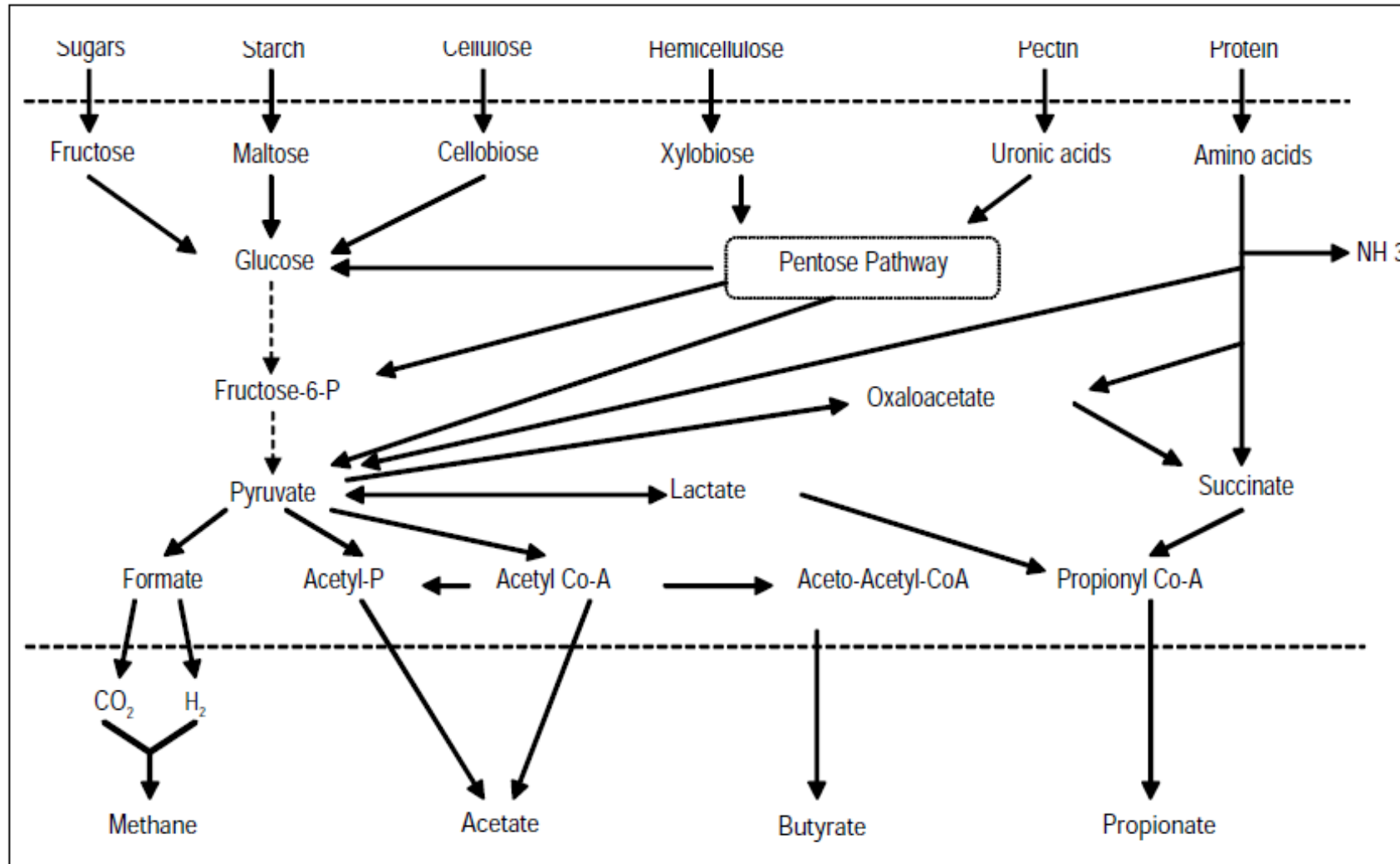
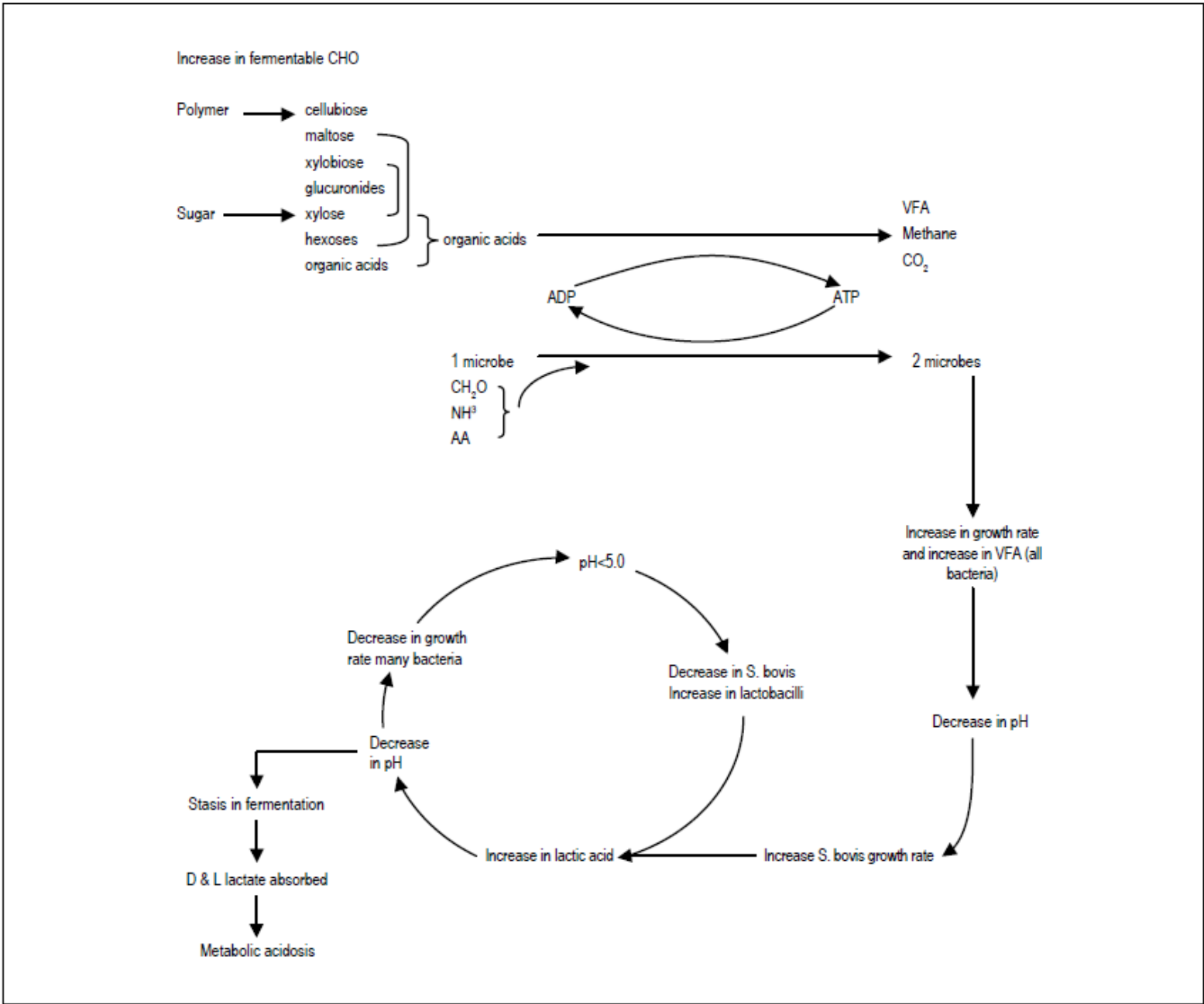


