Consumers are willing to pay more for food that has been produced via sustainable processes and with a reduced environmental impact. A large-scale US survey, that questioned strawberry consumers on aspects of sustainable food production, suggests that food producers could benefit from increased premiums if product ecolabels were to advertise specific environmental virtues.

Agriculture depends upon healthy ecosystems with fertile soil, clean groundwater, pollination and more. However, practices such as excessive use of fertiliser and pesticides can damage these ecosystem services. One way to steer farmers towards more environmentally-friendly practices is the use of ecolabels, such as organic certification, that usually come with associated price premiums.

However, it remains unclear which aspects of environmentally-friendly production are actually valued the most by consumers. Understanding these preferences could explain why some ecolabels are more attractive to consumers than others and help to guide pricing strategies of greener products. A key question is whether consumers most value sustainable processes, such as lower pesticide use, or environmental impacts, such as lower impacts on air, soil, and water.

To learn more about these preferences, this study conducted an online survey of US consumers. It asked respondents what they would be willing to pay for a box of fresh strawberries, given the production processes and impacts described.

Six different claims of the strawberries were made. Three of these highlighted production processes:
1. produced with conventional farming methods;
2. produced with fewer pesticides than the industry average; and
3. produced with less fertiliser.

The other three highlighted impacts:
4. produced with fewer negative impacts on water quality;
5. produced with fewer negative impacts on soil quality; and
6. produced with fewer negative impacts on air quality.

The researchers analysed 2 525 valid responses. Although respondents did not reveal any clear-cut preferences for either processes or impacts, the study did show that environmental attributes are not valued equally.

The average willingness-to-pay value was lowest for the conventionally produced strawberries at $2.76 (€2.43) per box. The strawberries produced with less pesticide had the highest average value at $3.07 (€2.71). This confirms previous findings that consumers are willing to pay more for low-pesticide products, owing to perceptions that they are safer to eat.

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The second most valued attribute was 'fewer negative impacts on water quality'; on average, consumers said they were willing to pay $2.95 (€2.60) for a box of these strawberries. The remaining attributes were valued as follows: less fertiliser ($2.94/€2.59), fewer soil quality impacts ($2.93/€2.58), and fewer air quality impacts ($2.92/€2.57). Although these prices were relatively close and not statistically significantly different, they were significantly higher than those for the conventionally produced counterpart.

The researchers thus conclude that, because consumers differentiate between different aspects of sustainability, labels that make specific claims may attract higher premiums than those that make more generic claims of sustainability. They also comment that improved customer awareness of sustainable production methods could lead to greater support for sustainably produced products. This, in turn, could make the labels and their environmental claims more profitable for producers.