Consumers’ acceptance of health-related innovations in dry-cured ham from Turopolje pig breed

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Turopolje pig (TP) is a local Croatian breed which nearly extinct in the second half of the 20th century. Currently, despite the state support, the TP is still endangered and to self-sustain the breed a new marketing strategy, based on the meat products with an extra added value, is needed. As consumers nowadays increasingly demand for more convenient and healthier types of products, in present work (within TREASURE project) we investigated consumers’ acceptance of health-related innovations associated with the reduction of salting or smoking of TP dry-cured ham. A consumer (n=120) sensory test was carried out in Zagreb city area with the three types of TP hams (typically salted and smoked, less salted or less smoked) and two types of standard hams (conventional and premium) from modern pig breeds. Effect of information on innovation and/or breed on ham preferences was tested using three-step procedures as blind, expected and actual (informed) test on liking scale from 1 (dislike extremely) to 9 (like extremely). Data were analysed by GLM procedures at 0.05 α-level. In the blind test, in the absence of information, no significant differences between ham liking scores were found. In the expectancy test, when only information is given, all types of TP ham were more preferred than conventional ham, but only typical TP ham was preferred over the premium ham. Finally, when tasting is repeated with the information, all TP hams were scored higher than premium ham, while innovative TP hams were scored similar as conventional ham. This results suggest the preference of TP hams over the standard hams and a good acceptance of health-related innovations in TP ham by Croatian consumers. Funded by European Union’s H2020 RIA program (grant agreement no. 634476).
CONSUMERS’ ACCEPTANCE OF HEALTH-RELATED INNOVATIONS IN DRY-CURED HAM FROM TUROPOLJE PIG BREED

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BACKGROUND AND AIM – Turopolje pig (TP) is a local Croatian breed which nearly extinct in the second half of the 20th century. Currently, despite the state support, the TP is still endangered and to self-sustain the breed a new marketing strategy, based on the meat products with an extra added value, is needed. As consumers nowadays increasingly demand for more convenient and healthier types of products, in present work we investigated consumers’ acceptance of health-related innovations associated with the reduction of salting or smoking of TP dry-cured ham.

MATERIAL AND METHODS

A consumer (n=120) sensory test was carried out in Zagreb city area with the three types of TP hams (typically salted and smoked, less salted or less smoked) and two types of standard hams (conventional and premium) from modern pig breeds. Effect of information on innovation and/or breed on ham preferences was tested using three-step procedures as blind, expected and actual (informed) test on liking scale from 1 (dislike extremely) to 9 (like extremely). Data were analyzed by GLM procedures at 0.05 α-level.

MAIN RESULTS

In the blind test, in the absence of information on innovation and/or breed, no significant differences between ham liking scores were found. In the expectancy test, when consumers received a form only with the information about the innovation and/or breed, all types of TP ham were more preferred than conventional ham, but only typical TP ham was preferred over the premium ham. Finally, when tasting is repeated with the information on innovation and/or breed, all TP hams were scored higher than premium ham, while innovative TP hams were scored similar as conventional ham.

Effect of information on innovation and/or breed on ham preferences tested using three-step procedures as blind, expected and actual (informed) test

<table>
<thead>
<tr>
<th></th>
<th>Blind</th>
<th>Expected</th>
<th>Informed</th>
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<tbody>
<tr>
<td></td>
<td>I5M</td>
<td>se</td>
<td>I5M</td>
</tr>
<tr>
<td>Turopolje (TP) dry-cured ham</td>
<td>6.6</td>
<td>0.15</td>
<td>7.0a, 0.17</td>
</tr>
<tr>
<td>TP dry-cured ham less salt</td>
<td>6.5</td>
<td>0.17, 0.17</td>
<td>6.6ab, 0.18</td>
</tr>
<tr>
<td>TP dry-cured ham less smoked</td>
<td>6.1b, 0.17</td>
<td>6.7ab, 0.17</td>
<td>6.6ab, 0.15</td>
</tr>
<tr>
<td>Premium dry-cured ham</td>
<td>6.4</td>
<td>0.19, 5.9c, 0.15</td>
<td>5.9, 0.17</td>
</tr>
<tr>
<td>Conventional dry-cured ham</td>
<td>6.4c, 0.17</td>
<td>5.7c, 0.16</td>
<td>6.1c, 0.16</td>
</tr>
</tbody>
</table>

Effect of information on innovation and/or breed on ham preferences tested using three-step procedures as blind, expected and actual (informed) test

Unlike letters in the same row [X, Y, Z] mean different for p<0.05 between phases of the test. Unlike letters in the same column (a, b, c) mean different for p<0.05 between treatments; Category scale from 1= dislike extremely to 9= like extremely; I5M = least squares means; se = standard error.

CONCLUSION

- Results suggest the preference of TP hams over the standard hams and a high market potential of TP breed products
- Good acceptance of health-related innovations in TP ham by Croatian consumers

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From consumer sensory testing's

Turopolje pig ham

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