Omeostasi ruminale





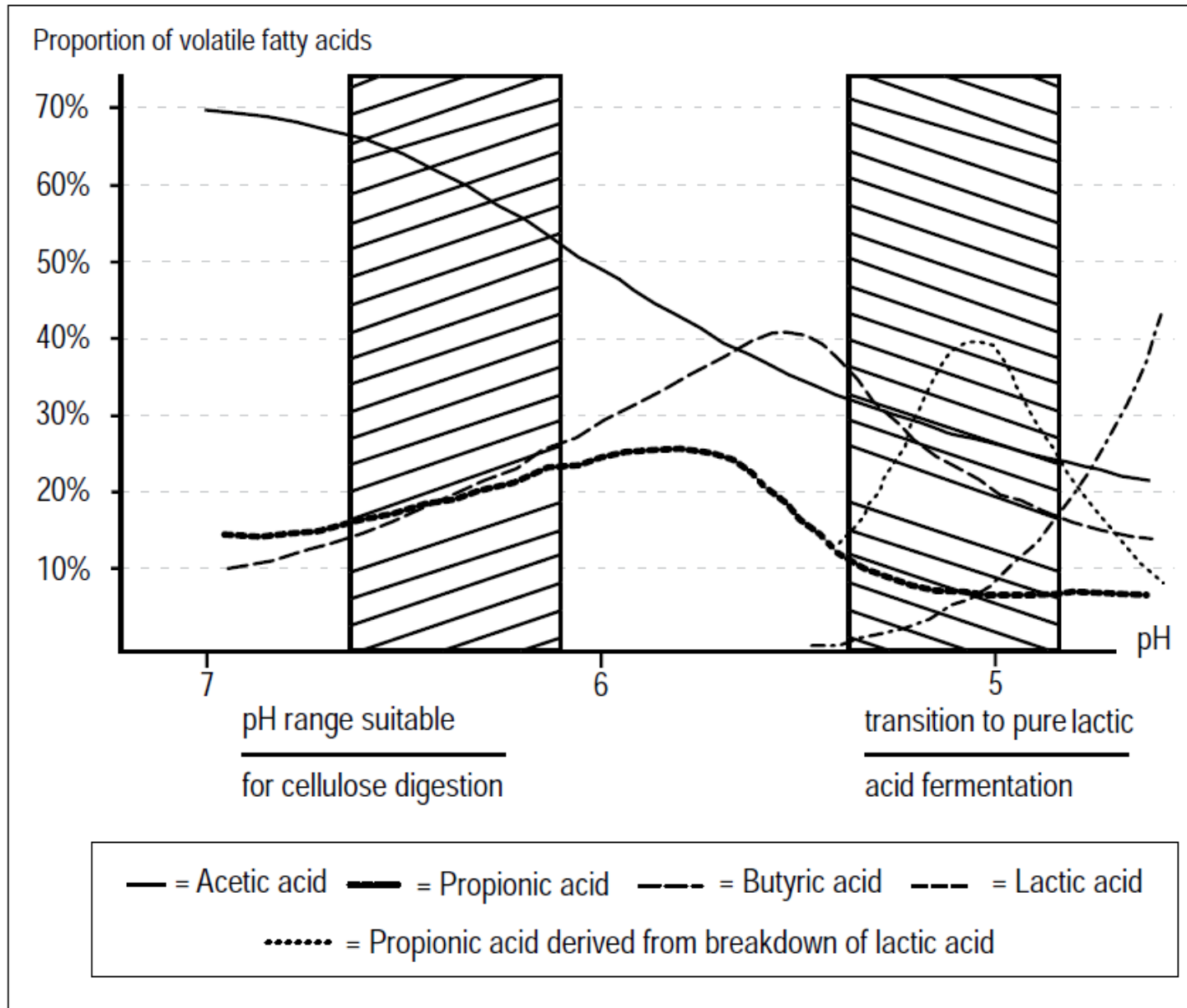
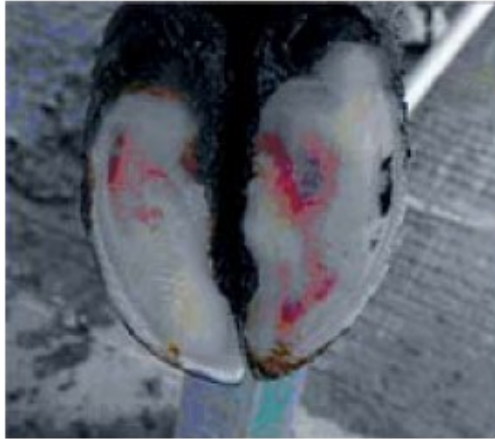


