

this fluid. Tubercular consumption, for example, greatly increases the proportion of calcium phosphates in it—even to seven times the usual quantity. Milk from diseased cows is sometimes characterized by a want of homogeneousness and by imperfect liquidity, and also by its manifesting under the microscope certain globules not found in healthy milk.

From a dietetical or a sanitary point of view, this subject is of very *grave* importance indeed.

Pure cows milk is of a full white color, perfectly opaque, not viscid, but quite liquid and homogeneous; it is free from any peculiar taste or smell, is without deposit or sediment on standing, and is neither acid nor alkaline; it should yield from 6 to 12 per cent. of cream by volume, and have a specific gravity of *at least* 1.028;—if it falls to 1.026, it shows either that the milk is very poor or that water has been added.

Dr Letheby gives the following table as indicating approximately the proportion of water-adulteration according to the specific gravity and percentage of cream:—

	Specific gravity.	Percentage volume of cream.	Specific gravity when skimmed.
GENUINE MILK.....	1030	12.0	1032
Do with 10 % water.	1027	10.5	1029
Do “ 20 “	1024	8.5	1026
Do “ 30 “	1021	6.0	1023

When the milk is largely diluted with water, other substances, as chalk, turmeric, salt, &c., are frequently added to improve the appearance and flavor.

The use of a tall, graduated glass vessel to determine the percentage of cream, and of a lactometer to ascertain the specific gravity, will usually enable any one to form a reliable opinion as to whether the milk is or is not genuine. While the manner in which the cows are kept—as regards their housing and the nature of their food, together with the use of a microscope of sufficient power, will indicate the degree of its exemption from the effects of disease.

That specific disease is sometimes spread through the agency of milk, can scarcely be doubted. In the *London Lancet* (1870) an outbreak of scarlet fever is noticed, which