



### INTERESTED

7,500,000 Americans flocked to the Medical and Public Health Exhibits of the New York World's Fair last summer to learn something about their health. Tests proved they knew more about health after seeing the exhibits than before.

#### PUBLIC HEALTH

## Health IQ Rates High In Tests at New York Fair

After Months of Study and Analysis, Scientists  
Announce Results of Quiz; New Exhibit Nearly Ready

By JANE STAFFORD

**N**OW, at last, we have a measure of the national I. Q. on health—what Mr. and Mrs. America know about health and medical matters. It was determined through a specially prepared variety of America's pet pastime, the question-and-answer game.

Mr. and Mrs. America, and perhaps you, yourself, played this game by taking tests at the Quiz Corner in the Medical and Public Health Exhibits at the New York World's Fair last summer. The answers given by 50,000 persons taking these tests have been subjected to careful study and analysis and after months of such work, scientists are ready to announce the results of this largest scale health information test ever made on adults.

The results surprised the scientists. The national I. Q. on health is higher than was expected. If you took one of the tests, you know what your own health I. Q. is, because the answers were scored on an automatic scoring machine and in a few seconds the attendant told you what percentage of the questions you answered correctly.

The national health I. Q. was determined by getting the average score of all the tens of thousands of people who took the tests. On a test containing 25 questions about health and medical matters, the average score was always 20, that is, the average person scores about 80 per cent. One of the test questions was, "Most forms of bacteria cause disease—true or false?" On a set of 50 such true-false questions, the average score was 37 or 38. That means the average

person knew the correct answers to 37 or 38 of the 50 true-false questions or about 75 per cent.

On some of the questions the national health knowledge rated pretty low. For example, the answers to the question about what a positive reaction to a tuberculin test means shows that the public knows practically nothing about this subject, because the percentages of right and wrong answers are the same as would be obtained by chance.

On the other hand, 90 per cent. know that diphtheria is prevented by immunization, as shown by the number who correctly underlined the word "immunization" in answering the question, "Diphtheria is prevented by: taking cough drops, immunization, wrapping the neck with cloth?"

### Revealed Ignorance, Too

The national I. Q. on health is not the only thing scientists learned from the Quiz Corner. Just as important as finding out what the public knows about health was discovering what vitally important health information it does not have.

Officials of the American Museum of Health, who sponsored the Quiz Corner through a grant from the Carnegie Corporation of New York, wanted to know this so as to be able to furnish such needed information in their exhibits when they open the Museum.

The wrong answers, therefore, were scanned just as closely as the right ones by Dr. Mayhew Derryberry and his associates at the National Institute of Health of the U. S. Public Health Service when they analyzed the health intelligence test material from the World's Fair.

Equally interesting were answers to questions about what the public would like to learn about health in addition to what was portrayed at the Fair last summer. Visitors to the Quiz Corner, therefore, were asked to check which of the six following subjects they would like to see included in future exhibits: periodic health examinations, arthritis, compulsory health insurance, hospital insurance, birth control, and abortions. The answers were: 46 per cent. for periodic health examinations, 26 per cent. for arthritis, 29 per cent. for compulsory health insurance, 39 per cent. for hospital insurance, 54 per cent. for birth control, and 33 per cent. for abortions.

If you played the health question-and-answer game at the Fair last summer, you know it was fun, and instructive as well, because the correct answers to

the questions in your test, with additional information on the subject, were mailed to you after you got home. You probably realize, too, that you learned something from the other Medical and Health Exhibits. The Quiz Corner tests showed this to be true. Some of the questions were based on 12 of the exhibits themselves, and those taking these questions were asked to indicate whether or not they had seen the exhibits. For all but one of these exhibits there was a significant difference in knowledge between those who had seen the exhibits and those who had not.

The health question-and-answer game is over, but the chance to learn more about health and medical matters will continue. Dr. Louis I. Dublin, acting chairman of the American Museum of Health, has announced that the Medical and Public Health Exhibits at the New York World's Fair will reopen this year on May 11. Most of the exhibits, such as the famous Carrel-Lindbergh artificial heart and lung apparatus, which attracted 7,500,000 World's Fair visitors last summer, will be there, and a number of new ones are also being prepared.

### The Man Godfrey

First of these new exhibits to be announced is "Mac," alias "Godfrey," the Mechanical Man who, while you are reading this, will probably be on the high seas, braving the perils of mines and submarines on his voyage over here from England. Pointing out that this Mechanical Man from England will be housed in the same building with the Transparent Man from Dresden, officials of the Medical and Public Health Exhibits announce humorously that they do not anticipate any trouble but to be sure to keep the peace and allow sufficient "Lebensraum" for these gentlemen, each will be assigned to a different sphere of influence in the building, with the Talking Skeleton between, as a grisly reminder of what both may eventually come to.

