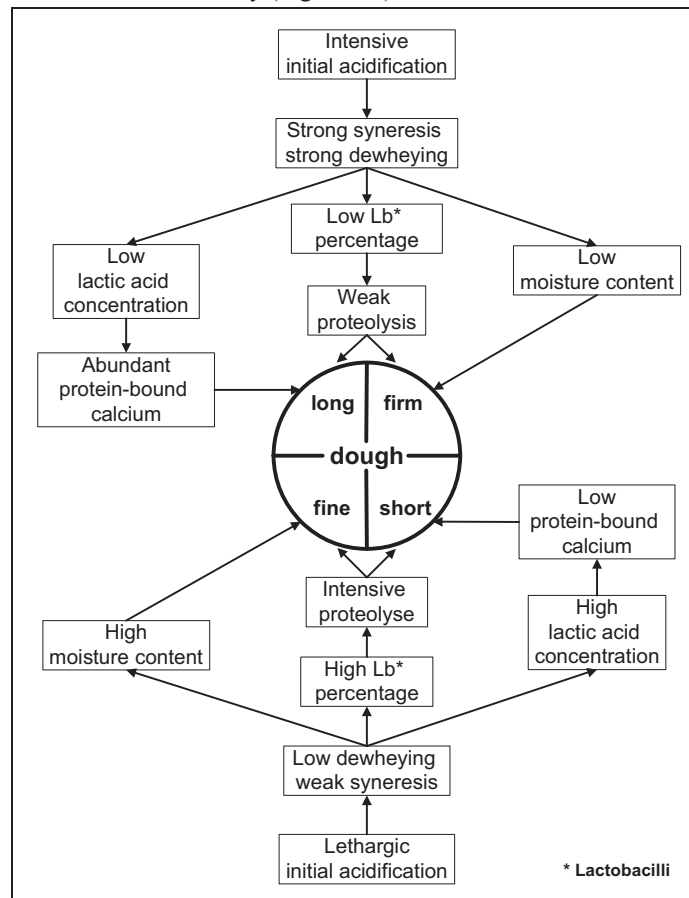


form eyes (holes). Progression of lactic acid fermentation does not only influence microflora, but has also an effect on cheese mass consistency (Fig. 2.110).



**Fig. 2.110** Cheese mass consistency of Emmentaler in function of lactic acid fermentation – intensive or delayed initial acidification (STEFFEN)

Each cheese variety has its own typical acidification. During production, certain pH-values need to be complied with (Tab. 2.103, next page).

In Switzerland, a method for determining lactic acid content is accredited. Stable lactic acid contents for each individual cheese variety are required to maintain high quality levels (BACHMANN and NICK).

Structure of rennet gel depends on progression of the acidification curve (PETERS and KNOOP). Progression of lactic acid fermentation during production influences:

- Syneresis and dewheying and thus water content
- Percentage of lactobacilli (Lb.)
- Lactic acid concentration
- Extent of proteolysis, and thus flavour
- Percentage of protein-bound calcium.

All these factors characterise cheese mass (Fig. 2.110). Culture manufacturers provide defined cultures (see 2.3.2.2), with whom necessary acidification and ripening can be controlled very precisely.