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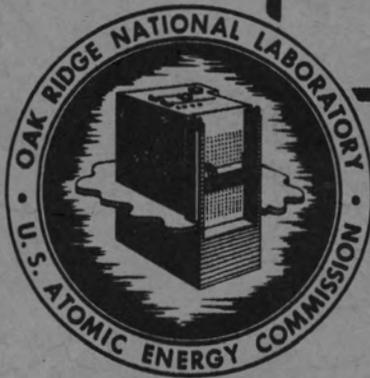
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HEALTH DIVISION ANNUAL REPORT  
COVERING PERIOD JULY 1950  
THROUGH JUNE 1951

J. S. Felton



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HEALTH DIVISION

ANNUAL REPORT COVERING PERIOD JULY 1950 THRU JUNE 1951

J. S. Felton, M. D.

Date Issued  
                    

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- 57-58. Hanford Engineer Works
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- 62-63. AEC, Washington
- 64-65. Los Alamos
- 66-70. Health Division, Oak Ridge National Laboratory

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HEALTH DIVISION ANNUAL REPORT

July 1, 1950 -- June 30, 1951

Jean S. Felton, M. D., Medical Director

SCOPE OF PROGRAM

An active program in industrial health has been maintained at the Oak Ridge National Laboratory during this period, with the objective in view of maintaining the best possible health status of the employed personnel. The specific component parts of this program are as follows:

I. INDUSTRIAL HEALTH PROGRAM AS IT RELATES TO THE INDIVIDUAL EMPLOYEE

The employee ordinarily is considered from three points of view: A. As a candidate for employment; B. As an employee requiring health maintenance; and C. As a sick or injured employee. The various procedures carried on under these divisions are as follows:

A. As A Candidate for Employment

1. Physical examination or inventory
2. Visual examination through use of special rating equipment.
3. Audiometric study.
4. Personality appraisal through use of questionnaire.
5. Laboratory examinations.
  - a. Complete blood count
  - b. Chest film.
  - c. Urinalysis
  - d. Serodiagnostic test for syphilis
  - e. Vital capacity (of workers with beryllium)
  - f. Special food handler examination
  - g. Electrocardiogram
  - h. Rh factor
  - i. Blood typing
  - j. Other diagnostic procedures as indicated.
6. Immunization
  - a. Smallpox and typhoid fever vaccination
  - b. Tetanus immunization for employees in laboring or craft occupations.

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7. Recommendations regarding:
  - a. Placement by matching physical capacities against physical demands of the job.
8. Fitting and issuing of occupational eyewear.

B. As An Employee Requiring Health Maintenance

1. Repeat physical appraisal
  - a. Annual physical examination (Or multiphasic screening).
  - b. Post-sickness absentee examination
  - c. Food handler inspection
  - d. Periodic examination of workers exposed to special hazards (non-radioactive).
  - e. Job transfer examination and recommendation.
2. Repeat laboratory examination
  - a. Repeat blood count (frequency determined by special physical condition of work or work assignment).
  - b. Chest film (frequency determined by physical condition or work assignment).
  - c. Serodiagnostic test (frequency determined by worker's physical condition).
  - d. Urinalysis (frequency determined by worker's physical condition or work assignment).
  - e. Vital capacity (frequency determined by worker's job assignment).
  - f. Electrocardiogram (frequency determined by worker's age or physical condition).
3. Health promotion (education).
  - a. Creation (or procurement) and distribution of posters.
  - b. Creation (or procurement) and distribution of pamphlets.
  - c. Procurement and maintenance of moving signs.
  - d. Preparation of three dimensional table-size exhibits.
  - e. Procurement and waiting room use of the American Medical Association health magazine "Today's Health. "
  - f. Preparation of a weekly column for the Oak Ridge National Laboratory News.
  - g. Meeting with supervision or management to clarify job adjustment of the worker.
  - h. Weekly orientation program for new employees.
  - i. Special orientation programs for trainees and other groups.
  - j. Preparation and distribution of special health promotional materials to colored employees.
  - k. Talks to employee groups relative to occupational health hazards.

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4. Industrial hygiene surveys for occupational hazards control (non-radiation hazards control.)
5. Recommendation for the installation of, and follow-up of local exhaust ventilation systems (industrial hygiene engineering).
6. Plant sanitation surveys.
7. Medical rehabilitation.
8. Procurement of popular medical treatises (bibliotherapy).

C. As A Sick or Injured Employee

1. Medical and/or surgical care of occupational illness or injury, including over-exposure to radiation, under workmen's compensation laws.
2. Emergency medical and/or surgical care for non-occupational illness or injury.
3. Liaison between ill employee and private physician, hospital, Welfare Services Department, American Red Cross, Veterans' representative Office of Vocational Rehabilitation, Committee for Crippled Children and Disabled Adults, etc.
4. Counseling services for workers presenting job maladjustments involving emotional disturbances (mental hygiene procedures).
5. Conference with management or supervision, in order to effect a better work adjustment for the emotionally disturbed employee.

II. CONSULTATION SERVICES PROCURED FROM OUTSIDE AGENCIES OR INDIVIDUALS.

- A. Consultant services in cardiology
- B. Consultant services in radiology.
- C. Consultant services in psychiatry.
- D. Others as selected.

III. MISCELLANEOUS

- A. Termination physical examination for all employees.
- B. Maintenance of complete clinical records on all employees, present and terminated, in addition to some records on construction, loan, and other Oak Ridge organization employees.

PERSONNEL SERVED

During this period, the total number of employees at the Laboratory approximated + 2800, and in addition, the Health Division rendered services to personnel from the J. A. Jones Construction Company, the American Cyanamid Company, the

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Bechtel Corporation, the Atomic Energy Commission, the Philips Petroleum Company, the duPont Company and California Research and Development Corporation. These services represented, in the main, pre-placement and termination examinations or dispensary visits.

#### PERSONNEL OF THE HEALTH DIVISION

The Division, headed by a medical director, has, when staffed to capacity, two additional staff physicians and seven nurses. There is one X-ray technician, three clinical laboratory technicians, a health education artist and assistant, a statistician, two record clerks, one administrative clerk, one ophthalmic dispenser (in charge of the entire occupational vision program involving safety glasses), one stenographer, and one secretary to the medical director. In addition, there have been three members rendering custodial services. During the first part of the fiscal year, an industrial hygiene engineer was on the staff.

