

# Better Product Labels for Better Consumer Choices

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## KEYWORDS

**Product Labels, Product Seals, Cognitive Biases, Ethical Consumption**

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**Ethical consumption is on the rise** ✕ Sustainable and ethical consumption has become increasingly important and has had a major impact on consumer buying behavior over the last 10 years. For example, sales of organic food in Germany have more than doubled since 2010. On the one hand, this change in behavior is intrinsically motivated, as individuals may enjoy doing something good for others or the environment – economists refer to this phenomenon as the “warm glow effect.” On the other hand, consumers are increasingly aware that they can make a difference and change markets through their buying behavior. However, people’s needs and preferences are diverse. Conscious consumption can be driven by health-related motives. But it can also be triggered by socio-political, ethical, or environmental considerations. Some consumers specifically seek products or services that are produced in accordance with their subjective values. Others consciously focus on consuming less and limiting purchases to a necessary minimum.

**Conscious consumers need a good basis for decision-making** ✕ But how do people find products or services that best reflect their own values? One way to support consumers in their decision-making is by using product labels or quality seals. Such labels usually highlight certain product characteristics, e.g., whether the product was produced according to ecological principles, and enable consumers to easily identify different qualities. Therefore, they help consumers decide whether products meet their own needs and preferences.

In some cases, product labels and certifications are subject to regulation. There are legal requirements for granting quality labels, especially when their goal is of public interest and consumers are nudged to behave in a certain socially desirable way. Other labels are issued by manufacturers or associations and often aim at highlighting specific or unique product characteristics.



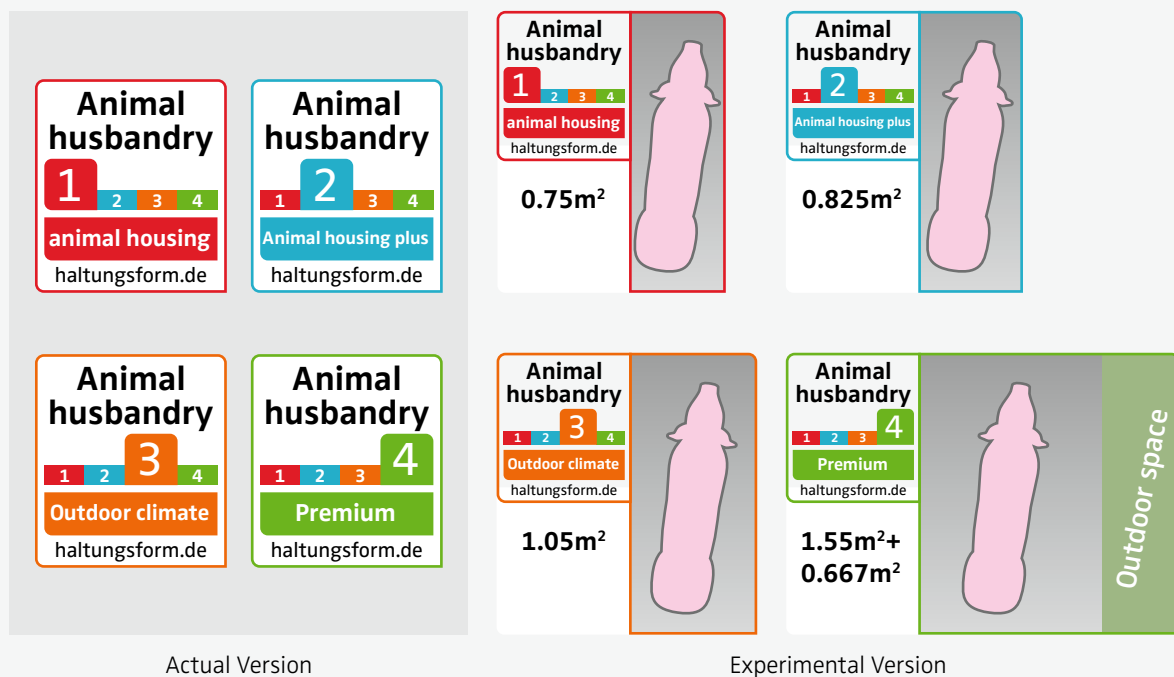
## BOX 1

## Study on the perception of the German Animal Husbandry Label and a modification

About 400 participants – representative of the adult pork-consuming population in Germany – were recruited for the study. The online survey consisted of a conjoint design plus general questions on purchasing and consumption behavior and on attitudes on ethical and sustainable consumption. The conjoint part focused on preferences for different husbandry conditions in relation to other product attributes such as price, packaging, or origin.

