!**



Fresh, Frozen, or Canned Fish

Serving size:

75g or 125 mL fresh, frozen, or canned fish

- ❑ Choose fish low in mercury* “light” canned tuna, not albacore or white (low sodium)
- ❑ Do not serve smoked fish or raw seafood/shellfish



Fresh or Frozen Meats

Serving size:

75 g or 125 mL cooked fresh or frozen meat

- ❑ Plain, fresh, frozen, or pre-cooked:
 - ❑ Chicken, turkey, lamb, lean beef, pork, game
 - ❑ Ground meat/poultry
 - ❑ Meatballs, hamburger patties

Do not serve: deli meats, hot dogs, bacon, sausages, breaded or battered poultry/meats or ham



Frozen Prepared Meats

Serving size:

75 g or 125 mL cooked fresh or frozen meat

- ❑ Include plain poultry, fish, pork, beef
- ❑ Foods should be cooked by a lower fat method: baking, grilling, broiling or BBQ

Do not serve: Poultry, fish, pork or beef with breading, sauces, salt, or seasonings unless added on-site.



Shopping and Transportation

- Shop for groceries last if you are running other errands
- Pick perishable foods such as meat and milk at the end of the grocery shopping
- Keeping a cooler and ice packs in your car to store perishable foods is a good practice, especially on hot days
- Put away perishable items first as soon as you arrive home or at the school
- Check [here](#) to see what kinds of foods your school can provide to the students



Food Safety

- Most food borne illnesses are caused by living microorganisms called bacteria
- Bacteria need certain conditions to multiply: nutrients, oxygen, the right temperature, water content and pH
- Bacteria multiply rapidly in the Danger Zone which is a temperature range from 4°C to 60°C
- Keeping food out of the Danger Zone and using good food handling techniques are necessary to prevent illness



Food Safety

DANGER ZONE

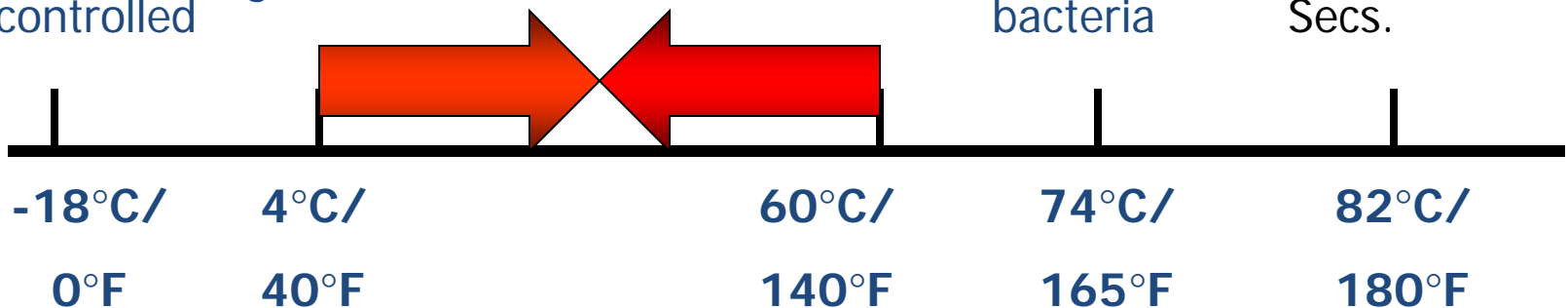
Freezer
bacteria
growth
controlled

Fridge
bacteria
growth slow

Hot Holding
bacteria
controlled

Internal
Food temp.
Kills most
bacteria

Whole Poultry
Internal temp.
Hold for 15
Secs.



Safe Food Handling

- Frozen foods must be thoroughly frozen and in packages that are intact without tears or punctures
- Store raw products on the lowest shelf of the refrigerator and check that the refrigerator is keeping food at 4°C or less using a thermometer
- Cook foods thoroughly to eliminate bacteria that may cause illness, using a thermometer to check the temperature
- Use a separate cutting board that is only for raw meat or fish
- Always wash your hands before and after handling raw meat, poultry, eggs and fish



Safe Food Handling

- Opened canned beans, legumes, tofu and other meat alternatives may be considered potentially hazardous food
- Potentially hazardous foods provide the right conditions for bacteria that may cause illness
- Transfer unused contents of canned goods into containers with tightly fit lids that can be cleaned and sanitized
- Refrigerate any unused portions at 4°C or less
- Discard any uneaten foods that have been served



Safe Food Handling

- Wash your hands, clean and sanitize utensils and work surfaces before preparing or serving food
- Have one cutting board just for fruits and vegetables
- Only use water that is safe to drink in your food preparation and cooking
- Don't handle food if you are ill as it is possible to spread illness through food
- Encourage students to wash their hands before eating



Handwashing

- Cleaning your hands properly is vital to keeping food safe for eating
- Clean your hands using warm running water and liquid soap, drying with a paper towel
- Hand sanitizers are not recommended when handling food
- Hand sanitizers are not effective on hands that may have food residue on them
- Hand sanitizers do not remove all food allergens
- Soap and water must be used to ensure your hands are clean



Proper Handwashing

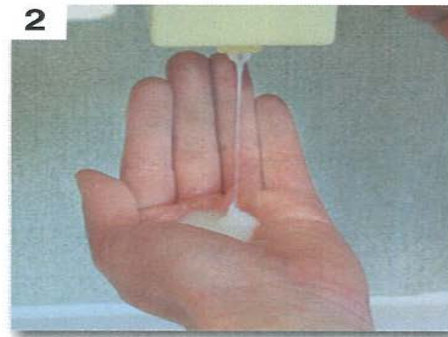
WET HANDS

Remove jewellery and watches, and wet hands with warm water first.



