

parallel with all this has been an almost complete re-organization of the Academy of Sciences supervising and advisory committee system and its membership. Leadership of the US programme passed from the hands of Roger Revelle of Harvard to Frank Blair of Texas last spring. With the more recent streamlining of the committee structure, the academy's IBP organization looks more like an executive body and less like a gathering of all the worthies in the field.

The \$5 million line item called for in the Federal Government budget for the fiscal year 1970 is expected to get through Congress. It seems modest against the \$200 million originally estimated at the 1967 Congressional hearings for setting up programme operations. The programme itself is now stabilized, with thirteen "integrated" large-scale projects already active, and five more adopted but not yet fully organized. The academy committee has been at pains not to close the door on further promising research subjects which scientists may wish to press, but only on grandiose proposals spanning large areas and many disciplines. Thus it is pointed out that the US IB programme could take on a study of the effects of defoliation in Vietnam (as has been suggested) but it would not rank as a programme in its own right.

The newly formed executive committee for the US IBP is a six-man affair with Frank Blair as chairman. It is supported by two other committees, PROCOM, the Program Coordinating Committee, and INTCOM, the International Coordinating Committee. Altogether the reshuffle has pared the membership of the committee from about 100 people to thirty. In consequence of the rather thorough rethinking and re-organization that have taken place over the past 9 months which have been greatly influenced by the public hearings in Congress, the US IBP goes into 1969 still not rich but in a mildly optimistic frame of mind.

#### NUTRITION

### Eat up your Veg.

LAST week a report was published which suggests that more than £5 million may be lost each year because children are too undernourished to concentrate on their school work. Prepared by Dr G. W. Lynch of the social nutrition unit at Queen Elizabeth College, the report is an extension of earlier work carried out by the unit which indicated that fasting for 18 hours each school day is by no means uncommon among children from low-income homes. (*Medical Officer*, January 24.)

In 1967 the unit estimated that about two thirds of a million children in Britain are likely to be undernourished for reasons of poverty alone. This estimate was based on extracts from various statistics—chiefly from Government surveys of income and expenditure and national food surveys. A second study a year later showed that 25 per cent of a sample of eighty children in the East End of London aged between 10 and 11 regularly went to school without breakfast. Compared with other children, their milk intake, dental health and school records were poor.

A more recent finding reported by Dr Lynch is that among ninety-six working class schoolchildren, only a third had a main-course meal in the evening; ten had sandwiches only and three had nothing. Parents often seem to be under the impression that their children eat

a large lunch at school, but out of seventy-five children, fifty-seven habitually left certain foods, which were almost always vegetables. Thirty-six of these children had parents who never asked them what they had eaten for lunch, and Dr Lynch comes down heavily on the indifference of adults about children's eating habits.

He adds that the adverse effects of poor nutrition on learning ability are well known. Based on expenditure by local education authorities in 1966 on secondary schools, he suggests that if poor nutrition impaired the learning ability of one in four schoolchildren by as little as 25 per cent and for only one-quarter of a school day, a loss of more than £5 million would be involved—£1 million more than the Government's estimated saving in stopping free milk for secondary schoolchildren.

Dr Lynch's samples are admittedly small and his results do rely rather heavily on the assumption that the children are telling the truth. Nevertheless, his findings are unlikely to whip up much support for the Government's decision to end next April the scheme by which free school meals are provided for the fourth and subsequent children. As a next step, Dr Lynch says that the aim is to launch a national survey covering a wider cross-section of the population.

#### INDUSTRIAL RESEARCH

### Tax against Innovation

THE view that industrial innovation in Britain is hampered by the prevailing system of taxation is put forward by Dr Gordon Fryers, managing director of Bayer Products, in one of three contributions to a symposium, *Innovation and Profitability*, published by the Science of Science Foundation at five shillings. The other contributions to the symposium, by Mr Herbert Hollomon, lately Assistant Secretary for Commerce in the United States, and Mr P. G. Peterson, chairman of Bell and Howell, have previously appeared in printed form. Dr Fryers's contribution to the symposium, which is intended as background material for a meeting to be held later in the year, was first presented in 1968 to a private meeting of the Science of Science Foundation.

The case for believing that the British system of taxation acts as a brake on new developments has often been made, but Dr Fryers has taken the trouble to construct some numerical comparisons of the profitability of two kinds of enterprises—those which innovate and those which are content to sell what they have always produced. One of his illustrations is that of a hypothetical company which is able to sell a new product at prices 80 per cent greater than those obtained for equivalent products by an older company. The nub of his argument is that the extra costs of research, promotion and manufacture will yield a pre-tax profit of only 19 per cent, compared with the figure of 15 per cent which, Dr Fryers says, is more or less representative of the profitability of companies in the United States in somewhat static phases of their history. With British corporation tax at 42.5 per cent, Dr Fryers says that an innovative company seeking to distribute half its profit (after tax) will be left with just over 5 per cent of its turnover to invest in expansion. It is only natural, in those circumstances, that