

## MEDICINE

## Stress Adds to Heart Ills

► Occupational stress has been found to be the most prevalent of three contributing factors common to 100 sufferers of heart diseases, a ten-year study shows.

Heredity and fat consumption were the other two factors most frequently found to influence coronary disease.

Questions answered by the study, published in the *American Journal of the Medical Sciences* (March), include the problem of overwork and long hours. Over 90% of those in the experimental group, all between the ages of 25 and 40, had been under severe occupational stress for varying periods before the appearance of heart disease. All had hardening or narrowing of the arteries.

One-fourth of the patients held two jobs while another 46% worked at least 60 hours per week.

Others showed unusual fear, insecurity, discontent, frustration, restlessness or inadequacy in employment. The 100 subjects in the normal group did not experience any such emotional upset, according to the study.

Heredity, another factor which showed significant data, has long been linked with causes of heart disease. The study showed

67% of the patients had a history of some heart disease for one or both parents. However, a positive history is not a certain death certificate nor a negative history a guarantee of longevity.

More than half of the patients were accustomed to large amounts of fats in the diet, while regular exercise, or the lack of it, showed no correlation with normal health or early heart afflictions.

Tobacco smoking proved to be more prevalent among the heart group under study, and the patients were more addicted than the normal group. The heavy smoking habits of the patients appeared to be the result of heightened emotional strain rather than a direct cause of disease.

Overweight did not seem to play a significant role in the causal relationship, the study showed.

The study was conducted by Dr. Henry I. Russek, a consultant in cardiovascular research at the U. S. Public Health Service Hospital, Staten Island, N. Y., and Dr. Burton L. Zohman, associate professor of medicine at the State University of New York College of Medicine in Brooklyn.

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## PSYCHOLOGY

## Indians Had Dream Theory

► FREUD'S psychoanalytic theory of dreams was independently invented by the Iroquois Indians before the coming of the White Man.

Although the Iroquoian theory is not precisely the same as Freud's, the difference is not any more marked than the difference between the Jungian and Freudian varieties of psychoanalytic theory, Dr. Anthony F. C. Wallace, of the Eastern Pennsylvania Psychiatric Institute and the University of Pennsylvania, explains in the *American Anthropologist* (April).

"Over the course of nearly 300 years and probably longer, the Seneca—like the other Iroquois—have let dreams direct their lives," he said.

The Iroquois theory was described by one of the Jesuit fathers who began preaching the gospel to the Seneca nation in 1668. They found that the Seneca were particularly obstinate in looking to their dreams for guidance in all the important affairs of life.

The Iroquois recognized conscious and unconscious parts of the mind and dreams were believed to be the expression of desires that "come from the depths of the soul."

On awakening, the dreamer would tell his dreams and spare no pains to fulfill the desire revealed in the dreams. Or he might take his dreams to a clairvoyant to have them interpreted.

The Jesuit fathers were appalled at the thought that some Iroquois might dream of the priests' deaths and then have to kill to fulfill their desires. One Huron did dream

that he killed a French priest. He was appeased, however, by being given a French coat supposedly taken from the body of a dead Frenchman.

When a sick person dreamed, the whole village vied to give the sick person his every wish, for any frustration was a threat to life. A dying man might be surrounded by literally thousands of scissors, awls, knives, bells, needles, blankets, coats, caps, wampum belts, beads and whatever else was suggested by the sick man's fancy or the hopeful guesses of his friends.

If he died at last, "He dies," the people would say, "because his soul wished to eat the flesh of a dog, or of a man; because a certain hatchet that he wished for could not be procured."

If he survived, the gift of the last thing he wished for during illness was cherished for the rest of his life.

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## TECHNOLOGY

## Stretchable Paper Makes Better Bags

► HIGH STRENGTH paper that stretches to absorb shock instead of tearing can now be used to make grocery bags, cement sacks and heavy-duty wrappings.

Some supermarkets already are using the new grocery bags, which can be dropped more than 20 times without breaking when filled with an average load of groceries.

The new paper, called Clupak, is identical to present kraft papers except for the way in which fibers of the stretchable paper are intertwined to provide elasticity.

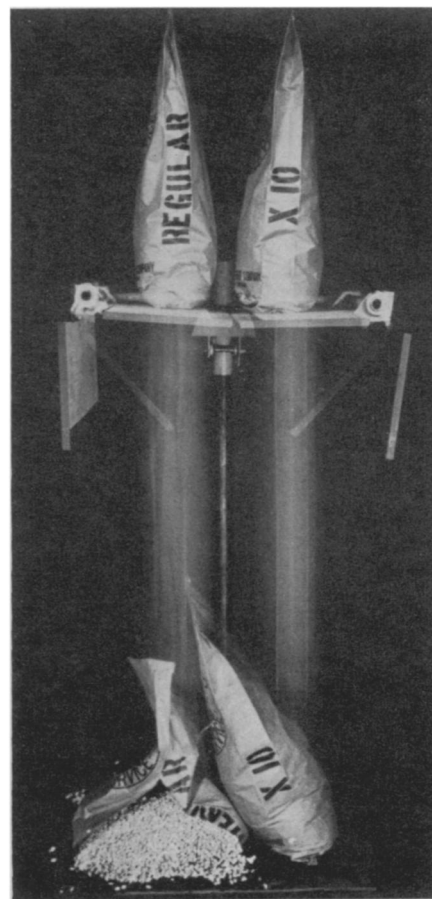
Fibers of ordinary kraft paper are "matted" like the felt in a hat. When a strain is applied, the fibers separate. In Clupak, the same fibers are "twisted and pushed together, similar to a person interweaving the fingers of his hands." Mechanically, the differences between the new paper and ordinary kraft paper are similar to the differences between a felt hat and a knitted sweater.

Clupak was developed from a basic process patented by Sanford Cluett of Cluett, Peabody and Company, developers of the "Sanforized" pre-shrinking process for fabrics. It will be licensed to paper manufacturers by a new company, Clupak, Inc., New York, organized jointly by West Virginia Pulp and Paper Company and Cluett, Peabody and Company.

Although Clupak costs 10% to 15% more than ordinary kraft papers, it is expected to be cheaper to use because bag manufacturers will be able to use just three layers of the new paper to achieve four-ply bag strength.

Tests show that multi-wall sacks made of the new extensible paper can withstand two to three times more punishment than similar sacks made of regular kraft paper.

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**TWO BAGS FULL** — Clupak paper bag survives a five-foot butt drop test intact, while regular bag, at the left, splits.