### SPECIAL | Plant Protection Products





#### Imprint

BfR Consumer Monitor 2016 | Special Plant Protection Products

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	Max-Dohrn-Straße 8–10
	10589 Berlin
	bfr@bfr.bund.de
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### Foreword

#### Dear Readers,

For many years now, residues of plant protection products in foods have headed consumers' lists of topics that people believe could impair the quality and safety of our food. You can now add to this the public debate about the assessment of the health risk of glyphosate, the most commonly used active substance in plant protection products in the world. Just like every other active substance in a plant protection product, glyphosate is also re-assessed at regular intervals within the scope of EU active substance evaluation with regard to its risks to health and the environment, as well as its effectiveness. As Germany is currently the Rapporteur Member State for the Community evaluation and assessment of glyphosate, BfR was commissioned with the assessment of the possible health risks of the substance.

BfR took this as an opportunity to conduct a representative survey on the subject "Plant Protection Products" to find out what attitudes the public has to plant protection products in general and glyphosate in particular. The last time BfR conducted such a survey was in 2010.

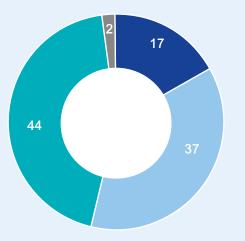
The survey also investigates whether and how the discussion of glyphosate in the media is perceived by consumers. It was also asked whether the report on the detection of small quantities of glyphosate in urine, which scientists had been expecting, was picked up on by the general public or whether it tends to be more of a discussion conducted by various actors in the media.

You will find the results of this survey in this special issue of the BfR Consumer Monitor which we hope you will enjoy reading.

Prof. Dr. Dr. Andreas Hensel President Federal Institute for Risk Assessment (BfR)

## Do you believe that the quality and safety of our food tend to increase, decrease or stay the same?

### **Quality and Safety of Food**



Tend to increase
Stay the same
Tend to decrease
Don't know, no answer

## What could most severely impair the quality and safety of food? You can name three examples.

### Impairment of Quality and Safety

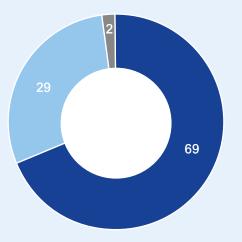
17	Pesticides/chemicals/toxins	F
16	lustrialisation of agriculture	Inc
13	vestock farming/antibiotics	Mass li
13	mental pollution in general	Climate/enviror
10	ic engineering/manipulation	Genet
10	seeking/economic interests	Profit-
9	Lack of controls	
9	ancers, preservatives etc.)	Ingredients/additives (flavour enh
8	nsport over long distances	(Over)storage, tra
8	o low-priced/cost pressure	То
	Wrong/poor declaration 7	
	lards in producer countries 7	Imports, stanc
2	Don't know, no answer	

Spontaneous mentions

Shown: Mentions  $\geq$  5 % (multiple mentions possible)

### Have you heard, seen or read anything about plant protection product residues in the media in the last 2 years?

### Perception of Media Reporting on Residues





### What exactly was it about?

### Information on Plant Protection Product Residues

21		Plant protection products in general
9	9	Health hazards
8	8	Residues in/on food in general
8	8	Use of plant protection products/chemicals in agriculture
	7	Residues in soil/water (fertilisers, liquid manure, pesticides)
	6	Glyphosate/Roundup/Monsanto
	6	Residues of plant protection products/pesticides on fruit, vegetables, lettuce
	6	Genetic engineering/manipulation
24		Can't remember   Don't know, no answer

Spontaneous mentions Shown: Mentions  $\geq$  5 % (multiple mentions possible) Basis: 695 respondents who had heard, seen or read something about plant protection product residues in the media in the last 2 years; figures given as percentages

## To what extent are you personally concerned or unconcerned about reports on the pesticidal active substance glyphosate?

Please use a scale from 1 to 5 for your answer, with 1 representing "not concerned" and 5 "concerned".

### Concern About Reports on Glyphosate

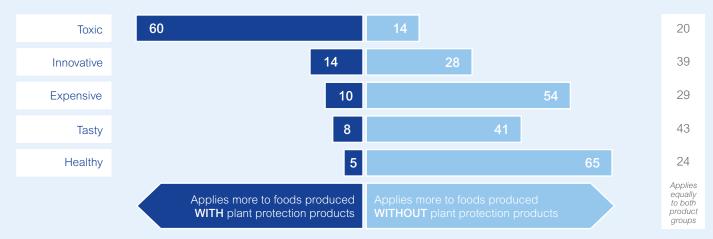
Glyphosate in breast milk	39
Glyphosate in the food chain	35
Glyphosate in blood	34
Glyphosate in urine	28

Shown: Percentages "concerned" (4 + 5 on the scale)

# Plant protection products are used in agriculture to protect plants from insects, weeds and fungi.

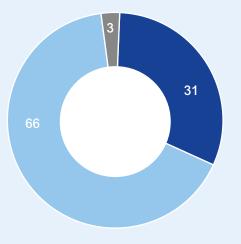
I will now read out a few properties to you and ask you to tell me whether they apply to foods produced with or without plant protection products.





