

# News

Office of Medical Information  
The University of Texas Southwestern Medical Center at Dallas  
5323 Harry Hines Boulevard Dallas, Texas 75235-9060 214/688-3404

June 23, 1988

CONTACT: Ann Harrell  
Office: 214/688-3404  
Home: 214/520-7509

\*\*\*\*UT Southwestern researchers look  
at cholesterol in infants

DALLAS--Adults everywhere are concerned about the amount of cholesterol they get in their daily diets. And it seems that all the "good stuff" contains large amounts. However, researchers at The University of Texas Southwestern Medical Center at Dallas are also interested in the amount of cholesterol in the diet of infants and how this may affect blood cholesterol levels.

Breast milk in humans may supply a six-month old infant with 150 mg. of cholesterol or more a day, said Dr. Ricardo Uauy, associate professor of pediatrics and associate professor in the Nutrition Center at UT Southwestern. The American Heart Association's recommended maximum intake per day for an adult is 300 mg. of cholesterol. Past studies and thousands of years of experience have indicated that mother's milk is best for the infant, so Uauy suspects that Nature must have a reason for such a high level of cholesterol in this special baby food. In fact, cholesterol is needed for normal growth and development.

The researcher and his associates have embarked on preliminary studies they hope will unlock some of the mysteries of cholesterol. He is particularly interested in uncovering information about the effects of early diet on cardiovascular risk in later life.

Uauy and his associates, including Dr. Robert Kramer, are studying babies in their first year of life whom Kramer and his group see in their North Dallas medical practice. Kramer is also clinical professor of pediatrics at UT Southwestern and center director of the Dallas Cystic Fibrosis Care and Teaching Center at Children's Medical Center.

The infants in the study are receiving either breast milk or specially formulated baby formulas. One of these formulas is high in monounsaturates and the other is high in polyunsaturates, both types of fatty acids that have been shown to be good for the heart. Each is also lower in cholesterol than human milk.

The researchers are looking at 20 babies in each group. Eight of these infants are now one year of age. After the babies get too old for a diet in which formula is the major food, they are fed "weaning foods" with the same fat composition as the milk or formula research diets they have been on.

Uauy said they are also interested in continuing to study these children at different ages.

(More)

Animal studies have shown that there very well may be an association between the relationship of the high amount of cholesterol in the breast-fed infants' early diet and the development of a mechanism or system that regulates cholesterol in later life. Uauy also said that it has also been shown that the HDL (high density lipoprotein) level is higher in the breast-fed babies. HDL is the so-called "good" cholesterol that indicates cholesterol is being removed from the bloodstream. It does not stick to the walls of the veins and arteries like LDL (low density lipoprotein) cholesterol.

"Although too much cholesterol can do dangerous things to people, especially their hearts, little is known about how much cholesterol is needed for infants. However, we do know that it is very important because it plays a major role in human growth and development," Uauy said.

"That's why it is so important for us to seek these answers about cholesterol in infants," continued the researcher.

In addition, the researcher reported that he and Dr. Jennifer Cuthbert, associate professor of internal medicine, are involved in cholesterol receptor studies in children fed different diets. (Receptors have been shown by UT Southwestern researchers and Nobel Laureates Brown and Goldstein to act like "magnets" that pull the LDL cholesterol from the bloodstream.)

###

Distribution: AA,AB,AC,AC1,AF,AF1,AG,AG1,AH,AI,AK,AK1,ADM,ADM1,SL

Note: The University of Texas Southwestern Medical Center at Dallas comprises Southwestern Medical School, Southwestern Graduate School of Biomedical Sciences and Southwestern Allied Health Sciences School.