

The data from the later follow-up are also relevant to Horn's hypothesis that teachers are less likely to retain in grade or place in special classes children whom they know were in preschool programs. If this effect existed, presumably it would occur primarily in grades 1 and 2, so that the difference between treatment and control groups should be especially large at that time. Just the opposite was found; there were no significant differences in the first two grades (pooled $z = .02$, $P = .98$ at the end of grade 1; pooled $z = .92$, $P = .36$ at the end of grade 2). For all projects combined, at

the end of the second grade the proportion of children classified as failing to meet school requirements was 39/515 (7.6 percent) in the treatment groups and 23/234 (9.8 percent) in the control groups. We plan to report those results in more detail in future publications.

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Preventing Maternal Cannibalism in Rats

The elaborate procedures described by Libbin and Person (1) to reduce or prevent maternal cannibalism in rats are, in my experience, generally unnecessary. In my experiments on pregnant rats, the animals are received 3 days after mating and housed in hanging solid-bottom cages measuring 24 by 40 by 17.5 cm in a room with a 12-hour light-dark cycle (light is provided by overhead fluorescent bulbs). This lighting regimen is maintained throughout pregnancy and lactation. No attempt is made to reduce the amount of light entering the cages.

There is a thin (~ 1 cm) layer of wood shavings on the floor of each cage. Twice weekly the rats are removed from the cages long enough for the fouled shavings to be removed and replaced with clean shavings. If the shavings are not changed within 30 days, the accumulation of excess urine and feces leads to the production of ammonia, which may produce lung lesions in the mothers and pups. Failure to change the shavings for 30 days also violates guidelines established by the National Institutes of Health (2) and could result in the loss of accreditation of the laboratory by the American Association for Accreditation of Laboratory Animal Care.

The extensive "hand gentling" described by Libbin and Person is not necessary to prevent maternal cannibalism.

I have conducted experiments in which the mothers are either weighed three times per week (3) or weighed only on arrival and not disturbed further until parturition (4). At birth the pups are removed from the mothers, pooled, randomly assigned to other mothers, removed again, weighed, injected with drugs, and returned to the surrogate mothers (4) with virtually no resulting cannibalism. The pups can be weighed one to three times weekly throughout the nursing period, as needed. All these procedures involve routine handling similar to what nonpregnant or nonlactating rats receive. I did not observe that "merely handling pups, as in the carrying out of simple injection procedures, produces [cannibalism]" (1). In fact, cleaning the cages, weighing the mothers and pups, and manipulating the pups experimentally may serve the same purpose as "hand gentling."

Cannibalism does occur in laboratory rats, but is generally restricted to the consumption of stillborn pups or pups weakened or dead as a result of experimentation. Usually there is a 12- to 24-hour interval between death of the pup and its consumption by the mother.

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Microencapsulated Islets in Diabetic Rats

In discussing briefly in our report (1) some techniques used to circumvent the problem of the immune rejection of islets, we incorrectly referred to Sutherland *et al.* (2) as injecting neonatal rats with DL-ethionine to prevent rejection. In fact, Sutherland *et al.* treated adult rats with DL-ethionine only as an adjunct to the preparation of islet tissue. In our statement on Mullen *et al.* (3) we should have said that these workers used fetal pancreas in an attempt to avoid rejection and cited an additional reference (4). Further, it has been pointed out (5) that the term allotransplantation would have been more appropriate than isotransplantation in describing our experiments (6).

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