

agent with an equal quantity of the suspected urine is placed in a test tube and thoroughly shaken. To this mixture add 1 c.c. of chloroform, and invert several times. The chloroform will settle to the bottom of the tube and if indican is present it will turn blue. Precautions: Sometimes there is a delay in the splitting of the potassium indoxyl sulphate, so in negative cases it is advisable to allow the mixture to stand for five or ten minutes before venturing an opinion. Occasionally the chloroform will acquire a red instead of a blue colour. This is usually due to the presence of skatol compounds, and the significance is the same unless the patient has been taking potassium iodide. In the latter case, the red colour will disappear upon the addition of a little hyposulphite of soda.

*The Practical Value of Sour Milk.*—The present day use of sour milk is based upon the following attributes: First, the casein has undergone a chemical change and has been subdivided and transformed in such manner as to make it more easily digested and more readily absorbed than that of sweet milk. This fact makes fermented milk of great value where a non-irritating easily-digested, quickly-absorbed, and well-tolerated food is required. Second, as a result of carbohydrate fermentation, sour milk contains lactic acid, which tends to prevent the development of putrefactive and other injurious bacteria, both in the milk itself and in the intestines. Hence, such milk is safer than sweet milk of questionable origin and purity. It is also a convenient means of giving lactic acid to influence the intestinal flora. Third, the carbohydrates have been converted into lactic acid, so sour milk is free from sugar, which makes it a valuable aliment for diabetic patients and individuals who fail to tolerate the carbohydrates. Fourth, fermented milk contains a very large number of lactic acid organisms which are supposed to be antagonistic to the putrefactive bacteria, and hence displace them in the intestines.

The dietetic value of sour milk is well known and will only require a few words here. It has been found useful in both the acute and chronic exhaustive diseases and in cases where the stomach is non-retentive. Of late it has been very extensively advocated in the modified feeding of infants. When used for this purpose it must be diluted and combined with sugar. It appears to be specially indicated in infantile diarrhoea and malnutrition, for these children usually have a pronounced intestinal putrefaction. Its use seems to be accompanied by marked success. The remedial value of sour milk depends both upon the

change in the casein and the presence of lactic acid and lactic acid organisms. Its use is indicated whenever there is proteolytic putrefaction and in many cases of saccharolytic fermentation. In the latter instance, its action depends largely upon the freedom from sugar and the quickness with which it is absorbed. Bacterial antagonism does not appear to be quite so well marked in these cases as in the proteolytic type. Sour milk is not only of service in effecting a cure in a given case, but should be advised in all persistent cases of indicanuria as a prophylactic measure. Metchnikoff has noted that individuals who have consumed large quantities of sour milk throughout their lives attain a very old age. This phenomenon he ascribes to the fact that the enterogenic toxins will in time produce arteriosclerosis, which he asserts is one of the chief causes of premature senility. If this be true, then we have in sour milk the nearest approach to the long-sought elixir of life. It seems a shame that this discovery could not have been made sooner, so that poor old Ponce de Leon could have had his fountain of eternal youth. Complete reliance must not be placed on fermented milk. In employing this remedy it is advisable to restrict the amount of animal food. One should also utilise all good hygienic measures, such as exercise, thorough mastication, recreation, bathing, attention to the teeth, etc. I have only seen one case of indicanuria which could not be entirely controlled by persistency in these measures. This patient is still under observation, and I hope to conquer his condition in time. Cases of excessive saccharolytic fermentation are apt to be very obstinate, and some patients receive very little benefit from fermented milk, but in my experience its use in such cases has been very encouraging.

*The Various Forms of Sour Milks.*—All sour milks, chiefly through the agency of the lactic acid and the lactic ferments, will temporarily, at least, control an indicanuria. The permanency of the cure has yet to be proven. Metchnikoff, Combe, and Cohendy assert that lactic acid bacteria isolated from the common sour milk of the Orient will grow in the intestines and restrain the development of putrefactive organisms. It is my experience that milk soured through the action of foreign bacteria is far more efficacious than when fermented by means of native organisms. The same may be said when bacteria are given in pure culture. There have been many commercial products placed upon the market, some of which are to be commended, while others are to be avoided. We find both effervescing

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