

# Survey of Back Pain Among Recreational Day Hikers and Backpackers

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Dear Participant:

We are contacting you to request your participation in a survey that examines the prevalence of back pain among recreational day hikers and backpackers. Your responses will be used in a future research study.

The purpose of our research study is to examine the prevalence of back pain among recreational day hikers and backpackers and investigate correlations with experience, fitting, load and activity level. Peer reviewed literature regarding this population is lacking with current evidence focusing on the military and school age children. Our intention is to provide groundwork for future research pertaining to guidelines and injury prevention specific to this population.

The survey is being conducted by medical professionals from the University of Colorado School of Medicine and University of Colorado Hospital. Collectively, we have expertise practicing in emergency medicine, wilderness medicine, physical therapy and sports medicine.

Earlier this year we deployed a pilot survey to ensure the burden would be minimal and that the survey itself would be of the highest quality. Results showed it should take no more than 10 minutes to complete. Participants rated the survey as easy to take.

Your participation in this survey is completely voluntary and all of their responses are anonymous. None of the responses will be connected to identifying information. The survey has undergone several reviews by the Colorado Multiple Institutional Review Board and the Colorado Clinical and Translational Sciences Institute to ensure this.

If you complete the survey you will have the option to be entered into a raffle to win a backpack or daypack.

If you have any questions about this survey, or difficulty in accessing the site or completing the survey, please contact Jacqueline.Kiernan@ucHealth.org

Thank you in advance for providing this important feedback.

Sincerely,

Jacqueline Kiernan PT, DPT

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Do you agree to terms above?

- Yes  
 No

## Hiking Questions

Have you gone hiking with a pack weighing 10 pounds or more in the last 3 years?

- Yes  
 No

Are you older than 18?

- Yes  
 No

Are you younger than 89?

- Yes  
 No

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The survey is split into several sections with each section containing separate questions on backpacking and day hiking with a pack. To prevent confusion we have defined the terms backpacking and day hiking below. Please take the time to read these definitions to prevent confusion while taking the survey.

### Definitions

**Backpacking-** hiking trips that are **SEVERAL DAYS** long, where a pack is carried. Gear includes clothing, food and items that will sustain a person for several consecutive days.

**Day Hike-** hiking trips that are **ONE DAY** long, where a pack is carried. Gear includes clothing, food and items that will sustain a person for a single day. (In this case a "pack" does NOT include small utility packs such as those that hold little more than a water bladder and should not be considered when answering survey questions.)

\*It is ok if you use the same pack for backpacking and day hikes. A question exists towards the end of the survey for you to indicate this.

**Day Hiking With A Pack**

In the last 3 years have you went day hiking with a pack?

- Yes  
 No

Please enter the number of times per year you day hike with a pack

When you go day hiking, what is the average weight of your pack?

On average how long do you typically day hike with a pack?

- 1-2 hours  
 3-4 hours  
 5-6 hours  
 7-8 hours  
 9-10 hours  
 11-12 hours

How many years have you been day hiking with a pack?

**Backpacking With A Backpack**

In the last 3 years, have you went backpacking?

- Yes  
 No

Please enter the number of backpacking trips you take each year \_\_\_\_\_

On average how long are your backpacking trips in days? \_\_\_\_\_

When you go backpacking what is the average weight of your backpack? \_\_\_\_\_

On average how long do you typically backpack per day on backpacking trips?

- 1-2 hours  
 3-4 hours  
 5-6 hours  
 7-8 hours  
 9-10 hours  
 11-12 hours  
 Not applicable

