

5 per cent. of dried meat does not delay the onset of scurvy but does greatly prolong the life of the animals, while 10 per cent. of this meat delays the onset of the disease and greatly prolongs the life of the animals. He also thinks that calcium and chloride cause delay in the development of scurvy.

Dutcher<sup>7</sup> and his associates claim that raw lean beef does not possess antiscorbutic properties. They think the favorable influence from dried meat claimed by Pitz is in reality due to the fact that the animals in those experiments were consuming milk ad lib.

The dried meat used in our experiments was lean beef freed of fat and dehydrated in vacuo at a temperature never higher than 65° C. for a period of twelve hours.<sup>8</sup> The meat was then air dried for several days, during which time it gave up a little more moisture. This dried product was ground to a powder and offered as such to the animals. The guinea-pigs did not care for the food in this form and the only satisfactory consumption obtained was through intimately blending the meat with the soy cake food by grinding the two together. By this manipulation an average consumption of fifty per cent. or better of the 3 gm. of meat offered daily, was obtained from all animals. The actual daily amount of dried meat eaten was about 1.5 gm. per guinea-pig; representing approximately 15 per cent. of the total solids ingested.

The dried meat was fed uncooked and cooked for fifteen minutes at 100° C. In neither case was there any protection against the onset of scurvy nor was death therefrom delayed. A graphic presentation of the above results is given in the chart by a curve of growth of a typical animal from each group.

The findings in these animal experiments are in accord with those of Chick, Hume and Skelton and of Dutcher and associates on the value of raw meat juice and raw meat and a

watery extract of raw meat. The results support Stefansson's contention, in so far as meat is concerned, that foodstuffs preserved by desiccation are deficient in their antiscorbutic property.

The meat used by Pitz in his experiments was dried over steam coils. Our results are in direct opposition to his. The explanation of this is undoubtedly due, as Dutcher believes, to the amount of milk consumed by the guinea-pigs in Pitz's experiments. His results in all likelihood would have been the same as ours had the intake of milk been controlled quantitatively.

MAURICE H. GIVENS,  
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#### THE AMERICAN METEOROLOGICAL SOCIETY

THE American Meteorological Society was organized in St. Louis, on December 29, 1919 (*cf.* preliminary announcements, *SCIENCE*, August 22, 1919, pp. 180-181, and December 12, 1919, pp. 546-547). Following the organization, the Council of the American Association for the Advancement of Science granted affiliation. The officers elected for 1920 are: R. DeC. Ward, president; W. J. Humphreys, vice-president; Robert E. Horton, treasurer, and Charles F. Brooks, secretary. Fifteen councilors representing the various phases of theoretical and applied meteorology were also elected. They are: Lieutenant Colonel W. R. Blair, Meteorological Service, Signal Corps, Washington; E. H. Bowie, Weather Bureau, Washington, D. C.; Professor H. J. Cox, Weather Bureau, Chicago, Ill.; A. W. Douglas, Simmons Hardware Co., St. Louis, Mo.; Professor Ellsworth Huntington, Yale University, New Haven, Conn.; Lieutenant C. N. Keyser, Aerology Division, U. S. Navy, Washington, D. C.; Professor C. F. Marvin, Weather Bureau, Washington, D. C.; Major General C. T. Menoher, Air Service, Washington, D. C.; J. C. Millas, Meteorological Service, Habana, Cuba; James H. Scarr, Weather Bureau, New York, N. Y.; Professor J. Warren Smith, Weather Bureau, Washington, D. C.; Sir F. Stupart, Meteorological Office, Toronto, Canada; Professor C. F. Talman, Weather Bureau, Washington, D. C.; Dr. F. L. West, Utah Agricultural College, Logan, Utah; Professor W. M. Wilson, Cornell University, and Weather Bureau, Ithaca, N. Y. Eleven committees

<sup>7</sup> Dutcher, R. A., Pierson, E. M., and Biester, A., *Sci.*, N. S., 1918, 50, 184.

