

the absence of growth promoting factors there is no change in the resistance of *B. Shiga* to 5 percent salt solution for a period of 45 minutes of incubation.

To sum up, the food accessory substances of tomato extract are able promptly to "rejuvenate" *B. Shiga*, and thus make it possible for this micro-organism to enter the phase of active multiplication very quickly after inoculation.

88 (2611)

Acetylation as a physiologic reaction.

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After the ingestion of para-amino phenyl acetic acid by human beings it was found that this substance was detoxicated by acetylation of the amino group. When fed to rabbits, acetic acid was also employed as the detoxicating agent and p-acetyl amino-phenyl acetic acid was excreted in the urine. When the p-amino phenyl-acetic acid was fed to dogs, however, the amino group remained free and the detoxication of the compound was accomplished by combining with glycocoll.

Ortho, meta and para amino benzoic acids were ingested by human beings then fed to dogs and rabbits. All three compounds were excreted unchanged in the urine of the dog. The ortho amino benzoic was excreted unchanged by the human being and rabbit, but the meta and para amino benzoic were acetylated by the human being as well as by the rabbit. Ortho acetyl amino benzoic acid was prepared and fed to the dog and rabbit as well as taken by a human subject. The acetyl derivative was found to be non-toxic, and was in each case rapidly excreted unchanged. There was in no case a glycocoll compound formed as reported by Salkowski¹ after feeding meta amino benzoic acid to a human being, dog and rabbit.

³ Shwartzman, G., PROC. SOC. EXP. BIOL. AND MED., 1924, xxii, 44.

¹ Salkowski, Zeit. Physiol. Chem., 1882-83, vii, 93.