How many years have you been backpacking? \_\_\_\_\_

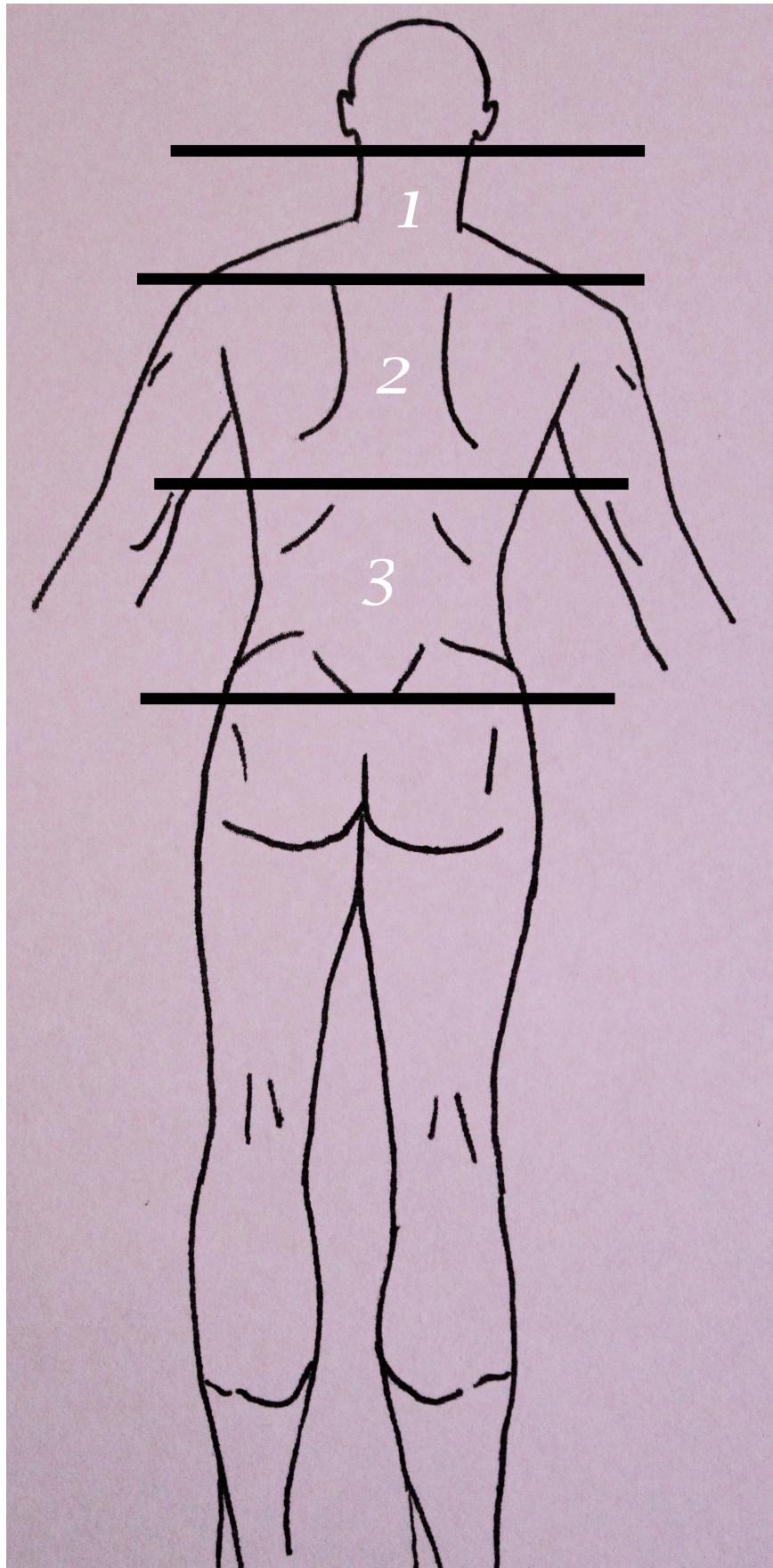
**Back Pain**

Over the last 3 years have you experienced back pain?  
(back pain includes neck, mid back/shoulder blade area and low back)

- Yes  
 No

If you experience back pain, choose the area from the picture below where you have the most pain (choose one).

- Neck- 1  
 Mid back/shoulder blade- 2  
 Low back- 3



When you experience back pain how would you rate the severity?

Slight

Moderate

Extreme

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(Place a mark on the scale above)

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Have you seen any of the following medical professionals for treatment of your back pain? (mark all that apply)

- Medical Doctor
  - Physician Assistant or Nurse Practitioner
  - Chiropractor
  - Physical Therapist
  - Emergency Department Visit
  - Other
- 

Do you currently have back pain?

- Yes
  - No
- 

In the last 3 years how physically strenuous is your job with regards to lifting and/or carrying loads?

- Low
  - Medium
  - High
  - Not Applicable
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In the last 3 years how physically strenuous are the recreational activities you participate in with regards to lifting and/or carrying loads?