#### FACILITIES

The dispensary of the Health Division occupies 7448 square feet in Building No. 2013 in the east end of the present Oak Ridge National Laboratory site. Complete diagnostic facilities exist in the X-ray Section and Clinical Laboratory (exclusive of facilities for tissue examination) and a well equipped minor surgery and treatment room are available for medical care.

#### SPECIAL ITEMS IN PROGRAM DEVELOPMENT

##### Medical Records Section

The Medical Records Section currently is housing 3417 active clinical records. These represent charts, not only on ORNL personnel, but those coming for brief period of training, including representatives of such outside organizations as the E. I. DuPont de Nemours Company, Inc., the American Cyanamid Company, the Philips Petroleum Company, etc. At the present time the pre-placement physical examination consists of completion of the health questionnaire, the physical examination itself, electrocardiogram, audiogram, chest film (and spine film in employees occupying craft or laboring positions), vision test, with and without glasses, by means of the Bausch and Lomb Ortho-Rater, and complete blood count, Kahn test, and urinalysis. The records for this pre-placement procedure comprise the total clinical record, plus a recording of notes on visits for occupational or non-occupational illnesses or injuries. Within the past few months, with the acquisition of the Coreco camera, frequent clinical photographs have been taken for inclusion as part of these records, although they are maintained in a separate clinical photograph file.

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Within the past three months, the question of completion of preliminary physical examinations has come up, and this was based on the findings in two previous cases of positive Roentgen evidence of tuberculosis on applicants for employment after they had been accepted by us. In an effort to remedy this delay in reporting of laboratory procedures, physical examinations are now done when prospective personnel report to the Laboratory for initial interview. The Health Division has been able to carry out these examinations in nearly all instances except in those few cases where no time remains to accomplish the procedure because of the numerous interviews with prospective supervisors.

Individuals reporting to the Laboratory for three months, i. e., work, training, research participation, etc., or less, receive a chest film, complete blood count, and urinalysis. In addition, entries are made for treatment of such emergency or non-occupational visits as may take place.

Statistical records have been maintained by means of punch cards for the entire year. With these records, we have been able to secure statistical material for the causes, or reasons, for Dispensary visits each month. A compilation and abstracting of this material provides the numerical data for this annual report. Special reports are procured intermittently during the year, and these machine cards have given us lists of employees in various age or other groupings, when such information is desired. Special brief studies on the type of professional person attending our personnel have been secured, and this system has been found to be invaluable in offering a full picture of the clinical activities of the Health Division.

At the present time we have an inactive Medical Records Section of 10 filing cabinets housing 3800 records of ORNL personnel, visitors, previous employees from the J. A. Jones Construction Company, Atomic Energy Commission, etc. As these records accumulate they require a marked amount of storage space. Termination physical examinations are done on an average of seven to 10 per week, and include a physical examination by a staff physician, laboratory examinations, and chest films

Approximately 150 persons are serviced by the Dispensary each day from 8 a. m. until 4:30 p. m. In addition to these, about 10 individuals are called in each day for the multiphasic screening procedures consisting of the complete blood count, urinalysis, audiogram, electrocardiogram, Ortho-Rater vision examination, health questionnaire, and completion of past medical history sheet. This represents a continuing rapid turnover of clinical records in the files each day. For the past three months there has been a temporary clerk added to the Section to assist in the filing of laboratory reports and the clinical records themselves at the end of the day when all notations have been made.

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### X-ray Section

The examination room was redesigned during the year in order to enlarge the dressing booths, which had proved to be too small. A wash basin has been added, to complete the needed physical facilities of the main examination room.

In September 1950 the annual chest x-ray survey was conducted and 2400 employees received chest films on standard 14 by 17 inch size films. \* New

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\* This survey revealed no positive findings immediately connected with radiation or effects of radiation, but demonstrated only those positive heart or lung findings which were consistent with the individual disease process of the employee, if such were present.

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contact screens were procured and the X-ray Section now has 11 pair installed in the cassettes.

Discussion has been carried on relative the procurement of a surplus dental x-ray unit, which may be procured for a possible dental x-ray survey of ORNL employees.

The x-rays of terminated employees have collected in considerable quantity and, as per the recommendation of the Annual Report for the year 1949 to 1950, a means must be devised for either permanent storage in a repository, or microfilming of these films must be accomplished, for the cost of additional storage cabinets enters into every budget consideration.

### Clinical Laboratory

One of the objectives of the Clinical Laboratory this year was to increase the number of electrocardiograms that could be taken daily. This was effected by having all preliminary preparation of the patient, such as completing the mounting card, recording the blood pressure, the rendering of instructions, etc., accomplished before the patient's admission to the electrocardiogram room. With only one electrocardiographic machine, it was found time saving to utilize two adjoining rooms, so that the patient could be prepared for the procedure while the machine was in use in the second room. By switching the machine from room to room, it was learned that 15 minutes only would be required, per patient, for a single tracing. Prior to this, 20 to 25 minutes represented the time required. This, of course, includes the patient's undressing and dressing.

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As to the technical procedures themselves, the unipolar chest leads  $V_1$ ,  $V_4$  and  $V_6$  are now being used in place of the  $CF_2$ ,  $CF_4$  and  $CF_5$  leads. This, it is hoped, will eliminate the cost of repeat tracings. An air cooler was added to the electrocardiographic rooms to eliminate interference in the recording due to perspiration of the patient collecting under the electrodes.

In view of the fact that much of the laboratory equipment had been in use for several years, it was found necessary to make a survey of needed repairs and servicing on all laboratory instruments and machines. Most of these are being sent back to the factory for such maintenance and service. So far, the basal metabolic determination apparatus and the electrocardiograph have been so treated, and the blood chemistry photometer is being prepared for shipment to the factory.

A considerable amount of time has been spent on the restandardizing of all the reagents used in blood chemistry determinations. Blood chemistry procedures are not accomplished routinely on employees, but individually, at the request of either a staff physician or, in certain instances, on the request of the private physician, such determinations are done.

A new procedure has been established, the Ortho-Tolidine Test, for detection of occult blood in urine. In order to conserve time, urine specimens now are collected each day until 2 p. m., at which time a simultaneous analysis is accomplished. Red cells in urine sediments are often crenated or disintegrate in specimens a few hours old. They may be missed completely in a microscopic examination only, and the Ortho-Tolidine test was selected to overcome this problem because of its simplicity.

