

# Lidl germ scandal (Germany)

## Investigation report

### Key Takeaways

- This investigation aims to provide a different perspective to the Lidl chicken scandal by examining food safety concerns rather than animal suffering. ASF commissioned a lab analysis carried out in January 2023.
- It examined 51 chicken products from Lidl Germany's own brand "Metzgerfrisch" and found that 71% of the samples were contaminated with ESBL-producing and thus antibiotic-resistant bacteria.
- This highlights the need to reduce antibiotic use by improving animal welfare to prevent the emergence of antibiotic-resistant bacteria.
- Lidl should join the European Chicken Commitment to keep their customers and everyone safe.

### Why germs?

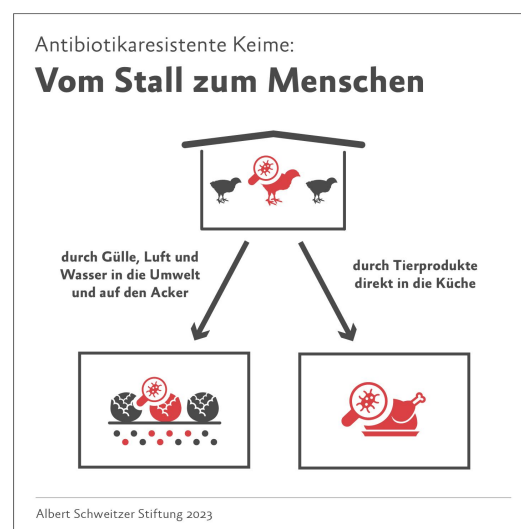
The goal of this investigation is to provide another lens to the Lidl chicken scandal. All investigations so far have been focused on proving the animal suffering caused by Lidl chicken.

Lidls customers care more about Food safety than about animal suffering. And Lidl cares most about what their customers think about their product quality. We believe adding this lens will increase the pain for Lidl and also re-ignite the media and public interest.

### Graphics



Lab analysis of Lidl chicken:  
71% contaminated with resistant bacteria



Antibiotic resistant germs/pathogens:  
From far to food  
by waste, air and water into the environment  
and on the fields  
through animal products directly into the kitchen

## Introduction

The spread of resistant bacteria via poultry meat is an increasing concern. Studies by various organizations such as the German Federal Institute for Risk Assessment, Germanwatch, BUND and the Deutsche Umwelthilfe indicate that poultry meat is increasingly contaminated with resistant bacteria.

Antibiotic resistance is now among the top ten causes of death worldwide, killing more than 1.2 million people in 2019. European estimates suggest that around 670,000 people are affected by multiresistant bacteria each year, of which around 33,000 die. The situation in Germany is worse than recorded due to a lack of data. One major cause of the spread of antibiotic resistance is the overuse of antibiotics in human and veterinary medicine, poor hygiene in hospitals and animal agriculture. The increase in chicken meat production in Germany by about 52% from 2006 to 2021 (to around 1.6 million tons) has significantly increased the risk of the spread of resistant bacteria.

Investigations of chicken farms supplying Lidl stores in Germany, Spain, Italy and Austria have revealed shocking conditions and treatment of the animals, leading to concerns about their impact on consumer health.

So we at ASF went ahead and contracted a laboratory to check Lidl Germany's chicken.

## Methods

In January and February 2023, a total of 51 chicken products from Lidl were examined. The products were purchased directly from Lidl by the laboratory's field staff in strict compliance with the cooling chain and examined by the laboratory shortly afterwards. The aim was to buy and act as Lidl customers would: Buy and prepare at home.

The 51 samples were subdivided among eight different types of chicken products from the self-service section (pre-packaged). All products were Lidl Germany's own brand "Metzgerfrisch" with the label "Stallhaltung Plus" (Haltungsform 2) :

- »Frische Hähncheninnenfilets« der Marke »Metzgerfrisch«
- »Familienpackung Frisches Hähnchengeschnetzeltes«
- »Hähnchen Minutenschnitzel aus Brustfilet«
- »Familienpackung Frische Hähnchenbrustfilet«
- »Frische Hähnchenministeaks (aus Brustfilet) «
- »Frische Hähnchenschenkel« der Marke »Metzgerfrisch«
- »Frische Hähnchenflügel« der Marke »Metzgerfrisch«
- »Frische Hähnchenoberkeulen« der Marke »Metzgerfrisch«



The products came from eight randomly selected Lidl shops in different cities and regions in Germany: Oldenburg (Lower Saxony), Paderborn (North Rhine-Westphalia), Bautzen (Saxony), Fellbach (Baden-Württemberg), Ostfildern (Baden-Württemberg), Eisenach (Thuringia) and in Leipzig (Saxony).

