BEUC Campaign on Antimicrobial Resistance

Promoting the 'One Health' approach to Protect Public Health

Consumer Organisations' Campaign on Food Systems and Antimicrobials[1] Use in Livestock

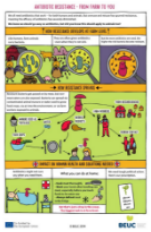
Our campaign's aim

1. Where is my meat from?
2. Antibiotic resistance
3. Honest meat labels

Can we trust our meat when animals reared for consumption are inappropriately given antibiotics? Inappropriate use of antibiotics swells the threat of antibiotic resistance.

25,000 people in the EU die from antimicrobial resistance each year. While antibiotics should not be a sudden reflex when we are ill, this needs to apply to farm animals also.

EUROPEAN ANTIBIOTIC AWARENESS DAY
A European Health Initiative



Current EU rules on antibiotic usage on livestock are inadequate. While antibiotic use for growth promotion was banned in the EU in 2006, animals are still given antibiotics to prevent sickness although the whole herd is healthy.

Overuse and misuse of antibiotics among livestock generates resistant bacteria which can be transmitted from a farm to you by multiple routes, including food. These bacteria may also transfer their drug-resistance to other germs. So antibiotics eventually become useless when we need them.

If we are to curb resistance, the new EU proposals[1] should clearly prohibit administration of antibiotics to healthy animals. Also, those antibiotics which we crucially need to treat humans must not be given to animals.

Click the prescription to see our recommendations to EU decision makers.

[1] European Commission proposals on veterinary medicines and medicated feed, released on September 10, 2014.

Articles from our members:
Consumentenbond (Netherlands) - beef tests - chicken tests
DECO (Portugal) - Antibiotic resistance
FRC (Suisse)
OCU (Spain)
Sveriges Konsumenter (Sweden)
Test-Achats (Belgium)

[1] BEUC work on antimicrobial resistance focuses on antibiotics. Therefore the terms 'antimicrobial resistance' and 'antibiotic resistance' are used interchangeably in this document.

Contents

1) Background: The interrelationship between food systems, antimicrobial resistance and human health

***Relevance**: Any antimicrobials use has the potential to spur antimicrobial resistance and render these precious drugs ineffective for humans. Consequently it is critical to make sure that no sector misuses or overuses antimicrobials. In this particular case, the focus is on the livestock sector and the risk that antibiotic resistant bacteria develop and spread from farming facilities through the environment.*

If BEUC and its members have long been campaigning to raise awareness about the dangers related to overconsumption of antibiotics by consumers, we also believe that the overuse of antibiotics at farm level and the risk of transmission via food products must be appropriately addressed. **Contamination can occur by consumption of meat and dairy products.** Indeed the World Health Organisation (WHO) has identified food products of animal origin as the main potential route of contamination for transmission of resistant bacteria and resistant genes from food animals to people. **But contamination can also occur through spread of faeces and manure which can end up on fruits and vegetables, well as in soil and rivers. Direct contact with animals can also be of significance depending on the type of bacteria. In addition, resistant genes can move from resistant bacterium in animals to a bacterium pathogenic to people.**

If we acknowledge the fact that it is difficult to quantify transmission potential between antibiotic resistant bacteria in livestock and antibiotic resistant bacteria in humans, **it is now recognised that the intensive use of antibiotics in food animals adds to the burden of antibiotic resistance in humans.** More and more scientific studies demonstrate a stronger link between the two than previously thought and a recent study showed genetic similarities between resistant isolates found in chicken meat and humans. **If the risk posed to humans by resistant organisms from farms and livestock cannot be precisely quantified the link between antibiotic use in food producing animals and the occurrence of antibiotic-resistant infections in humans is now undeniable.**

In addition, the WHO highlighted the fact that the use of antimicrobials, including antibiotics, in livestock still outweighs use for humans in several EU countries. For instance in Germany, according to data collected by the Federal Office of Consumer Protection and Food Safety in 2011, 1.734 tons of antimicrobial agents were supplied by pharmaceutical companies to German veterinarians while only around 800 tons were used in human medicine. This is also the case in the United States as shown by a recent government-funded report which found that more kilograms of antibiotics are sold in the US for food-producing animals than for people. The recent Eurobarometer on antimicrobial resistance also reports that, on a global scale, the bulk of antimicrobials are not consumed by humans, but by animals. Worryingly, it also indicates that between 2010 and 2030, global consumption of antimicrobials in the livestock sector is projected to increase by about 67% [2].

