

Scientist Reports on Cancer Research at Moscow Congress

Portland — Speaking in Moscow Monday Dr. Howard J. Tatum, professor of obstetrics and gynecology at the University of Oregon Medical School, reported on his research on effects of oxygen upon experimental tumors in laboratory animals.

He told scientists gathered in the USSR for the eighth International Cancer Congress that protection against cancer must in final analysis be derived from inherent defense mechanisms of the person having the malignancy.

The primary objective of Dr. Tatum's investigations is to study these natural defenses in the hope that methods can be developed to stimulate them to function more efficiently.

Growth Parallels Oxygen

It is generally accepted by scientists that the growth of cancer cells, as well as normal cells, somewhat parallels the amount of oxygen available to the cells. Since cancerous cells grow and divide more rapidly than normal cells, one would assume that cancerous cells would be affected more than the normal cells when oxygen available to them is increased and decreased. The reticulo-endothelial system (the system of the body concerned with blood cell formation) prob-

ably provides protection against cancer by building up some immunity as well as by the production and destruction of malignant cells.

If a method were found to increase the efficiency of this system and, at the same time, to reduce the vitality of cancer cells, a retardation or even a reversal of the process which forms cancer might be expected.

Through his research Dr. Tatum, with his assistants Eunice Popa and Carol Stevenson, is seeking such a method using laboratory animals in environments where the amount of available oxygen is closely controlled.

For the experiments Dr. Tatum and his staff injected mice with cancer cells. Two groups of mice were put into chambers where they received 11 per cent oxygen, or approximately the amount of oxygen in the air at the top of a 19,000-foot mountain. In one chamber the atmospheric pressure was lowered to simulate that of a high altitude. In the other chamber the oxygen remained at 11 per cent but the atmospheric pressure was normal. In a third chamber atmospheric pressure was left at normal but a concentration of 70 per cent oxygen was maintained in the enclosure.

Serving as a control group were mice which were injected with the cancer cells but received no treatment.

May Speed Action

The group of mice which received 11 per cent oxygen at a lowered atmospheric pressure survived over twice as long as those in the control group. The group receiving 11 per cent oxygen at normal atmospheric pressure survived three times as long as the control group. Those which were given 70 per cent oxygen succumbed to the cancer significantly faster than those in the control group or those that received 11 per cent oxygen.

Dr. Tatum reported that at this stage of the study the information gained indicated that changes in the amount of oxygen had a profound effect upon the injected animal-tumor relationship. There was no indication whether these effects were brought about by changes in the characteristics of the cancer cells or by changes in the formation of red blood cells in the animal, or a combination of both these factors.

Questions Raised

The experiments raise a number of very pertinent questions which may ultimately have important implications in the treatment of cancer in humans. Why is it that the experimental animal frequently responds to injection of the malignant cells by a prompt reduction in production of red blood cells, resulting in anemia? The anemia thus produced would tend to reduce the amount of oxygen which reached the malignant growth. Does this represent a natural defense mechanism? There has yet been no adequate explanation proposed for the consistent appearance of severe degrees of anemia found in experimental animals and in humans who have malignancy of one type or another. Is it mere coincidence that leukemia rarely occurs among inhabitants of high altitudes where there is a reduced concentration of oxygen?

It is hoped that some of these questions can be answered as additional research in this area is continued, Dr. Tatum told the scientists.

SERVES

Lawrence R. Wilson, aerographer's mate airman apprentice, USN, son of Mr. and Mrs. Carl W. Wilson, 894 Casino rd., is serving at headquarters of the Pacific Missile range, Point Mugu, Calif.



FAMILY MISSING—The missing family of Lonnie Hancock of Alpine, Calif., is shown in recent snapshots found in the belongings of Ida Hancock at a small inn at Phillipsville, 70 miles south of Eureka. At top left are Shirley Ann, 14, and father Lonnie, 44; top right, Roy Lee, 15, and Kathryn, 13; lower left, Dorothy, 18, and Lonnie Jr., 17; lower right, Ida Hancock, 40. Authorities fear foul play and a wide search for the family is under way. (UPI)



15, and Kathryn, 13; lower left, Dorothy, 18, and Lonnie Jr., 17; lower right, Ida Hancock, 40. Authorities fear foul play and a wide search for the family is under way. (UPI)

The Family Council

Editor's note: The Family Council consists of a judge, a psychiatrist, three clergymen, three editors and a women's editor. Each article is a summary of a family disagreement presented to the Council. The Council deals with problems, major and minor, encountered by guidance counselors and social workers. Edited by Mrs. Alma Denney. (Copyright by General Features Corp.)

Ada C. — I don't want her to help me so much, but she insists.

Mrs. F. C. — Nothing's too much for me when it comes to my son's family.

Ada C. — If you want to know what the expression "to kill someone with kindness" means, you should watch my mother-in-law. She insists on baby-sitting for us, even when we don't want to go out. She's over at our home more than at her two daughters'. We can well afford a paid baby-sitter. Her overbearingness puts me in an embarrassing spot.

In the first place, she seems to upset our children when she takes charge. They become wild and unruly. We'd much rather have a "professional" in charge. But there's another problem. Mother C. snoops. And then later she talks to others about my housekeeping. I find closets disarranged, jewelry and personal belongings

disturbed. Her remarks about me have come back to me. Frankly this area of our home is none of her business.

Mrs. F. C. — I'm not hurt by Ada's criticism. She talks that way because she doesn't know the difference between having a stranger around and a loving, loyal member of the family. Once she tries the professionals she wants, she'll be only too glad to accept my devotion.

