Plan for Better

2024 Antibiotic Stewardship Report

J Sainsbury plc

Contents

Definitions

CIAs = antibiotics which are deemed critically important for human health by the European Medicines Agency (EMA). This includes the antibiotics: Colistin, 3rd and 4th generation cephalosporins, fluoroquinolones.

Colistin = an antibiotic often considered to be the most critically important of all CIAs. As of 2024 we have banned Colistin across all our own brand supply chains. If due to exceptional circumstances a veterinary surgeon prescribes Colistin as an absolute last resort, Sainsbury's agriculture team must be notified alongside extensive justification of why Colistin is required instead of other available antibiotics.

Antibiotic resistance

Antibiotic resistance is a major public health issue, predicted to cause 10 million deaths/year by 2050 (more than cancer!)

Overuse of antibiotics in human and veterinary medicine has enhanced naturally occurring resistance.

UK agricultural industry has reduced total antibiotic use by 52% since 2014, and the use of critically important antibiotics by 79% since 2014.

Sainsbury's is committed to ensuring antibiotics are used responsibly through supporting farmer training, research and monitoring usage.

Sainsbury's antibiotic policy means:

- **they cannot be used to promote growth**
- **they cannot be used routinely to prevent disease**
- **critically important antibiotics can only be used as a last resort, if needed to safeguard animal welfare.**

What are antibiotics?

Antibiotics are drugs which are used to treat infections caused by bacteria.
Since Alexander Fleming discovered Penicillin in 1928, antibiotics have helped to prevent many bacterial infections becoming fatal.
There are many different classes of antibiotics used to treat both humans and animals, and the European Medicines Agency (EMA) defines some as critically important antibiotics (CIAs) for human health. The CIAs which are most important for veterinary medicine are colistin, fluoroquinolones and 3rd and 4th generation cephalosporins.

Antibiotic resistance: What is it and why is it a problem?

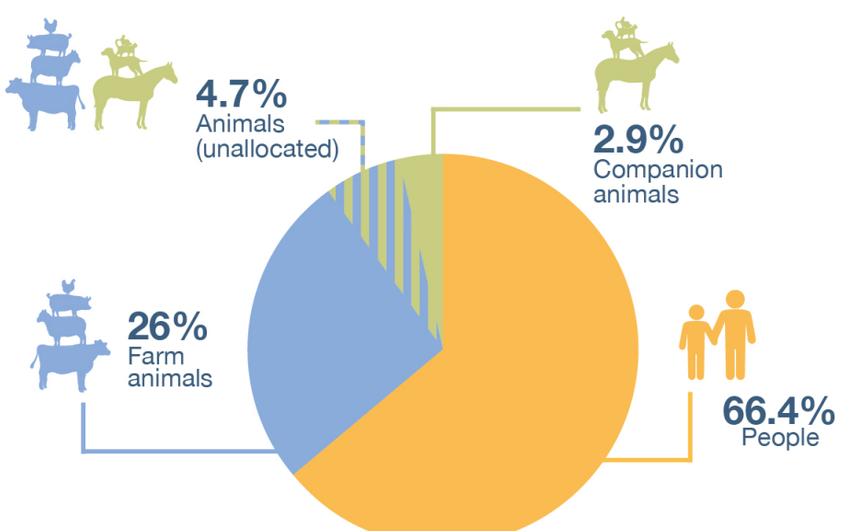
Antibiotics are designed to protect us and fight bad bacteria but unfortunately these bacteria can evolve to fight off the drugs. As a result, antibiotic resistance has become a high profile, global health issue in recent years. While there is still much to learn, we know that frequent exposure to antibiotics is likely to enhance the development and spread of resistance; so reducing antibiotic use should help.
Overall, we are seeing a growing global effort to reduce the amount of antibiotics prescribed to animals and humans.

Antibiotics in agriculture

Prescribing antibiotics to farm animals is an essential part of providing good veterinary care – it allows us to treat disease and keep them as healthy as possible. However, we're working to strike a very careful balance between caring for our animals and avoiding adding to the growing challenge of antibiotic resistance. Currently over 70% of antibiotics used globally are used in agriculture, while in the UK this figure is much lower at 26%[1].

In recent years great progress has been made through industry-wide collaboration and sharing of best practice. This has helped to refine, replace and reduce antibiotic use.
As part of these efforts, in 2016 the Responsible Use of Medicines in Agriculture Alliance (RUMA) set up a specific task force to address the Government objective of producing species-specific antibiotic reduction targets. This brought industry experts together to define appropriate usage targets for each livestock sector, which created a focal point for evaluating current usage and identifying where reductions could be made.

The UK agricultural industry has made great progress so far, reducing antibiotic use by 52%[2] since 2014 and achieving the 2020 RUMA multi-species target two years earlier than anticipated. There has also been a 79%[2] reduction in use of those antibiotics deemed critically important for human health (CIAs), between 2014 and 2020. However, there is still a lot of work to be done to help each sector achieve individual usage targets. This includes driving further reductions in the use of CIAs in agriculture and collaborating to collect more detailed and representative antibiotic usage data.



