CONTROL OF RESISTANCE TO ANTI-MICROBIALS

nti-microbials are used to treat infections caused by micro-organisms. They include antibiotics, which are used to prevent and treat bacterial infections.

The availability of antibiotics and other anti-microbials has allowed great advances in medicine and surgery. Unfortunately to a great extent, the development of resistance is a consequence of their widespread use. References to antibiotics in this statement should be taken to refer also to all other anti-microbials available only against prescription.

Exposure to an antibiotic can isolate resistant strains. Resistance makes infections more difficult to treat, often at greater financial cost and can lead to increases in morbidity and mortality rates. The problem can be reduced if an antibiotic, or a combination of antibiotics, is prescribed at optimal dosage, and is taken at the correct intervals for the complete duration of the prescribed course of treatment.

Because the use of antibiotics is an important factor in the emergence of resistance, it is very important that they should be prescribed responsibly and taken correctly by the patient. Ideally an antibiotic or other anti-microbial should be prescribed only after the infecting micro-organism has been identified. In practice, however, clinical decisions often have to be taken, in the best interests of the at-risk patient, before the test results are available.

Antibiotic resistance is a major public health problem and is a cause of growing national and international concern. The development of new antibiotics is expensive and results cannot be guaranteed. Effective reduction and control of antibiotic resistance cannot be achieved by national initiatives alone. This will require a global strategy.

The FIP welcomes the initiative taken by the World Health Organisation (Resolution WHA 51.17 of 16/5/98) and shares the concerns expressed by the WHO in its annual report on infectious diseases entitled "Overcoming Antimicrobial Resistance" published in June 2000. The FIP also welcomes the position paper on this topic published by the Pharmaceutical Group of the European Union in 1999.

Recommendations

The FIP urges governments and health authorities:

- 1. To specify data that must be provided to support applications for marketing authorisations for new antibiotics.
- 2. To designate an antibiotic as a prescription-only medicine if development of resistance is likely to be a problem

and to impose additional restrictions on prescribing of selected antibiotics when appropriate to limit the risk of resistance developing.

- **3.** To strengthen legislation and other regulatory controls over authorisation for marketing, importation, prescribing and dispensing and their enforcement to ensure that only secure channels of distribution are used, thus guaranteeing that antibiotics available meet the required high standards of safety, quality and efficacy.
- **4.** To initiate information campaigns to influence the expectations of the public in respect of the prescribing of antibiotics, in particular that they are not useful for the treatment of viral infections or simple coughs and colds, or simple diarrhoea.
- **5.** To establish, in co-operation with the relevant health professions including the veterinary profession, codes of practice for the use of antibiotics and to indicate that adherence to the guidelines for antibiotic use, including withdrawal periods for animals used in food production referred to in these codes, which should be used in undergraduate and postgraduate training, will be recognised as the standard of care expected of the health professionals concerned.
- **6.** To support the development of alternative means of animal husbandry to secure the discontinuation of the use of antibiotics as growth promoters and in prophylaxis.
- **7.** To utilise epidemiological methods to assist in establishing comprehensive surveillance systems and effective

strategies to monitor the avoidance of the development of resistance to antibiotics and to include national data on resistance in product information.

- **8.** To establish infection control programmes in healthcare settings where they do not already exist and to utilise the expertise of pharmacists in all infection control programmes.
- **9.** To support the development of a framework that will encourage the development of new antibiotics to meet future needs.

Pharmacists, conscious that all medicines are special products, are ready to collaborate actively with physicians at local level to promote optimal use of antibiotics, to cooperate with regulatory authorities and all other health professionals in actions to fight the development of resistance and to participate in public information campaigns on this important topic.