The relationship between antibiotic use in animal husbandry and the increase in resistance in bacteria pathogenic to humans is of particular concern because the same classes of antibiotics are used in both animal and human medicine and similar resistance mechanisms have emerged in both sectors. For instance the use of enrofloxacin, a fluoroquinolone, in food animals has resulted in

[2] AMR: a major European and Global challenge < http://ec.europa.eu/dgs/health_food-safety/docs/amr_factsheet_en.pdf>

the development of resistance in *Salmonella* and *Campylobacter* to ciprofloxacin, a fluoroquinolone used to treat people. Therefore it is urgent to combat this growing threat by adopting measures to regulate the use of antibiotics at farm level and decrease the prevalence of these bacteria in food-producing animals and eventually in food products. This is particularly relevant knowing that bacteria most frequently causing food-borne infections, such as *Salmonella* and *Campylobacter*, exhibit significant resistance to common antimicrobials[3].

2) Case study: BEUC members tests investigating the presence of antibiotic resistance bacteria in raw meat products

Sustainability*: The tests carried out by BEUC members can be replicated by other organisation, including food safety authorities, to further evaluate the extent to which foodstuff can act as a transmission pathway for antibiotic resistant bacteria. It can also influence testing priorities. For instance BEUC research showed that poultry meat is much more contaminated with antibiotic resistant bacteria than other types of meat, which can orientate the research into this specific type of meat. The profile of the bacteria found in the samples can also help public health and food safety authorities identify certain trends and assess the need to restrict the use of certain antibiotics in some species.*

Intersectoral collaboration*: The tests have encouraged synergy between human health and animal health experts by raising the issue of the potential transmission risks. It has spurred discussions not only about the contamination rates, but also about the difficulty to identify at what point contamination occurred and the need to look into the many transmission routes possible. Therefore BEUC tests results have reinforced the idea that research looking into the interaction between animal and human health is urgently needed. At the end of the day, it has generated dialogue between different organisations and reinforced the need to adopt a comprehensive 'One Health' approach.*

As the presence of antibiotic resistant bacteria in food-producing animals has increasingly been recognised of particular concern for public health, **nine BEUC members have decided to undertake a series of tests looking for the presence of such bacteria in a wide range of raw meat products**.

Samples were collected in nine countries (Belgium, France, Germany, Italy, Portugal, Spain, Sweden, Switzerland and the Netherlands) in 2013 and 2014. The products, ranging from chicken fillets to pork chops, were bought in supermarkets but also in retail stores and butchers.

Overall BEUC member tests showed a high prevalence of antibiotic-resistant bacteria in raw meat products. In six countries more than 70% of the products tested were contaminated with antibiotic resistant bacteria. Eight countries reported that half of the samples contained these harmful bacteria.

A very large percentage of samples were found to contain antibiotic resistant bacteria, among which **ESBL-forming bacteria, methicillin-resistant *Staphylococcus* (MRSA) and resistant *Campylobacter*** which all cause very serious infections with limited treatment options. Multiresistant bacteria, which

[3] All references can be found in BEUC Position Paper 'Antibiotics Use in Livestock: Time to Act'

are of particular concern as they exhibit resistance to several classes of antibiotics, were also discovered in some products.

BEUC member tests results are summarised in Annex 1 of BEUC Policy Paper on Antimicrobial Resistance. The table depicts the results by species (poultry and beef/veal) and by bacteria type (ESBL-forming bacteria, MRSA, resistant *Campylobacter*). It aims to demonstrate the high prevalence of antibiotic resistant bacteria in meat products in each country. As such it is not designed to compare situations in different countries and estimate average contamination levels in the EU[4].

This is not the first time consumer organisations perform tests and find antibiotic resistant bacteria in food. **Yet this is the first initiative launched on such a scale which depicts how serious the situation actually is.** As a consequence, consumer organisations have called for strong political commitments from national and EU policy-makers.

