

# CHLORINATED CHICKEN

## Why you shouldn't give a cluck

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BRIEFING PAPER

### EXECUTIVE SUMMARY

- The EU has banned the import of chicken disinfected with chemical rinses for two decades.
- Liberalising US poultry imports is expected to be a key feature of US-UK trade talks.
- Americans safely eat upwards of 156 million such chickens each week.
- Adults would need to eat 5% of their bodyweight in chlorinated chicken each day to be at risk of ill health from poultry alone.
- US methods produce fresh chicken at 79% of the price of equivalent birds on British supermarket shelves.
- British trade negotiators should be authorised to permit the import of chemically disinfected poultry from the US in return for a rapid free trade agreement.

### INTRODUCTION

Europe's politicians have long resisted efforts to allow US meat products onto supermarket shelves. In particular, repeated attempts to liberalise trade have been thwarted by member states of the European Union who refuse to accept the sale of chicken which has been disinfected with chlorine.

Anti-trade campaigners have raised concerns about the impact of chlorinated chicken on human health, but have tended to rely on a scientifically unsupported squeamishness. Opponents deride the food as “less natural” and “Frankenfoods”.<sup>1</sup> Some activists have compared the consumption of chemically disinfected poultry to drinking poison.<sup>2</sup> Chlorinated chicken is held up as the epitome of poor food standards in the United States by groups opposed to free trade in food products

<sup>1</sup> The Washington Post. (2014, December). Free trade with U.S.? Europe balks at chlorine chicken, hormone beef.

<sup>2</sup> Flashmob Stop TTIP. (2016, September). Retrieved from <https://www.facebook.com/flashmobstopttip/videos/1780387882175326/>

with the US. However, as discussed in this report, food regulators around the world believe that such chicken is safe to eat.

The United Kingdom's withdrawal from the EU offers a chance for the country to agree a more rapid trade deal than the remaining members of the group could secure. It is an opportunity that the government should embrace.

## **THE IMPORTANCE OF A STRONG US TRADE DEAL**

Favourable access to a market as large as the US, with its population of more than 320 million people, would be a great prize for a post-Brexit Britain.

Free trade agreements (FTAs) with such economies will be vital in order to replace a likely loss of trade with some of the remaining 27 EU members. Yet while the EU has been able to offer the US a combined market of some 510 million inhabitants, the UK is in a weaker negotiating position with just over 65 million.

The government is convinced that it will quickly agree a trade deal with the US, and the US President is reported to believe that the two countries could strike a bargain within 90 days of the UK's withdrawal from the EU.

A deal with an economic power as large as the US will also set the tone for negotiations with other major players, such as Canada, Japan, and other nations with which the EU has so far struggled to agree terms of trade with. To demonstrate that the country is open for business, the UK will have to offer something extra in order to make the lengthy process of trade negotiations appear worthwhile.

Yet while the UK's smaller market size makes it relatively less enticing than the EU, it can take advantage of its new found nimbleness, negotiating deals more quickly. In order to do this, the UK must accept that it will need to compromise in allowing potential partners access to parts of its economy that the EU would never have accepted.

The issue of access to European poultry markets is a longstanding one for the US, and its vast chicken exporting industry. The country is the second largest exporter of the foodstuff, with government estimates for exports this year at over 3.1 billion kilos.<sup>3</sup> Some of the country's most influential lobbyists have made clear that they are keen on pressing for chlorinated chicken to be part of any US-UK trade deal.<sup>45</sup>

A shallow tariffs-only FTA would be of relatively little value to the UK. Tariffs between the two countries are already relatively low. However, if the UK were to relax the ban on chlorinated poultry imports, it could provide leverage for a more extensive UK-US free trade deal. Chlorinated chicken is important for more than just symbolic reasons.

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<sup>3</sup> United States Department of Agriculture. (2017, January). Livestock, Dairy, and Poultry Outlook.

<sup>4</sup> Financial Times. (2017, January 26). Europe looms large over Trump-May talks.

<sup>5</sup> BuzzFeed. (2017, February 1). American Chlorine-Dipped Chicken Could Make It To The UK.

In return, the UK may benefit from better terms of trade with the US. Perhaps this would be in the form of “passporting” rights for Britain’s financial institutions, with automatic mutual recognition of the two country’s different regulatory systems. Or, talks could involve freeing the movement of workers between the US and the UK.

The EU’s own trade negotiations with the US, in the form of the Transatlantic Trade and Investment Partnership (TTIP), are effectively over. Progress was too slow, and in the aftermath of the US President’s decision to abandon a Trans-Pacific Partnership (TPP) trade deal, TTIP also looks doomed.