To analyze the perception and influence of the original and the modified label design (see Fig. 1), we randomly formed two groups. The control group evaluated products with the actual German Animal Husbandry Label, the experimental group received an extended version of the label and its four categories. In this modification, in addition to the information on the real label, the available husbandry space per animal in each category was visualized and indicated. Category 1 corresponds to the minimum legal requirements and level 4 to the standards that apply to organic meat production. The other product characteristics were the same for both groups.

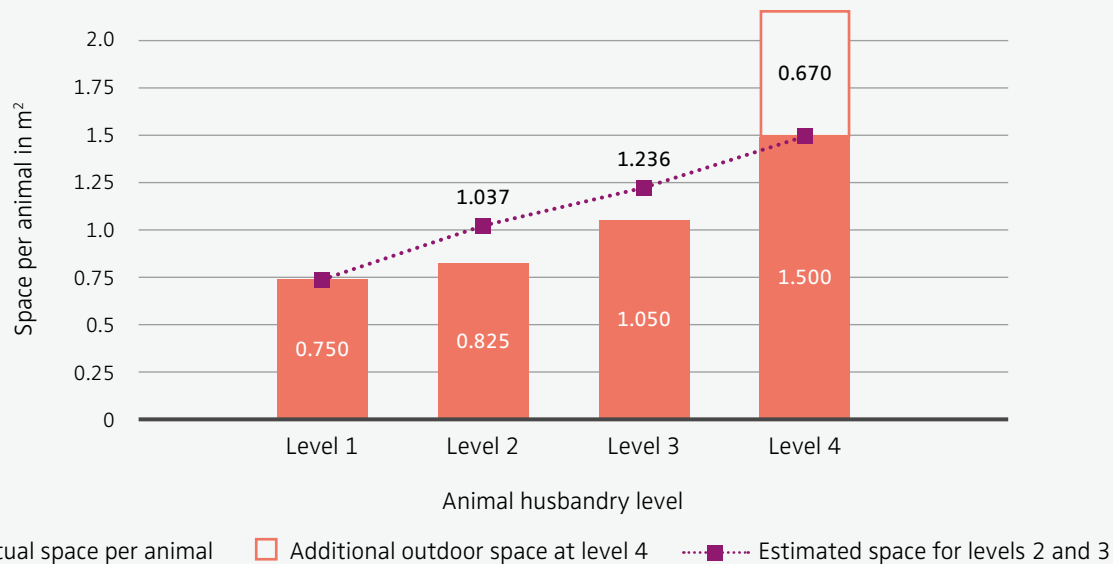
**FIGURE 1** > Current German Animal Husbandry Label (left) and extended label with visualization and indication of the available space per animal (right)\*



\*translated version (Original in German)

- > The study confirmed earlier findings that given information scarcity people make their own assumptions.
- > In our case, they overestimated the husbandry space per animal in the middle categories compared to the other levels.
- > Moreover, the additional information on the modified label prevented this misinterpretation,
- > and the willingness to buy products with higher label levels increased with the additional information.

FIGURE 2 > Estimated vs. actual husbandry space of the two middle level categories



### Product labels – the amount of information is tricky

✗ Given that the main function of labels is to highlight product characteristics in a simple and transparent way, designing a label is a big challenge: On the one hand, labels have to be concise and allow for easy orientation; on the other hand, they often have to explain complex criteria and information. If too much information is included in the label, it might become incomprehensible and fail to fulfill its actual purpose. If, on the other hand, its design is too minimalistic and lacks information, relevant content may be missing. In this case, consumers might make their own assumptions. And if these assumptions are wrong, undesirable effects can arise for both consumers and manufacturers.