3) Action proposed: BEUC Campaign on Antimicrobial Resistance

***Effectiveness**: The campaign's objective was to highlight the need to have EU wide rules regulating the use of antibiotics in livestock, and in particular phasing out the routine preventive use of antibiotics, determining if certain antibiotics should only be used in human medicine and set up consumption databases across the EU. Having EU Regulation in place guarantees that all countries apply the same concrete rules to limit the risk antibiotic resistant spread. At the end of the day, it creates a level-playing field ensuring that all Member States apply the same minimum standards.*

BEUC and its members believe a series of measures should urgently be taken at European level to ensure antibiotics are responsibly used in livestock. Indeed if consumers organisations will continue to test products and to provide advice to consumers on ways to avoid contamination, such as thorough cooking of the meat, careful handling of raw products to avoid cross-contamination and frequent hand washing, full responsibility should not fall on consumers who should be provided with safe food products. Indeed as far as food safety is concerned, **the remaining efforts to achieve are at farm level**.

To raise awareness among consumers and maximise our policy impact, **BEUC and its members have launched a campaign on antibiotic resistance.** The campaign was based on our policy paper which contains several recommendations to reduce the unnecessary use of antibiotics in livestock and eventually get a chance to win the war against antibiotic resistance. The long-term objective was to raise awareness about the need to include adequate provisions in the Veterinary Medicines and Medicated Feed laws. This was summarised in a Fact Sheet issued for the occasion. A short policy position commenting on the two draft laws was also published in June 2015 as a follow-up to the campaign.

[4] All references can be found in BEUC Position Paper 'Antibiotics Use in Livestock: Time to Act'

4) Methodology: Communication and Policy Work

Innovation and creativity: *Two communication tools were developed for the campaign. Our infographic 'Antibiotic Resistance: From farm to you' explained in simple graphic terms how bacteria can become resistant to antibiotics and eventually spread from farms to humans through the environment via a myriad of ways. Unlike most infographics, BEUC's infographic did not focus on number and percentages. Instead it followed the journey of a bacterium, from its transformation into a bacterium resistant to antibiotics at the farm to the bed of a sick patient. It was accompanied by short texts telling the story of the bacterium. In addition, a 'BEUC Prescription' was sent to national and EU policy-makers. It contained three key policy recommendations described as 'tough remedies to tackle antibiotic resistance' accompanied by the message 'The health of consumers is in your hands'. It was used to reinforce the message that legislators have the power to change rules to fight antimicrobial resistance. The two campaigning tools were disseminated via regular channels such as emails and meetings but also via social media. Our full Twitter feed about the campaign is available here.*

On European Antibiotic Awareness Day, BEUC and its national members kicked off a campaign urging the EU institutions to restrict antibiotic use in livestock so as to reduce resistance and protect human health.

It was decided to centralise action at EU level, given that national rules are inadequate to address this cross-border issue. So far several EU countries have set up different policies to tackle this burning problem, with specific rules on issues such as the type of antibiotics allowed in both veterinary and human medicine and the kind of data collected by national authorities. Yet national policies only have a limited impact and their effectiveness can be reduced as the population might still be exposed to antibiotic resistant bacteria through imported food from other EU countries.

A campaign page was created on BEUC website and a press release was sent to interested journalists. The campaign generated a lot of media attention as **the campaign was quoted in 50 articles from all across Europe**. An op-ed from our Director General about the campaign was also published in Euractiv.