Figure 3: Proportions of acids produced in the rumen when pH falls from 7.0 (after Kaufmann and Ruhr 1967, reprinted from: Rosenberger, Clinical Examination of Cattle, 1979, Paul Parey Scientific Publishers, Berlin and Hamburg).



Cow scouring.



Paint brush sole haemorrhages and white line disease.



Laminitic rings – these are the result of an outbreak of acute laminitis approximately two months previously.



Abnormal horn formation due to production of inferior quality hoof horn.



Score 1: Faeces extremely liquid, bubbling and containing grain.



Score 2: Runny – stools do not form up – little evidence of fibre.



Score 3: Porridge-like consistency, forms 'chocolate cake' stools. Well-digested fibre is evident.



Score 4: Excessive fibre evident throughout stool, forms piles more than 50 mm high.

Rule of thumb

Score at least 25 fresh manure pats in the paddock using the 1-5 scoring system.

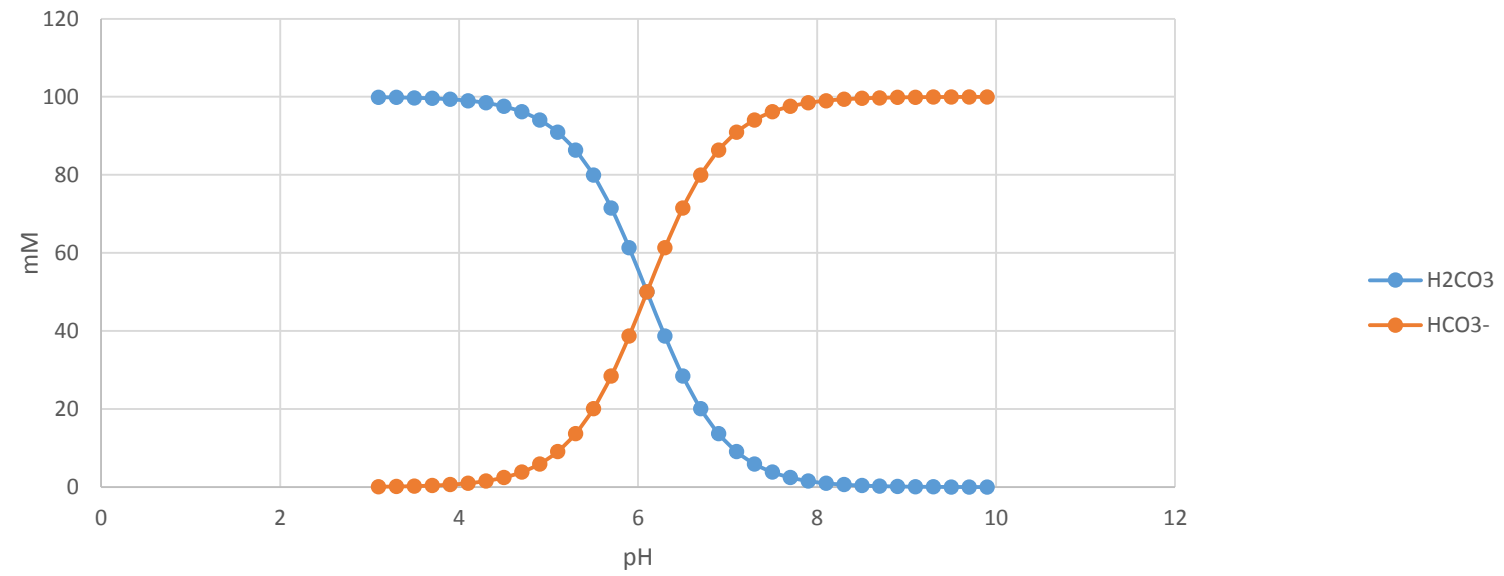
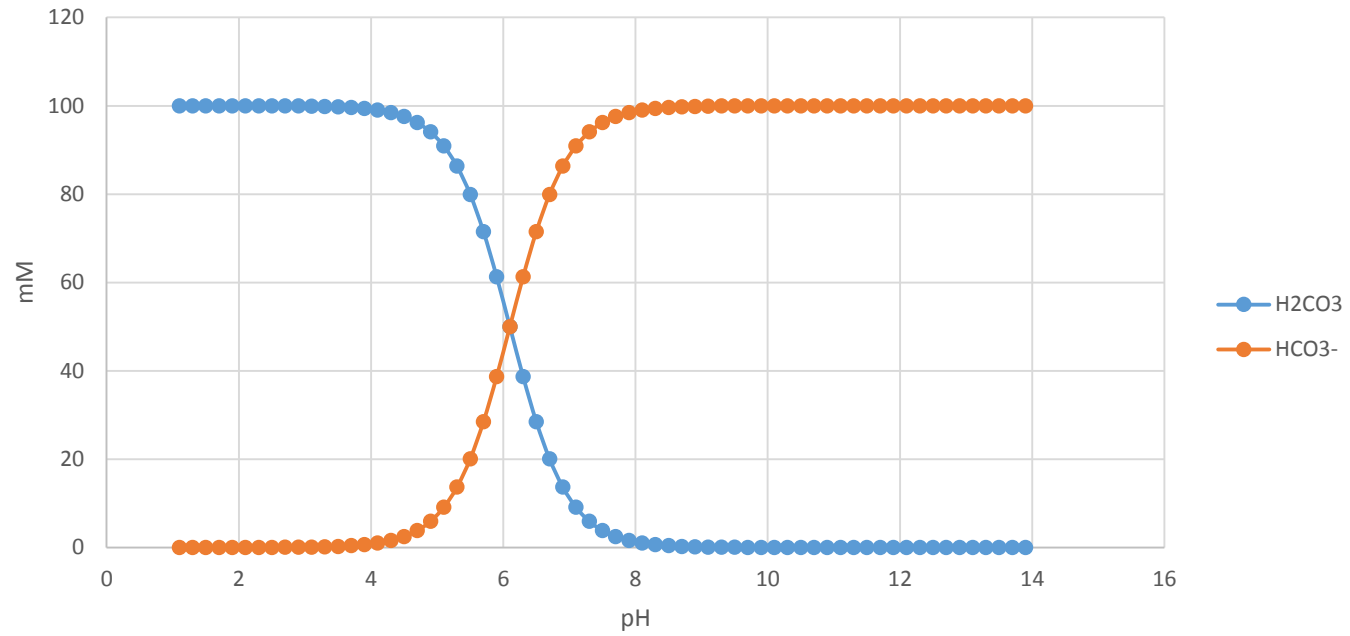
If more than 5 of the 25 pats are score 2 or less, take action.

