

mostly smaller, irregular eyes; this is how “overset” is generated. As a general rule, Alpine cheese should have only few, maximum pea-size eyes. Exceeding this requirement is considered a defect (HÜFNER 1999).

Causes:

- Transition from summer feed to winter feed
- Foam and dirt in curd mass are weak points; they are the initial points for eye formation
- In contaminated resp. too weak, too weakly or too strongly acidified as well as otherwise weakened starter cultures (also by bacteriophages), gas-forming microorganisms frequently become dominant
- Cheese with too low pH-value, i.e. with weakly matted cheese mass as well as those with too high wff has a tendency towards overset; but also those, mainly Bergkäse, with a high pH-value (>5.2) after pressing, a salt content of 0.8...1.2% and at elevated ripening temperatures of 15...18°C and thus linked propionic acid fermentation
- See also early-blowing (pin-holes, bulging).

Countermeasures:

- ▶ See early-blowing
- ▶ Avoid incorporations of air into curd mass, check all pipelines, lids, valves, gaskets, i.e. the entire filling and forming station and repair leaky devices, remove possible foam from freshly formed cheese
- ▶ Proper control of acidification (VAN DEN BERG and DE VRIES), process curd sufficiently, and properly acidify, press, salt and ripen cheese.

Post-fermentation

A normal propionic acid fermentation for longer ripening cheese can be followed by another fermentation between the 4th and 6th month, and is called “post-fermentation”. This can lead to very large (Fig. 2.128) and/or numerous eyes. If plasticity of cheese mass does not permit an eye formation any more, then cracks appear (see also cracked, splinty body) (Fig. 2.129).



Fig. 2.128 Weak post-fermentation, large eyes (LVA Kempten)

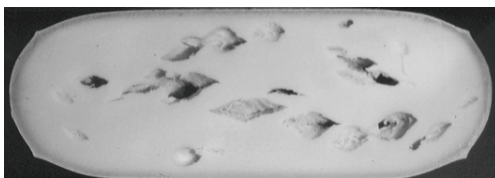


Fig. 2.129 Strong post-fermentation, irregular eyes and cracked body (LVA Kempten)

If it is only propionibacteria contributing to this eye defect, then cheese still can have good taste attributes; if contaminants (Clostridia and others) are active, then flavour is being degraded too. Post-fermentation and crack formation show up, if more CO₂ is formed in cheese during metabolic activities than can be diffused throughout cheese, being dissolved in cheese or accumulated in individual eyes, as presented by GINZINGER:

$$\text{CO}_2\text{-formation} > \text{CO}_2 \text{ from cheese} + \text{CO}_2 \text{ soluble in cheese} + \text{CO}_2 \text{ in eyes}$$