

Table II. Estimated biomass composition of *Escherichia coli* and measured uptake and excretion fluxes in a continuous culture, both at a growth rate of $\mu = 0.1 \pm 0.002 \text{ h}^{-1}$.

Compound	Proportion [% g/g DW]		Source				
Protein	72		a				
DNA	4						
RNA	10						
Lipids	9		b				
Polysaccharides	2.5						
Mureine	2.5						
Amino acids ^c		Nucleotides ^b		Lipid monomers ^b		Fatty acids ^c	
Proportion [% Amount]		Proportion [% Amount]		Proportion [% Amount]		Proportion [% Amount]	
Ala	11.4	amp	26.2	Glycerol	8.3	<i>Saturated:</i>	
Arg	5.0	gmp	32.2	Ethanolamine	25.1	C10	0.08
Asp	5.0	ump	21.6	Fatty acids	66.7	C12	3.53
Asn	5.0	cmp	20.0			C13	0.27
Cys	1.7	damp	24.6			C14	12.84
Glu	5.6	dgmp	25.4			C15	8.00
Gln	5.6	dtmp	24.6			C16	40.64
Gly	8.6	demp	25.4			C17	20.09
His	1.7					C18	1.03
Ile	4.6					C19	0.59
Leu	9.1					<i>Unsaturated:</i>	
Lys	5.6					C13	0.08
Met	2.4					C14	0.36
Phe	3.4					C15	0.16
Pro	4.2					C16	9.72
Ser	4.9					C17	0.19
Thr	5.3					C18	2.48
Trp	1.1						
Tyr	2.8						
Val	7.2						
Glucose uptake				9.2 ± 0.9 mmol L ⁻¹ h ⁻¹			
Acetate excretion				Not detectable			
Oxygen uptake				24.3 ± 2.4 mmol L ⁻¹ h ⁻¹			
Carbon dioxide excretion				24.8 ± 2.5 mmol L ⁻¹ h ⁻¹			

^aIngraham et al. (1983); ^bNeidhardt et al. (1996); ^cPramanik and Keasling (1998).