nature

30 June 1977

Carry on talking

YOU MIGHT think that, what with the Select Committee on Science and Technology, the Parliamentary and Scientific Committee, The Royal Society, the Council of Engineering Institutions, the British Association for the Advancement of Science, the Council for Science and Society, Chief Scientists in governmental departments and an Advisory Board for the Research Councils, there is no shortage of channels in Britain by which scientists could make their views known to politicians and by which politicians could learn more about science and technology. You would be wrong. Scientists and politicians generally only talk to each other when things are going wrong, and even then it is usually directors. of laboratories or scientific administrators who speak for science. A modest welcome, then, for the initiative of the Anglo-German Foundation for the Study of Industrial Society in trying a new format.

The foundation, in collaboration with Mr Ian Lloyd, MP, chairman of the Select Committee's sub-committee on science, recently invited a small number of MPs and staff members of the committee to spend a day and a half listening to six scientists and engineers describing their fields of interest, the prospects they see and the difficulties they face, not simply in the intellectual sphere but also in securing adequate support. The topics covered were construction,

power generation, immunology, genetics, microelectronics and the earth sciences.

In many ways the initiative was imaginative: the group was small enough for round-the-table conversation to flow easily, the scientists and engineers had ample time to describe their work, no one was angling for funds or speaking for the public record. On the other hand the MPs, for whom the show was staged, were conspicuous mostly by their absence; by half way through the gathering, Mr Lloyd was the only one left. There were, no doubt, other pressing matters to be attended to, and the harsh realities of the ballot box make little allowance for how well an MP has briefed him or herself, least of all in science or technology. So the welcome for the initiative must be tempered by some concern about whether politicians really value such exchanges. And if they do, the foundation has to decide on what lines another meeting should run. Should MPs be treated to completely new faces each time or should the effort be made, whatever the accusations of cosiness, to keep a nucleus of scientists and engineers together in the hope that good relations will develop? There is much to be said for the latter policy, tempered, of course, by new faces where necessary. For the initiative should develop into a talking shop, not a lecture series.

Whose venture, whose gain?

There were signs at a recent meeting in Basel that the rising risk-consciousness reflected, for instance, in the endless debate on recombinant DNA and in the witch-hunt for environmental carcinogens, is increasingly losing the sympathy of research scientists. The meeting was not about potential environmental hazards from research; the scientists were all there at the invitation of Hoffman-La Roche to celebrate their research director's 60th birthday with a series of talks on the contribution of fundamental research to the medicines of tomorrow. Participants however seemed almost equally preoccupied with the possibility that the fruits of that research might never reach the market.

The main source of unease, of course, is the fear that far-reaching defensive action may be taken on the basis of questionable evidence. This has already happened with saccharin in the USA; whether in the end the saccharin link with bladder cancer is or is not substantiated, the fact remains that the evidence on which it has been condemned is widely regarded as inadequate. Professor Peter Cerutti implied that the over-enthusiastic use of the Ames test for carcinogens could very well lead to similar over-reactions. The Ames test depends on the correlations between mutagenic effects of chemicals on bacteria and their carcinogenic effects in whole animals. But the bacteria used in the tests are much more sensitive than animal cells, whose repair mechanisms for chromosomal damage give them complete protection from chemicals at doses that would produce a positive result in Ames bacteria.

As Professor Burgen unarguably remarked in his summing-up, "We must be cautious but not timid". After

all, nothing venture, nothing gain. But one does have to be sure that it is not the public health that is being ventured for the gain of pharmaceutical companies. And from that point of view, it is not at all clear that the public is its own best friend. A recent survey by Sir Richard Doll and his colleagues, for example, illustrates once again how enormously doctors over-prescribe anti-microbial psychotropic drugs (British Medical Journal, 1, 1561; 1977).

The hazards of over-use of antibiotics are well known, and the natural ability of virulent strains to acquire resistance to drugs has often been emphasised in the course of the recombinant DNA debate. The hazards of psychotropics, of which the most popular are Roche's own Librium and Valium, are not as well known. But as the authors of the BMJ article point out, with about 10% of males and 20% of females now taking psychotropic drugs, it is necessary to ask questions about, for instance, their possible effects on driving and other skills that require judgment.

This is not a case of the pharmaceutical industry foisting on the public drugs which carry unacceptable risks; antibiotics are life-savers, and psychotropics are certainly invaluable in some circumstances. It is the unnecessary use of the drugs that creates the unacceptable risk. However, people are not rational about the acceptability of risks. Recent publicity shows that they will insist on being allowed (or even encouraged) to smoke, or to drive without seat belts, both of which carry large known hazards, and to accept the risk of disease to an unvaccinated child rather than minuscule risk of damage by vaccination.