

## Appendix B: Specification for the Body Volume Index App

**See also:** 9.37 Body Volume Index app and body measurements

App name: Body Volume

App icon: use the Understanding Society logo

### APP STRUCTURE

- Log in screen
- Introductory pages automatically shown the first time the participant opens the app
- Landing page

### LOGIN SCREEN

<Understanding Society logo>

**BodyVolume**

Enter Access Code

Please sign in using your unique app access code below

[Textbox]

- Continue

Pop-up error message if re-using access code:

Login Failed. The ID you have entered has already been used to complete a scan, please use a new unique identifier to log into the app.

### LANDING PAGE

- Scan Body Volume
  - Video on how to take the scan
  - Profile questions
  - Body scan
  - Debrief questions
- Results
- FAQs
- Settings
  - Introductory pages (same as those shown when app first launched)
  - Tutorial Videos
  - Help
  - Privacy Policy
- Log Out

## INTRODUCTORY PAGES

### Screen 1

Thank you for downloading the Understanding Society BodyVolume app. We will ask you to take two photos of yourself: one from the front and one from the side. Please wear tight fitting clothes for the photos. This will only take you a few minutes to complete.

[Swipe to next screen]

### Screen 2

You will see a brief video tutorial on how to take the photos. You will then be asked to report your age, gender, height, weight and activity levels, before taking the photos. At the end you will be asked a few debrief questions about how you took your photos.

[Swipe to next screen]

### Screen 3

You can view your results in the Results section of the app.

For more information about this study, the data we collect, and how the body volume measures are derived, see the FAQ section. If another person in your household has an Understanding Society access code for the BodyVolume app, you can log out of the app and the other person can log in with their access code.

- Continue [go to landing page]

## SCAN BODY VOLUME

### Scan Type Selection

- I will scan myself → tutorial video
- Someone else will scan me → tutorial video

### Your Profile

**Text:** Please answer these questions about yourself. The answers are needed to compute your body measures from the body scans.

Age (scroll)

Sex (Male, Female)

Height (Metric/Imperial, scroll)

Weight (Metric/Imperial/Imperial US, scroll)

Activity level (Sedentary, Active, Fit, Very Fit).

Help text: Activity Levels Explained

Sedentary: No/Low Exercise

Active: Moderate Daily Exercise

Fit: Regular Gym Use

Very Fit: Athlete or Daily Gym Use

- Continue

Pop-up: “Understanding Society” Would Like to Access the Camera

Understanding Society needs access to your camera in order to perform a body scan”

- Don’t Allow
- OK

### Body scan

Starts automatically after completing the profile questions

### Debrief questions

**Specification notes:** Allow respondents to continue without answering questions.

### debriefintro (Introduction to debrief questions)

**Text:** Thank you for completing your body scan, to end we would like to ask you a few questions about the scan

- Continue

#### scan (Who took the photos)

**Text:** Who took the photos?

- 1 I did
- 2 Someone else

#### backgrd (Background in photos)

**Scripting notes:** Response option 7 is mutually exclusive.

**Text:** What was visible in the background of your photos?

*Please select all that apply.*

- 1 Furniture
- 2 Door(s)
- 3 Window(s)
- 4 Picture(s)
- 5 Mirrors
- 6 Something else
- 7 Nothing, empty wall

#### wallclr (Colour of background wall)

**Text:** What was the colour of the background?

- 1 White or off-white
- 2 Red
- 3 Orange
- 4 Yellow
- 5 Green
- 6 Blue
- 7 Purple
- 8 Grey
- 9 Brown
- 10 Black
- 11 Multiple colours

#### wallsd (Shade of background wall)

IF wallclr = 2, ..., 11 // Ask if background wall was colour other than white

**Text:** What was the shade of the background?

- 1 Light
- 2 Medium
- 3 Dark

#### **clothes (Type of clothing worn)**

**Text:** What type of clothes did you wear in the photo?

- 1 Underwear
- 2 Tight clothing
- 3 Baggy clothing
- 4 No clothes
- 5 Mixture of tight and baggy clothing

#### **light (Lighting when photos were taken)**

**Text:** How was the lighting when you took the photos?

- 1 Light
- 2 Medium
- 3 Dark

#### **thankyou (Thank you for completing the measurement)**

**Text:** Thank you for completing your body scan and the debrief questions

- Upload Results
- Update Answers to questions about the scan

Uploading your results, please wait until complete...