- Lidl, Cloppenburger Straße 405, 26133 Oldenburg / Niedersachsen
- Lidl, Dessauer Straße 2, 33106 Paderborn / Nordrhein-Westfalen
- Lidl, Neuhäuser Straße 127, 33102 Paderborn / Nordrhein-Westfalen
- Lidl, Neusalzaer Straße 39a, 02625 Bautzen / Sachsen
- Lidl, Stuttgarter Straße 66, 70736 Fellbach / Baden-Württemberg
- Lidl, Edith-Stein-Straße 5, 73760 Ostfildern / Baden-Württemberg
- Lidl, Am Stadtweg 6, 99817 Eisenach / Thüringen
- Lidl, Zschochersche Straße 79, 04229 Leipzig / Sachsen

The laboratory was commissioned to test the meat for single- and multi-resistant germs, antibiotic residues, salmonella, campylobacter and other faecal germs.

## Results

### Main Finding:

A concerning number of ESBL-producing and thus antibiotic resistant bacteria were found in 71% of chicken meat samples. Escherichia coli was the most commonly found ESBL-producing bacteria (75%).

### Further findings:

In addition, the faecal germ intestinal enterococci were detected in 26% of the 51 samples. Campylobacter and Salmonella, which are pathogenic, were found in 18% and 2% of the samples, respectively. Only 6 out of 51 samples (12%) of were considered uncontaminated.

These results suggest a significant contamination of the majority of chicken meat products with potentially dangerous pathogens, posing a risk to consumers. The investigation shows that Lidl's chicken contaminated with antibiotic-resistant bacteria is sold to the public.

**Table: Detailed results**

Parameter / method	Results		Comment on methods
ESBL	nothing detected: 15 <b>detected in 10g: 36</b>	29% <b>71%</b>	ESBL detection on ESBL plates and peptone water
intestinal Enterococci	<100 Germs/g: 38 <b>100 Germs/g: 6</b> <b>300 Germs/g: 2</b> <b>400 Germs/g: 3</b> <b>500 Germs/g: 1</b> <b>2500 Germs/g: 1</b>	74% <b>12%</b> <b>4%</b> <b>6%</b> <b>2%</b> <b>2%</b>	Determination of Enterococcus faecalis and Enterococcus faecium in meat and meat products on selective plates  Spatula method → CFU-mL determination  Detection limit: <100 germs/g
Salmonellen	nothing detected: 50 <b>detected in 25g: 1</b>	98% <b>2%</b>	Counting of Salmonella on selective medium No Serotyping of Salmonella
thermophile Campylobacter	nothing detected: 42 <b>detected in 25g: 9</b>	82% <b>18%</b>	certain species are subject to notification of the authorities
MALDI-TOF Analysis (of the ESBL-positive samples)	<b>Alcaligenes faecalis: 1</b> <b>Escherichia coli: 27</b> <b>Pseudomonas aeruginosa: 2</b>	<b>3%</b> <b>75%</b> <b>5%</b> <b>8%</b>	MALDI-TOF database matching was only done for the samples that had a positive ESBL detection, to determine the exact bacteria strain strains.

	<i>Serratia fonticola</i> : 3 <i>Pseudomonas lundensis</i> : 1 <i>Pseudomonas mosselii</i> : 1 <i>Pseudomonas otitidis</i> : 1	3% 3% 3%	The percentages refer to the ESBL detected in 36 samples.
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## Remarks - How to Use this material

All this information is to be kept confidential until 10 May 2023, 07:00h CEST.

It can be publicly communicated that the Albert Schweitzer Foundation commissioned this investigation.

