HEALTH-RELATED ENVIRONMENTAL MICROBIOLOGY

Health-related Environmental Microbiology Nov. 1. 1999

- 1. Milk portion of 10 L will be contaminated (from dirty hands) by 10 000 cells of *Salmonella typhimurium*. Milk will then be used for a pudding so that pudding powder will be mixed to the milk without any heating and the mixture is divided to 250 mL portions in glass dished served later to people. The pudding will then be kept at room temperature for 4-5 h before serving and the generation time of *Salmonella* is 25 min at this temperature. The infective dose is 50 000 100 000 bacteria. Can you expect that all 40 persons eating pudding will get salmonellosis? Will there be any cases? 6 p
- 2. Possibilities and needs to improve determination methods in water hygiene. 6p
- 3. Chemical compounds used as disinfectants. 6p
- 4. Development mechanisms of antibiotic resistance in bacteria. 6 p

Muista laittaa papereihin nimesi ja syntymäaikasi (ilman tunnusosaa).