Erratum to: Estimating Energy Requirements

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Erratum to:

**Chapter 27 in: J.J. Robert-McComb et al. (eds.),
The Active Female: Health Issues Throughout the Lifespan,
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The print and online versions of the book were incorrectly published with Mathematical errors in Chapter 27, pages 424-426. The errors have now been updated with these changes. The correct equations are given below

Chapter 27, Page 424

27.5.3.1 Estimating TEE: A Case Study

Alice is a 37- year-old woman, weight 64 kg,
should be

Alice is a 37- year-old woman, weight 75 kg

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First Step.

$FFM = 75 - (0.12 \times 75) = 75 - (9) = 64 \text{ kg.}$

Should be

$FFM = 75 - (0.12 \times 75) = 75 - 9 = 66 \text{ kg.}$

$RMR = 24.6 \times (64 \text{ kg}) + 175 = 1,749 \text{ kcal/day.}$

$RMR \text{ (kcal/h)} = 1,749/24 = 72.9 \text{ kcal/h}$

Should be

$RMR = 24.6 \times (66 \text{ kg}) + 175 = 1,798.6 \text{ kcal/day.}$

$RMR \text{ (kcal/h)} = 1,798.6/24 = 74.94 \text{ kcal/h}$

The updated online version of this chapter can be found at
https://doi.org/10.1007/978-1-4614-8884-2_27

Second step.

3. EE of sleeping = $0.9 \times 72.9 \text{ kcal/h} = 65.6 \text{ kcal/h}$.

Should be:

3. EE of sleeping = $0.9 \times 74.94 \text{ kcal/h} = 67.4 \text{ kcal/h}$.

Total EE of sleeping = $65.6 \times 5 = 328 \text{ kcal/day}$.

Should be

Total EE of sleeping = $67.4 \times 5 = 337 \text{ kcal/day}$.

Page 426**Calculations:**

3. EE during sedentary leisure = $1 \text{ h} \times 2.0$

METs = $3.9 \text{ kcal/kg} \times 75 \text{ kg} = 150 \text{ kcal/day}$.

Should be

3. EE during sedentary leisure = $1 \text{ h} \times 2.0$

METs = $2 \text{ kcal/kg} \times 75 \text{ kg} = 150 \text{ kcal/day}$.

Sixth step.

$$TEE = 2759 \text{ kcal/day}$$

$$PAL = 2759 \text{ (kcal/day)} / 1749 \text{ (kcal/day)} = 1.5$$

Should be

$$TEE = 2759 \text{ kcal/day}$$

$$PAL = 2759 \text{ (kcal/day)} / 1798.6 \text{ (kcal/day)} = 1.5$$

Page 426, line 15-20**27.5.5 NEAT Estimation**

All together NEAT physical activities lasted 13 h, and RMR was 72.9 kcal/h. So we need to multiply $13 \text{ h} \times 72.9 \text{ kcal/h}$ in order to calculate kcal that were expended for resting during NEAT activities, which were 948 kcal. So final net NEAT was 1,483 during a day.

Should be

All together NEAT physical activities lasted 13 h, and RMR was 74.94 kcal/h. So we need to multiply $13 \text{ h} \times 74.94 \text{ kcal/h}$ in order to calculate kcal that were expended for resting during NEAT activities, which were 974 kcal. So final net NEAT was 1,457 kcal during a day.

$$\text{Final NEAT Results } 2,431, \text{ kcal/day} - 948 \text{ kcal/day} = 1,483 \text{ kcal/day}$$

Should be

$$\text{Final NEAT Results } 2,431, \text{ kcal/day} - 974 \text{ kcal/day} = 1,457 \text{ kcal/day}$$