<sup>8</sup> Our thanks are due Dr. K. Geo. Falk, of the Harriman Laboratories, Roosevelt Hospital, New York City, for kindly supplying us with the meat used in these experiments.

were formed to carry out the objects of the society. These with their chairman are: Research, C. F. Marvin; Public Information, C. F. Talman; Meteorological Instruction, W. M. Wilson; Membership, C. F. Brooks; Physiological Meteorology, Ellsworth Huntington; Agricultural Meteorology, J. Warren Smith; Hydrological Meteorology, R. E. Horton; Business Meteorology, A. W. Douglas; Commercial Meteorology, H. J. Cox; Marine Meteorology, J. H. Scarr; Aeronautical Meteorology, Major General C. T. Menoher.

On December 30 and 31, in St. Louis, and on January 3, in New York, 29 papers were presented in five sessions. There was one joint session with the American Physical Society, and one with the Association of American Geographers and National Council of Geography Teachers. Since brief abstracts of each paper are published in the January issue of the *Bulletin of the American Meteorological Society*, and more extensive abstracts, excerpts, or the papers in full, covering all but nine, in the December *Monthly Weather Review*, only the titles and authors will be given here:

*Progress of American meteorology in 1919*: C. F. BROOKS.

*Some meteorological paradoxes*: W. J. HUMPHREYS.  
*How the American Meteorological Society can serve geography teachers*: C. F. BROOKS.

*Use of laws in teaching climatology*: S. S. VISHER.

*Motion pictures of weather maps: a report of progress*: J. WARREN SMITH.

*The work of the Weather Bureau in the West Indies*: O. L. FASSIG.

*Aims and achievements of the Blue Hill Observatory*: A. MCADIE.

*Aerological work in the U. S. Navy*: C. N. KEYSER.

*Plans for establishing a network of meteorological stations in Palestine*: P. W. ETKES.

*Determination of the normal temperature by means of the equation of the seasonal temperature variation and of a modified thermograph record*: F. L. WEST, N. E. EDLEFSEN and S. P. EWING.

*The roaring of the mountain*: W. J. HUMPHREYS.  
*Some applications of radio-telegraphy to meteorology*: J. C. JENSEN.

*Sunshine in the United States*: R. DEC. WARD.

*Cloudiness in the United States*: R. DEC. WARD.

*Weather conditions in the orchard regions of the North Carolina mountain slopes*: H. J. COX.

*The effect of a "lid" on the temperature and transparency of the lower air*: J. W. REDWAY.

*Preliminary steps in making free-air pressure and wind charts*: C. L. MEISINGER.

*The prevailing winds of the north Pacific coast*: A. E. CASWELL.

*Evaporative capacity*: R. E. HORTON.

*A device for measuring maximum and minimum temperatures of reservoir surfaces*: R. E. HORTON.

*Clouds and their significance*: C. F. BROOKS.

*Difficulties in the theory of rain formation*: W. J. HUMPHREYS.

*Cultivation does not increase rainfall*: J. WARREN SMITH.

*Predicting minimum temperatures*: J. WARREN SMITH.

*Seasonal distribution of maximum floods in the United States*: A. J. HENRY.

*Weather and business*: A. W. DOUGLAS.

*Explanation of peculiarities in flying in the wind*: J. G. COFFIN.

*Determination of meteorological corrections on the ranges of guns*: W. NOLL.

*Evidence of climatic effect in the annual rings of trees*: A. E. DOUGLASS.

On January 21, the society was incorporated in the District of Columbia. The membership of the society, elected up to the end of January, was 586.

The next meeting of the American Meteorological Society will be held in Washington, D. C., probably, Thursday, April 22, immediately preceding that of the American Physical Society, on Friday and Saturday, April 23 and 24. Plans are being made for meetings with the Pacific Section of the American Association for the Advancement of Science next summer and with the American Association for the Advancement of Science in Chicago next December.

CHARLES F. BROOKS,  
 Secretary

WEATHER BUREAU,  
 WASHINGTON, D. C.

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