

“Organic foods have a halo”

How do we perceive risks and how do we assess them?

Professor Dr. Michael Siegrist researches the behaviour and preferences of consumers and examines what motivates them.

Professor Siegrist, you recently published a study outlining how experts and laypersons have a different assessment of the health risks in the environment and in foods – something that is also frequently experienced at the BfR. What were the main differences?

Experts and laypersons were asked to say how they would allocate resources that could be used to reduce risks. Among laypersons, the focus was on “synthetic” manmade risks like glyphosate and other pesticides. In contrast, the experts assigned higher risk scores to “natural” risks like bacteria or viruses. Moreover, the number of affected people played little or no role among laypersons. For example, the experts classified the ink used for tattooing as a relatively significant risk, because a lot of people get tattoos. The laypersons considered this to be only a minor problem. They argued that no one is forced to get a tattoo, and that people who take the risk also have to face the consequences.

This was then followed by a second round with additional information and more-in-depth discussion – but it didn’t succeed in achieving any change in attitudes. How do you explain this obstinacy?

We humans try to remain consistent in our beliefs. If we believe that pesticides pose a major risk, then we are unable to reverse this opinion without further ado. And strongly held opinions are particularly hard to revise. If this wasn’t the case, we would constantly change our opinions every time we read the newspaper.

What should be the consequences of this for scientific risk communication?

There are some risks that are wrongly perceived, and risk communication should do more to focus on these risks. This takes me back to the natural and the man-made risks. We should point out that not everything that comes from nature is free of risk and is always good for us – and that, by the same token, not everything created by humans is harmful. This kind of black-and-white mindset can lead to wrong decisions. It goes without saying that risk communication cannot change these attitudes in the short term, but if we continually remind people of the facts, then this can change some of these attitudes.

Your work is also concerned with “naturalness”. Why are we so enthusiastic about everything that we associate with “nature”?

In many areas, nature no longer poses a threat to us here in Europe or to people in other developed regions. The risks that used to exist have been massively reduced. Take bacterial infections, which we have effectively combatted thanks to science and medicine. It’s ironic that this success hasn’t made people more enthusiastic about research and technology. On the contrary, there is a growing interest in “natural products”, which are seen as posing a lesser risk. Ultimately, nature has technological innovation and scientific knowledge to thank for its good image!

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Do we subconsciously assign things to certain categories and put them in mental compartments like “natural” and “artificial”?

I’d rather put this down to heuristics – simple rules of thumb that help us to make decisions. Unfortunately, there are also heuristics that are misleading, like when we believe that everything that is natural is good and everything made by humans bad. Then there is the “halo effect”. If we view a particular property of an object positively, then that also rubs off on other attributes of that object, and a product is given a kind of “halo”. Consumers perceive organic foods as being better for the environment, for example, and this in turn leads them to also classify these foods as being healthier and better-tasting.



Negative judgements are also based on information. In the case of things like genetically modified plants and pesticides, which factors determine whether information actually reaches us or whether we simply don't take note of it?

The information in question must have some kind of meaning for consumers. They have little or no benefit from genetic engineering, for example. Genetically modified corn is not cheaper, it doesn't taste better, and doesn't have any other recognisable advantages. It's naturally difficult to accept a new technology if it doesn't supply any benefits – particularly in cases where there are also reservations. The same applies to pesticides; they have a poor image as synthetic chemicals. It's very difficult to convince people that it is in fact quite a good idea to use pesticides in moderation. The situation is different when it comes to the Internet or cars, where the consumer has a noticeable benefit and is willing to accept a certain level of risk.

You're a Swiss national. Is there a typical "Swiss" kind of risk perception?

One conspicuous thing about Switzerland is that we're over-insured in many areas. The general rule should be: if you can rectify some type of damage yourself without any real problem, then you don't need to take out insurance for it. But many Swiss people still have travel insurance which covers them up to a sum of 2,000 Swiss francs. It's not really worth it for most people.

Many thanks for the interview, Mr. Siegrist. ▀

Swiss national **Michael Siegrist** has been Professor for Consumer Behavior at the ETH University of Zurich since 2007. Born in Vordemwald in 1965, Siegrist studied Psychology, Business Management and Journalism at Zurich University, where he also completed a PhD in 1995 and gained a postdoctoral qualification in 2001. His core fields of research are risk perception, risk communication, acceptance of new technologies and decisions under uncertainty. Siegrist advises the BfR as a member of the Scientific Advisory Board.