The name of the laboratory is generally NOT communicated publicly. We assume that the laboratory is afraid of losing customers from the poultry industry and the food retail trade. For this reason, most laboratories had refused such an investigation in advance.

## Conclusions

Antibiotic-resistant bacteria are spreading and the effectiveness of antibiotics is decreasing, leading to an increase in antibiotic use and further promoting the growth of resistant bacteria. Developing new reserve antibiotics is expensive and time-consuming, so reducing antibiotic use in agriculture is urgently needed. German livestock receives about 670 tons of antibiotics per year, with an average of 88 milligrams of antibiotics per kilogram of meat.

Lidl's chicken meat is heavily contaminated with dangerous bacteria, including multiresistant germs and other pathogens. Overuse of antibiotics in chicken farming contributes to the spread of dangerous bacteria and the emergence of resistance.

These bacteria can affect all of us, not just Lidl's customers, as resistant germs can spread through wastewater or ventilation systems into the environment. Cooking meat thoroughly can kill the bacteria, but contaminated surfaces and utensils can also spread germs, making good kitchen hygiene essential.

To address this issue, we need to reduce the use of antibiotics in livestock by improving animal welfare. Another investigation by Germanwatch showed that organic chicken meat had fewer dangerous germs than conventional meat<sup>1</sup>.

Lidl should join the European Chicken Commitment and make necessary changes to reduce the number of bacteria.

<sup>1</sup> <https://www.faz.net/aktuell/wirtschaft/unternehmen/discounter-antibiotikaresistente-keime-auf-iedem-zweiten-haehnchen-16143865.html>

## Appendix - Detailed info to the bacteria

The largest group of contaminations involves **ESBL-producing bacteria**, particularly ESBL *E. coli*. These bacteria produce an enzyme that makes them resistant to common antibiotics such as penicillin and cephalosporin. ESBL genes are located on plasmids, enabling their quick dissemination among species. Infections with ESBL carriers can only be treated with reserve antibiotics, and even healthy people can carry them in their gut. ESBL-producing *E. coli* is a significant problem in human medicine, leading to urinary tract infections, infections of other organs, and sepsis. Other ESBL-producing bacteria include *Pseudomonas* spp., *Serratia* spp., and *Alcaligenes faecalis*, which can cause infections in immuno-compromised patients.

**Intestinal enterococci**, such as *Enterococcus faecalis* and *Enterococcus faecium*, are normal gut bacteria that can cause nosocomial infections and transmit resistance. Vancomycin-resistant enterococci (VRE) can be extremely difficult to treat, as they often have multiple resistances. While VRE in the US is mostly found in hospitals, in Europe, agricultural livestock and healthy people are a significant reservoir. The massive use of Avoparcin, a related antibiotic, as a growth enhancer in animal farming in Europe explains this phenomenon. Although Avoparcin has been banned in the EU since 1997, VRE remains prevalent.

**MRSA** (methicillin-resistant *Staphylococcus aureus*) has only been presumptively detected once. Although its impact on human medicine is declining, MRSA still caused around 100,000 deaths in 2019. These bacteria can colonize healthy people and transfer from person to person and from animals to humans, leading to infections of almost all organs via wounds, catheters, and other foreign bodies.

**Campylobacter** is the most common bacterial notifiable disease in Germany, causing 60,000-70,000 reported cases per year. The infection is mainly caused by consuming contaminated food, particularly poultry meat. The bacteria are transferred from the animal's gut content to the meat during the mechanical slaughtering process. Even a small number of bacteria can cause infection, and the symptoms range from asymptomatic infection to severe diarrhea, fever, and general illness, leading to complications like joint inflammation and Guillain-Barre Syndrome. Antibiotic treatment is necessary in severe cases, but antibiotic resistance is common. The infection is usually transmitted from animals to humans, making it a typical zoonosis.

**Salmonella** infection is also a typical foodborne illness, and the bacteria can multiply in poorly cooled food. Mild intestinal infections do not require antibiotic treatment, but in immunocompromised people, salmonella can cause severe illness or even sepsis and affect almost all organs. Frequent antibiotic resistance can make it challenging to administer appropriate antibiotic treatment.