31. The textbook notes that a nutritionist's "Calorie" is equivalent to 1000 cal. The athlete's rate of dissipating energy is

$$P = 4000\,\text{Cal/day} = \frac{(4000 \times 10^3\,\text{cal})(4.18\,\text{J/cal})}{(1\,\text{day})(86400\,\text{s/day})} = 194\ \text{W}\ ,$$

which is 1.9 times as much as the power of a 100 W light bulb.