

TABLE I
Effect of various perfusing media on appearance of perfusate radioactivity, half-life, and total quantity of rapidly degrading protein

Perfusion medium (glucose medium + DL-leucine)	Observed rate of release of radioactivity							Calculated rapidly degrading protein		
	1st hr	2nd hr	3rd hr	4th hr	10th hr	20th hr	Average after 5 hrs	Half-life ($T_{\frac{1}{2}A}$)	Radioactivity (P_{A_0})	Amount (P_A)
%/hr										
A. Incubation period: $\Delta t = 70-$ 150 min								min	% ^a	% ^b
Complete.....	2.49	1.41	0.62	0.36			0.34	50	4.46	11
Minus uracil.....	2.96	1.29	0.80	0.51				45	5.95	10
Minus uracil.....	2.43	1.65	1.19	0.76	0.54	0.65	0.66	64	4.76	15
Minus tryptophan.....	2.66	1.36	0.91	0.62	0.29	0.38	0.36	63	4.85	9
Minus glucose.....	3.18	2.01	0.93	0.77	0.75	0.58	0.64	58	5.30	12
Minus glucose.....	4.24	3.86	2.68	1.88	0.72	0.72	0.57	82	12.62	23
Minus glucose, uracil, and tryptophan.....	1.44	1.19	0.73	0.47	0.42	0.42	0.42	67	2.82	7
B. Incubation period: $\Delta t = 3$ min										
Complete.....	7.02	3.08	1.91	1.65				55	12.56	7
Minus glucose.....	8.56	3.43	2.52	1.54				65	10.47	5
Minus glucose.....	8.09	5.00	2.95	2.49				60	16.59	7
Average.....							0.50	60.9		10.6
$\pm S.E.$							± 0.06	± 3.2		± 1.6

^a Percentage of total cellular radioactivity present at start of collection.

^b Actual amount present in growing cells expressed as percentage of total cellular protein.