Tampone bicarbonato



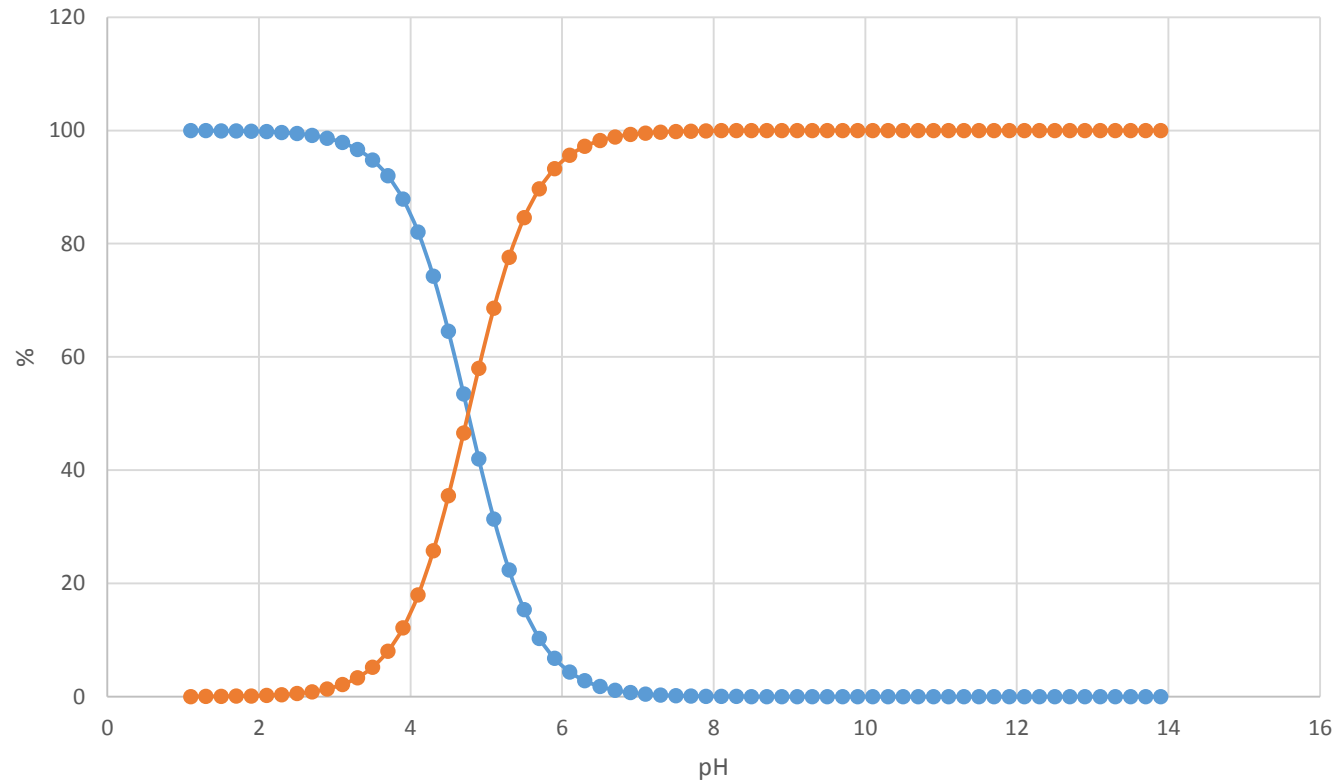
$$pK_a = 6,1$$

$$pH = pK_a \text{ H}_2\text{CO}_3 + \log \left(\frac{[\text{HCO}_3^-]}{[\text{H}_2\text{CO}_3]} \right)$$