[1] Specific source: https://www.farmantibiotics.org/science-facts/antibiotic-infographs/human-vs-animal-antibiotic-use-2/
[2] Specific source: https://www.ruma.org.uk/wp-content/uploads/2020/11/SO-469-RUMA-REPORT-021220.pdf

Tackling antibiotic resistance

Our Antibiotic Policy

To promote responsible antibiotic use in our own brand supply chains we focus on preventing the need for antimicrobial intervention in the first place, by improving the overall health status on our supplying farms. Where antibiotics are required we manage their use in a similar way to our health and welfare outcome KPIs and we do not permit routine prophylactic use of antimicrobials. However, we do recognise that controlled intervention may be required on a clinically-assessed risk basis to prevent the outbreak and spread of disease and to safeguard animal welfare. Our farmers only use antibiotics under the supervision of a vet, and then only to treat animals that are unwell or in pain. Our approach to antimicrobials reflects the following principles:

1. In line with veterinary advice, we focus on the use of preventative strategies, e.g. the use of vaccines and probiotics and the good health of our animals.

2. We work with our farmer groups to reduce antibiotic use, while protecting animal health and welfare.

3. We minimise the use of Critically Important Antimicrobials (CIAs) used in human health (as defined by the European Medicines Agency).
- Suppliers must demonstrate a commitment to not using Colistin under any circumstances, as it is deemed to be the most critically important antibiotic for human health of all antibiotics. If due to exceptional circumstances a veterinary surgeon prescribes Colistin as an absolute last resort, Sainsbury's agriculture team must be notified alongside extensive justification of why Colistin is required instead of other available antibiotics

4. We back the development of new technologies and techniques to replace antimicrobial use, e.g. nutritional management of gut bacteria, and support more targeted treatments.

5. We foster R&D, knowledge-sharing and better technical capabilities within our value chains We are committed to reducing the use of antibiotics across our supply chains and recognise collaboration is key to achieving this. We work closely with the farmers in our farmer groups and they share information with us, including data on antibiotic use.
Such information enables us to make more informed decisions, and equipped with accurate data on the current level of antibiotics in our supply chain we can move towards more responsible use.

Finally, in line with UK legislation under no circumstances must antibiotics in our supply chains be used to compensate for poor hygiene, farming practises or inadequate animal husbandry. At Sainsbury's we understand that improving animal welfare leads to lower antibiotic use, we recognise our farmers are facing the growing challenge of antibiotic resistance and we have an important role to play in promoting responsible use.
To help reduce reliance on antibiotics, we're working closely with our farmers to minimise their use in three key ways.

Continuing to improve health and welfare

The health and welfare of animals within our supply chains is extremely important to us, and, for many years, we've worked hard to ensure we meet the high standards our customers expect. For example, we were the first major UK retailer to commit to only selling cage-free shell eggs, we invested substantially in research to support reducing the confinement of sows in indoor pig production and we sell a higher volume of RSPCA Assured products than any other retailer. We also know that high standards of animal health and welfare are essential for enabling farmers to reduce their use of antibiotics. We work with our farmers to ensure their focus is on effective management and veterinary health planning, which will help them keep their animals healthy.

One of the ways we do this is through measuring animal health and welfare outcomes. You can read more about this in how we're setting new standards and in our Animal Health & Welfare Report.
This allows farmers to benchmark themselves against industry standards and encourages a continuous cycle of learning and improvement. It has already proven to be a very effective strategy within our Dairy Development Group, where we have seen a significant reduction in conditions such as lameness and mastitis since the group was set up 16 years ago.

Using antibiotics responsibly

We're working with industry bodies and the veterinary community to promote the responsible use of antibiotics and help our farmers understand how reducing antibiotic use on their farm can contribute to tackling global antibiotic resistance. Our standards strictly prohibit the routine use of antibiotics, ensuring antibiotics are reserved only for when they're the best way to keep an animal healthy. All suppliers must ensure responsible antibiotic use is adhered to, including but not limited to: no routine (automatic) prophylactic use, no use to promote growth, and regular review of antibiotic use by a veterinary surgeon.
All our farmers also adhere to strict rules which ensure the meat, milk and eggs you buy from us do not contain traces of antibiotics.
In addition, we're focusing on reducing the use of antibiotics which are considered critically important to human health (as defined by the European Medicines Agency).
We minimise the use of these critically important antibiotics (CIAs) within our supply chains; promoting the responsible use of the most appropriate antibiotics. Since 2017, members of our Dairy Development Group no longer use fluoroquinolones or 3rd and 4th generation cephalosporins, unless a vet cannot identify a suitable alternative. These classes of antibiotics can also no longer be used as a first-line treatment within our pig and poultry supply chains.

Research and data - the foundation of our decision making

We believe collecting robust and representative data is key to helping farmers reduce their antibiotic usage and increase our understanding of what causes resistance.
To achieve this, we're working in partnership with other UK retailers, supply chain partners, scientists and health professionals to promote responsible use and tackle the issue of antibiotic resistance together. For example, we are a founding member of the Food Industry Initiative on Antimicrobials which has the stated vision of:

"Retailers, manufacturers and processors coming together to promote and support responsible antimicrobial use and action on antimicrobial resistance".