SOAP

Be sure to use enough liquid soap.



LATHER WELL

Lather for **15-20 seconds**. Clean wrists, palms, back of hands and between fingers.



RINSE

Rinse with warm water. Be sure not to touch side of sink.



DRY

Dry hands completely with paper towel or with an air dryer.



KEEP CLEAN

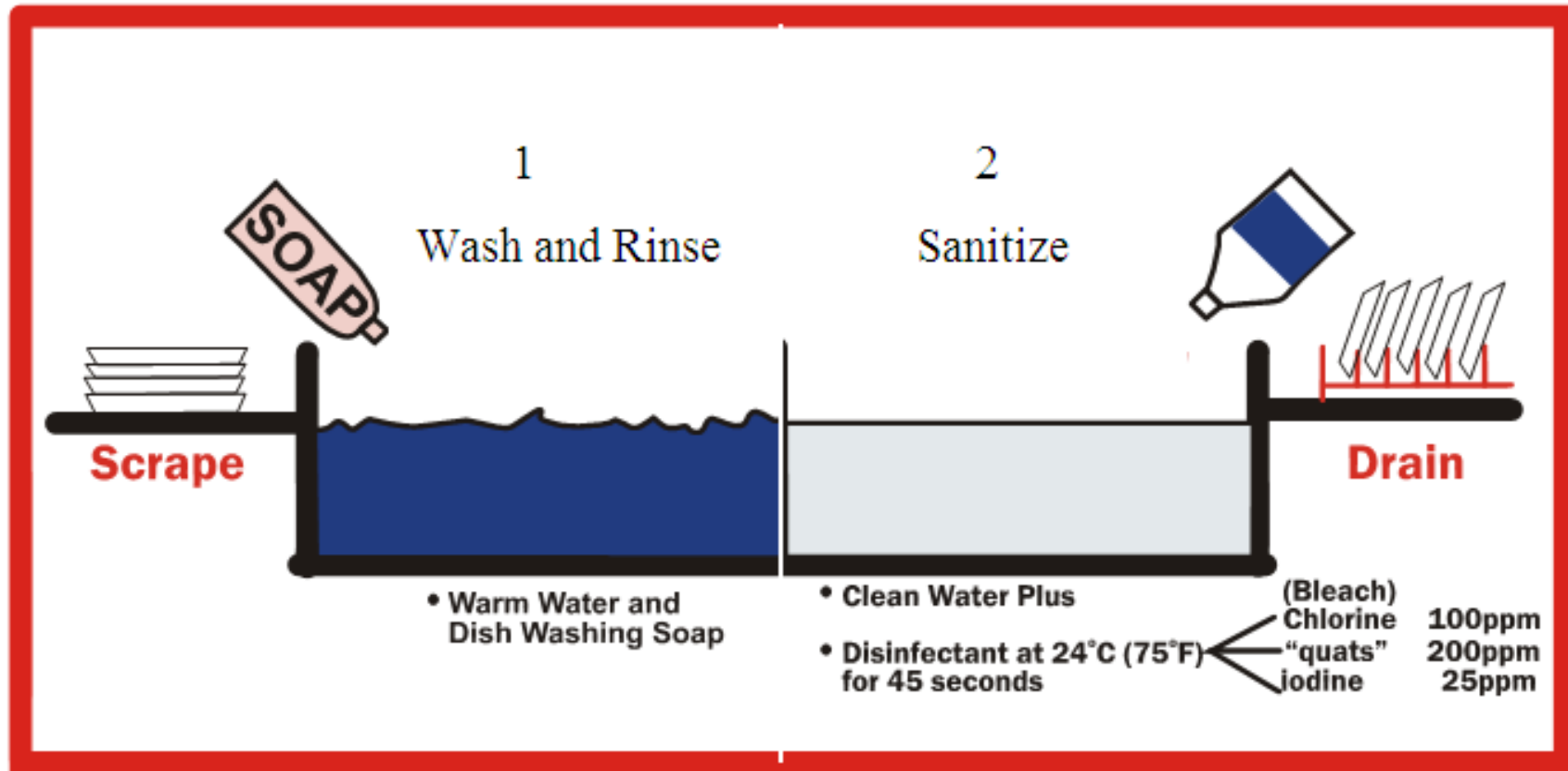
Use a paper towel to turn off water and open door, protecting hands from being recontaminated.

Cleaning and Sanitizing

- Bacteria may remain on utensils, equipment and work surfaces if they are not cleaned and sanitized adequately
- Cleaning reduces the amount of debris and bacteria
- Sanitizing eliminates bacteria
- Clean with warm soapy water and rinse with clean water
- Sanitize using an appropriate sanitizer always following the manufacturer's instructions



Cleaning and Sanitizing



Handling foods safely: Cooking

- Always cook food to the correct temperature to keep food safe
- Cooking food thoroughly can eliminate bacteria that can cause illness
- Foods must be kept hot (at least 60°C) until served
- Use a thermometer to check cooking and holding temperatures



Safe Cooking Temperatures

Product	Celsius	Fahrenheit
Ground Meat and Meat Mixtures Turkey, chicken, Veal, beef, lamb, pork	74° C 71° C	165° F 160° F
Beef and Veal	60-74° C	140-165° F
Pork	71° C	160° F
Poultry Whole poultry Poultry parts and stuffing (cooked alone or in bird) Duck, goose, pheasant	82° C 74° C 74° C	180° F 165° F 165° F
Ham	71° C	160° F
Seafoods Fish, shellfish and other seafoods	70° C	158° F

Hot Holding 60°C 140°F

and when reheating foods - heat to original cooking temperature



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For More Information:
613-345-5685 • 613-283-2740
www.healthunit.org

Thank you!

