

TABLE 4. Effect of futile enzyme cycles on the ATP turnover rate by bacteria under different growth conditions

Bacterium	Growth limitation	Nongrowth energy dissipation	Additional ATP consumption ( $\mu\text{mol}$ of ATP/mg of protein/h)	Reference
<i>E. coli</i>	Glucose	Maintenance	5.1–8.7	109
<i>E. coli</i>	Potassium	Energy spilling	19.2	70
<i>E. coli</i>	Potassium + excess ammonium	Energy spilling	25.4	13
<i>S. bovis</i>	Glucose	Maintenance	5.0	97
<i>S. bovis</i>	Chloramphenicol	Energy spilling	50.8	18

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