

Alliance to Save Our Antibiotics

1. The Alliance to Save Our Antibiotics would like to respond primarily to question

9, with a specific focus on the use of farm antibiotics: "What risks could a trade agreement with India pose to the UK's food safety standards, animal and plant health or animal welfare standards? How could any such risks be mitigated?"

Antibiotic use in farming is a human-health issue

2. Antibiotic resistance is global problem and a very recent study published in *The Lancet* estimated that in 2019 it caused the deaths of 1.27 million people and was linked with the deaths of 4.9 million people [1].

3. The overuse of antibiotics in farm animals tends to encourage the spread of antibiotic-resistant bacteria through the food chain. While most antibiotic resistance in human infections is caused by the use of antibiotics in human medicine, it is established that antibiotic-resistant bacteria can also spread from food to humans, and ultimately contribute to greater levels of antibiotic resistance in infections affecting humans [2].

4. The Review on Antimicrobial Resistance ("O'Neill Review") commissioned by the then Prime Minister David Cameron recommended that farm antibiotic use be reduced globally in order to help protect the efficacy of antibiotic in human medicine [2].

5. Large amounts of meat are already imported into the UK, primarily from the European Union. UK attempts to diversify the sources of imports, and to lift tariffs on some imports via trade deals, mean that global farm antibiotic use is relevant to consumer health in the UK, as imported food may be contaminated with antibiotic-resistant bacteria which can spread to humans.

British reductions in farm antibiotic use could be undermined by cheaper imports

6. British farmers have responded to the O'Neill Review's call to action by voluntarily reducing their antibiotic use by about 50% since 2014 [3]. This is a welcome development, but since the actions have been voluntary, there remains the possibility that the reductions could be reversed in the future.

7. There are major concerns that the importation cheap meat, dairy or eggs produced with much higher levels of antibiotics could undermine farmers' current standards. Routine antibiotic use, as practiced in many countries around the world, including India, can enable cheaper production.

8. If tariffs are lifted on food produced to lower standards, using production practices which are illegal in the UK, British farmers may be tempted to increase their own antibiotic use again in an attempt to compete on price.

Very weak regulations on farm antibiotic use in India

9. India has few regulations on antibiotic use in food animals [4]. This is particularly the case for animal-origin foods produced for home consumption. There are more rules in place for food produced for export. However, even for exported animal-origin foods there are major concerns relating to the misuse of antibiotics in India.
10. India's official National Action Plan on Antimicrobial Resistance [5] says: "The absence of stringently framed and implemented regulatory frameworks to limit the use of antimicrobials in livestock and food animals, especially for nontherapeutic purposes, like growth promotions, has been one of the drivers of antibiotic overuse at the community level. A more recent directive has been issued in January 2015 by the FSSAI which outlines certain principles that include limiting the use of antibiotics in livestock rearing; it does little besides reiterating the directives of a previous advisory from the Department of Animal Husbandry, Dairying and Fisheries."
11. Key concerns regarding the overuse of antibiotics in Indian farming are:
 - Medically important antibiotics, including at least one classified by the World Health Organization as "highest-priority critically important in human medicine", are widely used in livestock as antibiotic growth promoters.
 - There is no reliable data being collected and published on antibiotic use in farming India. However, India's own National Action Plan on Antimicrobial Resistance admits "The consumption of antimicrobials in the food animals sector in India is expected to double by 2030."
 - Medically important antibiotics are widely used as pesticides on crops in India. This practice, which is not permitted in the UK, contributes to the spread of antibiotic resistance in the environment and on crops.

Use of antibiotics as growth promoters in India

12. Antibiotics are widely used as growth promoters in India [5]. However, it is difficult to obtain a full official list of antibiotics that are currently used as antibiotic growth promoters in India. A list of approved veterinary drugs is provided on the website of the Central government's regulator, The Central Drugs Standard Control Organization (CDSCO) [6]. Unfortunately, this list appears to be incomplete and furthermore for many of the drugs the indication (i.e. what it is licensed for) is not given. This means that it is not always possible to determine whether the antibiotics listed are used for growth promotion or not.
13. The following antibiotics are listed as being used for growth promotion:
 - **Tylosin:** tylosin is a member of the macrolide family of antibiotics. Macrolides are classified by the World Health Organization as "highestpriority critically important antibiotics in human medicine" [7]. Macrolides are the treatment of choice, and one of the few remaining treatments, for treating serious *Campylobacter* infections in humans.

Poultry are known to be the leading source of Campylobacter bacteria infecting humans. It is partly for this reason that the WHO has classified macrolides as highest priority critically important.

