

Curcumin may protect premature infants' lungs

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Turmeric, a key ingredient in spicy curry dishes, has long been known to have medicinal values. Now new research finds a substance in turmeric, curcumin, may provide lasting protection against potentially deadly lung damage in premature infants.

Premature infants often need the assistance of ventilators and forced oxygen therapy because they're frequently born with inadequate lung function. These therapies can cause the infants to suffer lasting lung damage and even death. Researchers at Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center (LA BioMed), using <u>disease models</u>, found curcumin provided long-term protection against this damage.

Their study, published online by the American Journal of Physiology, Lung Cellular and Molecular Physiology, found curcumin provided protection against bronchopulmonary dysplasia (BDP), a condition characterized by scarring and inflammation, and against hyperoxia, in which too much oxygen enters the body through the lungs, for up to 21 days after birth. A previous LA BioMed study found curcumin provided protection for up to seven days after birth.

"This is the first study to find long-term benefits of using curcumin to protect lung function in premature infants," said Virender K. Rehan, MD, the LA BioMed lead researcher who authored the study. "Curcumin is known to have potent antioxidant, anti-inflammatory and anti-microbial properties, making it a promising therapy for premature infants who require <u>oxygen therapy</u> after birth."

BDP is now the most common <u>chronic lung</u> <u>disease</u> of infancy in the U.S. With more premature babies surviving because of improvements in neonatal care, the cases of BPD have increased. A 2010 study found 67.3% of babies born at 22-25 weeks of gestation developed BPD, compared to

36.6% of infants born at 26-30 weeks of gestation.

More information: ajplung.physiology.org/content00082.2013.abstract

Provided by Los Angeles Biomedical Research Institute at Harbor



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