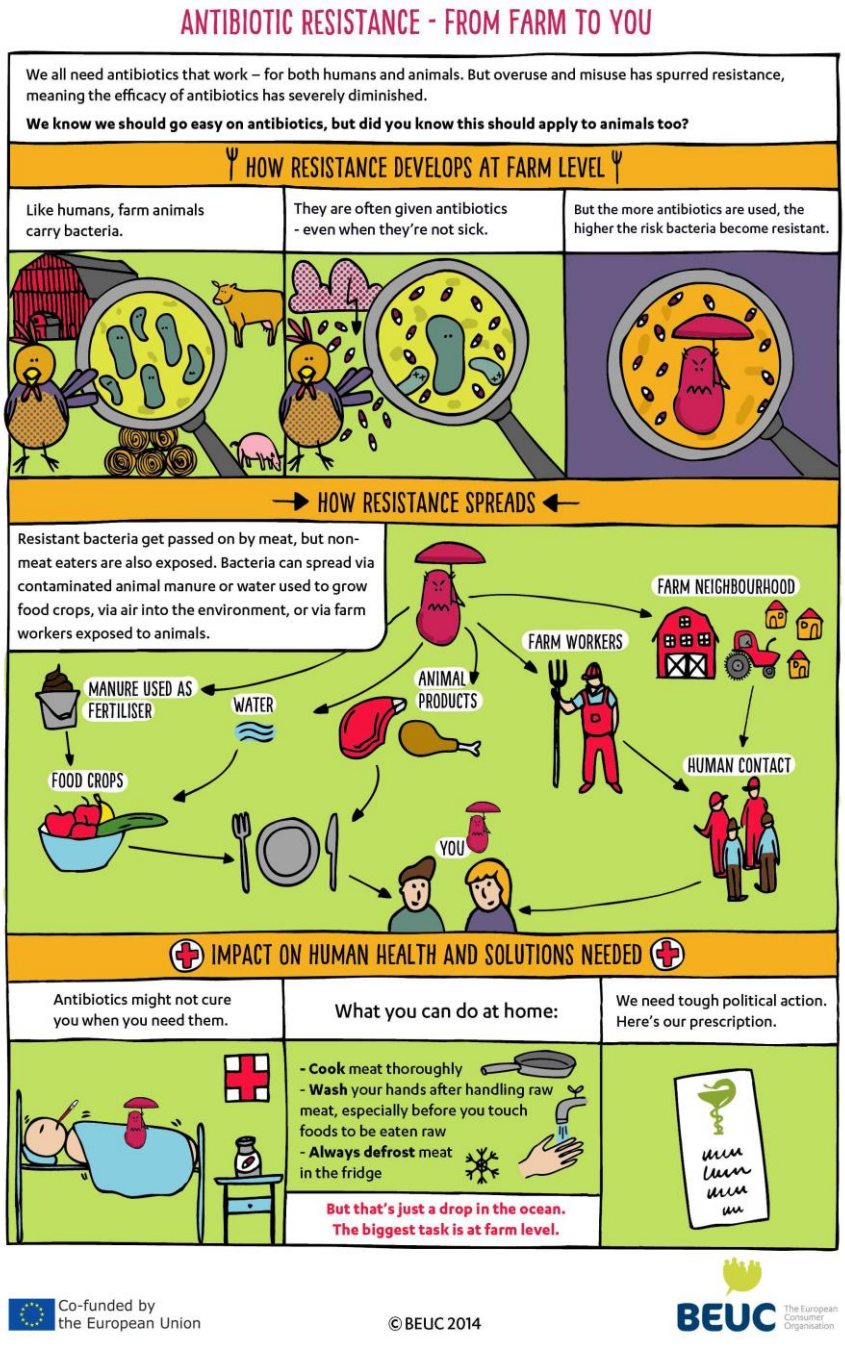
Several innovative communication tools were developed to strengthen our message. They were shared with policy-makers, industry and international organisations. They were also used on social media including during Twitter chats including those organised by ECDC and WHO.

- An infographic, translated in eleven languages, was shared with EU and national policy-makers, international public health and food safety authorities (i.e. WHO, FAO and OIE) and other interested organisations (i.e. industry, NGOs, civil society, research centres, universities). **BEUC contacted EU and Brussels-based stakeholders while our members disseminated the infographic via their magazines and websites[5] and shared the campaign's communication materials with national public health authorities and policy-makers.**

