Alcohol boosts bacteria, according to articles in *Science News*, 25 June 2005 and American Society for Microbiology Meeting, Atlanta, 5-9 June 2005. Michael Smith and Michael Snyder were studying the interaction between yeast and a bacterium named *Acinetobactor baumannii*. This bacterium can cause serious illnesses such as pneumonia, meningitis and blood infections, but not much is known about its virulence, i.e. what enables it to cause disease. Smith and Snyder found the bacterium grew better near the yeast and further study showed the effect was from the alcohol produced by the yeast. They fed these bacteria and some alcohol to worms and slime moulds that normally eat bacteria and found the worms produced fewer offspring and the bacteria resisted plaque formation by the slime moulds. The worms also had shorter lifespans than did worms that had been fed a different strain of the bacterium whose growth is not boosted by alcohol, even if they are exposed to it. Smith and Snyder are now comparing the genes of the bacteria whose growth is boosted by alcohol with those that don't respond to it, in order to help find out which genes in bacteria increase their ability to cause disease. The *Science News* article concludes: "Although the researchers aren't sure how ethanol increases A. baumannii's virulence, they suggest that their research could displace a common misconception among drinkers. While some people believe that drinking alcohol can kill off a budding infection, Smith notes that drinking may actually make some bacteria more powerful and speed along a nascent infection."

Editorial Comment

: The response to alcohol by these bacteria probably has some function in keeping the ecological balance between yeast, moulds, worms and bacteria in the soil. Like all living organisms, bacteria respond to changes in their environment. When those changes enable the bacteria to grow more vigorously the bacteria are more likely to cause disease if they can also find their way in to human tissues. Whatever genes are found to respond to alcohol, the result is a kind of adaptation, but it is not evolution. (Ref. micro-organisms, disease, pathogenesis)