

Waiting for a male: It's conceivable

A desire to select the sex of one's offspring has been the aim of many aspiring parents since ancient times, and modern scientists are trying to help parents achieve that goal. In 1954, for instance, a scientist named Kleegman reported that insemination immediately before ovulation was more likely to result in the conception of a boy than was insemination earlier or later in the cycle. Landrum Shettles has since popularized Kleegman's results in a book called *Choose Your Baby's Sex* (Dodd, 1977). But now another scientist — Susan Harlap of Hebrew University of Jerusalem — reports just the opposite findings in the June 28 *NEW ENGLAND JOURNAL OF MEDICINE*: Parents have a better chance of having a boy if they have intercourse two days after ovulation.

Harlap studied 3,658 births to Jewish women who observed the Orthodox ritual of sexual separation each month and who resumed intercourse right before or shortly after ovulation. The proportion of male babies, Harlap found, was significantly higher in the offspring of women who resumed intercourse two days after ovulation than in offspring of women who resumed intercourse right before or during the day of ovulation.

So whose findings are correct? Kleegman's or Harlap's? Only more experiments will tell. Meanwhile Harlap cautions couples desiring a boy against delaying intercourse until after ovulation because override eggs have been associated with chromosomal abnormalities and birth defects.

Arterial linings: Clues to disease

The endothelial cell layer that lines arteries is increasingly interesting to physicians, particularly because of its likely role in heart attacks, strokes and blood diseases. For instance, K. S. Sakariassen and his co-workers at University Hospital, Utrecht, the Netherlands, report in the June 14 *NATURE* that the binding of two blood factors, factor VIII and Von Willebrand factor, to the arterial endothelium is an important first step in slowing blood flow through the artery. Blood platelets then stick to the endothelium and clog the artery. So the effect of factor VIII and Von Willebrand factor on platelet adhesion may be important in the development of hardening of the arteries — a major risk factor in heart attacks and strokes.

Additional information is reported by Lyle W. Hayes and his colleagues at the University of Massachusetts in Amherst in the June *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES*. They find that both arterial endothelial cells and the smooth muscle cells underlying them contain many identical enzymes, but the activity of these enzymes can differ dramatically from one kind of cell to the other. What these differences might mean for the development of heart attacks, strokes or blood diseases, however, remains to be explored.

Zapping vampires

Vampire bats may mean big bucks to the makers of horror films, but they can mean big losses to the breeders of cattle — especially in areas of Central and South America where the bats are numerous. The threat to the cattle comes not from the loss of blood but from the rabies inflicted when the vampires bite the necks of the cattle. Now a new technique for reducing vampire bats among cattle is reported in the *BULLETIN OF THE PAN AMERICAN HEALTH ORGANIZATION* (Vol. 13, No. 2) by Raúl Flores Crespo and his colleagues of the National Institute of Livestock Research in Mexico City. Cattle are being inoculated with the drug warfarin. The amount of warfarin injected into the cattle is small enough not to hurt them, but large enough to induce internal bleeding and death in any bats that bite them.

Rand, right or wrong: Round 3

Like an extended hangover, the debate over whether an ex-alcoholic can resume moderate drinking lingers on three years after a Rand Corp. study determined that total abstinence was not necessary in all cases to successfully treat alcoholism. A year and a half after that report, University of Oklahoma researchers did not completely refute the Rand report, but they did conclude that non-abstainers were three times more likely to relapse than those who never drank (SN: 6/24/78, p. 407).

Now, psychiatrist Edward Gottheil of Thomas Jefferson University in Philadelphia reports on a two-year study that he suggests supports the original Rand findings. Gottheil studied 171 volunteers who participated in a two-year "fixed-interval drinking decisions program."

Follow-up interviews at 6, 12 and 24 months revealed that 8 percent were still abstinent after two years and 47 percent had either been abstinent until recently or were drinking moderately for varying lengths of time without reverting to alcoholism. In total, 55 percent of the patients were classified as being in remission. Moreover, Gottheil found that while these percentages varied over the two years, they did not necessarily decrease, "challenging the fatalistic hypothesis that alcoholism is necessarily a chronic and progressively deteriorating disease," he says. "It is unrealistic to consider total abstinence the only 'cure' for the alcoholic. And it's unrealistic to call therapy programs 'failures' if some patients relapse or revert to former heavy drinking patterns."

Unmarried couples and single parents

While it may still be the norm for a woman and man to fall in love, get married, settle down and have two-point-something kids, it is not as usual as it used to be even a decade ago. The latest Census Bureau report indicates that Americans increasingly are adopting various bits and pieces of that typical family, rather than the whole scenario.

The number of unmarried couples living together has more than doubled since 1970 — climbing to 1.1 million in 1978, an increase of 117 percent, according to the Census Bureau. The increase was greatest — 165 percent — among childless couples, compared with a 39 percent rise among unmarried couples with children. Couples without children account for about three-fourths of the unmarried households.

While unmarried couples still comprise only 2 percent of all cohabitations in the United States, the increase does reflect notable changes in family patterns, according to Census officials. Fewer persons are marrying and those that are are doing so later. They are divorcing more and rearing children by themselves. About 22 percent of all homes are single-person households. And although 62 percent of these are maintained by women, such lifestyles are increasing faster among men.

The statistics also suggest that young persons want to further their education and careers before marrying. Since 1970, the average age at first marriage in the United States has increased by one year to 21.8 years for women and 24.2 years for men.

In 1978, 78 percent of U.S. children under 18 years of age lived with both parents — a drop of 7 percent since 1970, and the increase in single-parent situations has been higher among blacks than whites. One percentage that has not changed since the start of the decade is the ratio of women heading one-parent households: Females account for about 11 million of the 12 million such households.

The divorce rate has nearly doubled in eight years — rising from 47 to 90 divorces for every 1,000 marriages; between 1960 and 1978, the divorce rate jumped 296 percent among persons under 30 and 83 percent in the 45 to 64 age group.