

MIDWEST RESEARCH INSTITUTE

425 VOLKER BOULEVARD

KANSAS CITY 10, MISSOURI

September 23, 1958

Dr. James G. Gaume
Chief of Space Medicine
The Martin Company
Denver Division
Denver, Colorado

Dear Dr. Gaume:

I intended to write to you as soon as I returned from Denver; however, it seems that more time is spent catching up with the routine after a trip than the time spent away from the laboratory. I am sorry that we were unable to arrange a meeting while I was in Denver. Mr. Schuler was not aware that I had planned to attend the short course at the University of Colorado Medical Center until the afternoon of my departure. Otherwise, we would have contacted you by phone at an earlier date.

I feel that our telephone conversation was quite profitable for me. The viewpoints that you expressed in relation to the various problems of providing nourishment for space crews broadened my outlook on this new area of human nutrition. The September issue of Food Technology has reproduced your presentation at the recent meeting of the Institute of Food Technologists which outlines some of the points we discussed in more detail.

The Midwest Research Institute has a section of food technology staffed with competent people with a background of experience in the design and development of food items for commercial concerns. More in line with your interests we have developed reasonably palatable, low moisture, high stability foods for human consumption. I am sorry that we cannot provide you with samples of some of these products. This program is of a confidential nature and it will be necessary to clear with the sponsor as to what portion of this work we can discuss with others. It is anticipated that we will know more about clearance sometime in October.

If you will recall in our phone conversation, I expressed the viewpoint that, although we have little information on the level of palatability required in relation to stress, it might very well be the determining factor of the food

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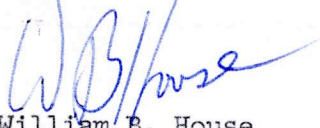
supply that goes aboard the space ship. Obviously the ideal ration would approximate familiar foodstuffs in regard to taste and texture and yet have all the advantages of high caloric density, high digestibility, low bulk former and nutritious. We find that palatability is the real problem in designing compact dehydrated rations.

You mentioned that a considerable amount of your personal efforts were concentrated on a recycling regenerative system. In the past, the Institute has studied some of the problems involved in the growing of *Chlorella*. It is possible that we may be of service to you in this phase of your program.

I wanted to ask you in our phone conversation if you planned to attend the 2nd International Symposium of Physics and Medicine of the Atmosphere and Space to be held at San Antonio, Texas, in November. In the event that this meeting is included in your plans, we would like to arrange a meeting with you and Dr. B. W. Beadle, Manager of our Chemistry and Chemical Engineering Division, who will attend the meeting. I feel from knowing some of your ideas about feeding space personnel with dehydrated food that we could be of service to the Martin Company in providing the know-how from the food technology angle.

Sincerely yours,

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William B. House
Biochemistry Section

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