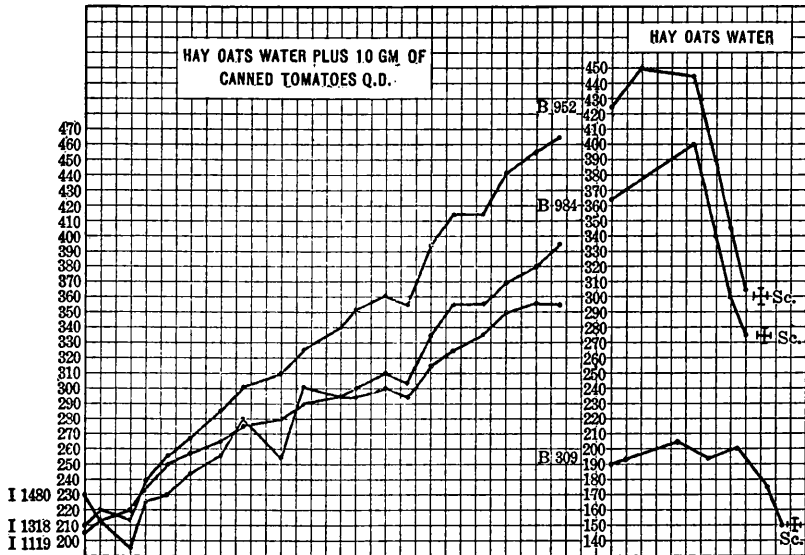


were receiving pasteurized milk, substituting it in the dietary for orange juice which has become increasingly expensive. The amount given to babies three months or more of age was 15 c.c.; half this quantity being given daily to younger infants. The



The guinea pigs represented in the graphs on the left received canned tomatoes and thrived. Those on the right were not fed tomatoes and died of scurvy.

tomatoes have been uniformly well tolerated throughout the summer by babies as young as one or two months of age, and we can recommend this foodstuff as an economical and efficient antiscorbutic.

2 (1377)

### Preliminary observations on the value of raw and dried tomatoes as antiscorbutic foods for guinea pigs.

By MAURICE H. GIVENS and HARRY B. McCLUGAGE.

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The external signs of the nutritional failure known as experimental scurvy, which can be produced in young guinea pigs in

16-26 days by feeding a mixture consisting of whole soy bean flour, milk, yeast, paper pulp, and inorganic salts,<sup>1</sup> have not been encountered during a period of 75 days in which 10 gm. of *raw* tomatoes were added daily to the diet. If on the appearance of the clinical scorbutic manifestations attributable to the scurvy-producing diet, 10 gm. of raw tomatoes are added as a daily supplement, the symptoms will subside and the animals will be restored to health.

Tomatoes *dried* in a blast of air either for 14-24 hours at 55-60° C. or for 36-44 hours at 35-40° C. retain some of their anti-scorbutic property. This statement is based on the fact that young guinea pigs receiving a daily addition of 1 gm. of either of such dried products have grown and continued in apparently perfect health for a period three times as long as that within which the usual scorbutic symptoms appear.

Further experiments are being conducted upon this subject.

3 (1378)

### A method of producing experimental shock.

By T. S. GITHENS, I. S. KLEINER, A. L. MEYER and S. J. MELTZER  
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In the numerous investigations on experimental shock there is no uniformity as to the method of inducing it. Some authors simply say "the animal was reduced to shock," without stating by what method it was induced or how long it took to induce it. Others claim that they have produced profound shock by continuous stimulation of sensory nerves, while other writers are quite positive that it is impossible to induce shock by this method. The method *par excellence* of producing shock seems to be the exposure of the abdominal viscera. Here again opinions differ. For instance, Erlanger and his coworkers say that in order to reduce blood pressure to 50 mm. mercury, an exposure and *manipu-*

<sup>1</sup> B. Cohen, PROC. SOC. EXP. BIOL. AND MED., 1918, XV, 102; M. H. Givens and B. Cohen, *ibid.*, 1918, XV, 126; Cohen, B., and Mendel, L. B., *J. Biol. Chem.*, 1918, XXV, 425; M. H. Givens and B. Cohen, *J. Biol. Chem.*, 1918, XXXVI, 127.