- Low
- Medium
- High
- Not Applicable

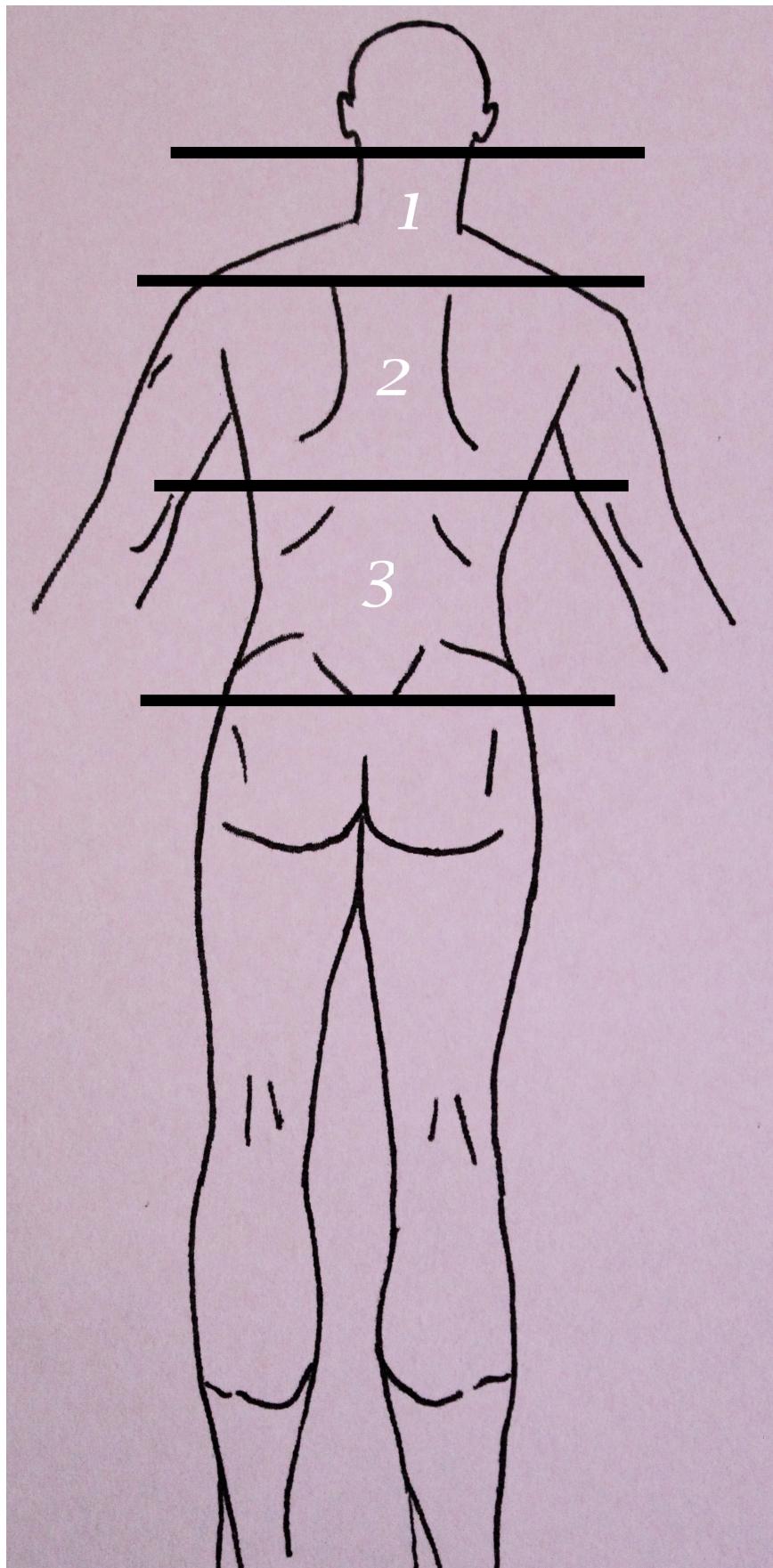
**Day Hiking, Backpacking and Back Pain**

I experience back pain while hiking with :

- Day pack     Backpack  
 Both     Neither

If you experience back pain while day hiking with a pack choose the area from the picture below where you have the most pain. (choose only one)

