



# The University of North Carolina

SCHOOL OF MEDICINE · DEPARTMENT OF SURGERY

CHAPEL HILL · 27514

March 19, 1973

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William Thornton, M. D.  
N.A.S.A. Headquarters  
Houston, Texas

Dear Willie:

All of the figures I have found since talking with you have mentioned from 1,000 to 1800 per day as the average, but with a normal variation from 25 ml. per hour up to 1800 per hour. Emotional strain will increase the value, and I would think that the no-gravity situation would tend to decrease it. Additional coffee will obviously make it go up, but if they drink as much Tang as the advertisements say, I have no idea what this does except to increase it proportional to the volume.

I have since checked the output of our patients here, and this varies all the way from a low of about 800 on up to better than 3,000. All of the high figures are on patients who are forcing fluids.

Best regards,

Paul L. Bunce, M. D.

PLB/jw