**Label design – up and downsides of categories** ✗ Especially in the case of ethical or sustainable products, labels often use different categories or levels. These indicate, for example, to what extent a product meets certain criteria. Typically, the different levels are marked by letters or numbers, sometimes with a colored background. In the case of the European Energy Efficiency Label, for example, the categories A to E indicate the efficiency of electric devices, while the German Animal Husbandry Label uses the numeric levels 1 to 4 to describe different qualities of animal husbandry. Quality levels enable consumers to classify products, but do not allow for detailed comparisons. Without additional information, consumers often have difficulties in assessing the

actual differences between categories, and individuals have to make assumptions – consciously or unconsciously – about the details of a label category.

In a conjoint study (Box 1), we used the German Animal Husbandry Label to investigate how consumers perceive categorical product labels, how this perception influences purchase decisions, and whether additional information on the categories change perceptions and purchase decisions. The German Animal Husbandry Label describes the conditions under which animals are kept using four levels. Level 1, for example, corresponds to the minimum legal spacing requirements, level 4 to the standards that apply to organic meat production. One half of the participants, the control group, was shown the animal husbandry label as it is currently used in retailing. The other half, the experimental group, was exposed to a modified label version with some additional information.

### The lack of information on product labels encourages misinterpretation

✗ To determine which husbandry space participants in the control group expected under information scarcity, we informed them about the minimum standard (level 1) and the legal minimum indoor requirements for organic meat production (level 4) and asked them to estimate the available husbandry space for levels 2 and 3. As Fig. 2 indicates, participants overestimated the husbandry



*To ensure that a label works as intended and produces the desired effects, it should be tested in advance.*



conditions for levels 2 and 3 and assumed a linear increase in space. In fact, the space increases only slightly in the lower levels and substantially only in level 4.

This misperception is problematic both for consumers and producers. On the one hand, it can favor the overvaluation of certain products and entail suboptimal purchase decisions which do not entirely correspond to consumers' values or preferences. On the other hand, meat producers or labelling authorities could set unplanned and undesired purchase incentives.

With the additional information about the husbandry space per animal, buyers did not have to make assumptions about the standard of the respective label levels and could thus decide according to their actual preferences.

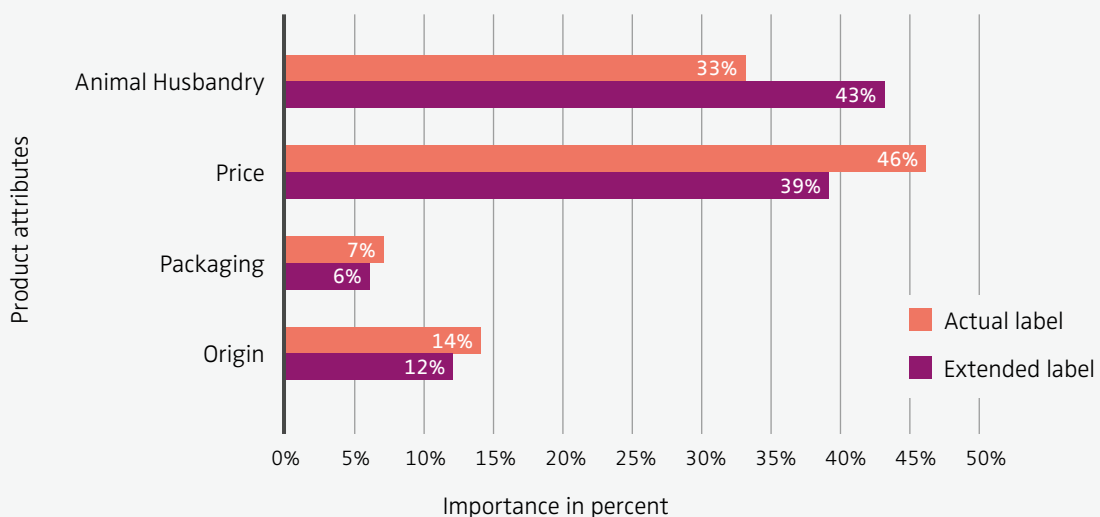
**Additional information increases the impact of the husbandry conditions on purchase decisions** ✕ In both

experimental groups, animal husbandry and price proved to be the dominant product attributes. While the price was the most important factor in the group with the original label, it was the animal husbandry condition in the group with the extended label. The additional information therefore changed the relative importance of the product attributes (Fig. 3).

