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**University of Illinois – Chicago Study:
Raisins Contain Compounds that May Inhibit Cavity-causing Bacteria**

CHICAGO – October 27, 2008 – New research published in the journal, *Phytochemistry Letters*, reveals raisins may benefit oral health because the fruit possesses antimicrobial phytochemicals that suppress growth of some oral bacteria associated with dental cavities and gum disease. The study was conducted at the College of Dentistry, University of Illinois – Chicago (UIC), by a research group led by Christine D. Wu, M.S., Ph.D., Professor and Director of Cariology Research, Department of Pediatric Dentistry at UIC. The research is part of ongoing UIC studies that examine a variety of natural sources of compounds that possess antimicrobial activities against oral pathogens.

“The findings of this particular study build upon previous laboratory research identifying compounds in raisins as effective at inhibiting cavity-causing organisms in the mouth,” said Wu. “Our investigation indicates there are *several* naturally occurring, beneficial phytochemicals in raisins that work to inhibit bacteria associated with dental caries and gum disease.”

The in vitro study, which was supported by the California Raisin Marketing Board (CRMB), isolated eight known compounds from raisins and then tested each for antimicrobial activity against oral pathogens, *Streptococcus mutans* and *Porphyromonas ginigvalis*, the bacteria can cause cavities and gum disease, respectively. The research revealed half of the compounds exhibited antimicrobial properties.

Oleanolic acid was one such compound showing positive response to reducing pathogenic activity. Prior, non-related studies reveal oleanolic acid also has anti-inflammatory and anti-tumor properties; thereby, suggesting the benefits of this natural compound found in raisins may go beyond oral health.

“Oral health and nutrition have always been linked – indicating that a healthy mouth supports a healthy body; in fact, some studies have shown an association between poor oral health and systemic diseases such as coronary heart disease,” said Julie Miller Jones, Ph.D., L.N., C.N.S., Professor of Nutrition in the Department of Family, Consumer and Nutritional Sciences at the College of St. Catherine in St. Paul, Minnesota and national scientific advisor to the CRMB. “Since oleanolic acid has proven beneficial, not only in this study but others, as well, we are intrigued about future research possibilities associated with the benefits of oleanolic acid intake via raisin consumption.”

Rivero-Cruz, J.F. et al. Antimicrobial constituents of Thompson seedless raisins (Vitis vinifera) against selected oral pathogens. Phytochemistry Letters (2008), doi: 10.1016/j.phytol.2008.07.007

Editor’s note:

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