

DIURNAL CYCLE OF GLOMERULAR FILTRATION RATE AND
SODIUM AND CHLORIDE EXCRETION DURING RE-

By LAURENCE G. WESSON, JR. AND DAVID P. LAULER†

(From the Department of Medicine, New York University School of Medicine,
New York, N. Y.)

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A diurnal cycle in volume and composition of lowered by alterations in the mean daily excretion

the urine in man has long been recognized. For rate of salt and water which, directionally, are

the most part, excretion of water and electrolytes such as to minimize the disturbance in body com-
is lowest toward the end of the sleeping period position. Although these alterations may be de-

and is greatest at some time during the hours of scribed in several ways, they represent, in effect,

normal wakefulness. Descriptions of the diurnal changes in the level, amplitude or form of the

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fluid balance, the changes in this cycle during the duration, but 4-hour periods were employed during sleep

transition from one to another state, and correla- in some studies. Inulin clearance was not calculated for

of potassium, calcium, magnesium, and phosphate will be

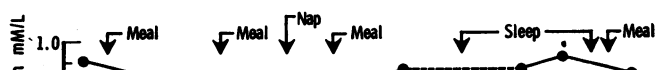
Pitressin tannate in oil: 5 units i.m. 2 x daily

Interruptions of the inulin infusion prevented

Low salt diet

Low salt diet

(GFR) rose progressively, the latter to 138 and





data to the theoretical curve is better than is war-

600 \square DOCA 10 mg daily

rhythm of filtration rate and, more remotely, the Under fluid depletion attending consumption of
changes in this rhythm under various loading con- a low salt diet, the filtration cycle shows a tend-
ditions are unknown. That a rhythm of the ency to a decrease in amplitude and in mean level.

magnitude observed in man is not a necessary as- but whether the daytime maximum is narrowed.

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