New equipment has been added to the Clinical Laboratory consisting of cabinets for the electrocardiogram and basal metabolic rate determination rooms, providing needed storage space for linens, etc. A Buhl Spirometer has replaced the rather cumbersome water-displacement type of vital capacity apparatus. The new device is of the pocket sized aneroid variety, which is completely simple in its operation. Adjustable chairs for the microscope tables have been added, and provide much more comfortable working conditions in connection with a prolonged, continuous use of the microscope. The air cooler, now in the Clinical Laboratory, affords a greater degree of accuracy from the use of instruments and balances.

Plans in the future call for the initiation of additional procedures in the multiphasic screening procedure, which is accomplished annually. This now consists of:

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- a. Complete blood count.
- b. Urinalysis
- c. Audiogram
- d. Electrocardiogram
- e. Completion of health questionnaire
- f. Weight
- g. Blood pressure determination
- h. Vision test
- i. Chest x-ray

The additional procedure of gastric analysis will be added through the use of the ion exchange method, the procedure proposed by H. L. Segal wherein the gastric acidity is determined without intubation and employs the Quininium exchange indicator compound. In addition to this, consideration is still being given the possibility of a mass blood sugar survey at the time of the annual chest survey, using special equipment for this purpose. Furthermore, at the time of the chest survey, to take place in October 1951, the weights of all employees will be recorded for research purposes. This multiphasic screening is employed in place of the annual physical examination as it is believed to be much more informative, provided of course that accurate follow-up of all abnormal findings is carried out.

#### Nursing Service

The only new clinical procedure of consequence in carrying out nursing functions was the addition of a Hydrocollator Steam Pack, which consists of a fabric envelope containing a small amount of a specially processed silica gel which will absorb and hold a relatively large volume of water. These packs, when immersed and heated in water, render and serve as an effective hot compress, which will steam for at least 30 minutes, and from which there is no dripping and which needs no wringing, or requires any repeated application. The packs are available in two sizes, a standard size of 9 by 9 inches for application to any portion of the body, and a small size of 2 1/2 by 2 1/2 inches, used for hot compresses to the eyes. This new method of applying moist heat has been found extremely practicable and saving on laundry and linen costs.

#### Health Education

The activities of this Section have been multiple, and have represented a continuation of the preparation of health education media in the form of three dimensional exhibits, posters, and illustrations for the health column in the Oak Ridge National Laboratory News.

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A 24 by 6 foot exhibit was prepared for the annual meeting of the American Medical Association on "Routine Electrocardiography in Industry," which included selected case histories, electrocardiograms, clinical photographs, (used as part of a study on somatotyping), and tabulated purposes and conclusions as follows: (See Exhibit A).

#### PURPOSES OF ROUTINE ELECTROCARDIOGRAPHY IN INDUSTRY

1. To aid in the evaluation of the employee or the prospective employee, so that he may be placed in the job of greatest opportunity commensurate with his cardiac capacity, to advance his own, as well as his employer's best interest.
2. Through a matching of cardiac capacity and physical demands of the job, to effect good placement in a job consonant with those capacities.
3. To discover impairment of cardiac function which, if not supervised medically on the job, may lead to occupational injuries.
4. To aid in the establishment of those pathologic cardiovascular findings whose presence might lead to the development of occupational illness.
5. To estimate the ability of the employee to return to work after illness-absence.
6. To aid in establishing a full knowledge of physical capacity so that one may estimate the feasibility of promotion of the employee.
7. To determine the progress of pathologic or senescent cardiovascular changes in the employee.
8. To provide, in part, a base line from which to build a constructive health program.
9. To aid in the ruling in or out of the psychogenic determinants in cardiovascular disease.
10. To provide information about cardiac function not obtainable in any other way.
11. To aid industry in the fuller utilization of the aged and impaired.
12. To aid in the discovering of those individuals who might be a greater than average drain on sickness insurance benefits or hospital insurance plans.

#### CONCLUSIONS

Routine electrocardiography in industry is of definite value in demonstrating the presence or progress of cardiac disease not detectable by any other measure, and may be used as a diagnostic adjunct to other laboratory procedures.

Routine electrocardiography aids in the constant medical supervision of physically marginal employees placed in jobs commensurate with their capacities, allowing greater utilization of the aged and impaired.

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Routine electrocardiography aids in forecasting the individual's worth to himself and his potential future contribution to his employer when cardiac function is a determining factor.

An electrocardiographic study of 342 individuals at specific employment periods has demonstrated that the percentage of abnormal electrocardiograms directly parallels the number of over-weight, hypertensive employees.

A new portion of the health education program was initiated with the creation of health education exhibits for the Cafeteria, consisting of nutrition-centered media, see exhibits B and C.

The health column in the Oak Ridge National Laboratory News continues on a weekly, or semi-monthly, basis and two samples of this column appear as Exhibit D.

In connection with the research program on the etiology of hypertension in the Negro employee, photography for somatotyping has been initiated and continued. During the year, a special Coreco color camera has been procured which has been used in the taking of color transparencies of clinical conditions, as they have appeared in day-to-day medical care, or evidenced at the time of preplacement or termination physical examination. Both color and black and white photography has been accomplished in connection with the physically handicapped individual in order to illustrate and make a permanent record of the physical condition which represents a physical impairment, but not a job impairment. A file of these clinical photographs is currently being maintained.

On or about June 30, 1951, the artist, Glenn C. Williams, and his assistant, Neva Patrick, are being transferred to the Technical Publications Division but their services will be available in the future to allow continuance of the health education program.

#### Occupational Vision Section

The program in the procurement and issue of protective occupational eyewear has continued. Currently, the following types of safety glasses are being issued:

1. Types of glasses -- spectacle and goggle types, face and eye shields, masks, respirators, and clip-ons.
2. Type of frames -- plastic and metal, with and without side shields, all plastic (including lenses), opaque and clear goggle frames, special frames inserted in filter masks, respirators, and clip-ons.

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3. Lenses -- hardened, white, plano or prescription; tinted, pink, on prescription only; green, sun lens type; glass blowers, cobalt and didymium; and welders, all sizes and shades.

Special problems that have been cared for during the year have included the provision of protective eyewear as follows:

1. Prescription lenses for cataract patients and those with extreme myopia.
2. Prescription lenses in filter masks for special use.
3. Glasses for reproduction operators using carbon arc lamps.

