MICROBIOLOGICAL ANALYSIS OF TRADITIONALLY MANUFACTURED UJANI BASUNDI

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ABSTRACT

The investigation was carried out to evaluate the microbiological quality of Ujani basundi manufactured traditionally in Ujani and neighboring villages by traditional manufacturers. There were lot of variations in microbiological quality of collected samples which might be due to not maintaining hygienic conditions during manufacturing the product. The SPC count ranged from 16,800-2,60,000 with an average of 45,520 per g. yeast and mold ranged from 14-270 with an average of 91 per g. coliform ranged between 8-80 whereas the average coliform count in Ujani basundi observed 22 per g.

Key words : Ujani basundi, SPC, Yeast and mold, Coliform count, Traditional dairy product.

Ujani basundi is the heat desiccated indigenous dairy product of Ujani village located in Latur district of Maharashtra state. The production of Ujani basundi is confined to unorganized level, However, because of its characteristic taste, color, appearance, body, texture the special appeal this product is widely consumed. However, the manufacturers do not adopt the special care and hygienic conditions during the manufacturing of this product.

Therefore the study was undertaken to evaluate the microbiological quality of this product manufactured traditionally by local manufacture. The samples were collected from 20 manufactures and were brought to the laboratory of Vivekanand College, Aurangabad (MS) for microbiological analysis. The samples were analyzed for standard plate count Indian standards (Sp:18, part XI,1981) and yeast and mold and coliform count as described in the book published by milk industry foundation.

The microbiological quality of all the samples of four villages varied significantly (Table 1). Standard plate count of Killari village Ujani basundi samples was extremely high. Yeast and mold of these samples were also very high. Coliform count of these samples ranged from 8-60cfu/g with an average of 30 cfu/g. Extremely high coliform count observed in Lamjana village samples ranged from 9-70cfu/g with an average of 44 cfu/g. The samples collected from Ujani village showed SPC from 18,000-1,80,000 cfu/g with an average of 41,000 cfu/g, whereas yeast and mold and coliform count ranged from 29-270 cfu/g and 10-80 cfu/g with an average 40 and 21 cfu/g. respectively. The SPC of samples collected from Ausa tehsil showed an average of 17,000 cfu/g. Whereas yeast and mold and coliform count ranged from 14-90 cfu/g and 8-43cfu/g with an average 40 and 21 cfu/g, respectively. Singh et al. (1975) and Arora (1987) also reported the same result of SPC, yeast and mold and coliform count in rabri, khurchan and sweetened condensed milk.

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TABLE 1: Microbiological quality of traditionally manufactured *Ujani basundi*.

<table>
<thead>
<tr>
<th>Name of Village</th>
<th>Total No. of samples</th>
<th>SPCrange cfu/g</th>
<th>Yeast &amp; mold count range cfu/g</th>
<th>Coliform count range cfu/g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ujani</td>
<td>5</td>
<td>18,000-1,80,000(41,000)</td>
<td>29-270(60)</td>
<td>10-80(40)</td>
</tr>
<tr>
<td>Killari</td>
<td>5</td>
<td>22,000-2,60,000(53,000)</td>
<td>17-160(75)</td>
<td>8-60(30)</td>
</tr>
<tr>
<td>Ausa</td>
<td>5</td>
<td>19,500-1,90,000(17,000)</td>
<td>14-90(40)</td>
<td>8-43(21)</td>
</tr>
<tr>
<td>Lamjana</td>
<td>5</td>
<td>16,800-1,70,000(42,000)</td>
<td>46-110(80)</td>
<td>9-70(44)</td>
</tr>
<tr>
<td>Over all</td>
<td>20</td>
<td>16,800-2,60,000(45,520)</td>
<td>4-270(91)</td>
<td>8-80(22)</td>
</tr>
</tbody>
</table>

Figures given in the parenthesis are the average values.

**REFERENCES**


