logical phenomenon, since patients were relieved of constipation by the ingestion of milk fermented by *B. Acidophilus.*

4. Relief from chronic constipation has persisted for six months after the ingestion of *B. Acidophilus* has been discontinued.

5. Viable *B. Acidophilus* organisms in appreciable number have been recovered from the feces of patients six months after the ingestion of *B. Acidophilus* milk.

61 (2021)

Brom cresol green, a sulfonphthalein substitute for methyl red.

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The sulfonphthalein indicators of Clark and Lubs have shown themselves quite stable and reliable in biological fluids. Methyl red, which is not a sulfonphthalein, is not altogether reliable, but was included in the Clark and Lubs series because it was indispensable in covering a certain range of H-ion concentration. Methyl red is easily reduced irreversibly to a colorless compound—frequently by microbic action—thereby impairing its utility as an indicator under all conditions.

A sulfonphthalein indicator has been synthesized which has an apparent dissociation constant almost identical with that of methyl red and which seems as stable and reliable as the rest of the sulfonphthaleins. This compound is tetra-brom m-cresol sulfonphthalein. It is made by the bromination in glacial acetic acid of m-cresol sulfonphthalein. The common name suggested for this compound is *Brom Cresol Green.* Its effective range as an acid-base indicator is between P_H 4.0 and 6.0, with a color change from yellow to green to blue-green. Its apparent dissociation constant in terms of P_H is 5.00 (that of methyl red is 4.95).

Color standards of *Brom Cresol Green* were unaffected after several months' exposure in test tubes to usual laboratory conditions, while similar standards of methyl red had faded irregularly and become totally useless. *Brom Cresol Green* may be used directly in a bacteriological culture medium, for instance, while this would be out of the question for methyl red.

62 (2022)

Can fasting fowls synthesize glycocoll or ornithine?

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According to Suga[1] "starving hens (unlike well-fed birds) are unable to synthesize hippuric acid from benzoic acid and glycocoll; they conjugate injested benzoic acid with ornithine into ornithuric acid and excrete the latter compound." This is contrary to other authors, as Thomas[2] found that chickens kept on an inadequate diet could not even produce ornithine for conjugation with benzoic acid. Crowdle aand Sherwin[3] found that hens on a carbohydrate diet were able to synthesize ornithine under these conditions but found no glycocoll compounds; in other studies[4] where chickens were fed toxic organic compounds such as were detoxicated in the animal body by union with glycocoll, no combination with glycocoll was ever found. They concluded that glycocoll was never used by the chicken for detoxication purposes and these results were corroborated by the work of Yoshikawa[5] who fed chickens benzoic acid and glycocoll

[1] Suga, T., *Kyoto Igaku Zasshi*, 1919, xv, 225; *Jap. Med. Lit.*, 1920, v, 46; *Chem. Abstracts*, 1921, xv. 881.

[2] Thomas, K., *Centralblatt f. Physiol.*, 1914, xxviii, 769.

[3] Crowdle, J. H., and Sherwin, C. P. Results unpublished.

[4] Sherwin, Carl P., and Crowdle, Jas. H., PROC. SOC. EXP. BIOL. AND MED., 1922, xix, 318.

[5] Yoshikawa, J., *Zeit. Physiol. Chem.*, 1910, lxviii, 79.