

Table XI. Fermentation of D-xylose and D-ribose with *Klebsiella pneumoniae* (formerly *Aerobacter aerogenes*); data are from ref. 23.

Substance	Amount (mol/100 mol pentose fermented)						
	D-xylose			D-ribose			
	Experimental	Calculated		Experimental	Calculated		
Carbon dioxide	46.0	45.7	45.7	60.0	62.9	62.9	64.4
Formate	72.3	72.3 ^a	72.3 ^a	59.4	59.4 ^a	59.4 ^a	59.4 ^a
Acetoin	0.0	0.0 ^a	0.0 ^a	0.0	0.0 ^a	0.0 ^a	0.0 ^a
Ethanol	55.6	55.6 ^a	55.6	59.6	59.6 ^a	58.1	59.6 ^a
Lactate	3.3	3.3 ^a	3.3 ^a	3.5	3.5 ^a	3.5 ^a	2.0
Succinate	6.0	6.0 ^a	6.0 ^a	11.0	11.0 ^a	11.0 ^a	11.0 ^a
Acetate	61.0	61.0 ^a	61.0 ^a	54.6	54.6 ^a	54.6 ^a	54.6 ^a
Butanediol	3.7	3.7	3.7 ^a	10.3	9.6	10.3 ^a	10.3 ^a
Hydrogen	N.D.	32.8	32.8	N.D.	40.1	40.9	40.9
Carbon recovery	80.0	80.0 ^a	80.0 ^a	88.7	88.7 ^a	88.7 ^a	88.7 ^a
NADH ₂ from XH ₂	—	5.5	5.5	—	3.7	1.5	2.9
Excess ATP	—	-47.2	-47.2	—	73.6	73.6	73.6
Apparent Y _{ATP}	—	11.12	11.12	—	6.32	6.32	6.32

^a Refers to data used in the calculations.

Note: ND refers to data not determined.