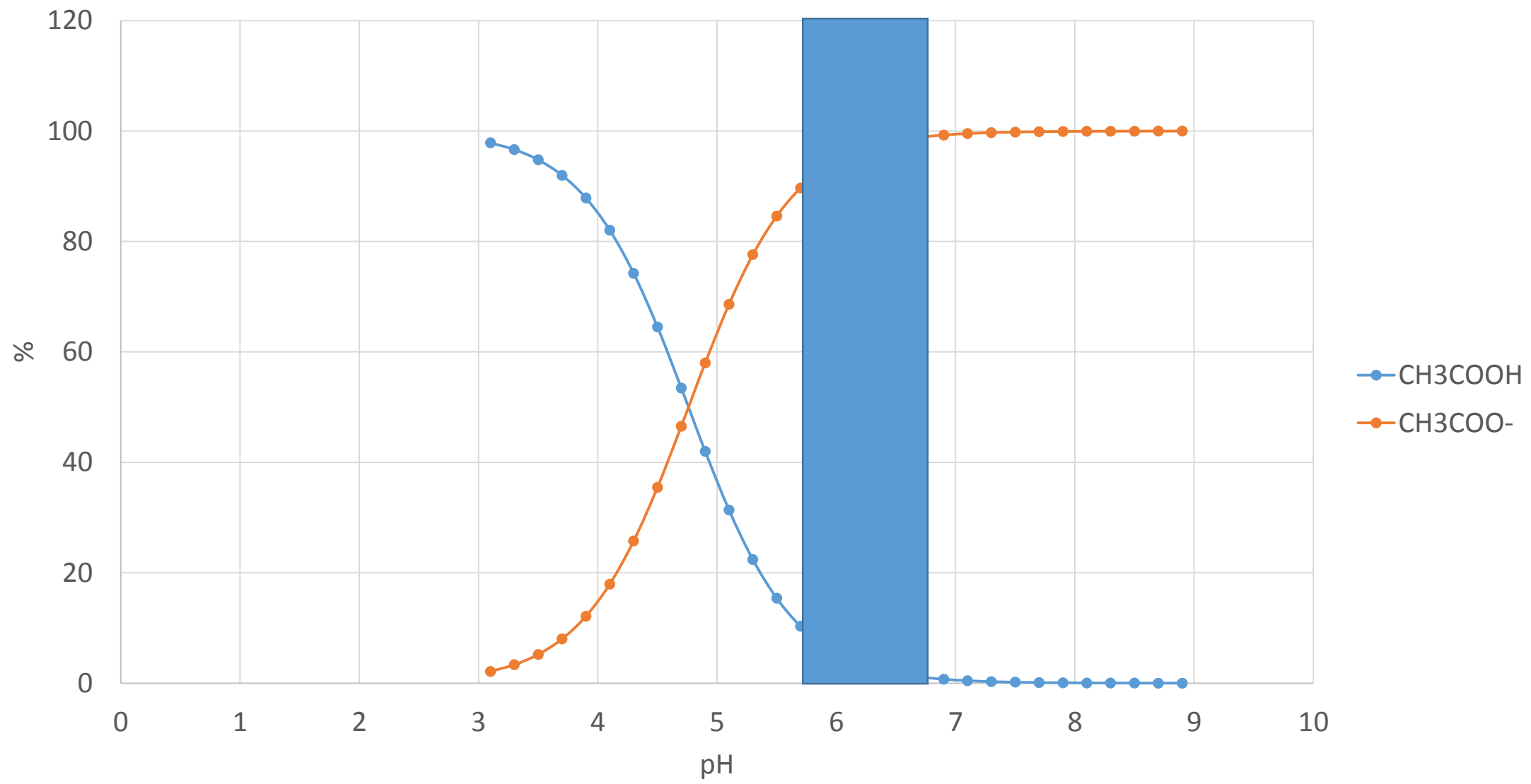


Acido acetico, pKa 4,76

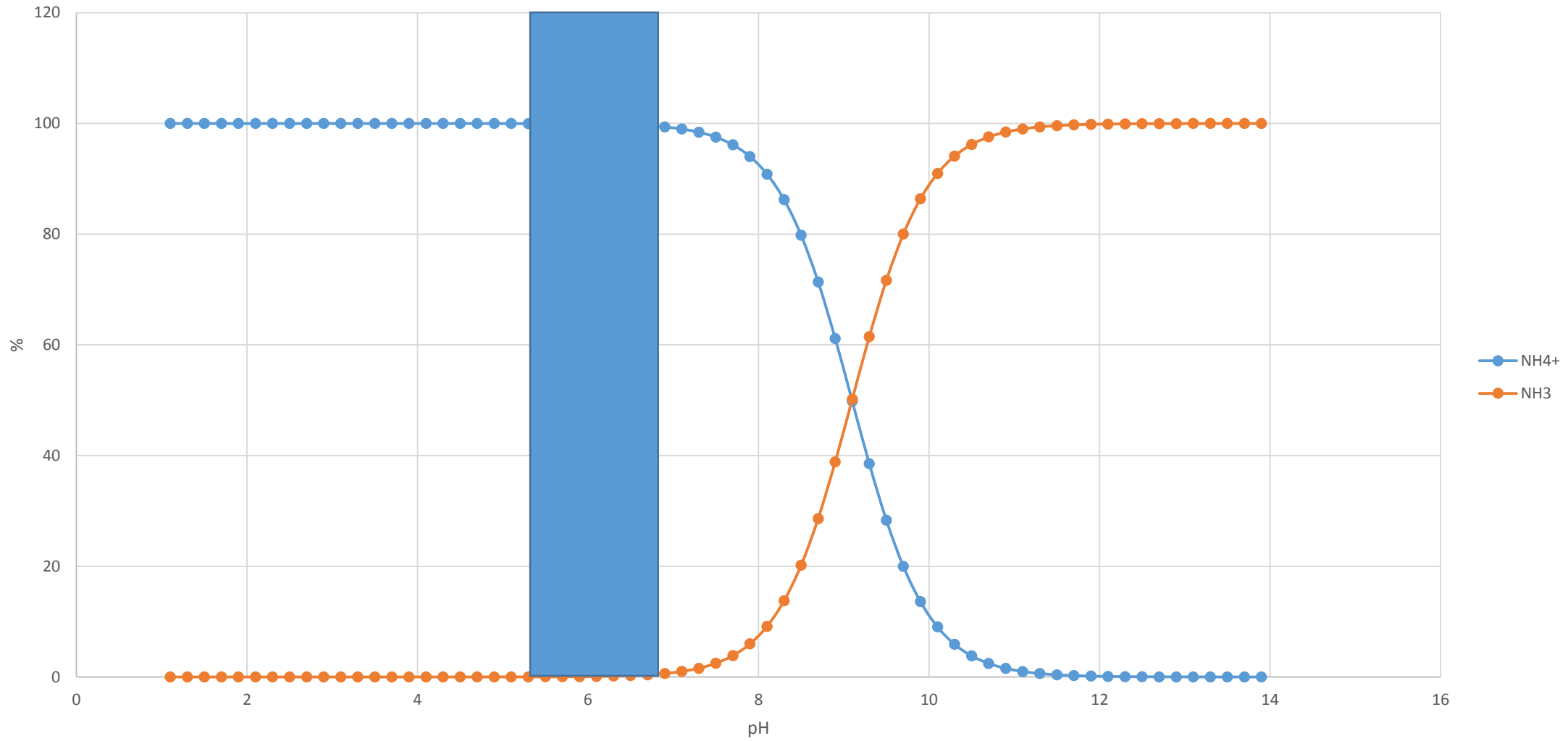
| pH | CH3COOH | CH3COO- |
|------|----------|----------|
| 1,1 | 99,97813 | 0,021873 |
| 1,3 | 99,96534 | 0,034662 |
| 1,5 | 99,94508 | 0,054924 |
| 1,7 | 99,91298 | 0,087021 |
| 1,9 | 99,86215 | 0,137848 |
| 2,1 | 99,7817 | 0,218299 |
| 2,3 | 99,65446 | 0,345539 |
| 2,5 | 99,45346 | 0,546537 |
| 2,7 | 99,13656 | 0,863443 |
| 2,9 | 98,63841 | 1,361589 |
| 3,1 | 97,85908 | 2,140923 |
| 3,3 | 96,64883 | 3,351171 |
| 3,5 | 94,79086 | 5,209145 |
| 3,7 | 91,98817 | 8,011834 |
| 3,9 | 87,8705 | 12,1295 |
| 4,1 | 82,04952 | 17,95048 |
| 4,3 | 74,25356 | 25,74644 |
| 4,5 | 64,53525 | 35,46475 |
| 4,7 | 53,44839 | 46,55161 |
| 4,9 | 42,0102 | 57,98998 |
| 5,1 | 31,36997 | 68,63003 |
| 5,3 | 22,38454 | 77,61546 |
| 5,5 | 15,39549 | 84,60451 |
| 5,7 | 10,29905 | 89,70095 |
| 5,9 | 6,755003 | 93,245 |
| 6,1 | 4,371085 | 95,62892 |
| 6,3 | 2,803187 | 97,19681 |
| 6,5 | 1,78718 | 98,21282 |
| 6,7 | 1,135121 | 98,86488 |
