



P R E S S R E L E A S E

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"Glyphosate in beer"

Statement from the German Brewers Association (Deutscher Brauer-Bund, DBB)

In a press release published on 25 February 2016, the "Munich Environmental Institute" (Umweltinstitut München), a private association, reported on traces of glyphosate, the active substance used in plant protection products, found in beer.

In response, the German Brewers Association states the following:

As the Environmental Institute acknowledges itself in its publication, traces of glyphosate can be "found virtually everywhere". For decades, glyphosate has been an active substance in a range of plant protection products authorised in Germany and worldwide. It is well known that use of the active substance can result in residues in agricultural and food products. Countless studies have declared that these traces do not present a health risk.

The German Federal Institute for Risk Assessment (BfR) also classifies the traces found in food products as harmless to health, as do other European and international institutes. The German Brewers Association has confidence in the opinion of the independent scientists. As a competent authority, the BfR has published an up-to-date statement on the test carried out by the Environmental Institute, which is available online at <http://www.bfr.bund.de/cm/349/provisional-assessment-of-glyphosate-contents-in-beer.pdf> (translated version see page 4).

The DBB rejects the Environmental Institute's accusation that the breweries do not monitor their raw materials adequately – a claim which the DBB deems absurd and completely unfounded. The breweries in Germany go to great lengths – just as they do during the earlier stages of malt and hops production – to check for possible contaminants in the four natural raw materials, water, malt, hops and yeast, which are used for brewing in accordance with the German beer purity law (the "Reinheitsgebot").

The German Brewers Association has its own monitoring system for brewing malt. Our monitoring shows that the measured values are always well below the maximum limits. Exceedance of the permitted maximum residue levels has not been observed at any point in time. In addition, state inspections and further internal inspections of the breweries are carried out, which ensure that no contaminants find their way into production.

The test results disseminated by the Environmental Institute are therefore neither verifiable nor credible. Given that we have seen neither the full study, nor sufficient evidence to support the analytical methods, there is reason to cast serious doubt on the reliability of the study. The study's "ranking" of beers is completely untrustworthy and the Environmental Institute even acknowledges itself that the test is only based on a "small number of samples" and that it "cannot draw general conclusions regarding the contamination of a specific brand of beer".

Even if the glyphosate levels asserted by the Environmental Institute were correct, which is doubtful in view of our monitoring system and the dubious methods adopted by this most recent study, according to the BfR, an adult would have to drink 1000 litres of beer in one day to be exposed to a health risk arising from residues. This fact is also known to the Environmental Institute. In spite of this, it speaks against its better judgement of a "detrimental effect on health, even in the smallest quantities".

The Munich Institute clearly wants to use its publication to gain influence over the decision of the EU Member States, scheduled for early March 2016, on the renewal of the authorisation for glyphosate – a decision which the European Food Safety Authority (EFSA) will advocate following comprehensive studies. Only a few days ago, the Federal Institute for Risk Assessment (BfR) sounded the all-clear with regard to possible glyphosate residues in breast milk, refuting a previously published study. This study applied the same analytical method as the one that is now being used by the Munich Environmental Institute.

Q & A

How can traces of glyphosate get into grain and therefore into beer?

In Germany, beer is brewed from the natural raw materials: water, malt, hops and yeast. Malt is made from grain. The use of glyphosate in the cultivation of grain for brewing purposes is not permitted in Germany. Nevertheless, the possibility of finding glyphosate residues in brewing grain or brewing malt cannot be ruled out, as they may be caused by spray drift when glyphosate is used for permitted applications on adjacent agricultural land, or by partially permitted use of glyphosate products for cultivating brewing grain abroad. As German agriculture is unable to meet the German breweries' needs for malting barley, approx. 50 % of the brewing grain or brewing malt used in Germany is imported from abroad, primarily from France and Denmark.

Do traces of glyphosate in beer present a health hazard?

The competent Federal Institute for Risk Assessment (BfR) classifies the traces that have been found in food products thus far as harmless to health, as do other European and international institutes. According to the BfR "even the highest contents published by the media (30 micrograms per litre) are so low that the estimated intake for an adult (60 kg bodyweight) would be more than 1000 times lower than the currently estimated amount that can be ingested daily over a lifetime (ADI, acceptable daily intake) or during one day (ARfD, acute reference dose) without appreciable health risk". The BfR explains that in order to ingest quantities of glyphosate that would pose a health risk, an adult would have to drink roughly 1000 litres of beer dur-

ing one day. According to the current state of knowledge, glyphosate contents of 30 micrograms per litre of beer do not pose a health risk, explains the BfR in its statement (<http://www.bfr.bund.de/cm/349/provisional-assessment-of-glyphosate-contents-in-beer.pdf>)

What is the German brewing industry doing to avoid glyphosate contamination?

In order to guarantee the highest possible levels of safety and quality of the malt used in the German breweries, the German Brewers Association has its own monitoring system for contaminants in brewing malt which also includes testing for glyphosate residues. The monitoring shows that the malt used by the German breweries is mostly free of glyphosate residues. In individual cases where glyphosate can be detected, the results are more than 100 times below the permitted maximum residue limit for barley, and are thus well within the range of what is classified as completely harmless. The Europe-wide legally defined maximum residue limit for glyphosate is 20 mg/kg in barley and 10 mg/kg in wheat.

Compared with the direct consumption of grain, a considerable amount of dilution is involved when using malted grain or malt in beer. Analyses show that in the event of possible contamination, only two percent of the glyphosate originally found in the barley can end up in the beer. In practice, several batches of barley are mixed together and the beer is produced from different malts. In light of this, the alleged test results are not plausible.

What guidelines are in place?

The study commissioned by the Munich Environmental Institute is dubious because it wrongly compares brewed beer – a food product made from grain – with drinking water. For drinking water too, there is a "limit value"; however this is only a "precautionary level" which says nothing about the significance for health. In fact, even the precautionary level for baby food is 100 times higher than that of drinking water.

What regulates the German beer purity law ("Reinheitsgebot")?

Unlike breweries in Europe, German breweries for beer brewed according to the beer purity law are, to this day, prohibited from using artificial flavours, artificial colouring, artificial stabilisers, enzymes, emulsifiers and preservatives. Beer brewing continues to be limited to using the four natural ingredients: water, malt, hops and yeast. All raw materials are subject to continuous and comprehensive monitoring of residues and contaminants across all processing stages.

For more information: www.reinheitsgebot.de

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Provisional assessment of glyphosate contents in beer

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According to media reports, in a recent study beer samples were analysed for glyphosate residues. Neither the original study nor sufficient methodical information about the analytical method and sampling procedure were provided to the BfR. From a scientific point of view, glyphosate residues in beer are plausible and to be expected in principle, since glyphosate-containing plant protection products are authorised and may be found in cereals, in accordance with the maximum levels and statutory requirements. In Germany, however, for the approved late applications of glyphosate which are leading to residues, a label restriction is normally set excluding the use in cereals for brewing purposes.

Apart from that, even the highest contents published by the media (30 micrograms per litre) are so low that the estimated intake for an adult (60 kg bodyweight) would be more than 1000 times lower than the currently estimated amount that can be ingested daily over a lifetime (ADI, acceptable daily intake) or during one day (ARfD, acute reference dose) without appreciable health risk. In order to ingest quantities of glyphosate that would pose a health risk, an adult would have to drink roughly 1000 litres of beer during one day. According to the current state of knowledge, glyphosate contents of 30 micrograms per litre beer do not pose a health risk.

Further information available on the BfR website under heading “Glyphosate”