

## Teetotaling for tots

Orange juice please, hold the vodka. That's what researchers at the National Institute of Child Health and Human Development (NICHD) are advising pregnant women to say, based on a recent study that shows that drinking even small amounts of alcohol can reduce both baby size and birth weight. The findings, reported in the Oct. 12 *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*, lend further support to what most doctors have in recent years come to regard as a steadfast rule: Pregnancy and alcohol don't mix.

Pediatrician James Mills and co-workers looked at drinking levels in the first trimester of 31,604 pregnancies for effects — if any — on birth weight, intrauterine growth and length of gestation. They found that pregnant women who have one or more alcoholic drinks every day “substantially increase” their risk of having lighter and smaller babies. The results showed that the number of babies weighing less than 5.5 pounds at birth rose with increasing alcohol consumption. When compared to babies of nondrinkers, the average birth weight was 0.5 ounce less in women who drank less than one drink a day, and 5.8 ounces less in those who took three to five drinks per day.

Although the women who had less than one drink a day had only a very small chance of bearing tinier kids, Mills advises against drinking any alcohol at all during pregnancy. “We don't know enough about the other risks attributed to alcohol,” he says. “Until the risks for miscarriage and physical and mental abnormalities [in the child] are resolved, we can't say less than a drink a day is safe.”

The harmful effects of heavy drinking on offspring have been well documented; they include growth deficiencies, facial deformities and central nervous system damage (SN: 3/26/77, p. 205). Previous studies, however, have been contradictory as to whether moderate or light drinking is harmful as well. The NICHD study has several advantages over earlier reports, Mills notes, such as a very large sample population. In addition, it takes into account the effects of certain risk factors that might contribute to lower birth weight, such as smoking, race and mother's age — items many other trials have ignored.

There is really no way of knowing just how many women drink heavily during pregnancy, Mills says. “It turns out that a lot of women who claim to be pretty heavy drinkers cut down during pregnancy anyway,” he explains. “It may be because with all the nausea and vomiting associated with early pregnancy, the alcohol doesn't taste as good. Nature is just doing the right thing.”

## Which virus to blame?

Scientists may have to apply a bit of sociology where the herpes simplex virus is concerned. Herpes simplex virus comes in two varieties: HSV-1 and HSV-2. Type 1 causes cold sores of the mouth and lips; type 2 brings on painful sores of the genitalia. Doctors have known for some time that genital herpes sufferers occasionally show up with a genital lesion caused by the oral variety of virus, type 1. However, according to recent studies by researchers at The Pennsylvania State University in University Park, this trend has been slowly increasing, and may pose new problems in diagnosis and treatment. Penn State microbiologist John Docherty attributes the increase to a growing preference for oral sex among young adults. This link between oral sex and type 1 herpes on the genitals may support this notion, which “sex researchers have been suggesting for years.”

Oral-genital contact with a person who has an oral herpes sore is as likely to result in a genital herpes infection as is contact with a genitally infected individual, Docherty warns. “The emphasis has been on the transfer of herpes by sexual intercourse,” he says. “As a result, patients with the oral variety [type 1-caused genital herpes] are often confused as to the source of their genital infection.”

## Vaccine for infant diarrhea

For most babies, diarrhea is an unpleasant fact of life. For third world infants, lacking treatment, it is deadly — worldwide, diarrhea kills 4.5 million children under the age of 5 each year.

Researchers have now announced successful trials of an oral vaccine against rotavirus, a diarrhea-causing virus that accounts for somewhere between 20 and 40 percent of childhood diarrhea bouts. The virus causes over 1 million deaths each year, and while it kills only a handful in the United States, it is responsible for half of the diarrhea-related U.S. hospital admissions among youngsters.

In a clinical trial of the vaccine in Finland just completed in May, only five cases of rotavirus-caused diarrhea occurred among 168 vaccine recipients, compared with 26 cases in 160 placebo recipients, says Timo Vesikari of the University of Tampere in Finland.

The “take” rate should improve, says Vesikari. “Much of the vaccine was destroyed in the stomach. When we give it with milk,” he says, “we get a much better antibody response.”

Whether the vaccine provides permanent protection or just a few years' worth does not concern the researchers. The key is getting children past the vulnerable early years. “Lifelong protection might not be necessary,” says Vesikari.

The vaccine may be available in Finland and other countries in two years, predicts Francis E. André of SmithKline Beckman Corp.'s division in Rixensart, Belgium, which developed the vaccine by modifying a calf rotavirus. Trials have just begun in the United States, where it is not expected on the market in the near future.

## Something to sneeze at

The scene: A large room in the university town of Madison, Wisc. At card tables sit 20 college students, eight of whom are sniffing and sneezing with bad colds. The action: Twelve hours of poker, with its attendant card passing, chip gathering and close contact. The winner: New, chemically treated tissues being used by the cold victims to prevent the spread of their colds to the other students.

Treated tissues to fight infectiousness were first tried successfully in Antarctica in 1979. In the University of Wisconsin test, Elliot Dick and colleagues replaced the smelly, quick-to-evaporate iodine tissues used in Antarctica with tissue treated with citric and malic acid, two naturally occurring substances, and sodium lauryl sulfate, a detergent used in shampoo and toothpaste.

The students were infected with a cold type that is not normally found in Wisconsin. With untreated tissue, 52 percent of the healthy people caught colds, usually within two days of the game. In two trials with the treated tissue, none of the healthy volunteers got sick. “Apparently,” says Dick, “the transmission was completely stopped.”

Plain tissues alone, if carefully used, can be somewhat effective, apparently by limiting the spread of virus. J. Owen Hendley of the University of Virginia in Charlottesville used a test setup in which cold victims maintained hand contact with cold-free volunteers for 10 seconds. When the cold sufferers carefully used untreated tissue, only three of 25 healthy controls got sick. When the cold victims didn't have tissues, four of eight volunteers got sick. (Again, with the virucidal tissue, there was no spread of illness.)

The treated tissue is being test-marketed, under the brand name Avert, in Buffalo, Rochester and Albany, N.Y., at \$1.30 for a box of 60 tissues.

The tissues don't cure colds, but Kimberly-Clark of Neenah, Wisc., which makes Avert, is hoping people will be interested. Says Russ Carpenter of Kimberly-Clark, “It's a very altruistic expectation: I'm going to buy that tissue to help somebody else.”