

Too many to count

In the days when the pub across the road was a legitimate extension of the hospital wards and on-call rooms, a bottle of beer strangely found its way to the sister's office. A nurse carrying a patient's dinner tray reawakened the hitherto dormant spirit of scientific inquiry. The fish was swabbed and the swab was sent for culture to the laboratory, accompanied by a test tube of beer labelled "urine." The beer came back "yeast cells, too many to count." The fish grew *E coli*.

I was reminded of this seminal contribution to science by a report that "too many drinks to count" has become a problem on college campuses, where many students "major in bingeing." "Everybody does it, students claim," the article goes on, presenting statistics and Venn diagrams showing that 73% of university undergraduates had used alcohol in the past 30 days and 22.8% had gone on binge drinking sprees three times or more in the past two weeks. The article also describes how a girl with 11 beers on board and her toe bleeding from a broken bottle was standing at midnight on the main strip of the university town glued to her cell phone trying to find another wild party.

Also "too many to count" are the agents contaminating our food. In Washington state 29 people became ill from eating *E coli* contaminated lettuce. A large meat company recently recalled 19 million pounds of beef potentially contaminated with the 0157 strain, cause of the haemolytic uraemic syndrome. A recent study found antibiotic resistant faecal pathogens in cultures from raw chicken livers, thighs, and wings sold in grocery shops. And the public has been advised to cook hamburgers until their internal temperature rises to 71°C.

Fish at various times have also presented dangers, containing PCBs (polychlorinated biphenyls), tritium, or high mercury levels leading to recent advice that pregnant women should limit their intake of tuna. More exotic is the tetrodotoxin neurotoxin found in the puffer or blow fish or fugu, a delicacy in Japan; ciguatera fish poisoning from the dinoflagellate *Gambierdiscus toxicus*; the tropical deadly stone fish with its 13 poisonous grooved spines; the box jelly fish; some toad fishes; the scorpion fish; the lion fish; the stargazer; and the catfish. There are warnings that some fish are so dangerous that they should not even be touched; also that one should go fishing only in crocodile free areas.