| 6,9 | 0,719226 | 99,28077 |
| 7,1 | 0,455008 | 99,54499 |
| 7,3 | 0,287574 | 99,71243 |
| 7,5 | 0,18164 | 99,81836 |
| 7,7 | 0,114684 | 99,88532 |
| 7,9 | 0,072391 | 99,92761 |
| 8,1 | 0,045688 | 99,95431 |
| 8,3 | 0,028832 | 99,97117 |
| 8,5 | 0,018194 | 99,98181 |
| 8,7 | 0,01148 | 99,98852 |
| 8,9 | 0,007244 | 99,99276 |
| 9,1 | 0,004571 | 99,99543 |
| 9,3 | 0,002884 | 99,99712 |
| 9,5 | 0,00182 | 99,99818 |
| 9,7 | 0,001148 | 99,99885 |
| 9,9 | 0,000724 | 99,99928 |
| 10,1 | 0,000457 | 99,99954 |
| 10,3 | 0,000288 | 99,99971 |
| 10,5 | 0,000182 | 99,99982 |
| 10,7 | 0,000115 | 99,99989 |
| 10,9 | 7,24E-05 | 99,99993 |
| 11,1 | 4,57E-05 | 99,99995 |
| 11,3 | 2,88E-05 | 99,99997 |
| 11,5 | 1,82E-05 | 99,99998 |
| 11,7 | 1,15E-05 | 99,99999 |
| 11,9 | 7,24E-06 | 99,99999 |
| 12,1 | 4,57E-06 | 100 |
| 12,3 | 2,88E-06 | 100 |
| 12,5 | 1,82E-06 | 100 |
| 12,7 | 1,15E-06 | 100 |
| 12,9 | 7,24E-07 | 100 |
| 13,1 | 4,57E-07 | 100 |
| 13,3 | 2,88E-07 | 100 |
| 13,5 | 1,82E-07 | 100 |
| 13,7 | 1,15E-07 | 100 |
| 13,9 | 7,24E-08 | 100 |