Yet the EU’s failed negotiations could still provide a useful starting point for the UK to complete a flurry of deals. TTIP can now serve as a template for a UK-US FTA.

Allowing the import of chlorinated chicken products would make clear that Britain is willing to agree sensible compromises, and that it is willing to use partial agreements such as TTIP as templates to rapidly make deals with other partners. As the symbol used by opponents of an FTA with the United States, it is important to know whether chlorinated chicken really is something to be concerned about.

## **HISTORY OF RESISTANCE TO CHEMICAL RINSES**

Disagreements over poultry safety standards stem from a fundamental divide in how the US and EU have tackled food regulation. The EU operates on the basis of the precautionary principle, preferring not to permit untested methods. The US is less interventionist, only forbidding processes that do demonstrable harm.

Accordingly, poultry for consumption in the EU must instead be produced according to strict food chain controls. Known as the “farm-to-fork” approach, these processes minimise the risk of contamination at each stage of production.

In the US, chicken carcasses are commonly washed or sprayed with a chlorine solution, dramatically reducing pathogens at the end of the supply chain. In 1997 the EU introduced a ban on this sort of poultry decontamination, citing hygiene concerns.

Since the prohibition on pathogen reduction treatments (PRTs) was introduced, the European Commission has submitted a proposal aimed at relaxing these controls. This effort was struck down by the EU’s member states.

In 2008 all member states on the EU Agricultural Council, except the UK, which abstained, voted against measures to allow chemically treated chicken, declaring that they were unconvinced by the Commission’s arguments.<sup>6</sup> The UK said that it needed more time to assess the proposal.

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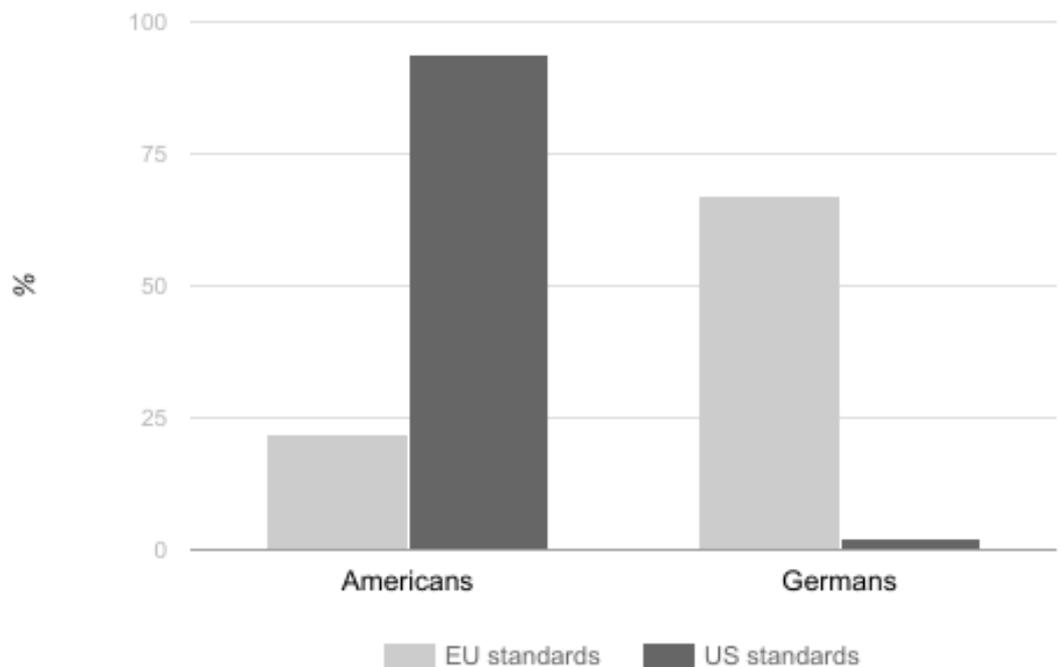
<sup>6</sup> EurActiv. (2008, June). EU vets reject plans to lift US poultry ban.

The Office of the US Trade Representative listed this opposition to the use of PRTs as one of the top barriers to trade with the EU in its last annual report.<sup>7</sup> After the European Commission was unable to make progress, the US requested that the World Trade Organisation establish a dispute settlement panel to deal with the matter. This panel has been established, but not yet composed.<sup>8</sup>

European opposition to imports of chlorinated chicken has been spearheaded by Germany, where the products are subjected to ridicule, often based on an unscientific apprehension. Angela Merkel, the country's Chancellor, has declared that there is "no question" they will accept US poultry treated with chemical rinses into Germany.