In June 1951, a refresher course in industrial vision was attended by Mr. James R. Rule, ophthalmic dispenser, at Purdue University, where the subject of the industrial vision program and its background and development, research, requirements, results, problems, teamwork, were discussed.

The current program in occupational vision was described in an article published in the NATIONAL SAFETY NEWS for August 1950 and which was later reprinted in the SUPPLEMENT TO THE TRANSACTIONS OF THE AMERICAN ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY, January-February 1951 issue. Its title was "The Health Division Takes Over Eye Safety."

### Research Section

In February 1951 this Section began the preparatory study for a research project into the etiology of hypertension among Negro employees. This has entailed a literature search concerning hypertension, Negro health, and the influence of emotions upon hypertension itself. A bibliography, with abstracts, was compiled from this search, and correspondence with the Adjutant General's Office of the Department of the Army and the Statistics Division of the Veterans Administration has been entered into, which has supplied valuable additional data. Questionnaires and informational forms, concerning the participants in the study on hypertension, have been prepared, and some of these have been completed on a trial run basis. The health records of Negro employees have been reviewed and pertinent data recorded. This will be a continuing study and with the assistance of personnel from the Acuff Clinic, approximately 50% of the Negro employees have already had physical examinations done, including an accurate and detailed cardiovascular survey.

At the present time a second survey study is going on in connection with the job performed by the physically impaired worker. Interviews have been held with the employees presenting physical impairments in an effort to learn exactly what

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might be their contribution to the Laboratory. This is a continuation, in a way, of a study conducted approximately three years ago when the job performance of 300 handicapped workers was compared with 300 physically normal employees. The first attempt was in the direction of comparing the quality of their job performance, and the present study is based on the actual content of the jobs accomplished by these individuals. This material will be prepared for publication.

Administrative Section

On September 30, 1950, the consultant psychologist contract with Mrs. Lydia L. Bredig was cancelled and Mr. Willard H. Bauman, industrial hygienist, was transferred to the Health Physics Division of the Y-12 plant on the same date.

ATTENDANCE AT PROFESSIONAL MEETINGS

The staff members attended professional meetings, in addition to AEC or Carbide and Carbon Chemicals Division conferences, as follows:

- |                     |  |
|---------------------|--|
| J. S. Felton, M. D. | National Safety Congress, Chicago, October 1950  |
|                     | First Annual Regional Industrial Health Conference, sponsored by the Tennessee State Medical Association, the Tennessee Section of AIHA, and the Tennessee State Department of Health, Nashville, December 1950. |
|                     | First Discussional on Radiologic Health, Ann Arbor, February 1951.   |
|                     | Industrial Health Congress of the American Medical Association, Atlanta, February 1951.  |
|                     | Tennessee Section, American Industrial Hygiene Association meeting, Chattanooga, March 1951.   |
|                     | Industrial Relations Program on Supervisory Training, Chattanooga, April 1951.   |
|                     | American Association of Industrial Physicians and Surgeons, Atlantic City, April 1951.   |
|                     | Discussional on Medical Problems in Industry, Ann Arbor, May 1951.   |

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American Medical Association Annual Session,  
Atlantic City, June 1951.

James R. Rule

Industrial Vision Conference, Purdue University,  
West Lafayette, Indiana, June 1951.

Papers were read by staff members at the following meetings:

J. S. Felton, M. D.

"Unusual Approaches in Health Education in  
Industry," presented before the Industrial Nursing  
Section of the National Safety Congress, October  
1950.

"Newer Problems and Hazards Which Suggest the  
Future Course of Industrial Medicine," presented  
before the Industrial Health Congress of the A. M. A.,  
in Atlanta, February 1951.

"Emotional Factors in Industrial Nursing,"  
presented before the Tennessee State Nurses  
Association, Knoxville, Tenn., April 1951.

PUBLICATIONS

The following papers were published during the fiscal year 1950 - 1951:

J. S. Felton, M. D.

"Relationships in Dentistry." JOURNAL OF THE  
TENNESSEE STATE DENTAL ASSOCIATION 30:165  
(July) 1950.

"Prepare for the Worst." OCCUPATIONAL HAZARDS  
12:16 (July) 1950

"Radiologic Health - the Inservice Training Course  
at the University of Michigan School of Public  
Health, February 5-8." INDUSTRIAL MEDICINE  
AND SURGERY, 20:146 (April) 1951

"The American Medical Association Council on  
Industrial Health." INDUSTRIAL MEDICINE AND  
SURGERY, 20:221 (June) 1951

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"Medicine in Industry" The Ann Arbor  
Discussional on Industrial Health -- University  
of Michigan School of Public Health, October  
27 and 28, 1950. " INDUSTRIAL MEDICINE AND  
SURGERY 19:581 (Dec.) 1950.

"Talking to Ourselves." INDUSTRIAL MEDICINE  
AND SURGERY. 20:144 (Mar.) 1951.

James R. Rule

"The Health Division Takes Over Eye Safety."  
NATIONAL SAFETY NEWS 62:26 (Aug.) 1950.

"The Health Division Takes Over Eye Safety."  
SUPPLEMENT TO THE TRANSACTIONS OF THE  
AMERICAN ACADEMY OF OPHTHALMOLOGY AND  
OTOLARYNGOLOGY. Jan.-Feb., 1951.

STATISTICS

Number of visits to the Dispensary for fiscal year 1950 - 1951	43, 153
Total number of visits by ORNL employees	40, 573
Total number of visits by J. A. Jones Co. employees	460
Total number of visits by American Cyanamid Co. employees	216
Total number of visits by Bechtel Corporation employees	53
Total number of visits by DuPont Co. employees	383
Total number of visits by Foster-Wheeler Co. employees	35
Total number of visits by Phillips Petroleum Co. employees	205
Total number of visits by A. E. C. employees	88
Total number of visits by other employees	1, 140
Average number of patients visiting the Dispensary monthly	1, 638
Average number of ORNL employees on payroll per month	2, 678
Average percent of all ORNL employees visiting the Dispensary	55. 7%
Number of visits per employee per year	15. 2
Number of illness-absences per employee per year	1. 03
Average monthly severity rate (days lost per illness-absence)	4. 2
Average monthly disability rate (days lost per 1000 days scheduled)	19. 2
Average monthly frequency rate (absence per 1000 days scheduled)	4. 6
Average monthly ratio of occupational to non-occupational procedures	0. 7