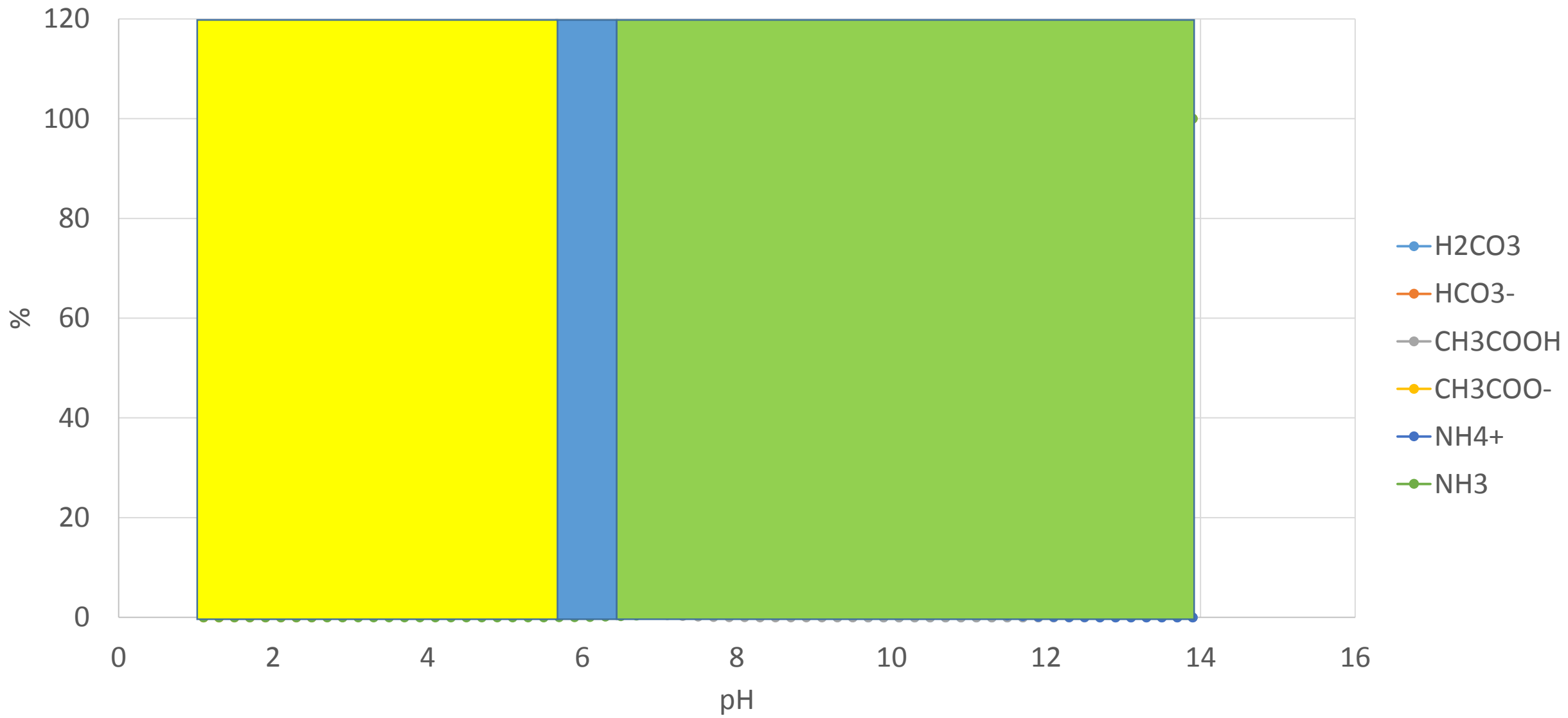


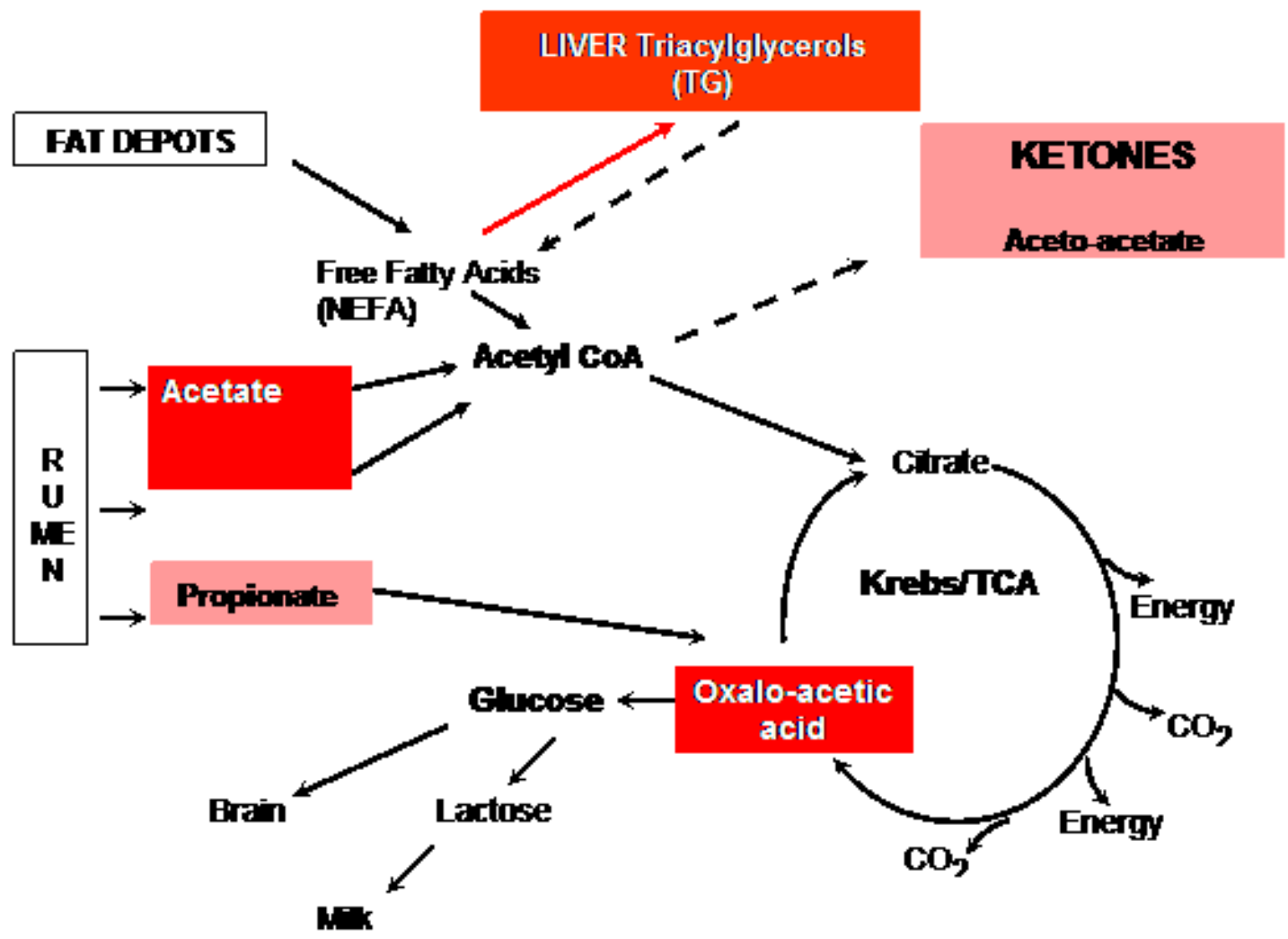
—●— CH3COOH
—●— CH3COO-

