

As Employee, What Do You Think of Duke?

If you've ever wished that someone would ask you the question in the headline above, your day is about to come.

And if you have any ideas about how to improve things, you'll get the chance to express those, too.

The opportunity will come by way of an Employee Survey that will be conducted here in early March.

Richard Peck, administrative director of Duke Hospital, said: "We are genuinely interested in knowing what employees think about working here. The only way we can find out about our strengths and weaknesses — and subsequently do something about correcting our deficiencies — is to ask."

But Duke will not be doing the questioning, Peck emphasized.

"We are asking an outside firm, the National Survey Research Center (NSRC) of Cleveland, Ohio, to do this for us," Peck said. "They have 25 years' experience in surveying and they have conducted surveys in other large medical centers like Duke."

Employees will be asked to participate in the survey, a series of about 60 questions that takes about one hour to

complete, during their normal work schedule.

"We are hoping that a large percentage of our employees will want to participate," Peck said.

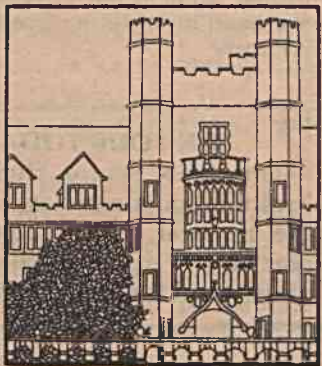
He stressed that no individual employee who takes part can or will be identified, and he said that NSRC ground rules also include the following:

- * The survey is done by secret questionnaire and is conducted entirely by personnel from the National Survey Research Center.

- * Employees do not identify themselves in any way on the questionnaire.

- * None of the completed questionnaires comes into the hands of anyone at Duke. After the results are tabulated and a report is written by NSRC, the questionnaires are burned.

A representative from the National Survey Research Center spent a full day here between Christmas and New Years talking with various employees and supervisors to try to get a feel for Duke and to help the organization develop the questions to be used in the survey, Peck said.



Intercom

Duke University Medical Center

VOLUME 24, NUMBER 2

JANUARY 14, 1977

DURHAM, NORTH CAROLINA

Helps Explain Milk Digestion in Newborn

New Protein Found In Anatomy Research

By David Williamson

A young researcher here has identified a new protein in the intestines of baby research rats that

helps to explain how mammals digest milk during the suckling period after birth.

Dr. Emma R. Jakoi, a post-doctoral

fellow in the Department of Anatomy, hopes the finding may one day prove useful to scientists seeking an effective treatment for Tay-Sachs disease, a hereditary disorder that causes brain damage and death, chiefly among babies of Jewish ancestry.

Dr. Jakoi said the protein, which she has named "ligatin," binds one form of a digestive enzyme known as "n-acetylglucosaminidase" (NAG) to a specialized membrane in cells that line the intestines of newborn rats.

Essential Enzyme

"This enzyme is essential for the breakdown of large milk proteins into smaller molecules before the stomach and pancreas begin functioning several weeks after birth," she said.

When NAG doesn't function properly, cells lining the intestines are unable to absorb milk and nourish the body with its components.

Dr. Jakoi said the protein ligatin may be absent in infants who are unable to digest milk. If this proves to be the case, she explained, then the cells have no way to hold on to the enzyme they have produced for nutrient digestion.

All Newborn Mammals

Electron microscope studies have shown the specialized membranes observed in the baby rats are common to all newborn mammals.

Dr. Jakoi and her associates also were able to determine that among normal rats, ligatin binds only one of two forms of the enzyme NAG outside the cell walls, while the other form remains in tiny cavities called

vacuoles in the liquid interior of the cells.

Explaining the bearing her findings may have on Tay-Sachs disease, Dr. Jakoi said certain kinds of cells from patients with the disorder are unable to metabolize some complex sugar molecules.

As the disease progresses, substances known as sphingolipids which are related to the sugars accumulate in cells causing them to degenerate. When this happens in the brain as it does in Tay-Sachs, blindness, paralysis and death are the result.

Inability To Bind NAG

"The problem with some of these cells seems to be their inability to bind one form of NAG," she said. "Ligatin might be the protein that is normally the receptor for the digestive enzyme in other parts of the body as it is in the intestines of the newborn research animals, and it could be that a genetic abnormality that affects ligatin is the primary deficiency here."

Dr. Jakoi said that if the theory holds up after more research, the work could open some new approaches to understanding Tay-Sachs and other diseases that may be related to it.

Dr. Jakoi published a report of her work in a recent issue of the *Journal of Cell Biology*. Co-authors of the paper were Dr. Guido Zampighi, a dentist who is working on a Ph.D. in anatomy, and Dr. J. D. Robertson, James B. Duke Professor and chairman of the Department of Anatomy.



EVEN IN THE SNOW—While others were buttoning up their overcoats or staying indoors during the recent snow, Dr. William C. Hall, associate professor of anatomy, was on his early morning training run. For the story about this "marathon man" see page 3. (Photo by Ina Fried)