

The current long-hair. . . . trend among the younger generation is not revolutionary, but a "renaissance," according to a New York labor arbitrator, because "longer hair is the traditional mode for men while short hair has historically been the exception."

As reported in the *New York Times*, the arbitrator, Theodore W. Kheel, made the statement in a decision in which he ruled that New York City bus drivers could wear beards and sideburns.

Among the points made:

"All over the world, flowing beards have stood for wisdom, strength and fatherliness.

"In the early civilizations of the Mediterranean, the great men of the mind were all bearded: Abraham, Moses, Jesus, Aristotle, Plato.

"In fiction and folklore, this tradition has been carried over to such varied characters as King Arthur, Father Time and Santa Claus.

"When artists have drawn the face of God, it has often been with a flowing, white beard. The creator was painted this way by Michelangelo in the Sistine chapel.

"Uncle Sam is always drawn with a mustache and a little goat-like chin beard."

He didn't mention Blackbeard the Pirate.

-S. S.

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Home Ec's

Nutritional Research Lab . . . .

# Where Pigs Eat Like Humans

By John Cooper



Diet ingredients, weighed by Donna Yu, are carefully measured.



The technician in the nutrition research labs, Mrs. Dorsie Scott, weighs (left) and feeds the guinea pigs (below), then charts their rates of growth.



When Dr. John Typpo came to the University's School of Home Economics in 1966 as chairman of the department of food and nutrition, no one had conducted nutrition research in the laboratories in the ground floor of Gwynn Hall for about five years and most of the laboratory equipment was obsolete.

Mrs. Donna Jeffery, research nutritionist who was then a graduate research assistant remembers: "When I came here in the fall of 1967 they were completely redoing the laboratories. We had our first animal experiment here in March 1968, and the human nutrition lab was just finished this summer."

The animals used in all the experiments in the nutrition research laboratories are guinea pigs. "You almost have to stick with one species of animal or you'll introduce too many health-related variables into your experiments," Typpo explains.

One of the major projects going on in the laboratories is a study

of protein malnutrition using the guinea pigs as an experimental model. It is financed jointly by the Agricultural Experiment Station and the Nutrition Foundation.

Dr. William K. Yamanaka, assistant professor of nutrition and one of the faculty members working on the project, explains the importance of the study: "Our government is sending food to alleviate malnutrition in Central and South America, especially among young children. But there is a possibility that irreversible damage has already been done by the effects of malnutrition (of their mothers) before they are born. We want to see if there is this damage and whether proper nutrition of the young could reverse it."

To find this out, four groups of guinea pigs are being used. The first group is a "control group" by which the results of the other groups will be measured. In this group both the mother and baby guinea pigs are fed adequate diets.

In another group the mothers are fed adequate diets but the babies get a protein deficient diet based on corn and bean meal, "which is similar to the diets of many people in Central and South America," Yamanaka says.

This is reversed in the third group, where the mothers get the deficient diet and the babies get the adequate diet. In the fourth group they all get the corn and bean diet.

By studying the baby animals in these four groups, the researchers will be able to tell what, if any, effects of malnutrition are present at birth and/or when they occur after birth.

Yamanaka is studying the growth and development of the brains in these animals. "We usually expect the maximum number of brain cells by the first few weeks after birth, the first six months for children."

Working with Dr. James Dexter, a neurologist in the School of Medicine, Yamanaka administers electro-encephalograms (EEG's) on the guinea pigs. The EEG measures the brain waves which in turn tell about the development of the brain. The EEG's are run three times: At the time of weaning (a few days after birth), 45 days later (half way between weaning and adulthood) and at about three and a half months (full sexual maturity).

Yamanaka is working on another project in which he is studying the effect of hyper-cholesterolemic diets in guinea pigs. "I'm interested in the effects

of different fats in the hardening of the arteries and in increased cholesterol in the blood. This is a continuation of experiments I did at Berkeley. The main emphasis of my research is in lipid metabolism, cholesterol metabolism and their relationship to cardio-vascular diseases."

The human nutrition laboratory consists of a sparkling new kitchen and a dining room. It will be completed and in use by next September, according to Dr. Helen L. Anderson, assistant professor of nutrition. By then she hopes about six male University students will be participating in a human metabolic study in which they will be eating all their meals at the lab.

Dr. Anderson is interested in reassessing the role of dietary histidine, an amino acid, in human nutrition. Histidine is considered to be essential for the growth of a number of animals and for human infants. Although histidine has been considered to be nonessential for adults, there is some evidence that indicates a need for further study. "I suspect histidine might be necessary under some conditions for the most efficient utilization of essential amino acids."

She says the students will be recruited from upper classmen and graduate students, as they were in similar experiments she conducted at the University of Wisconsin.

"It's very hard to design a histidine-free-diet because many natural foods contain it," she explains. "Histidine is present in meats and in all proteins, so the foods allowed are very limited. Therefore, instead of including proteins in the diet we use crystalline amino acids in amounts that would be present in foods, but leave out the histidine."

The diet will probably be like the one Dr. Anderson used at Wisconsin. It included applesauce, peaches, pears, tomatoes, green beans, dill pickles, cornstarch wafers, carbonated drinks, sugar, butter-oil, minerals, vitamins and coffee or tea. The amount of these foods will also be controlled. These foods constitute the total of what a subject participating in the study can have to eat during the experiment. The length of the experiments will probably be from 50 to 90 days. The subjects will not be allowed to consume any other foods, and thus can't get a Coke over at the Commons.

But because some phases of the experiments can't be done with humans, Dr. Anderson will also be feeding this diet to (who else?) guinea pigs. □