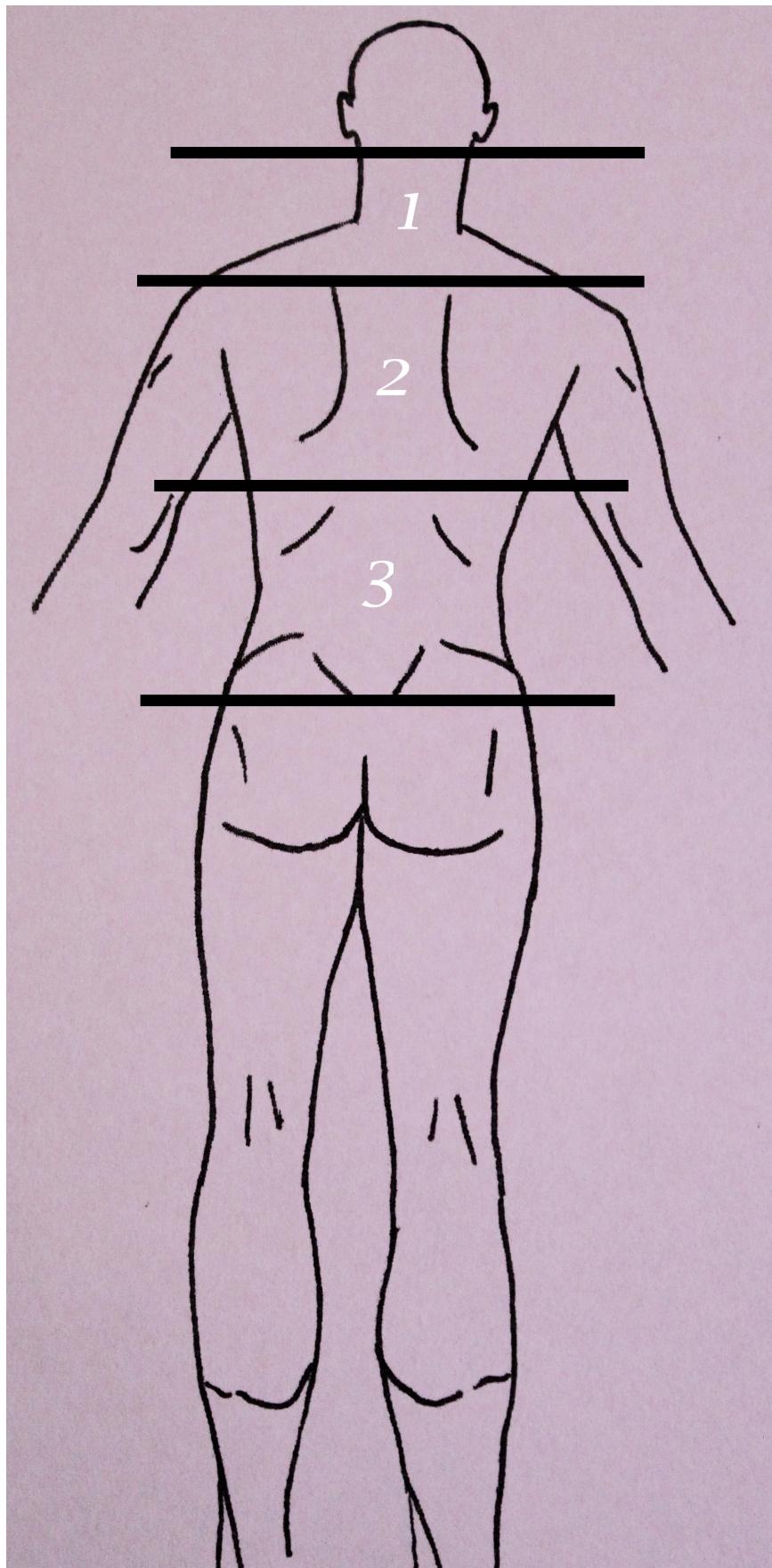
- Neck- 1  
 Mid back/shoulder blade-2  
 Low back-3  
 I do not experience back pain while day hiking with a pack



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If you experience back pain while backpacking, please choose from the picture below where you have the most pain. (choose one)

- Neck-1
- Mid back/ shoulder blade- 2
- Low back-3
- I do not experience back pain while backpacking



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How frequently do you experience back pain while day hiking with a pack?

Never    Rarely    Frequently  
 Always

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How frequently do you experience back pain while backpacking?

Never    Rarely    Frequently  
 Always

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Do you experience back pain after

Day hiking with a pack  
 Backpacking  
 Both  
 Neither

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Do any of the following options make your back pain worse?