- **Virginiamycin:** virginiamycin is a streptogramin antibiotic. Streptogramins are classified by the WHO as highly important in human medicine [7].
- **Dimetridazole:** dimetridazole is banned from all use in farming in the UK and the EU because of concerns it may be carcinogenic [8]. It is not clear whether this antibiotic is still used as a growth promoter in India, although it is still listed by the CDSCO as a drug that it approved.

14. In addition, the leading Indian NGO, Center for Science and Environment, lists the following antibiotics as being used for growth promotion in India [9]:

- **Oxytetracycline, chlortetracycline and doxycycline:** these are tetracycline antibiotics. Tetracyclines are classified by the WHO as highly important in human medicine [7].
- **Amikacin:** an aminoglycoside antibiotic. Aminoglycosides are classified by the WHO as critically important in human medicine [7].
- **Lincomycin:** a lincosamide antibiotic. Lincosamides are classified by the WHO as important in human medicine [7].
- **Furazolidone:** a nitrofurantoin antibiotic. Nitrofurans are classified by the WHO as important in human medicine [7].

15. The antibiotic colistin, used as a last resort in human medicine for treating life-threatening infections in humans, also used to be used as a growth promoter in India. However, in 2019 it was banned from all use in farming in India [10] (in the UK it continues to be used therapeutically in farming, albeit at very low levels). This was a welcome improvement in the regulation of farm antibiotics in India.

16. The continued widespread use of many medically important antibiotics in Indian livestock is a major health concern and is a practice that most countries say they no longer allow. According to the World Organization for Animal Health (OIE), globally 112 countries report that they no longer use (medically important) antibiotics for growth promotion, whereas 42 countries still use them [11].

No reliable data on farm antibiotic use in India

17. There is no reliable data published on the use of sales of antibiotics in farming in India. It has been estimated that India accounts for 3% of global farm antibiotic use [5][12]. The growth of intensive farming in India and the lack of effective policies aimed at reducing farm antibiotic use mean that it is expected that Indian farm antibiotic use could double between 2015 and 2030 [5][12].

Use of antibiotics as pesticides on crops

18. Five different antibiotics are licensed for use on crops in India to control certain fungal or bacterial infections [13][14]. They are:

- **Streptomycin, Kasugamycin and Validamycin:** these are all aminoglycoside antibiotics. Aminoglycosides are classified by the WHO as critically important in human medicine [7].
- **Tetracycline:** tetracycline antibiotics are classified by the WHO as highly important in human medicine [7].
- **Aureofungin:** an antifungal antibiotic.

19. Streptocycline, a combination of two antibiotics, streptomycin and doxycycline (a tetracycline antibiotic), is widely used on fruit and vegetables, according to an investigation by the Center for Science and the Environment (CSE). CSE found that it was used on many more crops than the eight crops for which it was licensed [15].

20. Using antibiotics on crops is not permitted in the UK. In the EU, no antibiotics are licensed for use on crops, although some Member States do sometimes apply for derogations to use a limited amount of antibiotics on certain crops.

Strict rules are needed to limit the spread of antibiotic resistance from imported food

21. There is greater regulation of food exported from India than there is for food produced for domestic production. In particular, residue testing, including testing for antibiotic residues, is carried out [4]. However, the spread of antibiotic resistance through the food chain occurs mainly via the contamination of food by antibiotic-resistant bacteria, rather than through residues [2]. So residue testing itself, while important, does not ensure that antibiotic resistance will not be imported on food.

22. This is why it is important to have proper regulation of the antibiotic use that may occur during the production of the imported food. Since 28 January 2022, the EU has banned the importation of all food produced with antibiotic growth promoters [16]. However, the UK has not implemented this regulation and continues to allow the importation of food produced with antibiotic growth promoters.

22. During a debate in Parliament on 26 June 2021 on the Free Trade Agreement Negotiations with Australia, the then Secretary for State for International Trade, Liz Truss MP, repeatedly refused to rule out lifting tariffs on food produced with antibiotic growth promoters [17].

23. The Alliance to Save Our Antibiotics believes that the Government should:

- Ensure that any FTA does not contribute to increasing the spread of antibiotic resistance via the food chain. Ensure that food imported into the UK from India is not produced with irresponsible use of antibiotics.
- Ban the importation of all food produced with antibiotic growth promoters. No FTA should be agreed which lifts tariffs on these foods.

- Ban the importation of crops sprayed with antibiotics. No FTA should be agreed should be agreed which lifts tariffs on these foods.

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