Differences in farm antibiotic standards in the UK and New Zealand

The British government says that a new free-trade agreement (FTA) with New Zealand is likely to make “high quality New Zealand products such as wine, food and drink” tariff-free in UK shops. British farmers and many civil-society groups have expressed concern that lifting tariffs on food produced to low standards could undermine British food safety and the competitiveness of UK produce. But how different are UK and New Zealand farm antibiotic standards?

Below we find that regulations on farm antibiotic use in New Zealand are laxer than in the UK. However, because large numbers of livestock in New Zealand are raised extensively, on pasture, antibiotic use per livestock unit is approximately 60% lower in New Zealand than in the UK.

Farm antibiotic sales in the UK and New Zealand

New Zealand has large numbers of sheep and cattle. Some cattle are raised in feedlots, but most cattle and sheep are pasture-fed and therefore require few antibiotics. On the other hand, New Zealand only has a small pig industry.

In 2018, 69 tonnes of antibiotic active ingredient were sold for use in New Zealand farm animals. Using data on New Zealand livestock numbers, we have roughly estimated New Zealand’s usage in terms of livestock unit (the “population correction unit”).

Farm antibiotic sales in the UK and New Zealand (mg per population correction unit)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31</td>
<td>12 (approximate estimate)</td>
</tr>
</tbody>
</table>

Antibiotic growth promoters

**UK:** It has been illegal to use any antibiotic as a growth promoter in the UK or the EU since 2006. Next year the EU will also ban the importation of any meat or dairy produced from animals fed antibiotic growth promoters, but the UK has not indicated that it will implement a similar ban.

**New Zealand:** New Zealand does not permit the use of antibiotics it considers medically important to be used as growth promoters. However, four antibiotics not currently used in human medicine continue to be used for production purposes:

- **Monensin, lasalocid and salinomycin:** used in dairy cows or pigs. All three are ionophore antibiotics. Scientists are investigating whether ionophores can be developed for human use in the future. Ionophores are used in UK poultry industry to control coccidiosis disease but were banned as growth promoters in 2006.
- **Bambermycin** – Used in chickens. Bambermycin was banned from use as a growth promoter in the UK in 1999. It is not currently used in British livestock.
Furthermore several antibiotics (virginiamycin, zinc bacitracin and carbadox) are licensed under veterinary prescription for continuous use in pigs, chickens or cattle at growth-promoting doses. These antibiotics were banned as growth promoters in the UK and are no longer licensed for any use in British livestock.

**Use of antibiotics to enable hormone growth promotion in cattle**

In New Zealand, hormone implants are licensed to promote growth in cattle, a practice that is banned in the UK and the EU. To prevent infection at the implant site, hormone implants often include tylosin, a macrolide antibiotic. Macrolides are classified by the World Health Organization as high-priority critically important antibiotics in human medicine.

[Contact us.](#)

[Read our Nov 2020 report: Farm antibiotics and trade deals – could UK standards be undermined?]