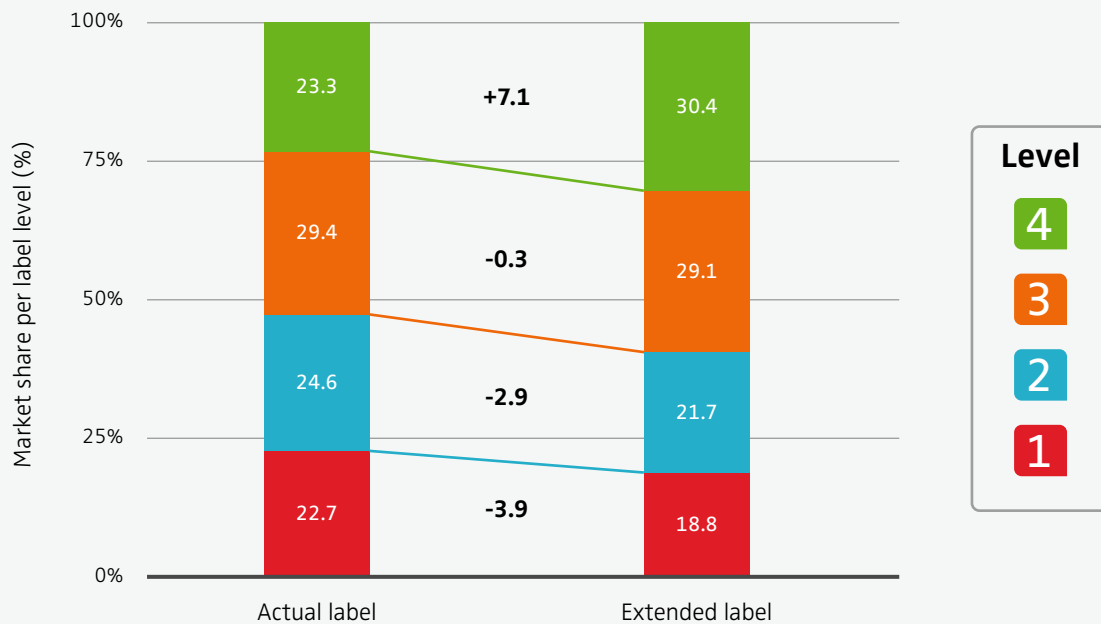
The extended label not only changed the weight of the attributes but also purchasing behavior. Adding information on the available husbandry space led to significantly lower market shares of products with the lower animal husbandry standards of levels 1 and 2 and to a higher demand for products with the highest standards (Fig. 4).

This shift in market share suggests that consumers cannot (fully) decide in line with their preferences when they make wrong assumptions due to a lack of information. With the current label design, they seem to overestimate the hus-

**FIGURE 3** > With additional information on the label levels, the husbandry condition becomes the most important product characteristic



**FIGURE 4** > Additional information increases the market share of products with the highest animal husbandry standards



bandry conditions and thus the value of certain products. With the extended information, more participants opted for the products with the highest animal husbandry standards, even if they were more expensive.

**Good product labels require a mindful design and tests in advance** ✕ Producers and marketing managers of products with higher standards should note that using labels with simple categories without additional information can lead to unutilized market potential for higher-quality products. Consumers rated products of lower label levels better than they actually were and bought products that only supposedly met significantly higher standards. A label with simple categories can therefore lead to undesirable consumption effects: less demand or lower willingness to pay for higher-quality variants.

However, this insight also concerns regulators that plan to use product labels to nudge consumer behavior in a certain, socially desirable direction, such as more ethical consumption. If product labels allow for misinterpretations, they can even be counterproductive and miss their point by unintentionally promoting less ethical product variants.

To ensure that a label works as intended and produces the desired effects, it should be tested in advance. Both consumer perception and the resulting choices can be tested in practice. If decision biases are observed, the label can still be modified.

With our study, we were able to show that the design of a label has a direct impact on the assessment of a product and on purchasing behavior. To fully use the potential of product labels, it is important to know and optimize their effect. Ecologically and ethically responsible consumption is increasingly important for many people. Well-designed labels help consumers base their purchasing decisions on these values and make conscious decisions in favor of appropriate products. Ultimately, all involved parties as well as society as a whole can benefit. ✕