Day Hiking with a pack  
 Backpacking  
 Both  
 Neither

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Does your back pain limit the distance you can cover:

Day hiking with a pack  
 Backpacking  
 Both  
 Neither

## Day Pack Fitting

Please mark all the features your day pack has from the following choices

- Hip belt
- Load lifters- (straps connecting shoulder straps to top of pack)
- Sternal strap
- Adjustable torso length
- External Frame- metal frame is outside and backpack appears strapped to it
- Internal Frame- frame is inside pack (no metal components outside pack)

Were you professionally fitted for the pack you carry on day hikes?

Yes     No

If yes approximately how long ago were you fitted?

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If you were professionally fitted to the pack you use on day hikes mark all that apply

- They went through the feature of my pack
- They measured my torso length
- They loaded the pack prior to me putting it on
- They checked the fit of my hip belt
- They checked the fit of my shoulder straps
- They checked the fit of my load lifters (small straps in the back that connect shoulder straps to top of pack)
- They demonstrated how to adjust my pack
- I don't remember what they covered
- They did not cover any of this information

Did you get professionally fit for your day pack because you had back pain?

Yes  
 No

If yes, did your back pain decrease after your fitting?

Yes  
 No

While day hiking with a pack what components do you adjust the most?

- Hip belt
- Shoulder straps
- Sternal strap
- Load lifters
- I don't make adjustments

## Backpack Fitting

Do you use the same pack for day hikes and backpacking?

- Yes  
 No

Please mark all the features your backpack has from the following choices

- Hip belt  
 Load lifters- (straps connecting shoulder straps to top of pack)  
 Sternal strap-(strap along collar bone that can connect shoulder straps)  
 Adjustable torso length  
 External Frame- (metal frame is outside and backpack appears strapped to it)  
 Internal Frame- (frame is inside pack (no metal components outside pack)

Have you ever had someone professionally fit your backpack?

- Yes  
 No

If yes, approximately long ago were you fitted?

If you were professionally fitted to your backpack mark all that apply.

- They went through the features of my pack  
 They measured my torso length  
 They loaded the pack prior to me putting it on  
 They checked the fit of my hip belt  
 They checked the fit of my shoulder straps  
 They checked the fit of my load lifters (small straps in the back that connect shoulder straps to top of pack)  
 They demonstrated how to adjust my pack  
 I don't remember what they covered  
 They did not cover any of this information

Did you get professionally fitted for your backpack because you had back pain?

- Yes  
 No

If yes, did your back pain decrease after your fitting?

- Yes  
 No

While hiking with a backpack what components do you adjust the most?

- Hip belt  
 Shoulder straps  
 Sternal strap  
 Load lifters  
 I don't make adjustments

## Load

When loading your backpack, where is the majority of the weight? Refer to picture below

- 1
- 2
- 3
- 4
- 5



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When loading the pack you use for day hikes where is the majority of the weight? Refer to picture below.

- 1
- 2
- 3
- 4
- 5



**Activity**

Do you have a physical conditioning program that you specifically do to prepare for backpacking trips?	<input type="radio"/> Yes <input type="radio"/> No
If yes, what activities do you do (mark all that apply)	<input type="checkbox"/> strengthening- (weight lifting) <input type="checkbox"/> cardio- (swimming, running, elliptical, biking etc.) <input type="checkbox"/> fitness classes- (yoga, pilates, HITT, etc.) <input type="checkbox"/> abdominal workout <input type="checkbox"/> day hike
Do you have a physical conditioning program that you do to prepare for day hiking with a pack?	<input type="radio"/> Yes <input type="radio"/> No
If yes, what activities do you do? (mark all that apply)	<input type="checkbox"/> strengthening- (weight lifting) <input type="checkbox"/> cardio- (swimming, running, elliptical, biking etc.) <input type="checkbox"/> fitness classes- (yoga, pilates, HITT, etc.) <input type="checkbox"/> abdominal workout <input type="checkbox"/> day hike
Do you belong to a hiking or backpacking club?	<input type="radio"/> Yes <input type="radio"/> No

## Demographics

Age

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Gender

- Male
- Female

## **Anthropometrics**

Height (in inches)

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Weight (pounds)

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## **Survey Conclusion**

Would you like to provide your email address to be entered into a raffle to win a day pack?

- Yes  
 No

## **Survey Feedback**

Thank you for your time and contribution to our research. If you have any additional comments, please leave them here.

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