WHAT IS THE IMPORTANCE OF HAND WASHING? March 2003

Food Safety Network Factsheet

Hand washing is a valuable way to help fight the spread of disease. Hand washing removes visible dirt from hands and helps loosen and reduce the number of harmful microorganisms (germs). Harmful bacteria and viruses such as Campylobacter, hepatitis A, Shigella, E. coli O157:H7 and Salmonella can be carried by people, animals or equipment and transmitted to food. Wash your hands before preparing or eating food especially after touching raw meats, poultry or eggs, and after eating. It is also imperative after using the washroom or changing a diaper. The fecal oral route is a common way of transferring microorganisms from people to food.

How do I wash my hands?

The steps in proper hand washing are:

- Wet hands with warm water
- Use a clean bar or liquid soap (put the bar soap on a rack to drain and dry)
- Lather all over hands by scrubbing vigorously, creating friction, reaching all areas of the hands and wrists and counting to at least fifteen
- Rinse hands
- Dry hands with a paper towel if possible
- Use the paper towel to turn off the water taps

It is the soap and the scrubbing that loosen and remove the microorganisms.

In general, most people only need plain soap and water to wash their hands. Limit your use of disinfectants such as antibacterial soap that can promote bacterial resistance.

There are situations, however, when use of an antibacterial soap may be indicated:

- close physical contact with people at higher risk for infection such as infants, the sick or the elderly
- contact with someone infected with an organism that can be transmitted by direct contact (such as diarrhea, colds or skin infections)
- working where infectious disease transmission is likely such as in food preparation, nursing homes or day care centers.

Alcohol Hand Rubs, Gels or Rinses

Alcohol hand rub, gel or rinse sanitizers are disinfectants containing at least 60 per cent alcohol. Alcohol hand sanitizers can be used after washing hands with soap and water as an additional agent to kill germs or when soap and water hand washing is not possible. To use these products put an amount the size of your thumbnail in your palm and carefully rub your hands all over including under your nails. If your hands are visibly soiled, wash your hands using warm water and soap and dry them completely before applying the alcohol hand sanitizer. The alcohol content will completely evaporate in fifteen seconds. Alcohol hand sanitizers are safe for children to use under supervision. Alcohol hand sanitizers will not contribute to the emergence of microbial resistance because there is no alcohol left behind to promote adaptation. Since

alcohol has a drying effect many of these products contain emollients to make them gentler on the skin

Food Service Personnel

Food employees with dirty hands and/or fingernails may contaminate the food during preparation. Food service personnel should refer to Model Food Code of the Food and Drug Administration (FDA), chapter 2 part 2-3, on personal cleanliness http://www.cfsan.fda.gov/~dms/fc01-2.html or to the Canadian Food Retail and Food Services Code chapter 5, part 5.6 on hand washing http://www.cfis.agr.ca/english/regcode/frfsrc-amendmts/frfsc_frme.htm

Farm Animals

E. coli O157:H7 is a bacterial infection that can be transferred to people through their contact with farm animals. Petting zoos and agricultural fairs present these opportunities. Careful hand washing with soap and water is recommended after touching animals and before eating. People should avoid touching their face and mouth before washing their hands with soap and water and are advised NOT to use baby wipes in place of hand washing as they do not kill germs such as E. coli O157:H7

<u>Information Sources</u>:

Centers for Disease Control. (2000). Wash your hands often. Retrieved February 28, 2003, from http://www.cdc.gov/ncidod/op/handwashing.htm

Larson, E. (2001). Hygiene of the skin: When is clean too clean? Emerging Infectious Diseases, 7(2). Retrieved February 28, 2003, from http://www.cdc.gov/ncidod/eid/vol7no2/larson.htm

LeTexier, R. (2001). Preventing infection through hand washing. Infection Control Today. Retrieved February 28, 2003, from http://www.infectioncontroltoday.com/articles/071feat2.html

Middlesex-London Health Unit. (2002). An E. coli 0157:H7 outbreak associated with an animal exhibit. Retrieved February 28, 2003, from http://www.healthunit.com/template.asp?id=859

Ontario Ministry of Health. (2000). Hand hygiene. Retrieved February 28, 2003, from http://www.gov.on.ca/MOH/english/pub/foodsafe/handhig.html

For more information on hand washing or other food safety topics, please call the Food Safety Network toll-free at 1-866-50-FSNET or visit our website at www.foodsafetynetwork.ca.

Although we strive to make the information on this fact sheet helpful and accurate, we make no representation or warranty, express or implied, regarding such information, and disclaim all liability of any kind whatsoever arising out of use of, or failure to use, such information or errors or omissions on this fact sheet.

Source: Christine M. Bruhn, PhD, Director, Center for Consumer Research, Food Science and Technology, University of California, Davis.

http://www.eatwelleatsafe.ca/factsheets/Handwashing.pdf