Is there any difference between the phenolic content of organic and conventional tomato juices?

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Abstract
The present study aims to compare the phenolic and hydrophilic antioxidant profiles of organically and conventionally produced tomato juices.

Comparisons of analyses of archived samples from conventional and organic production systems demonstrated statistically higher levels (P < 0.05) of phenolic compounds in organic tomato juices. This increase corresponds not only with increasing amounts of soil organic matter accumulating in organic plots but also with reduced manure application rates once soils in the organic systems had reached equilibrium levels of organic matter.

Using principal component analysis, results show that phenolic compounds and hydrophilic antioxidant capacity were responsible for the differentiation between organic and conventional tomato juices. Thus, there appear to be genuine differences in the bioactive components of organic and conventional tomato juices not previously reported.


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