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Total number of procedures accomplished for the fiscal year, 1950-1951	57,920
Non-occupational injury	1,165
Non-occupational injury, revisit	1,157
Non-occupational illness	9,761
Non-occupational illness, revisit	4,128
Occupational injury or exposure, chemical	103
Occupational injury or exposure, chemical, revisit	220
Occupational injury or exposure, chemical, alleged or questionable	10
Occupational injury or exposure, chemical, alleged or questionable, revisit	6
Occupational injury or exposure, not otherwise classified	1,902
Occupational injury or exposure, not otherwise classified, revisit	4,792
Occupational injury, not otherwise classified, alleged or questionable	13
Occupational injury, not otherwise classified, alleged or questionable, revisit	25
Occupational injury or exposure, radiation	1
Occupational injury or exposure, radiation, revisit	0
Occupational injury or exposure, radiation, alleged or questionable	1
Occupational injury or exposure, radiation, alleged or questionable, revisit	2
Occupational illness, not otherwise classified	16
Occupational illness, not otherwise classified, revisit	36
Absence due to illness or injury, non-occupational	2,999
Absence due to illness or injury, occupational	90
Physical Examinations	
Industrial hygiene	1,690
Job transfer	77
Periodic health	338
Preplacement	888
Rehire	78
Termination	765
Food handler	58
Other	217

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Audiogram	2,215
Blood donation	107
Clinical laboratory procedures	5,594
Electrocardiogram	1,619
Field clinical laboratory procedures	23
Occupational Vision Section procedures	3,693
X-ray Section procedures	5,603
Special study interview	46
Clinical photograph	25
Dispensary visit, patient not seen	29
Psychodiagnostic test	46
Consultation, occupational condition	78
Consultation, non-occupational condition	2,175
Consultation, without patient, occupational	40
Consultation, without patient, non-occupational	570
Home visit	4
Pre-marital serodiagnostic test	35
Immunizations	5,205
Diagnostic procedure for private physician	275

Disposition following dispensary visit

Number of visits followed by a return to regular work	47,885
Number of visits followed by a return to modified work	4,624
Number of employees instructed to remain off work following illness-absence	3,612
Total number of applicants for employment accepted	878
Total number of applicants for employment accepted conditionally	24
Total number of applicants for employment rejected	6
Number of employees referred to a private physician or sent to a hospital	690

Personnel attending patients:

Number of visits where care was rendered by nurse alone	28,111
Number of visits where care was rendered by nurse and physician	2,512
Number of visits where care was rendered by physician alone	8,036
Number of visits where service was rendered by technician	19,088
Number of visits where service was rendered by psychologist	125

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RECOMMENDATIONS

1. It is requested that a solution be reached for the permanent storage of clinical records of personnel having terminated employment at the Oak Ridge National Laboratory.
2. Microfilming of roentgenograms taken by the X-ray Section of the Health Division of ORNL should be accomplished as soon as deemed feasible by the Division of Biology and Medicine, AEC, Washington.

EXHIBITS

- A. Photograph of exhibit shown during the June 1951 meeting of the American Medical Association.
- B. Photograph of exhibit prepared for display in the Cafeteria of ORNL.
- C. Photograph of exhibit prepared for display in the Cafeteria of ORNL.
- D. Photograph showing two typical health columns as published in the ORNL News.
- E. Graph -- Percent of Employees Visiting Dispensary
- F. Graph -- Severity Rate.
- G. Graph -- Disability Rate.
- H. Graph -- Frequency Rate.

