

cause of poison cheese. If changes occur from a change of conditions, if the same germs by a change of circumstances can be made to produce wholesome cheese in one case, and alcohol in another, it will require no very great stretch of the imagination to suppose that they *might* be so varied as to produce some *other* poison; and it is possible, at least, that the poison in cheese may be thus originated. The variations in cheese from temperature alone are very great. If two green cheeses from the same vat are placed to cure, one in a temperature of 70 deg. and the other 50 deg., the one may become a fine, palatable cheese, the other bitter, offensive and unwholesome. But I must not stop to trace the changes further. I must turn to the examination of milk as the more probable cause of contamination, and from the crucibles of the chemist I appeal to the microscope to aid in the investigation.

I have prepared here some illustrations to show how milk appears, both in its natural and diseased condition, when viewed with the microscope, and also to show some of its natural, as well as unnatural, ferments, and how the latter get into it.

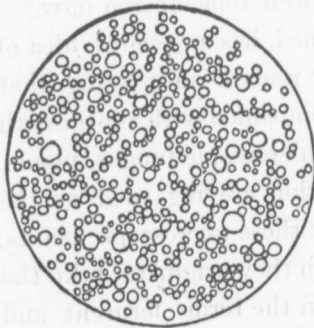


Figure 1 is a greatly enlarged view of the cream globules as they appear in healthy milk. It was taken from the milk of a large number of cows mixed. I wish you to take notice of the great inequality in the size of the globules, as it is an evidence of its healthy condition. This inequality may be a little greater than is common, the sample

being taken from the milk of a large number of cows mixed together. The globules in some cases are much larger than in others, but I have seen a difference even greater than this in the milk of a single cow. You will notice also how evenly they are distributed over the view. This is another evidence of healthfulness. In healthy milk the globules are not only evenly distributed through the milk, but they are separate from each other, and move about in the watery mass in which they are suspended

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