The intention of this initiative is to support and engage with existing industry groups working in this area, ensuring work is aligned, and avoiding duplication of effort. All members have signed up to the FIIA manifesto and committed to:

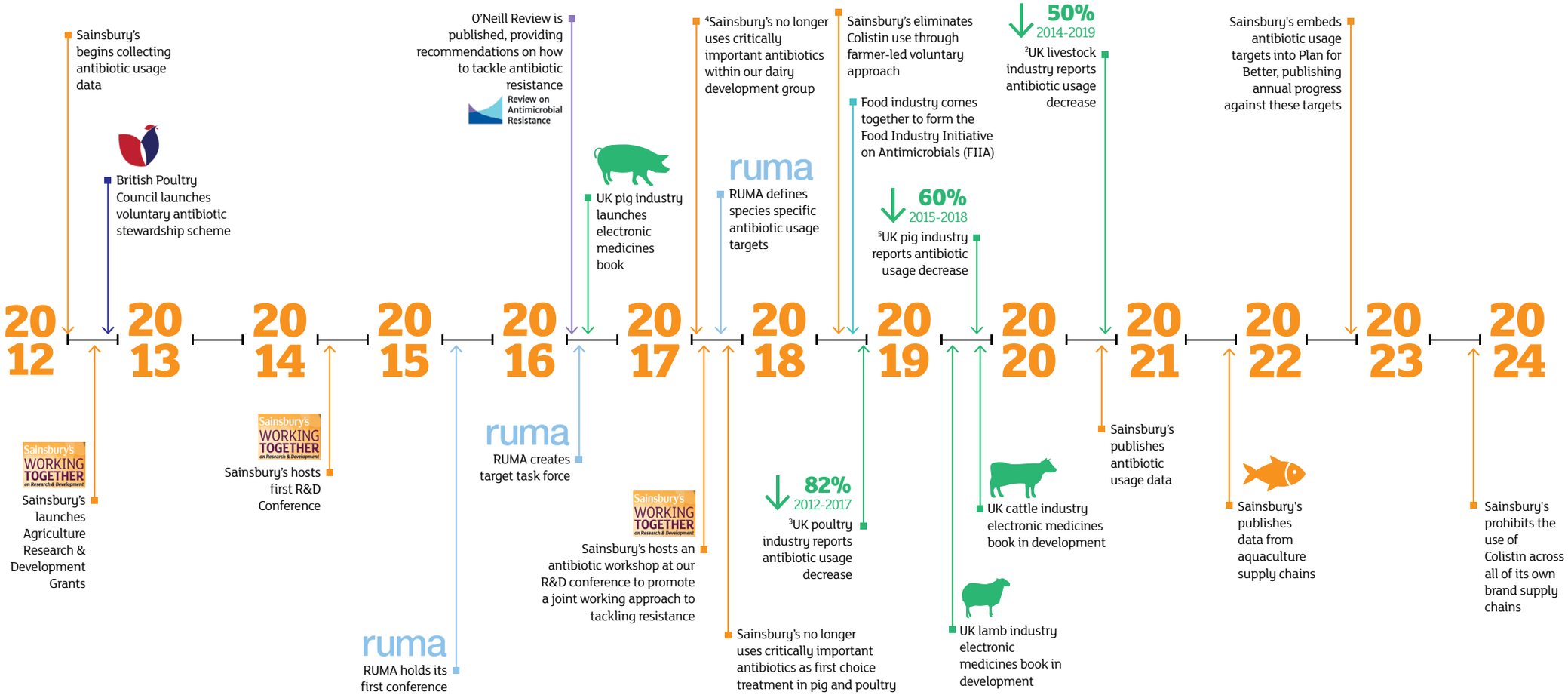
- restrict and reduce unnecessary or inappropriate antibiotic use;

- measure antibiotic use using universal metrics and support central data aggregation;

- support farmers in preventative disease practices, targeted antibiotic use, and measurement.

We have also been working closely with our farmers for a number of years to share knowledge and best practice through our species-specific development groups, and in recent years this has included collecting data on antibiotic usage. However, there are challenges to collecting robust and representative datasets for all species due to the different structures and challenges faced by each sector. We are continually working with our suppliers to improve the quality and quantity of data available.

Achieving antibiotic reductions and improved animal health through partnership and collaboration



[3] Specific source: https://www.ruma.org.uk/wp-content/uploads/2020/11/SO-469-RUMA-REPORT-021220.pdf

[4] Specific source: https://www.ruma.org.uk/wp-content/uploads/2020/11/SO-469-RUMA-REPORT-021220.pdf

[5] Specific source: https://ahdb.org.uk/news/pig-industry-antibiotic-results-show-further-reduction

Case studies

Our progress on ensuring responsible antibiotic use. In 2016 the Responsible Use of Medicines in Agriculture Alliance (RUMA) created a series of antibiotic usage targets to focus efforts to reduce antibiotic use. In 2020, RUMA updated their antibiotic usage targets to continue to drive a reduction in antibiotic use towards 2024.

This was a totally new concept, as was measuring antibiotic use in this way for most people, but since then everyone across agriculture has worked together to reduce, refine and replace antibiotics to ensure each iteration of the RUMA targets are met.
In fact, many sectors met the RUMA 2020 targets 2 years early due to the collective effort of everyone involved, particularly farmers and vets working to improve animal health and find new ways of treating disease which don't rely on antibiotic treatment.

Sainsbury's have been working closely with our farmers since the RUMA targets were set in 2016 to collect and monitor antibiotic use in our supply chains. This has been a completely new and highly complex undertaking but we have invested in the right expertise to ensure our data is accurate and representative of all our supply chains. Therefore, we are very happy to report that in 2023 87% of key supply chains met responsible use targets and 67% had zero use of CIAs.

