## Maple syrup may be newest ally in fight against antibiotic resistance

Maple syrup may help fight disease-causing bacteria, including antibiotic-resistant strains that often grow in healthcare settings, says a study published online in Applied and Environmental Microbiology.

Concentrated extracts of maple syrup combined with antibiotics significantly reduced the growth of four common bacterial strains and bacterial communities called biofilms, the study found.

Bacterial biofilms accumulate on medical surfaces and devices, such as catheters and artificial joints, and are responsible for many antibiotic-resistant hospital infections, research has shown.

The maple-syrup extracts appeared to damage the outer membrane of bacterial cells, increasing their susceptibility to antibiotics, and to disable cellular mechanisms called efflux pumps associated with antibiotic resistance, the researchers said. The extracts also reduced the activity of genes in the bacteria linked to antibiotic resistance.

The study, at McGill University in Montreal, used concentrated maple-syrup extracts developed from syrup purchased at local markets in August 2013. The extracts and four phenols isolated from maple syrup were tested separately and in various combinations, with and without the antibiotic ciprofloaxin, against Escherichia coli, or E.coli; Proteus mirabilis, a common cause of urinary-tract infections; and two strains of Pseudomonas aeruginosa, associated with hospital-acquired infections.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Maple Syrup: New Way to Fight Antibiotic-Resistant Bacteria?