September 5, 1951

J. S. Felton, M. D.  
Medical Director

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PHOTO NO. 8883

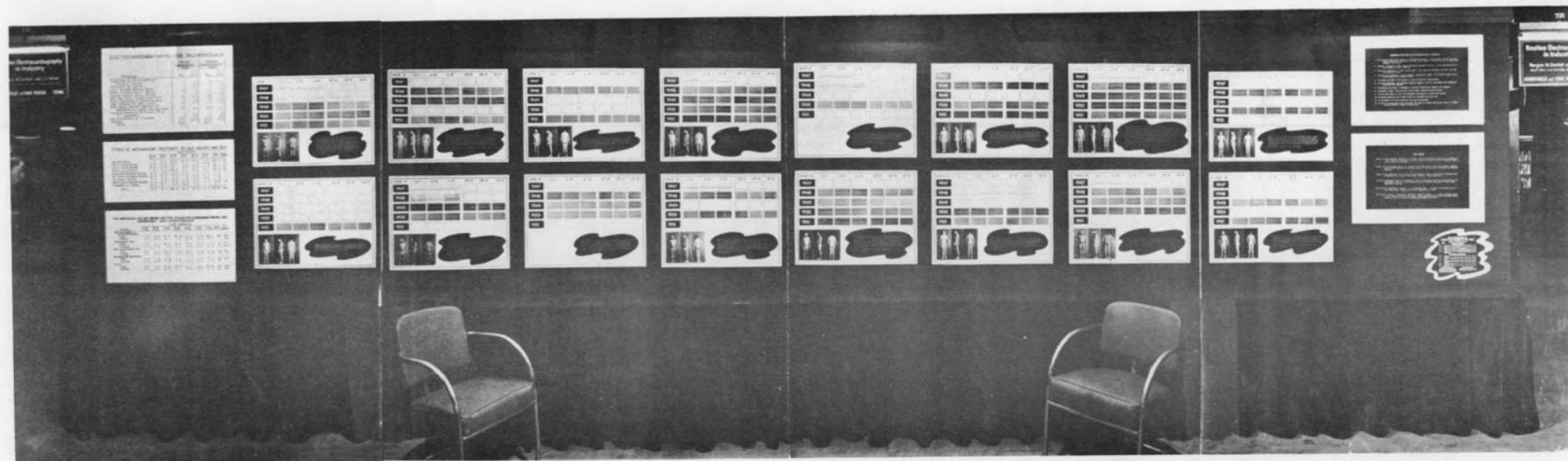


EXHIBIT A

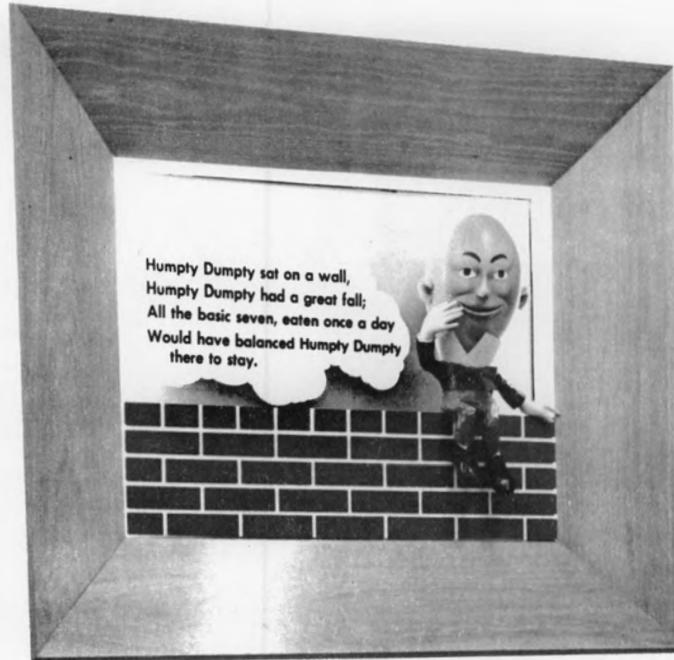


EXHIBIT B

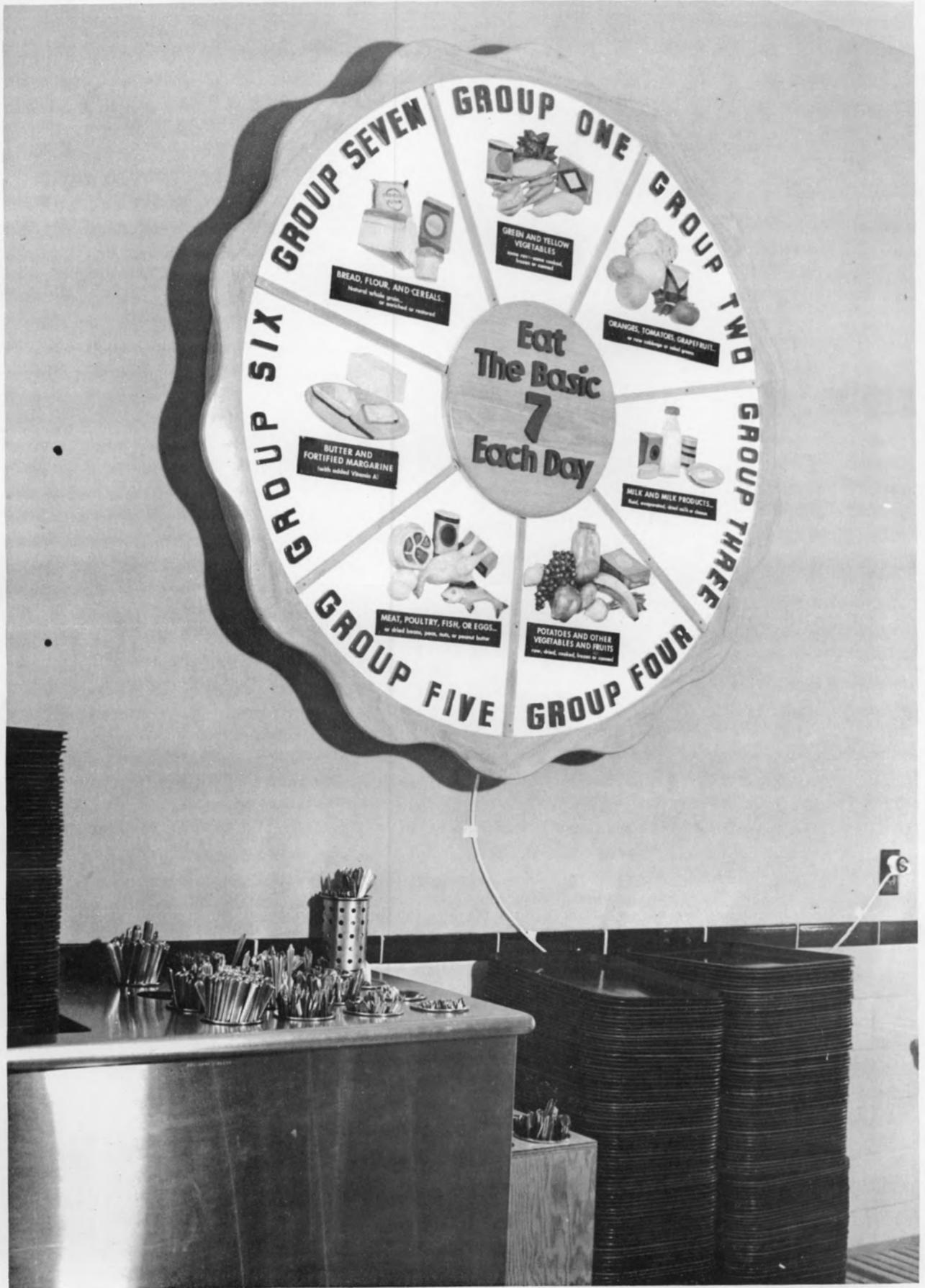


EXHIBIT C

Friday  
June 15, 1951

### Good Eating Habits Make Child Healthy

By *J. Feltz, M.D.*

Sometimes one may wonder why we include so much on child health in these columns. This is all purposeful. We have a great number of young parents here—many of whom are deeply concerned over special problems with their youngsters. We know about this, for they come in every day—anonymous, distressed, or worried—or invited, when they bring in the first pictures.

A parent upset by something wrong with his offspring's well-being is not a well person himself—therefore, doesn't it seem logical that one discuss those problems? Well child, well adult.

One of the questions heard so frequently is, "Doc, what can I do to make my child eat?" Fussy appetites can appear at certain times during the growing-up process and make things pretty difficult for the whole family—if, the parents' attitudes are not favorable. The youngster, in this sort of atmosphere may become a "poor eater," and may develop a digestive disorder of one kind or another if he is constantly under emotional tension. What else? Well, there can develop a personality disorder which is seen in the careful, antagonistic attitude toward adults, with a strain in parent-child relationships.

These fussy appetites have a far-reaching effect. In a recent article in *Today's Health* the ways of meeting this problem were outlined. They went something as follows:

1. Respect the child's food likes and dislikes. When his appetite is fussy, try to "tease" his appetite by giving him at least 1 favorite food at each meal.

2. Don't insist on each meal being "balanced." Kids are different. Their food intake over a week is satisfactory even though sometimes they eat only 1 food at a meal. Teen-agers, too, will eat what they need for health and growth if they have the chance, and are not urged or forced.