Success

Your results have successfully been uploaded, if you choose you can view your results on the next screen

- OK [back to landing page]

#### **RESULTS SECTION**

*Keep as is in the myBVI app: total body fat, visceral fat, waist to hip – with 'help' pages explaining what these are*

Error message if 'Results' clicked before taking body scan:

"Please Scan First

Please complete a body scan before attempting to view the results

- OK”

Information: Tap on the dials to see more information about your results

- OK

## FAQs SECTION

### How do I use this app?

After you select “Scan Body Volume” on the main menu, you will get a chance to watch a short video that will explain how you can scan yourself, or how someone else can scan you.

For more information please navigate to Settings then help.

On that website you can also see more detailed information on how to use the app.

### How do I get help?

If you have technical problems with the app, then please contact Select Research at:

[email]

For questions about the study in general, then please contact the Understanding Society Participant Liaison team on:

[email]

or call them during office hours on

0800 xxx xxx

### What does the BodyVolume app measure?

The app uses the outline of your body shape, plus the information about you from the ‘Your Profile’ questions (age, gender at birth, height, weight, and activity level), to calculate your waist-hip ratio, your waist circumference, total body fat, visceral fat (around your inner organs), lengths of body parts (e.g. right length of inside leg from crotch to floor), and the Body Volume Index (BVI).

The BVI is a measure of health risks based on your body shape and volume.

BVI technology is the world’s first system to measure body volume and produce the unique BVI health risk indicator number.

BVI uses patented 3D technology – the first time an affordable and easily accessible method has been available to professionals to measure body volume. Mayo Clinic developed the algorithm that provides the BVI result.

### Has the Body Volume Index (BVI) received certification and review?

Yes – BVI is certified as a Class 1 Medical Device by the UK Medicines and Healthcare products Regulatory Agency (MHRA) and has achieved CE Marking throughout Europe.

In the US, the Food and Drug Administration (FDA) has reviewed BVI and considered it to be a ‘general wellness’ product allowing for widespread use amongst companies and with patients.

### **Does the BodyVolume app retain any of my data?**

None of the images processed during the scan process are stored or sent anywhere.

The images are converted to outlines of your body shape, which are uploaded to a server in the UK, along with the information you entered on ‘Your Profile’ (your age, gender at birth, height, weight, and activity level).

The body outlines and profile information are used to calculate your body measures.

The body outlines are then deleted. The only information that is kept are your profile information, your results (the body measurements), and your responses to the questions about taking the scan.

### **How are my results calculated?**

<link to YouTube video: [https://www.youtube.com/watch?v=Vjxku\\_7ERIY&t=3s](https://www.youtube.com/watch?v=Vjxku_7ERIY&t=3s)>

## **SETTINGS SECTION**

### **Introductory Pages**

*Use the introductory pages shown the first time respondent launches the app*

### **Tutorial Videos**

*Choose Video*

*Which tutorial video would you like to watch*

*Scan Myself Video*

*Scan Someone Else Video*

*Cancel*

### **Help**

<link to <https://www.understandingsociety.ac.uk/bodyvolume>>

### **Privacy policy**

<link to <https://www.understandingsociety.ac.uk/bodyvolume/privacy>>

## LOGOUT

### Log Out?

This will log you out of the app, if you have completed your scan you will not be able to log in with your ID again and will non longer be able to view your results, are you sure you want to continue?

- Log Out [back to Enter Access Code page]
- Stay [back to Landing Page]
- **Screenshots from the BodyVolume app**