What do we want to achieve? Our overarching goal is to ensure antibiotic use within our supply chains is below the RUMA 2024 targets, and to continue to reduce use further where this is possible.

It's important to recognise that there will be fluctuations in antibiotic use over time, and antibiotics will sometimes be needed in higher amounts where antibiotics are the best line of defence to protect animal health and welfare. This means there may be some years when antibiotic use is above the RUMA 2024 target for a good reason, such as a specific disease or industry wide issue, but our long term goal is to keep antibiotic use below these targets most of the time.

We also want to ensure the limited use of antibiotics deemed critically important for human health (CIAs), so we only allow these to be used as a last resort where needed to protect animal welfare. We've made great progress reducing the use of CIAs in recent years, including completely eliminating CIA use in many of our supply chains through working closely with our farmers and their vets.

It's been more of a challenge in some sectors than others, and we are leading the way in sectors like beef and lamb where there is a lack of available data across the whole industry. Despite these challenges we've made some incredible progress and our data in the following pages demonstrates what can be achieved through close collaboration with our farmers! Read on to learn more about our progress and what we've achieved since 2016.

If you want to learn more about our animal health and welfare policies, including our pioneering approach to improving health and welfare outcome KPIs, please check out our Animal Health & Welfare Report.

Liquid milk - Our key achievements

Sainsbury's Dairy Development Group has been producing our Sainsbury's milk from the same group of dairy farmers since 2007.

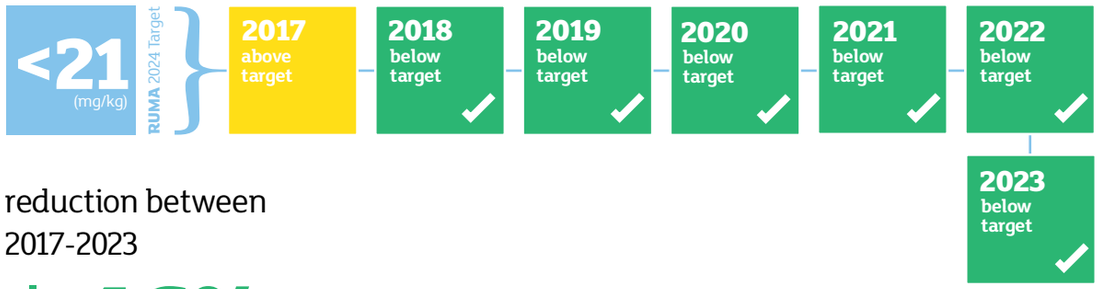
Over the last 16 years we have developed strong relationships with these farmers and worked with them to improve animal health and welfare, which enabled the group to meet the 2020 RUMA target 2 years early.

In 2017, in the spirit of partnership and collaboration on which the group was founded, our farmers voted to voluntarily stop using critically important antibiotics. This puts the group ahead of the wider dairy industry which still uses these antibiotics, albeit in small quantities.

Alongside their achievements in reducing antibiotic use, all our farmers have completed an independently certified antibiotic stewardship training course, and follow industry best practice such as performing selective dry cow therapy and discarding waste milk from cows undergoing antibiotic treatment.

Total Antibiotic Use

(mg/kg)



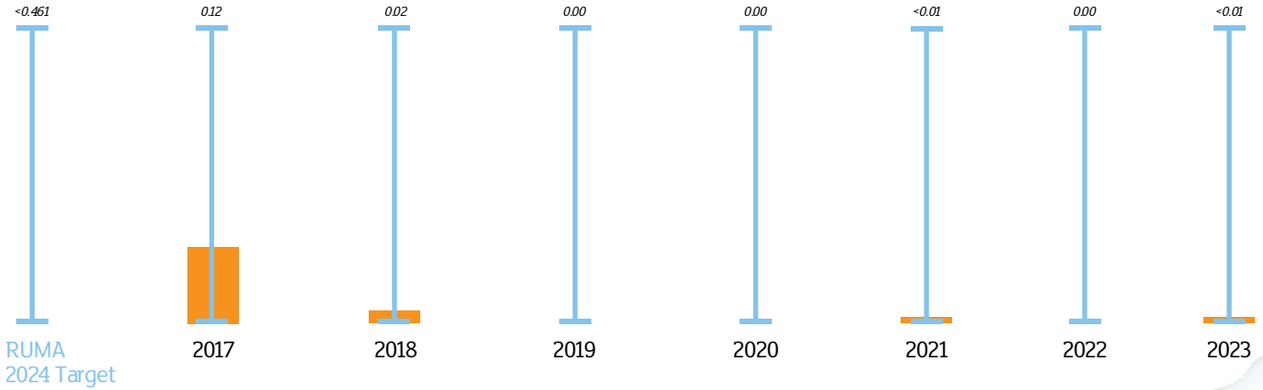
reduction between 2017-2023

↓ 46%

Data Coverage 100% by Sainsbury's fresh milk

Critically Important Antibiotic(CIA) Use

(mg/kg)



Colistin not used

at all between 2017-2023

Cheese - Our key achievements

We began collecting data for our British Cheddar supply in 2018 and in that time, have seen usage below the RUMA targets every year.

All our British cheese is certified to Red Tractor standards, and we are working closely with our suppliers to improve animal health and welfare and antibiotic usage.