3. Don't insist on a "clean plate" at every meal—it's a quick way to turn the child even against the foods he likes.

4. Serve small portions and let him ask for more. A heaping plate is discouraging and sometimes repulsive.

5. Make mealtime a pleasant experience. Don't use it for criticism or discipline.

6. Don't discuss the child's poor appetite in his presence, no matter how concerned you may be.

7. Don't force, bribe, or coax him to eat. No one will starve in the presence of food. But do any of us like to be forced to do something—even if its sugar-coated?

8. Dissuade him from drinking excessive quantities of milk, water, or soft drinks during or just before a meal. It will dull the appetite, even if it's a "tasty one."

9. Fix the food in an attractive way—give it eye appeal.

10. Relax those rules about table manners—kids are sloppy eaters. Recognize this and accept it.

11. Encourage your youngster to do his between-meal eating at home or at friends' homes, where there may be some control. The drugstore soda dispenser is not concerned over your kiddie's food intake.

12. Give the children a reasonable warning before the meal is ready so they can complete what they are doing.

13. Do what you can to see that the youngster is calm, relaxed, and in a good humor before each meal. Fatigue and tension cut that appetite. No strenuous play, studying, running around, or friction for at least 30 minutes before a meal. This is really said—but doggone difficult to carry out sometimes.

14. Go to the table with an air of confidence. Ever see any ranch hands hit the platters? Not an example for your kids and they'll follow.

Most youngsters seem to grow up—they'll do it more happily, though, with less "pushing" of the

### You and I Are Still Young, Maggie, On Golden Wedding Day

By *J. Feltz, M.D.*

The slickers with the slip-sticks have been at work again. This time they've come up with new facts and figures to prove something men have always suspected—that women have the advantage from birth to death. They have shown that females have a better chance of surviving every single age period throughout life than do males.

The only consoling fact seems to be that even though the differences are going to be around longer, during the last 50 years at birth in these U. S. A., has stepped up from 48 to 68 years.

The length of life in this country has been increasing steadily, the digit and other bits from the Metropolitan Life Insurance Company tell us. In 1900, for example, a man had about an 80 out of 100 chance of living from birth to the ripe old age of six years. By 1939 this jumped to 84 out of 100, and in 1948 it hit 96. It's hard to believe that at the turn of the century one-fifth of the babies died before reaching school age.

Most youngsters spend the 6 to 18 year period getting an education—and these 12 years have always had the good fortune of a low mortality rate. Between 1900 and 1948, the chances that a 6 year old would put 18 crows on his back had stepped up from 86 in 100 to 99 in 100.

Men spend a major portion of their lifetime in gainful employment, and their survival during the period when there are dependent social and economic importance.

What is the likelihood that a man will last out the 23 to 32 year old period, the usual time between marriage and when the last youngster leaves the family? Right now the chances are 86 in 100—but 30 years ago they were only 74 in 100.

What about reaching retirement age? The chances of a young fellow entering employment and getting the gold watch are 86 in 100—used to be 51 in 100 a half-century ago.

Contrast the women's figures—with this one just given. Even though men had the 86 in 100 chance of spanning to 85 years of age, women had better than an 83 out of 100 chance of living to their husbands' retirement. The outlook for years of life after retirement is really more favorable than most folks realize. The chances boys tell us that "the men at 63 will live at least 10 years longer. For their wives the chances of surviving this period are even greater because first, the husband and, second, the mortality among men at every age period."

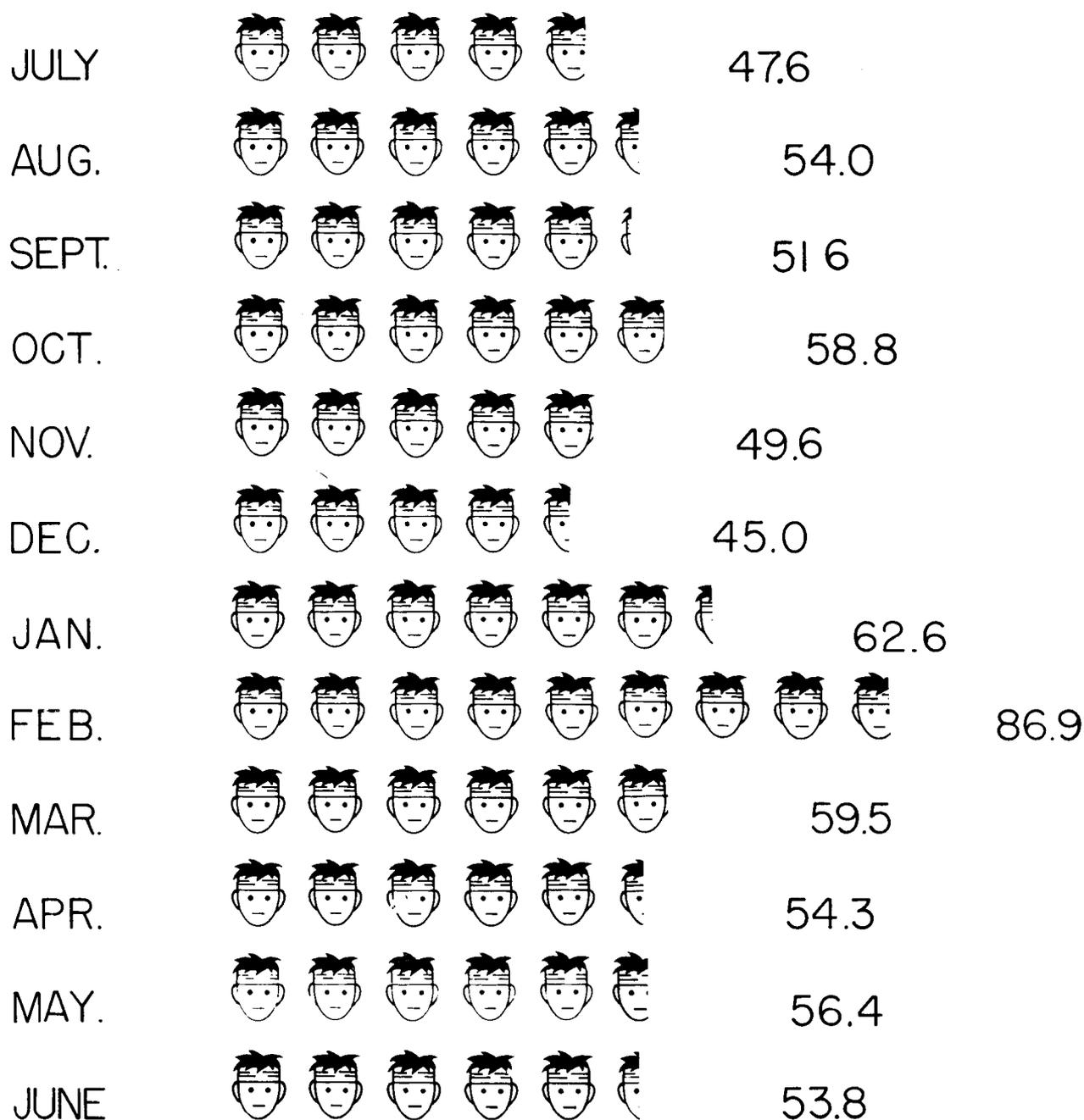
Right now, for the first time, there are more women than men in this country, and it has been found that male infants are showing hardening of the arteries at birth.

