energy conversion

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```r
convert_energy_units <- function(energy_value, input_unit, output_unit) {
  if (input_unit == "J" & output_unit == "KJ") {
    energy_value/1000
  } else if (input_unit == "J" & output_unit == "CAL") {
     1/4.1868*energy_value
  } else if (input_unit == "J" & output_unit == "KCAL") {
    1/4186.8*energy_value
  } else if (input_unit == "CAL" & output_unit == "J") {
    energy_value*4.1868
  } else if (input_unit == "KCAL" & output_unit == "J") {
    energy_value*4186.8
  } else {
    message("Sorry, I don't know how to convert ", input_unit, " to ", output_unit)
  }
}


energy_in_cal <- 200

energy_in_j <- convert_energy_units(energy_in_cal, "CAL", "J")
energy_in_j
```

```
## [1] 837.36
```

```r
# 837.36
```

```r
daily_energy <- 2500
daily_energy_in_j <- convert_energy_units(daily_energy, "KCAL", "J")
daily_energy_in_j
```

```
## [1] 10467000
```

```r
# 10467000
```

```r
daily_energy_in_kj <- convert_energy_units(daily_energy_in_j, "J", "KJ")
daily_energy_in_kj
```

```
## [1] 10467
```

```r
seal_daily_energy_kj <- 52500
seal_daily_energy_kj/daily_energy_in_kj
```

```
## [1] 5.015764
```

 # 5.015764

```r
convert_energy_units(1, "KJ", "ERG")
```

```
## Sorry, I don't know how to convert KJ to ERG
```