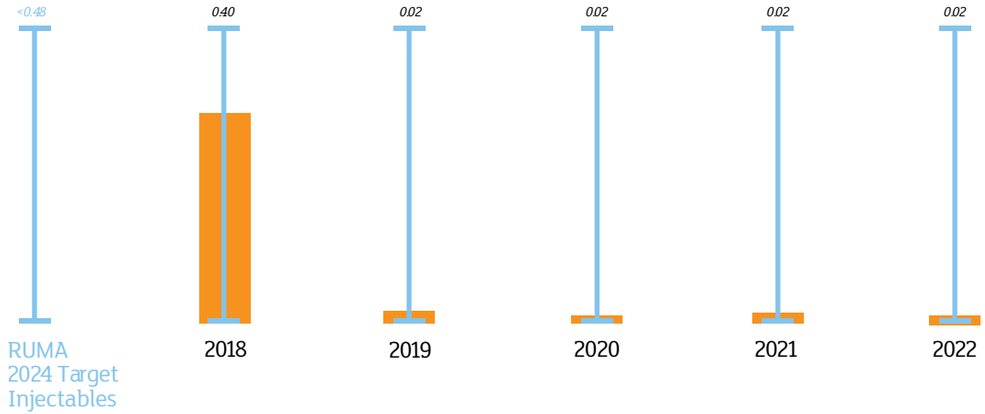
Our major supplier of British Cheddar launched a Sustainability Pledge in March 2020 which 95% of farmers have signed up to so far. The pledge contains specific guidance around the recording, monitoring and sharing of total antibiotic usage. Our supplier also has an Antimicrobial Stewardship scheme, which around 93% of farmers are engaging with.

Total Antibiotic Use

(mg/kg)

Critically Important Antibiotic(CIA) Use

(mg/kg)



Colistin not used

at all between 2018-2022

Data Coverage >70% by Sainsbury's british cheddar

Pork - Our key achievements

Sainsbury's Pork Development Group was set up in 2009 to allow farmers to share best practice and benchmark their performance against each other. The group currently has 9 members who between them provide the majority of our fresh pork products.

Antibiotic use was below the 2020 RUMA target of 99mg/PCU 2017-2021, which is an impressive achievement given usage across the wider UK pork industry currently remains above the target (105 mg/PCU in 2020). This reflects the fact our farmers are industry leading farmers who are committed to maintaining high animal health and welfare standards and using antibiotics responsibly.

In line with new targets, we now compare usage to the 2024 RUMA targets. Although we saw the group exceed this ambitious target in 2021, we are very pleased that the group are now below the 2024 target of 73mg/kg.

The group has also made good progress on reducing critically important antibiotics in recent years, and is working with their vets to reduce use further where this is possible. It is worth noting that this is our only species where Colistin has been used since 2017 and as Colistin has not been used in the last 6 years we have decided as of 2024 to prohibit it's use across all of our own brand supply chains. If due to exceptional circumstances a veterinary surgeon prescribes Colistin as an absolute last resort, Sainsbury's agriculture team must be notified alongside extensive justification of why Colistin is required instead of other available antibiotics.

Total Antibiotic Use

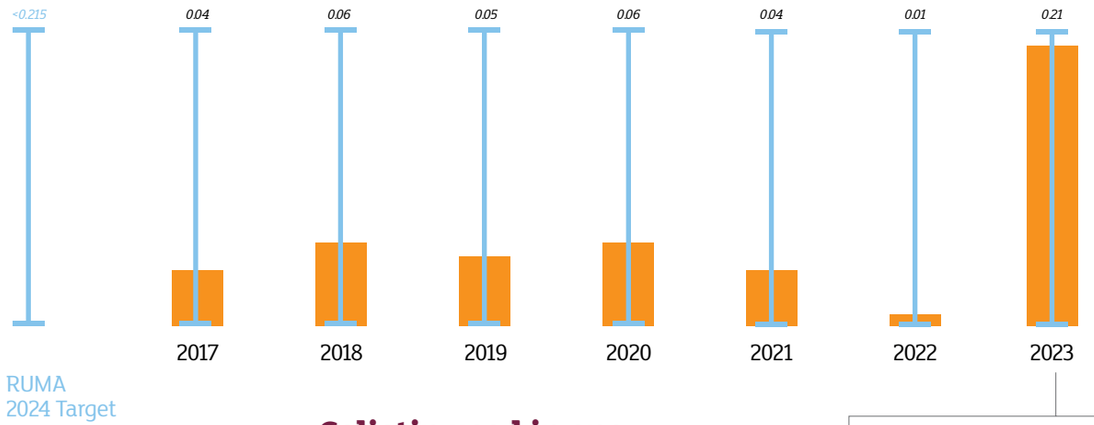
(mg/kg)

reduction between 2017-2023

↓ 61%

Critically Important Antibiotic(CIA) Use

(mg/kg)



Colistin not used

at all between 2018-2023

Colistin used in one isolated event in 2017,

where it was deemed by the veterinary team to be the only available treatment to protect animal welfare

CIA use on average remained low across our fresh pork in 2023. The increase in usage can be pinpointed to one farm where it was deemed necessary to utilise CIAs to ensure the health and welfare of the animals