## Do you think that residues of plant protection products may in general be contained in foods?

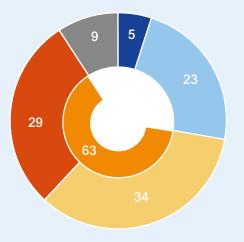
### Legality of Residues in Food



Yes	
No	
Don't know, no answer	

## How do you assess the risk-benefits ratio of plant protection products?

### **Risks Versus Benefits of Plant Protection Products**



Benefits outweigh by far
Benefits are slightly greater
Risks are slightly greater
Risks outweigh by far
Don't know, no answer
Percentages "Risks are slightly greater" + "Risks outweigh by far"

## Which of the following statements apply to you and which do not?

### Information and Purchasing Behaviour

I avoid foods that I know or presume to contain plant protection products		65
I mainly buy organically produced foods	48	
I mainly buy conventionally produced foods	45	
I regularly inform my family, friends and acquaintances about plant protection product residues in foods 27		
I often acquire information on plant protection product residues in foods 24		
None of the above 10		

Multiple answers possible Shown: Mentions ≥ 5 %

## Which of the following institutions or groups should play an important role in the legal regulation of plant protection product residues in your opinion?

### Legal Regulation of Residues

Consumer associations	85
Science	83
Agriculture	82
Consumers	81
Non-government organisations	80
State/public institutions/authorities	73
EU	71
Food industry	68
Politics	66
Traders	61

Shown: Mentions  $\geq$  5 % (multiple mentions possible)

### How were the data collected?

Date of the survey:	2 <sup>nd</sup> and 3 <sup>rd</sup> February 2016
Random sample:	1,004
Presentation of results:	All figures in percent, rounding differences possible
Population:	German-speaking population aged 14 years and over in private households in the
	Federal Republic of Germany
Sampling:	Samples drawn at random from land line and mobile telephone numbers which can also include telephone numbers not listed in directories (in line with standards set by the Association of German Market Research Institutes – ADM)
Method:	Telephone interview (CATI omnibus survey, Dual Frame)
Conducted by:	TNS Emnid

### Plant protection products

Plant protection products protect plants or plant products from harmful organisms and diseases. They are also used to regulate plant growth. Plant protection products are categorised into different groups, depending on the effect they have:

- > Herbicides to kill weeds
- Insecticides to control insects
- > Fungicides to prevent fungal diseases
- > Molluscicides to control snails
- > Acaricides to kill mites
- > Rodenticides to control harmful rodents
- Growth regulators to control biological processes

Even if authorised plant protection products are used properly and for the intended purpose, residues can remain in the harvested crops and the foods and feeds made from them. To ensure that residues cannot impair consumer health, even if consumed every day of their lives or consumed with a single intake of large quantities of food, BfR conducts a comprehensive health assessment of plant protection products within the scope of the approval process and prepares recommendations for maximum residue levels on this basis. The determination of admissible quantities of an active substance that a food may contain follows the ALARA principle (*As Low As Reasonably Achievable*).

Maximum residue levels are the maximum permissible concentrations of plant protection product active substances and their degradation products which may remain in a foodstuff. They are not determined solely on the basis of the health risk assessment, they also take into account good agricultural practice. Compliance with a maximum residue limit decides whether a food is sellable or has to be taken off the market.

### About BfR

Do nanoparticles promote the occurrence of allergies? Does apple juice contain health-damaging aluminium? The Federal Institute for Risk Assessment (BfR) evaluates possible health risks of foods, feeds, consumer articles and chemicals. With its work, it makes a decisive contribution towards ensuring that food, products and chemicals in Germany are becoming safer. The Institute is independent in its scientific assessments, research and communication. It is the scientific institution of the Federal Republic of Germany which prepares opinions and statements on food and feed safety issues, as well as the safety of substances and products. By doing so, the Institute makes an important contribution towards improving consumer protection and food safety. BfR reports to the Federal Ministry of Food and Agriculture (BMEL).

### More information at: www.bfr.bund.de/en

Residues of plant protection products in fruit and vegetables: > FAQ > Residues of Plant Protection Products in Food Authorisation process for plant protection products:

> FAQ > Authorisation Process for Plant Protection Products

Health assessment of glyphosate:

> FAQ > Glyphosate – Assessment of the health risk

Re-assessment of glyphosate within the scope of the EU examination of active substances:

> FAQ > Glyphosate – Procedure for the re-assessment

Different estimations of the carcinogenic effect of glyphosate by BfR and IARC:

> FAQ > Glyphosate – Assessment of the carcinogenic effect

Glyphosate and breast milk:

> Press office > Press releases > 2016 > BfR study confirms: no glyphosate detectable in breast milk

#### **Federal Institute for Risk Assessment**

Max-Dohrn-Straße 8–10 10589 Berlin GERMANY

Phone +49 30 18412-0 Fax +49 30 18412-4741 bfr@bfr.bund.de www.bfr.bund.de/en