The Mechanical Man is a four times life-size model of the upper half of the human body, open on one side to show in mechanical terms the working of the internal organs, the eye, the ear, processes of respiration and digestion, and circulation of the blood. If you look closely at his picture on this page you will see the instrument board in the head representing the automatic regulators adjusting the heart beat, the rate of breathing, and the temperature of the body. Close to them is the muscle switch.

When it turns over a flash on one of "Mac's" shoulders represents the contraction of one of his arm muscles. At the back of his head a library of books, album and records represents memory. The heart is represented by a pair of pumps, and so on. This unique gentleman gives a lecture, probably with a British accent since he was made in England, to explain the mechanisms while his visitors watch them in operation.

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#### BIOLOGY—OCEANOGRAPHY

### Biologists' Aid Is Needed To Combat Ships' Fouling

NAVY men, as well as merchant mariners, need the aid of marine biologists in combating the troublesome, speed-reducing, costly fouling of ships' bottoms by growths of barnacles, lesser seaweeds and a score of other oceanic hitch-hiking species. Fouling problems of the biologist are summarized by Dr. Claude E. ZoBell, microbiologist of the Scripps Institution of Oceanography at La Jolla, Calif.

The fight against fouling is complicated by the widely divergent preferences of the many species concerned. Some of them like light, others shun it. Some attach most readily to horizontal surfaces,

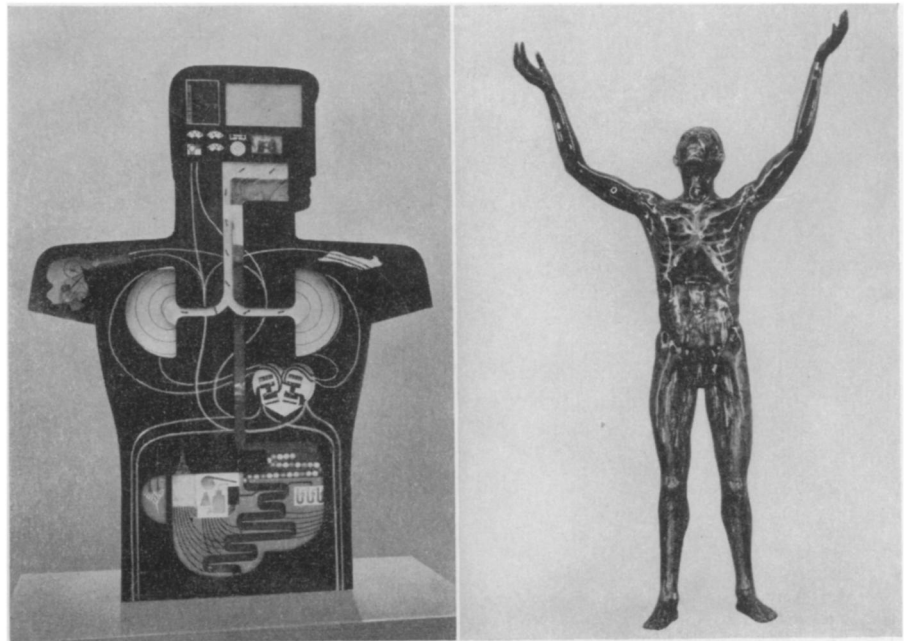
others to vertical or sloping ones. Some slough off when killed by a bath in fresh water, others leave their cumbering thick shells behind when they die. In the latter class, the too-familiar acorn barnacle is most bothersome.

One practical hint, which marine paint manufacturers are advised to take into consideration, lies in the apparent preference of the worst fouling species for dark surfaces and their avoidance of light ones. This suggests that experiments with white, light yellow and green bottom paints may be in order, instead of the dark paints now commonly used.

Bacteria and related microorganisms seem to be the precursors of all the other larger animal and plant forms that attach themselves. They take hold by millions in the first few hours, forming a slimy coating that offers congenial harborage to the larvae of barnacles, bryozoa and other fouling organisms.

An investigation on the relation of primary film formation to the fouling of submerged surfaces is now being conducted at the Scripps Institution of Oceanography as a project of the Bureau of Construction and Repair of the United States Navy Department under the direction of W. Forest Whedon, who is assisted by Dr. Robert Tschudy and J. C. Hindman.

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#### INSTRUCTIONAL VISITORS

*Americans will learn more about themselves at the New York World's Fair this year when they see these visitors from across the seas, the mechanical man Godfrey (left) from England and the Dresden transparent man,*