Data Coverage

100% fresh pork

Turkey - Our key achievements

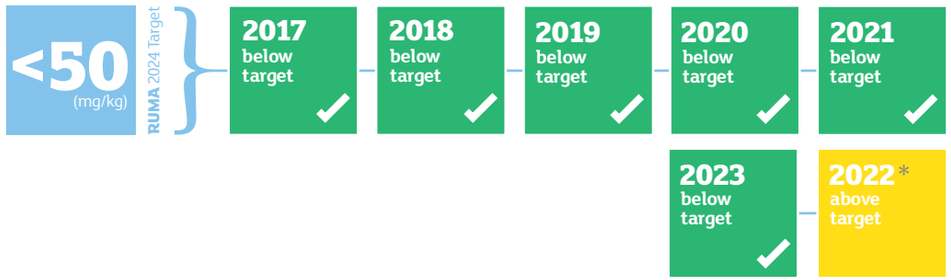
Our poultry farmers were the first to start monitoring and recording antibiotic usage back in 2012. Since then they have made great progress reducing antibiotic use which was below the 2020, and now 2024 RUMA targets between 2017 and 2021. In 2022, we saw a specific disease challenge in our turkey supply chain, resulting in increased antibiotic usage to protect bird welfare*.

Many of our farms have transitioned to using hot water heating to keep the birds warm, which keeps the litter much drier and reduces the bacteria they come into contact with. There has also been a focus on improving biosecurity, water quality and promoting a healthy gut microbiome, which have all improved bird health and reduced the need for antibiotic treatment.

The use of critically important antibiotics is minimal in our poultry supply chains, with our chicken and duck suppliers not using them at all. There is a need to use some of these antibiotics in our turkey supply chain, because there are some specific turkey diseases where these are the only treatment options which are effective. For this reason it is difficult to completely eliminate critically important antibiotics, but in 2021 this was achieved, after making good progress in the preceding years.

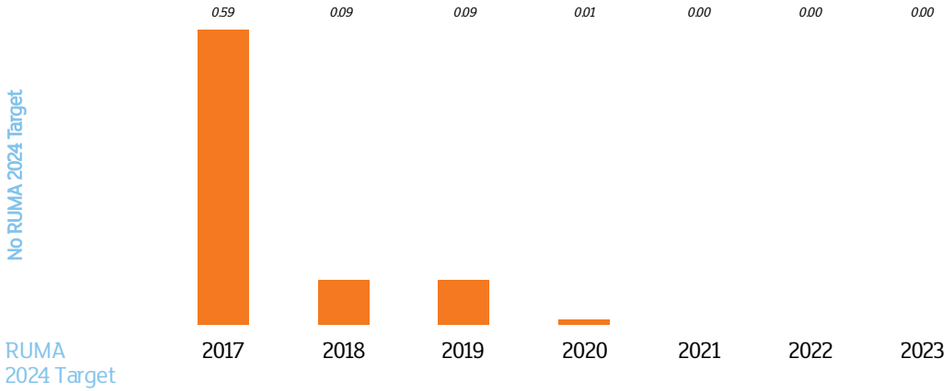
Total Antibiotic Use

(mg/kg)



Critically Important Antibiotic(CIA) Use

(mg/kg)



Colistin not used

at all between 2017-2023

Data Coverage 100% fresh turkey

Data Coverage 100% fresh chicken

Total Antibiotic Use
(mg/kg)

<25 (mg/kg) RUMA 2024 Target

- 2017 below target ✓
- 2018 below target ✓ representative of 99.1% of our supply
- 2019 below target ✓
- 2020 below target ✓
- 2021 below target ✓
- 2022 below target ✓
- 2023 below target ✓

Our average antibiotic use was <10mg/PCU (2017-2023), achieved by our suppliers focusing on health planning, feed quality and biosecurity to deliver continuous improvements to bird health.

Critically Important Antibiotic(CIA) Use

↓ **CIAs not used**
at all between 2017-2023

Total Antibiotic Use
(mg/kg)

<5 (mg/kg)* Sainsbury's Target

- 2017 below target ✓
- 2018 below target ✓
- 2019 below target ✓
- 2020 below target ✓
- 2021 below target ✓
- 2023 below target ✓
- 2022 below target ✓

Critically Important Antibiotic(CIA) Use

↓ **CIAs not used**
at all between 2017-2023

Data Coverage 100% fresh duck

Eggs - Our key achievements

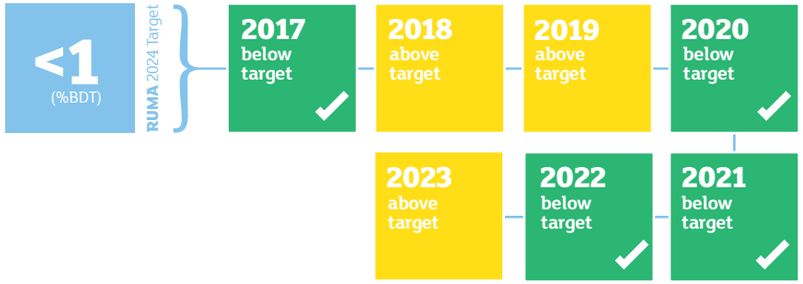
All of our shell eggs are sourced from RSPCA Assured, free-range farms where the birds are free to roam in outdoor ranges.