It's sure a woman's world, and as the wag put it, the little woman is going to have the last word if she has to outlive you to get it. These durable women!

Friday  
May 25, 1951

# PERCENT OF EMPLOYEES VISITING DISPENSARY

EACH SYMBOL REPRESENTS 10%

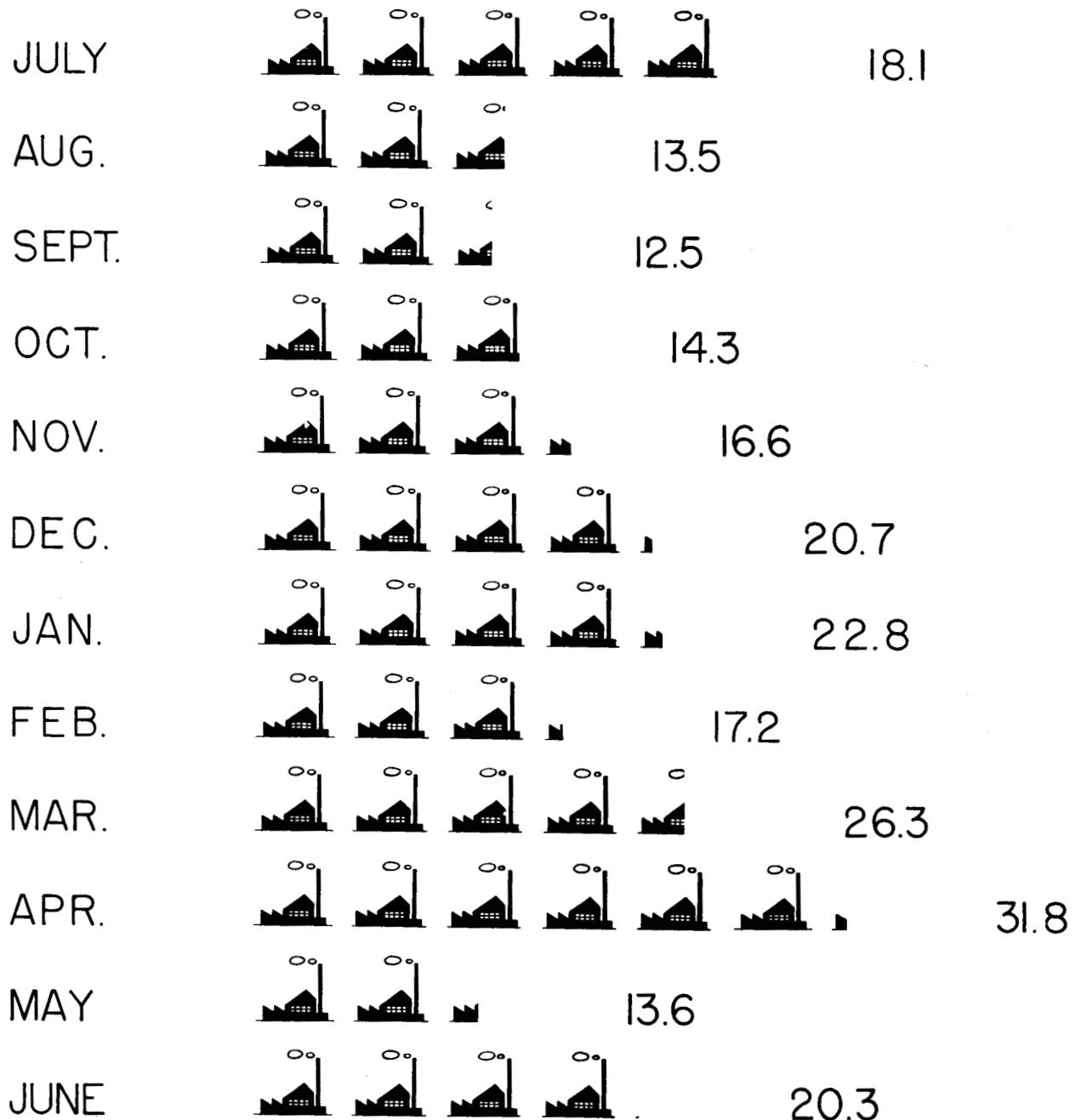


SEVERITY RATE  
Days Lost Per Absence  
EACH SYMBOL REPRESENTS 1 DAY

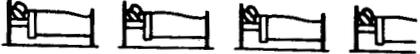
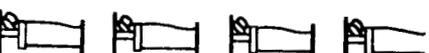
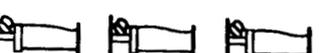
JULY		4.9
AUG.		4.1
SEPT.		3.5
OCT.		4.1
NOV.		4.5
DEC.		4.4
JAN.		5.3
FEB.		3.6
MAR.		4.6
APR.		5.5
MAY		4.5
JUNE		6.2

# DISABILITY RATE

Days Lost Per 1,000 Days Scheduled  
EACH SYMBOL REPRESENTS 5%



FREQUENCY RATE  
Illness Absences Per 1,000 Days Scheduled  
EACH SYMBOL REPRESENTS 1 DAY

JULY		3.7
AUG.		3.3
SEPT.		3.6
OCT.		3.5
NOV.		3.7
DEC.		4.7
JAN.		3.9
FEB.		4.8
MAR.		3.5
APR.		3.5
MAY		3.0
JUNE		3.3