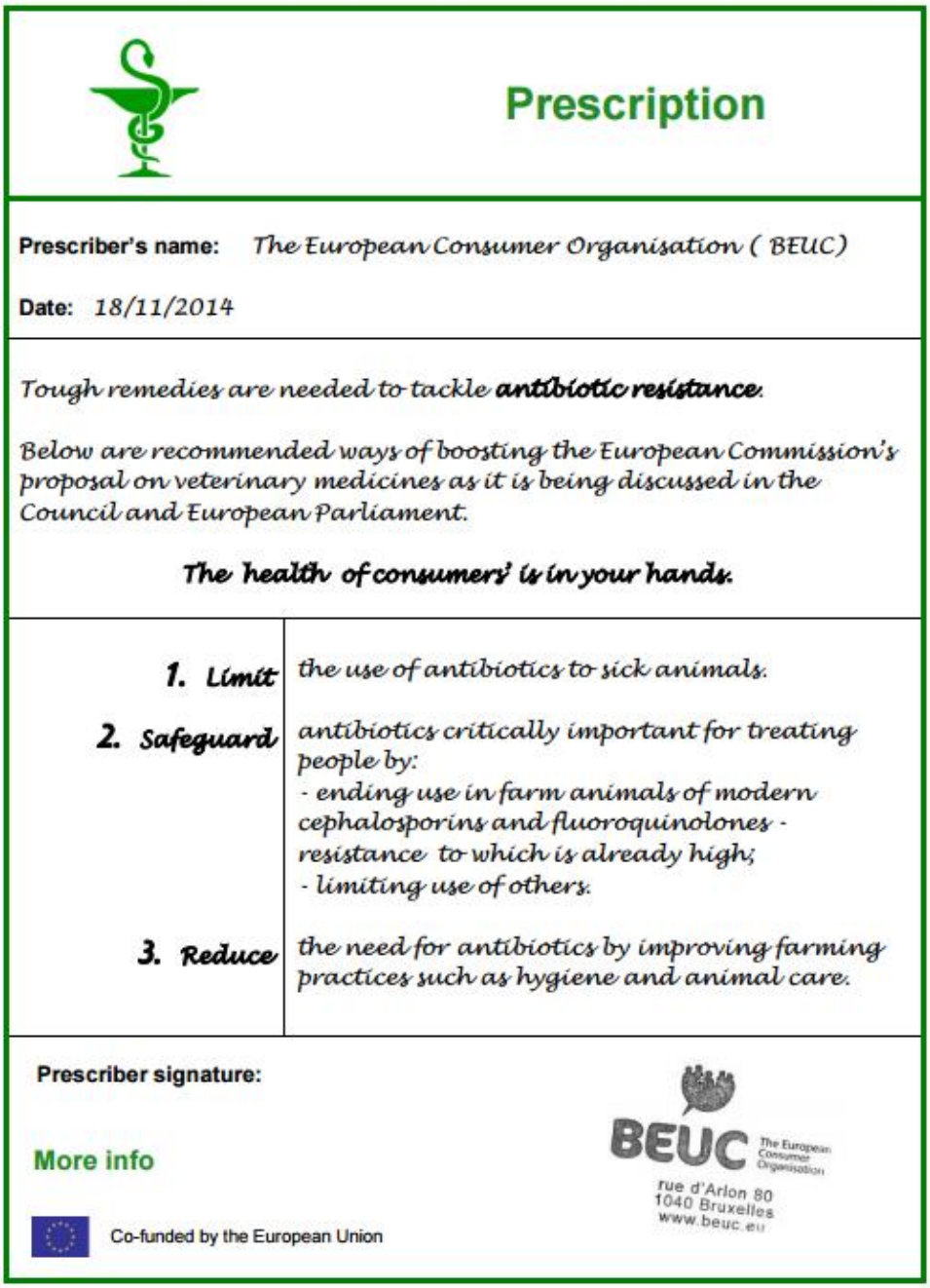
[5] A list is available on the campaign page; several articles about the campaign were published in BEUC members monthly magazines

The infographic aimed at illustrating the many transmission pathways used by antibiotic resistance bacteria to spread from farm facilities to humans. Although BEUC members' tests did focus on meat products, **we wanted the infographic to show that contamination can happen via many different pathways, including but not limited to food products.**

The infographic was also used by our national members to educate consumers about antimicrobial resistance. The infographic explains in simple terms that antimicrobial resistance is a natural phenomenon which is spurred by misuse and overuse of these drugs in all sectors and that the bacteria become resistant, not the animals or people. It also provides some basic tips to avoid cross-contamination when cooking at home (i.e. cook meat thoroughly, wash hands after handling raw meat and defrost meat in the fridge).



- **We also issued a '[prescription]' encompassing three key recommendations for amendments** that we asked public authorities and legislative assemblies to consider when discussing the two EU legislative proposals currently under review.



Prescription

Prescriber's name: *The European Consumer Organisation (BEUC)*

Date: *18/11/2014*

Tough remedies are needed to tackle ***antibiotic resistance.***

Below are recommended ways of boosting the European Commission's proposal on veterinary medicines as it is being discussed in the Council and European Parliament.

The 'health of consumers' is in your hands.