We have been working with the Sainsbury's Egg Development Group to monitor antibiotic usage since 2017, during which time we have completely eliminated the use of critically important antibiotics. Our total antibiotic use was initially below the 2020/2024 RUMA target in 2017, but increased in 2018/2019 to be slightly above the 1% target as a group average. We work closely with each of our suppliers to monitor antibiotic use, and could therefore see this increase was driven primarily by one supplier who had some specific disease challenges. They had been working closely with their vet to address these, and as a result their vet prescribed an increased amount of antibiotics to improve the health of the hens, and protect their welfare. We are pleased to report that from 2020, total antibiotic usage has reduced to below the 2020/2024 RUMA target once again.

We have recently created a pioneering hen health and welfare database, a first of it's kind as far as we're aware, so are confident that this will enable us to reduce antibiotic use in future and ensure we have happy and healthy free-range hens.

Total Antibiotic Use

(% Bird Days Treated)



Usage was above RUMA target for 2018, 2019 and 2023 due to disease challenges which meant antibiotics were needed to protect bird welfare.

Critically Important Antibiotic(CIA) Use

CIAs not used

at all between 2017-2023

Lamb & Beef - Our key achievements

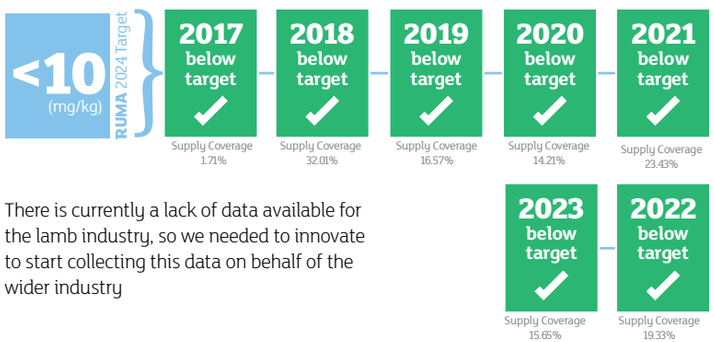
Sainsbury's have been at the forefront of industry efforts to gather reliable data on antibiotic use in the UK lamb and beef sectors.

There is currently a lack of available data across the sectors, and our datasets are one of only a handful of reliable datasets which have been included in the national electronic medicines database which launched in 2021. The data we have collected is invaluable to begin understanding current usage across the UK, and establish baseline data for farmer benchmarking and future reductions to be measured against.

We are committed to continue working with our supply chain partners to increase both the quality and quantity of data available in these sectors, and engage the wider lamb and beef farming base on the important issue of antibiotic resistance and responsible use.
It is promising to see that our datasets to date show relatively low overall usage, sitting below the original 2020 RUMA targets, and also minimal use of critically important antibiotics in these sectors.

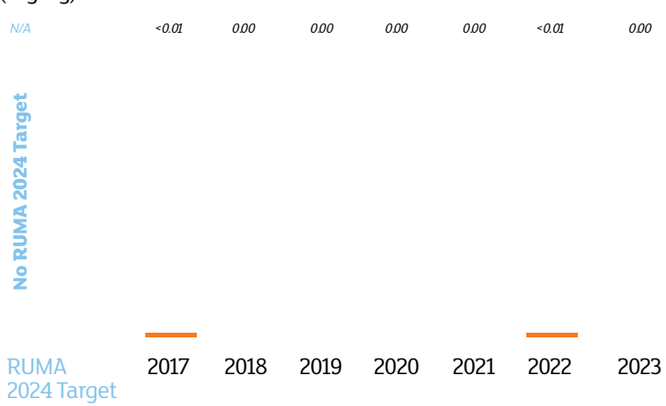
Lamb

Total Antibiotic Use
(mg/kg)



There is currently a lack of data available for the lamb industry, so we needed to innovate to start collecting this data on behalf of the wider industry

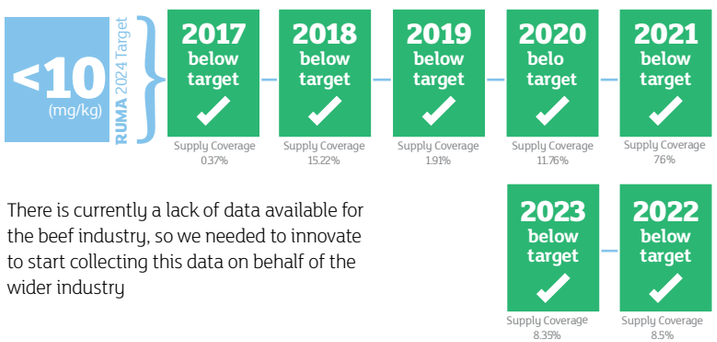
Critically Important Antibiotic(CIA) Use
(mg/kg)



Colistin not used
at all between 2017-2023

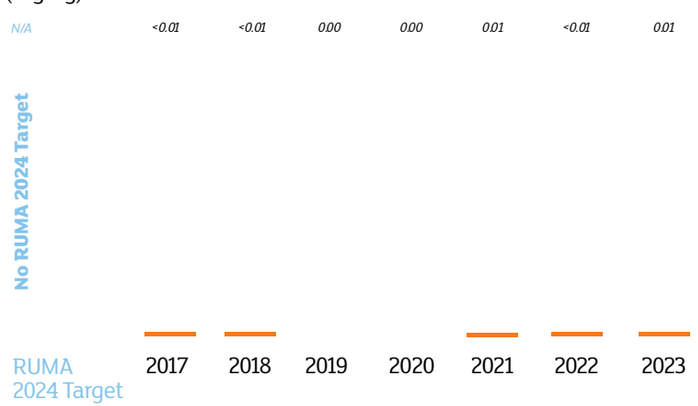
Beef

Total Antibiotic Use
(mg/kg)



There is currently a lack of data available for the beef industry, so we needed to innovate to start collecting this data on behalf of the wider industry

Critically Important Antibiotic(CIA) Use
(mg/kg)



Colistin not used
at all between 2017-2023

Negligible amounts of CIAs used

Seafood - Our key achievements

All of our salmon and trout is sourced from RSPCA Assured farms,and has been for many years. Monitoring antibiotic use in aquatic species can be a complex process which needs careful interpretation.

