

NOTES BY "DIGRESSOR."

Recent experiments by British investigators go to show that butter and some forms of oleomargarine contain a substance that promotes growth in the young. Young rats fed on a ration from which all butter and its substitutes had been eliminated, continued to live but did not increase in weight; while adult females fed on the same food failed to produce young. This growth-promoting substance is found in oleomargarine made from beef fats, but is absent from the other butter substitutes manufactured, as many of them are, from other animal fats or vegetable oils.

The conclusion drawn from these facts by an English writer is that while the presence of this substance in food is probably of little importance to adults whose growth is completed, it may have much to do with the health and robustness of children. Plenty of butter in their diet, he says, is indicated. But as the substance is known to exist in eggs and some other comestibles, it seems likely that the ordinary mixed diet long recognised as the most wholesome, will, even in the absence of butter or beef-fat margarine, supply all the needful constituents for growth and health.

This growth-promoting substance seems to belong to a class of food elements, the very existence of which was scarcely suspected until quite recently. Dietetists used to prescribe certain proportions of proteids, carbohydrates and fats producing so many calories, and they told us that if we did not thrive on these, it was our own fault. But it is now recognized that these methods of food valuation were far too coarse. Besides largely ignoring the sapidity of food, which has a great deal to do with digestion and consequently with nutrition, they knew nothing whatever of the astonishing influence of the "vitamines," the first of which was discovered a few years ago in connection with the study of the fatal oriental disease, beri-beri.

Beri-beri, which has been known in China and the East for hundreds of years, is a distressing disease with a mortality as high as 50 per cent. It was formerly attributed to all sorts of causes, such as damp situations, lack of ventilation, decayed food, and fungoid growths on grain. But it was finally traced to an exclusive diet of "polished" rice,—that is damaged rice which, in order to improve its appearance, has been put through a process that removes its outer coating,—and a rapid cure was effected by the use of unpolished rice, or by the addition of the polishings of the treated rice. From this it was evident that the disease was due to the lack of something removed in the polishing process, and eventually the all-essential substance was isolated from the outer layers of the rice grain, and named "vitamine."