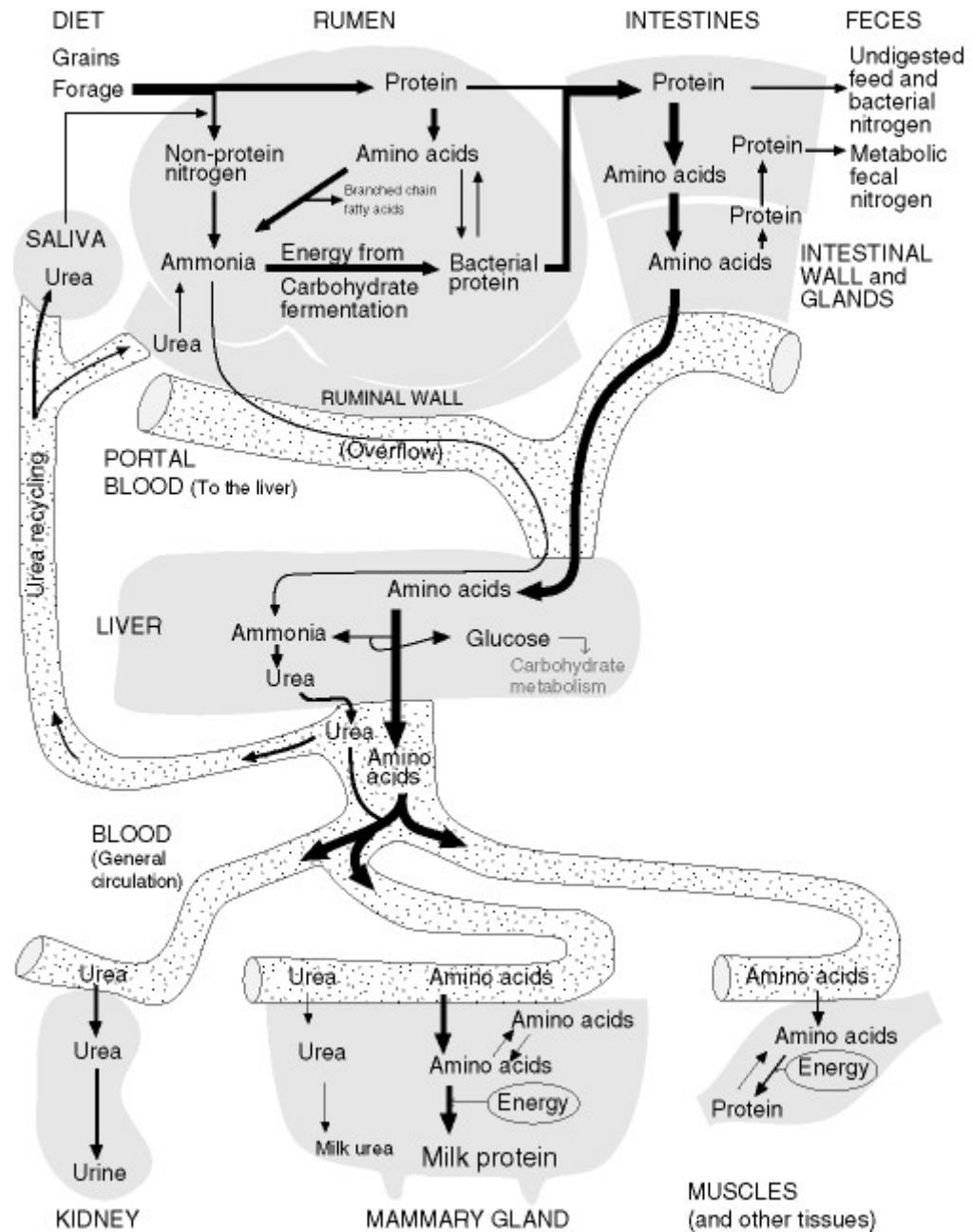


Ammoniaca pK_b 9,1











Structure of the mammary gland

