

## Communication 15/2024

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# Tattoo colours, e-cigarettes, raw food: are there risks?

The German Federal Institute for Risk Assessment (BfR) uses comics to illustrate current topics

Are tattoos harmful? What should you watch out for when handling raw ingredients? What are the risks of e-cigarettes? The BfR Knowledge Comics take a deep dive into these topics. Developed by the German Federal Institute for Risk Assessment (BfR), this new format provides information about everyday health risks in an entertaining, clear, and serious way (free download available at https://www.bfr.bund.de/en/bfr-science-comic.html).

Each comic asks: "what does the science say?". To answer this question, a scientist takes the reader on a short journey. These journeys may lead the reader through the history of science, or into a kitchen or a laboratory. Risk perception is a constant theme. What does the population think or know about each topic? How can I, the reader, protect myself?

People remember pictures more easily than words, so comics are particularly suitable for memorable science communication. Without complicated explanations, the invisible can be made visible, and abstract concepts can be transformed into narrative pictures. Text and image can be combined to illustrate complex issues when scientific precision is required.

For tattoo colours, the key aspects are hygiene, the ink formulation, and where the colour ends up in the body. Many pigments accumulate in the lymph nodes, and potentially toxic compounds are produced during tattoo removal.

Raw food is more popular than ever. However, there is a potential risk of food infections caused by salmonella, campylobacter, and other germs. Here too, the BfR scientist knows what to do and demonstrates the basics of kitchen hygiene.

The first smokeless cigarette was patented in the USA in 1963. Since then, the use of e-cigarettes has become widespread. The BfR scientist points out the potential risks. "That's why it's always better to stop smoking altogether," she recommends.

## Further information on the BfR website:

Questions and answers about tattoo colours:

https://www.bfr.bund.de/en/frequently asked questions about tattoo inks-201880.html

Fact sheet on foodborne infections:

https://www.bfr.bund.de/cm/364/protection-against-foodborne-infections.pdf

Questions and answers about e-cigarettes:

https://www.bfr.bund.de/cm/343/e-zigaretten-alles-andere-als-harmlos.pdf

### About the BfR

The German Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the Federal Ministry of Food and Agriculture (BMEL) in Germany. The BfR advises the Federal Government and the States ('Laender') on questions of food, chemicals and product safety. The BfR conducts independent research on topics that are closely linked to its assessment tasks.

#### **Imprint**

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