

One lb. of oil-cake causes a cow to yield 1 lb. more milk, and makes all the rest richer. Two lb. a-day may be given if the milk is to be sold or used as milk. If butter is to be made, 1 lb. is enough, as more gives the butter a taste.

404. *But if you were going to make cheese of your milk, would you give the same kind of food?*

I would then prefer beans, pease, vetches, and clover, or clover hay, with oil-cake—all of which make the milk richer in curd.

405. *Why do they make it richer in curd?*

Because they contain a very large proportion of gluten, which has nearly the same composition and properties as the curd of milk.

The feeding with whey thickened with meal or grains is said, in the State of New York, to have increased the yearly produce of cheese from a single cow by upwards of a hundred lb. If so, it must be more profitable to use whey in this way than to give it to pigs.

406. *Does milk contain all the elements of a nutritious food?*

Yes. The butter of milk supplies fat to the body, the curd supports the muscles, and the milk-sugar supplies the carbon for respiration. Further, the ash or mineral of the milk supplies phosphates for the bones and flesh, and salts for the blood.

The teacher may here examine his pupils as to the proportion of phosphates, &c. in milk (Q. 237, note,) and may illustrate the striking analogy in composition which exists between this *animal* food, prepared by the *mother* for her young, and the *vegetable* food produced by the *soil* for the general sustenance of man, and of all other animals. How truly the earth is our mother!

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When examining them on these latter parts of the subject, the teacher may draw the attention of his pupils also to the beautiful chemical connection which exists between the vegetable and animal kingdoms, and especially to the marked adaptation of the *living vegetable* to the *wants of the living animal*, which is exhibited in the fact, that the animal finds, ready formed in the ripened plant, as the young animal does in the mother's milk, all the most important substances of which its own body is composed. The gluten of the food it eats is nearly identical with the fibre of its muscles; the oil is similar in character to the fat of its body; the bone-earth, and other salts of the plant, supply mineral materials for its bones, blood, and flesh; while the starch and sugar afford the carbon which is required for the purposes of respiration, and for keeping the body warm. Finally, he may also point out that, when the vegetable food has discharged its office in the animal body, it returns to the earth in the form of dung, only to enter into the roots of new plants, and thus to produce new supplies of sustenance for other generations of animals. The entire economy of vegetable and animal life, and all the changes experienced by dead matter, are parts of one system—express, as it were, but one idea—the offspring of ONE MIND.

By a little reflection on the various subjects treated of, he may thus engraft a course of instruction in Natural Theology upon the purely practical principles of this little book; and may thus make it instrumental, not only in the intellectual, but also in what is much more important—the *moral* training of his pupils.