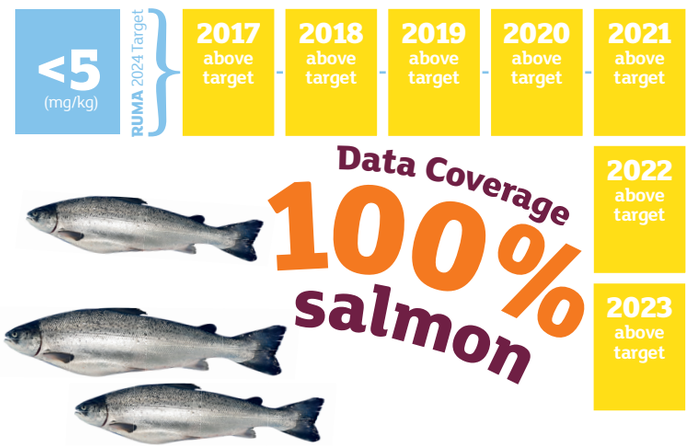
Unlike land-based species, fish health is highly linked to changing environmental conditions such as water temperature and the subsequent development of algal blooms. This means antibiotic use varies considerably between years due to the unpredictability of the natural environment, and a small number of isolated incidents can skew results disproportionately

The salmon sector set itself ambitious 2020/2024 RUMA targets, but is yet to meet their targets due to the reasons outlined above. Our supply base is investing in preventive strategies such as new vaccines and diagnostic tools, enhanced biosecurity and environmental monitoring, and novel management strategies, all of which are contributing to a reduction in the use of antibiotics.

We remain committed to reducing antibiotic use in our salmon supply chain.

Salmon

Total Antibiotic Use
(mg/kg)



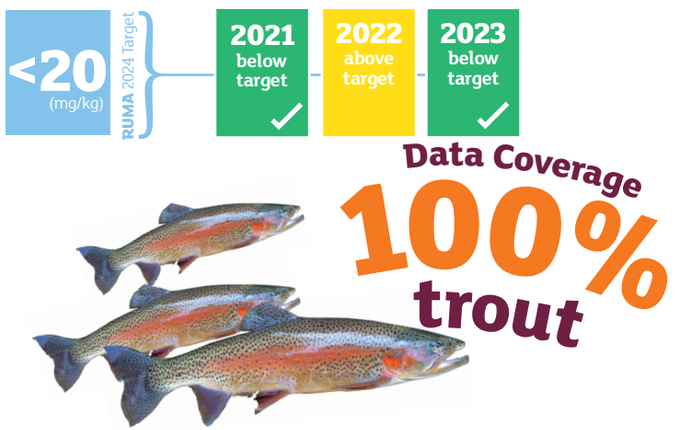
Critically Important Antibiotic(CIA) Use

CIAs not used
at all between 2017-2023

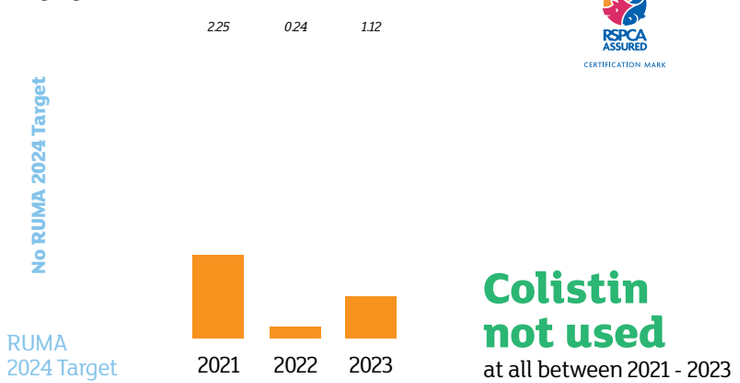
↓ 72% reduction in total antibiotic use since 2021

Trout

Total Antibiotic Use
(mg/kg)



Critically Important Antibiotic(CIA) Use
(mg/kg)



Colistin not used
at all between 2021 - 2023

Seafood - Our key achievements

Sea bream

Total Antibiotic Use
(mg/kg)

Data Coverage
100%
sea bream

No antibiotics used in 2023 ✓

Sea bass

Total Antibiotic Use
(mg/kg)

Data Coverage
100%
sea bass

No antibiotics used in 2023 ✓

Seafood - Our key achievements

Prawns

Total Antibiotic Use
(mg/kg)

Data Coverage
100%
prawns

No antibiotics used in 2023 ✓

Basa

Total Antibiotic Use
(mg/kg)

Data Coverage
100%
basa

No antibiotics used in 2023 ✓

Prawn image by topntp26 on Freepik

Basa image: Vidyan and Kamat