

Table S1. List of microorganisms used in this study. The source of isolation and corresponding references are also reported.

| Strain | Medium | Temperature (°C) | Source of isolation | Reference |
|--|--------|------------------|--|-----------|
| <i>Lacticaseibacillus casei</i> FC13 | MRS | 37 | “Flor di capra” (sheep milk cheese) | [19] |
| <i>Lactobacillus helveticus</i> PR4 | | | Parmigiano | [57] |
| | | Reggiano cheese | [21] | |
| <i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> B15Z | | 30 | Caciocavallo Pugliese cheese | [20] |
| <i>Lactococcus lactis</i> DIBCA-2 | | | Pecorino Umbro (sheep milk cheese) | [19] |
| <i>Streptococcus thermophilus</i> CR12 | M17 | 37 | Fermented milk | [22] |

Table S2. List and definition of the attributes used for the sensory analysis carried out on ricotta cheese samples.

| Attributes | Definition | Physical reference |
|-------------------|---|---|
| Color intensity | Color of the ricotta samples | |
| Color homogeneity | Uniformity of the ricotta texture at visual inspection | |
| <i>Odour</i> | | |
| Milk | Typical milk odor | Fresh milk |
| Acidic | Acid, sour, vinegar | Milk acidified with lactic and acetic acids |
| <i>Flavor</i> | | |
| Sapidity | Sapidity taste | Ripened cheese |
| Bitterness | Bitter taste | Coffee |
| Acidity | Acid, sour, vinegar | Milk acidified with lactic and acetic acids |
| Sweetness | Sweet taste | Ricotta cheese added with sugar |
| Milk | Typical milk flavour | Fresh milk |
| Butter | Typical butter flavour | Butter |
| Off-flavors | Presence of off-flavours | |
| Persitency | After-taste persistency of the flavor | |
| Intensity | After-taste intensity of the flavor | |
| <i>Texture</i> | | |
| Adesivnhess | Adherence to the spoon | |
| Graininess | Perception of grains (lumps) and heterogeneity in the mouth | |
| Friability | Tendency to break into smaller pieces | |
| Wetness | Capability of being melted in the mouth | |