HEMATOLOGY

Can Get Rh Blood Tolerance From Mother

➤ A WOMAN with Rh negative blood whose mother had Rh positive blood is likely to develop some tolerance to Rh positive blood that helps when she meets it in her unborn child.

The help apparently is to the daughter but does not extend to the grandchild. That is, the mother's tolerance to Rh positive blood apparently does not prevent the serious blood-destroying condition that may develop in her child if the father is Rh positive.

Discovery of this actively acquired tolerance to Rh positive blood, made by Drs. Ray D. Owen, Harold R. Wood, Alvin G. Foord, Phillip Sturgeon and L. G. Baldwin of Pasadena and Los Angeles, is announced in the *Proceedings of the National Academy of Sciences* (June).

Rh negative women whose mothers are also Rh negative, however, are not as likely to show tolerance to Rh positive blood.

The differences in tolerance to Rh positive blood show in tests of the mother's blood but not when development of erythroblastosis, the condition in babies whose parents have opposite Rh types, is used as a sign of Rh tolerance.

The mechanism by which an Rh negative woman has acquired some Rh tolerance from her Rh positive mother is not known. It might be either through the Rh antigen itself or intact cells of the mother getting into the daughter's blood before birth.

The studies were made at the California Institute of Technology and Huntington Memorial Hospital, Pasadena, Calif., and Children's Hospital, Los Angeles.

Science News Letter, August 7, 1954





Swans

➤ ACCORDING TO ancient custom in England, the swan has the status of royal bird, and swan-keeping is a royal prerogative.

Under certain conditions, the Crown will grant the privilege of keeping swans, together with a "swan mark," a mark similar to a cattle brand which is cut into the bird's upper bill for identification.

The swans seen on the Thames bear the swan mark of the king and of two guilds, the Dyers Company and the Vintners' Company. Once a year, all Thames swans are collected in a ceremony known as "Swan-Upping," and the young cygnets are marked and their flight feathers are cut.

This royal bird, the mute swan, is a native of Europe and Asia. It was introduced into North America as a domesticated bird to adorn parks and estates in the European manner. In the course of time, individuals have escaped from domestica-

tion, and by now the mute swan has become established to some extent in the East, notably in the Hudson Valley.

Despite its name, the mute swan is capable of making sounds. It can sound a resounding trumpet call and when aroused, it hisses angrily.

The two native American swans are the trumpeter swan and the whistling swan. The trumpeter, largest of all swans, reaches a length of more than five feet, measured from bill to tail with the neck stretched straight as in flight. It is the most publicized of the swans in this country because of the heroic fight being made to save it from extinction.

Although trumpeters once existed in great numbers here, the steady development of the land has slowly driven it towards the vanishing point. Small numbers of wild trumpeters in Canada and a few hundred which seem to be thriving on government wildlife refuges in the West represent the last slim hope that this magnificent bird will survive.

For whatever consolation it may be if the trumpeter becomes extinct, its call has been recorded for posterity. In 1937 Dr. A. A. Allen capture two cygnets and then made a transcription of the ensuing rescue by the two parents, complete with cries of distress from the youngsters, the reassuring honks of the parents and then finally the swanly hubbub of happy reunion.

The whistling swan is about ten inches shorter than the trumpeter, and gets its name from the shrill sound, not really a whistle, uttered by the migrating flock. The whistler breeds in the far Arctic north.

This fact, plus its habit of extremely high flight and a strong innate wariness, seems to account for the whistlers' marked success in surviving on this continent which man has rendered so inhospitable for so many other creatures.

Science News Letter, August 7, 1954

Questions

 $\begin{tabular}{ll} ASTRONOMY.--What is a fireball? & p. 90. \end{tabular}$

MATHEMATICS—How is arithmetic now being taught by Columbia University experts? p. 86.

MEDICINE—Why is it difficult to diagnose polio accurately? p. 91.

METEOROLOGY—Why do cities have "heat islands"? p. 85.

PUBLIC HEALTH—Why should cooked food be kept cold, particularly in summer? p. 84. How can rest be harmful? p. 93.

The narmful? p. 93.

VETERINARY MEDICINE — How can cattle grubs be destroyed? p. 87.

Photographs: Cover, U. S. Navy; pp. 83 and 90, Fremont Davis; p. 85, General Motors; p. 86, Columbia University; p. 87, Clifford E. Matteson; p. 95, Carnegie Institution of Washington; p. 96, Raytheon Manufacturing Company

PSYCHOLOGY

Dim View of Old Age

MEN AND women in their 20's and 30's take a dim view of old age.

Dr. Jacob Tuckman of Teachers College, Columbia University, New York, reported to the Third International Gerontological Congress in London that even "sophisticated, educated adults" stick to the notion that the later years are times of lessened happiness, lessened ambition and increased worries.

The sophisticated, educated adults of his report were students in a graduate course on the psychology of the adult. However, they evidently do not agree with the philosopher who, according to Robert Browning, said:

ing, said:
"Grow old along with me!
The best is yet to be,

The last of life, for which the first was made."

Dr. Tuckman and Prof. Irving Lorge of Teachers College asked the 71 men and 52 women in the psychology course to rank the age periods of the life span from most favorable to least favorable for "happiness," "freedom from worry" and "ambition."

The average age of the group was 32.

For happiness, early childhood, adolescence (13-19 years) and the 20's and 30's were rated most favorable. For freedom from worry, the students ranked early childhood as most favorable. For ambition, adolescence and the 20's and 30's were considered most favorable.

There was no significant difference between the sexes in ranking age periods for happiness, freedom from worry and ambition.

The negative judgments of old age by this group, Dr. Tuckman said, shows the need for spreading the idea that age, in and of itself, is not the thing that determines happiness, productivity and security.

Science News Letter, August 7, 1954