Yet German perceptions of food safety standards appear to be warped by a pro-domestic bias. Both US and German consumers believe that their own set of food regulations are superior.<sup>9</sup>

### DO YOU TRUST EUROPEAN OR AMERICAN FOOD SAFETY STANDARDS MORE?



The phenomenon is not unlike foreign attitudes to British beef products in the wake of the BSE scare of the 1990s. International consumers have remained wary, long after the crisis has passed. Tellingly, the EU's own scientists have sided with the US, in agreeing that PRTs are safe.

<sup>7</sup> The Office of the U.S. Trade Representative. (2017, March). 2017 National Trade Estimate Report.

<sup>8</sup> World Trade Organisation. (2009, November). European Communities — Certain Measures Affecting Poultry Meat and Poultry Meat Products from the United States.

<sup>9</sup> Pew Research Center. (2014, April). Support in Principle for U.S.-EU Trade Pact.

Permitting chlorinated chicken in the UK does not mean that regulators would be throwing the precautionary approach out of the window.

On the contrary, after decades of safe use in the US, the scientific evidence has confirmed that PRTs are effective. US households eat their way through 156 million chickens treated this way each week, the National Chicken Council reported, in testimony before the Senate Committee on Finance in 2014.

The quantities of chlorite and chlorate, the byproducts from using chlorine dioxide to disinfect poultry, are too low to realistically impact human health. According to data from the European Commission, a person would need to eat 5% of their bodyweight in chlorinated poultry daily to consume their tolerable daily intake of chlorate, or more than 23% to reach the same limit for chlorite.<sup>10,11,12</sup>

The average adult woman would have to regularly eat more than two and a half chlorinated chickens a day before suffering any noticeable health effects.<sup>13</sup> The typical man would have to eat nearly three whole birds each day. That is before “the expected decreases in the levels of these [chlorite] residues after processing, including cooking”, according to the European Commission.

Drinking water poses a far greater risk, contributing 99% of the disinfection byproducts consumed in a typical daily diet, with chlorinated poultry making up just 0.3% to 1% of total exposure.<sup>14</sup>

The British government limits the combined concentration of chlorite and chlorate in water at 0.5mg per litre.<sup>15</sup> At that upper bound, eating a whole chicken is roughly equivalent to drinking a glass of water.

The volume of evidence in support of PRTs is so strong that they are deemed safe not just by US regulators, but also by the EU’s own scientific advisors.

The European Food Safety Authority (EFSA) has said that four types of chemical rinse, including chlorine dioxide, “would be of no safety concern”.<sup>16</sup> The agency’s

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**10** European Commission. (2003, April). The evaluation of antimicrobial treatments for poultry carcasses.

**11** European Commission. (2008, April). Environmental impact and effect on antimicrobial resistance of four substances used for the removal of microbial surface contamination of poultry carcasses

**12** European Food Safety Authority. (2015). Risks for public health related to the presence of chlorate in food.

**13** Office for National Statistics. (2010, October). Average Briton highlighted on UN World Statistics Day.

**14** Najjar, M., & Meng, J. (2009). Risk Assessment of Disinfection Byproducts in Poultry Chilled in Chlorinated Water. Report to the USA Poultry & Egg Export Council.

**15** Drinking Water Inspectorate. (2017, January). List of approved products for use in public water supply in the United Kingdom.

**16** The EFSA Journal. (2005, December). Treatment of poultry carcasses with chlorine dioxide, acidified sodium chlorite, trisodium phosphate and peroxyacids.

independent experts concluded “that the available data on the treatment of poultry carcasses with chlorine dioxide does not indicate a safety concern”.

Other national regulators have become more critical of restrictions on PRTs since the EU’s 1997 ban. New Zealand Food Safety Authority research found “no safety issues were identified due to the use of chlorine dioxide”, and that “the concentrations of chlorine required to induce formation [of carcinogens] are well in excess of those used in practice”.<sup>17</sup>

It is also well established that PRTs are effective in reducing the prevalence of foodborne illnesses, such as salmonella and campylobacter infections. Yet critics of chlorine immersion highlight the inability of surface washing to disinfect the interior of a chicken carcass, suggesting that poultry treated in this fashion is not made safe.

If chlorination were so ineffective, then one would expect foodborne illnesses carried by chicken to be much more prevalent in the US, and nearby countries, like Canada, which also use PRTs to disinfect poultry. However, WHO figures reveal that salmonella and campylobacter infections in North American countries are not out of line with their European counterparts.<sup>18</sup>

Guidance published by the Codex Alimentarius Commission, the body which sets international food standards, states that immersing carcasses in a chlorine dioxide solution of the strength used in the US has been shown to reduce salmonella prevalence from 14% in controls to 2%.<sup>19</sup>

## **BENEFITS OF IMPORTING US POULTRY**

Conceding poultry market access as part of a US deal should not be viewed as a negative, intended only to advance the UK’s ability to secure trade deals after Brexit. Rather, the availability of chlorinated chicken products should be seen as a boon, enabling consumers to exercise greater choice over what they can eat.