My daughters don't need much help. Their children are older than Ada's and Sam's. And I'm sure Ada's children are better off with me than with a teenager who watches the clock and counts up the dollars. The children are used to me. Ada can even plan a long trip with Sam, and have no worries.

As for snooping, that's ridiculous. I admit that when I'm chilly, I go to the closet for a sweater. And if I see that Ada has something new, I'm delighted. A stranger, on the other hand, would be envious.

The Council: What's causing the trouble here is Mrs. C.'s lack of respect toward her son and daughter-in-law. She is treating them like pawns in a chess game, movable at will until stalemate. And it's Ada who's now calling, "Stalemate," to end Mrs. C.'s advantage.

Hiring an outsider to baby-sit would offer certain benefits for Ada, not now available. She could apply lock and key wherever she wished (except on refrigerator and television set) and no explanations needed. She'd have some privacy. In her absence she'd have peace of mind knowing a businesslike person is in charge, doing a businesslike job—even to the point of administering businesslike cuddles to a youngster who awakens from a bad dream. And if perchance the employee should stray to a buffet and rummage, or to a desk and rattle, said employee is most unlikely to talk. She'd keep mum about Ada's boohoo in the purchasing department.

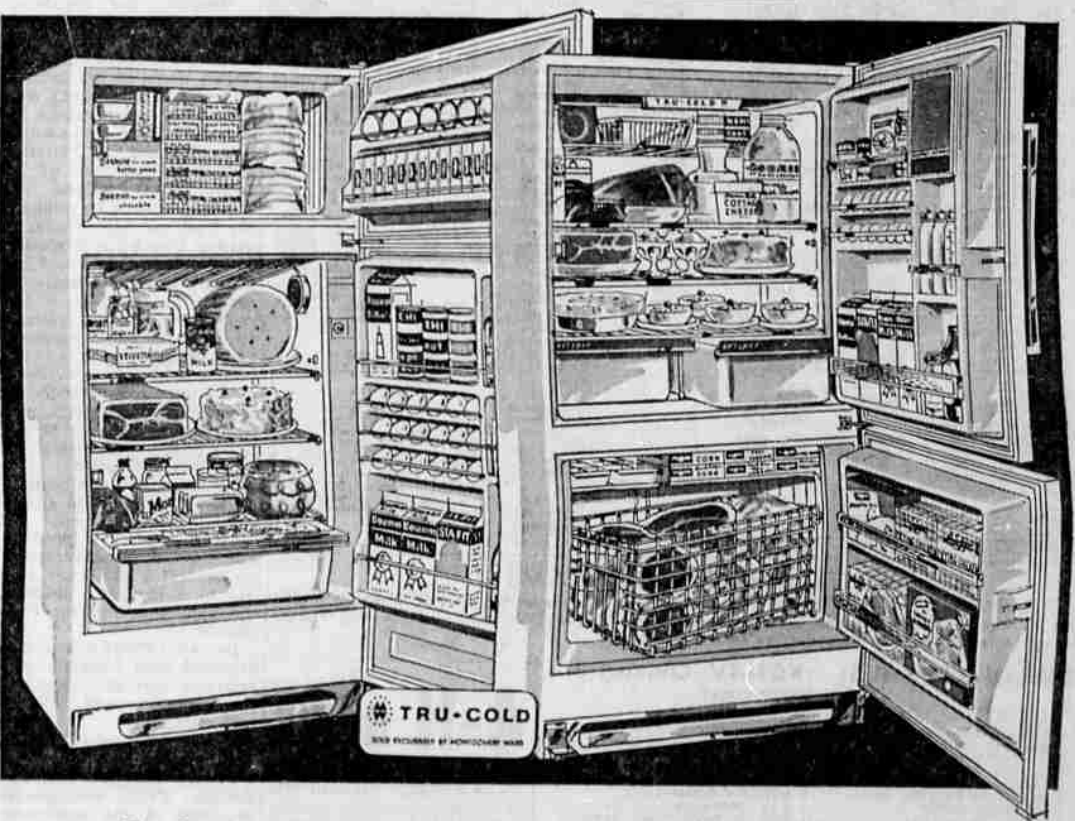
Not so, Mrs. C. Seeing a new coat in the front closet, won't she ask, "What happened to last year's tweed?" Won't she be tempted to add, "I could have used it?" A possessive mother can't help passing judgment at every turn, whether it's child-raising, use of spare time or expenditure of money. Nobody asks her. At times they might like to. She's no slouch. But nobody gets a chance to express his or her preference. She proceeds as though "Mother Knows Best" is Article I of The Constitution.

This relationship has enough rich ingredients, however, to rise into a delicious one, with better measuring and balancing. For Mrs. C., the measuring will include a large amount of holding back, of restraint. What you, Mrs. C., have conceived of as kindness, Ada finds oppressive. Your attitude toward her possessions, as well as her children, disturbs her. You are noisy and censorious about the former, too lenient and emotional with the latter. So, continue your laudable willingness, but play hard to get for a while. And when you appear, regard Ada as a dignified head-of-a-home, not as an irresponsible child you must set straight.

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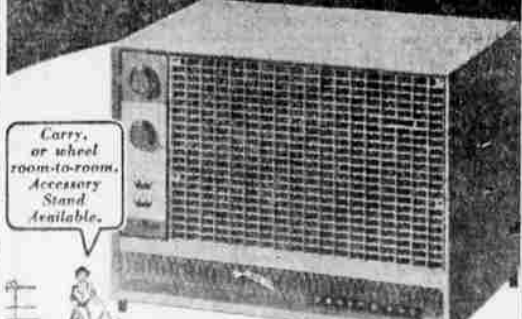


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