1. Limit	*the use of antibiotics to sick animals.*
2. Safeguard	*antibiotics critically important for treating people by:* *- ending use in farm animals of modern cephalosporins and fluoroquinolones - resistance to which is already high;* *- limiting use of others.*
3. Reduce	*the need for antibiotics by improving farming practices such as hygiene and animal care.*

Prescriber signature:

More info

BEUC The European Consumer Organisation
rue d'Arlon 80
1040 Bruxelles
www.beuc.eu

Co-funded by the European Union

5) Results

Intersectoral collaboration*: BEUC campaign has generated interest from a wide variety of organisations including international food safety authorities, industry bodies, charities, advocacy groups and scientific researchers. Given the broad range of issues raised by the campaign, BEUC has been able to build strong relationships with organisations working in the human, animals and environmental health fields. The expertise shared and received has been disseminated to BEUC members who have the possibility to both influence policy-makers and educate consumers at national level.*

Transferability*: BEUC's infographic and prescription have also been praised as easy-to-use materials by other organisations to explain antimicrobial resistance. The two campaigning tools can also be used in other regions of the world to lobby for identical legislative measures, therefore showing the EU leadership in tackling antimicrobial resistance.*

BEUC campaign has contributed to keeping discussions around the need to address the inappropriate use of antibiotics in livestock alive. In recent years, the risks posed by antimicrobial resistance to human health were only considered through inappropriate prescribing behaviours and use in humans. Without pointing fingers at a single sector, BEUC campaign has raised awareness about the complexity of the issue. **The campaign also highlighted the unique opportunity offered by the review of two critical EU laws addressing antibiotics use in livestock to ensure adequate rules are in place.**

Following BEUC campaign, many other organisations have produced similar infographics showcasing the multitude of pathways antibiotic resistant bacteria can use to spread. This has triggered interest of the scientific communities and politics while **highlighting the need to adopt a 'One Health' approach and better investigate all contamination routes.**

BEUC campaign has also generated interest among EU and national policy-makers. As a consequence, BEUC has been invited to take part to several working groups and consultation processes. **BEUC campaign has also helped raise the issue among MEPs, especially with new MEPs who entered office in 2014**. Eventually, **the campaign has prompted interaction with several industry bodies, professional organisations and other NGOs therefore opening ways for dialogue and cooperation in this area.**

6) Conclusions

Sustainability: *BEUC campaigning tools will continue to be used during the negotiations of the new Veterinary Medicines and Medicated Feed laws to inform policy-makers and insist on the need to enact adequate rules on antibiotics use in livestock. The campaigning tools can also be used in the framework of the next Action Plan on Antimicrobial Resistance to spur discussion about education and campaigning tools. The campaigning materials will also act as proofs of how policy demands put forward by consumers' organisations (i.e. end the routine preventive use of antibiotics) have been*

heard and are now being translated into EU legislation. The campaign was also used to back the EU proposal to include a chapter on antimicrobial resistance in TTIP as explained in our blog post.

BEUC campaign has been successful in raising the need to address antimicrobial resistance from a food safety perspective. It was a timely initiative as the campaign was launched two months after the European Commission published two legislative draft proposals addressing the issue of antibiotic use in livestock. **The campaign helped keep the issue high on the political agenda and created interaction between and with policy-makers, industry, professional organisations, advocacy groups and other NGOs.**

The campaign clearly showed that consumer organisations across the EU can speak in one voice and agree on a set of key policy demands that need to be implemented at EU level. This has demonstrated the urgency of addressing antimicrobial resistance as a cross-border issue. **At the same time BEUC members have been actively promoting the campaign at national level to show their support to EU coordinated action.** All nine members have published their tests in their magazines and websites and have actively publicised the campaign. Because the communication tools were translated in eleven languages, BEUC members were able to share them with their national authorities and MPs.

BEUC and its members continue to educate and raise awareness about the need to implement strict rules in all sectors, by using the campaigning tools **but also by attending and participating to EU and national conferences, workshops and working groups on antimicrobial resistance.**

BEUC campaign is not officially running anymore but its legacy is still alive. Very recently BEUC wrote a blog post about TTIP and the EU proposal to include a chapter on antimicrobial resistance which reemphasised our key campaign objectives and policy demands. The campaign was also mentioned in April this year in a press release about the European Parliament's vote on Ms Grossetête report.

In addition, BEUC members continue to publish articles in their magazines and websites and share our policy demands with their national ministries and authorities.

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