The US poultry industry is far more efficient than that of its European counterparts, making it well-placed to drive down the cost of chicken meat in a post-Brexit UK. Data for 2015 show that the average price of a kilo of fresh whole chicken in the US stood at just 79% of the same product in the UK.<sup>20,21,22</sup>

<sup>17</sup> Cressey, P., Nokes, C., & Lake, R. (2008). Chlorinated compounds formed during chlorine wash of chicken meat. Institute of Environmental Science & Research Limited, Christchurch, New Zealand.

<sup>18</sup> World Health Organization. (2015, December). Global burden of foodborne diseases.

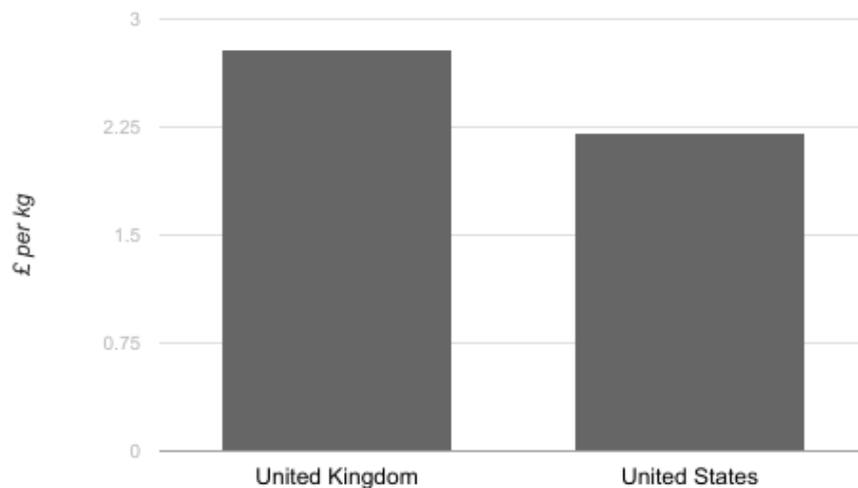
<sup>19</sup> Alimentarius, C. (2011). Guidelines for the control of campylobacter and salmonella in chicken meat. CAC/GL, 78.

<sup>20</sup> Agriculture & Horticulture Development Board. (2016, May). Poultry Pocketbook.

<sup>21</sup> United States Department of Agriculture. (2017). Retail prices for beef, pork, poultry cuts, eggs, and dairy products.

<sup>22</sup> Credit Suisse. (2016). Average Foreign Exchange Rates.

## RETAIL PRICE OF FRESH, WHOLE CHICKEN



Countries in Eastern Europe such as Romania and Bulgaria were themselves significant importers of US chicken meat before their accession to the EU prohibited customers from continuing to enjoy low-cost poultry.

Complying with EU legislation was estimated to add some 5.1% to the total production costs of poultry, according to 2011 data.<sup>23</sup> The same report found that other US efficiencies mean that the production costs of US broiler meat stood at just 78% of the EU average in 2013, despite requiring “standards for food safety and animal health [which] are similar to those in the EU”.

Customer choice need not be sacrificed. Chickens described as “organic” in the US are not subjected to PRTs, and UK labelling rules could be updated to ensure that British customers had the same information when choosing what to have for dinner.

## CONCLUSION AND POLICY RECOMMENDATIONS

It is critical that the British government identifies areas in which it can make sensible concessions to other trading nations, in order to improve on the EU’s patchy record in agreeing FTAs. Special attention should be given to areas where irrational prejudice, rather than scientific evidence, has hampered previous rounds of trade talks.

Critics of a possible EU-US FTA argued that it was “highly likely” that poultry market access would be a “take-it-or-leave-it” condition insisted upon by the US.<sup>24</sup> The issue is likely to be pressed harder still in negotiations with the UK alone.

<sup>23</sup> Van Horne, P. L. M., & Bondt, N. (2013). Competitiveness of the EU poultry meat sector (No. 2013-068). LEI, part of Wageningen UR.

<sup>24</sup> Friends of the Earth Europe. (2015, March). A Rotten Deal: Why TTIP threatens EU food safety standards for poultry.

British trade negotiators should be authorised to approach US trade talks willing to concede ground on the importation of chemically disinfected chicken, in recognition of the scientific evidence supporting the efficacy of PRTs, and of the potential advantages to price-sensitive households.