

3. Checking Height, Weight, DOB, Sex and ID:

The information for each participant in the Actiheart Database **MUST** be correct before files are exported. These individual variables are used in the calculation of energy expenditure therefore, it is essential they are correct.

If height and weight information was not available at the time of monitor initialisation, it will be in the database as default values: Height=1.8m; Weight=60kg.

There are various ways in which the user information from the Actiheart database can be checked against the Master user information list in case any data entry errors have occurred when entering participant details in Actiheart software.

User information can be checked in a number of ways:

1. If you have a very small number of volunteers, details can be double checked in the UserInfo table of the access database or through the software on the Utilities tab by highlighting the user ID and checking the values displayed visually against your master details list.
2. If you have a larger number of volunteers, you may wish to export the information from the UserInfo tables and run queries against a master database of participant information from your study in Excel or Access to automatically detect discrepancies.

The following sections explain how to check user information in studies which have a larger number of volunteers.

For information on how to change any discrepancies which are found in this user information, [click here](#).

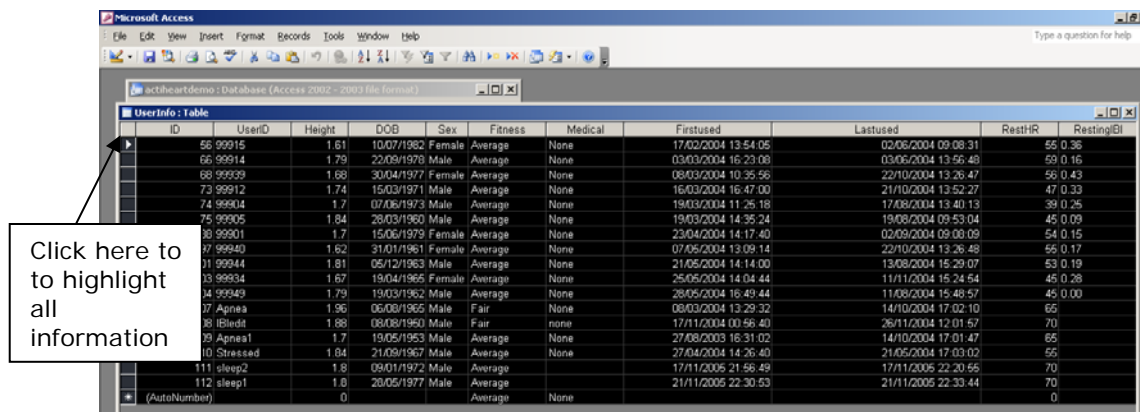
Extracting the data from sources to allow data-checking

The simplest way to do this is through Excel (however if you are well practised in using Access queries they can be set up in a separate database as well).

Extracting User Information Data from Actiheart database:

To extract from an Access database, it will be necessary to copy the user information from the Actiheart database into an Excel spreadsheet:

- Follow the instructions as before in opening the database file. Double click on the UserInfo in the table section. Then click on the Left corner of the table to highlight all the information. Copy this information and paste to a new Excel spreadsheet.



Depending on where your master information is stored (Excel or Access) will affect which of the following steps you need to take next.

Extracting User Information Data from Master Lists:

1. Extracting from Excel format:

If your master information is in an Excel spreadsheet, simply highlight the data needed (ID, Height, DOB, Sex, Weight) and paste it into the same sheet as your Actiheart user information.

Note: be sure not to overwrite any Actiheart information already in this sheet and also clearly label which information has come from which source.

If you now have all your information (Actiheart user details and master list user details) in an Excel spreadsheet, skip to "**Comparing the data**".

2. Extracting from an Access database:

If your master information lies within a Access database, the information needed (ID, Height, DOB, Sex, Weight) should be extracted and paste onto the excel spreadsheet that contains the Actiheart information

Comparing the Data

Your spreadsheet containing all of the information should look similar to the one below

	A	B	C	E	F	H	I	J	K	L	M
1	MASTER						AH				
2	Interact_ID	DoB	Gender	Height	Weight		UserID	Height	DOB	Sex	Startweight
3	1	15/09/1942	Male	1.77	70.00		1	1.77	15/09/1942	Male	70.00
4	2	30/10/1942	Female	1.67	51.40		2	1.67	30/10/1942	Female	51.40
5	3	24/03/1943	Female	1.65	82.20		3	1.65	24/03/1943	Female	82.50
6	4	31/05/1943	Male	1.74	70.60		4	1.73	31/05/1943	Male	70.60
7	5	08/06/1943	Male	1.65	84.20		5	1.65	08/06/1943	Male	84.20
8	6	17/04/1944	Female	1.65	88.60		6	1.65	17/04/1944	Female	88.60
9	7	12/05/1944	Female	1.51	57.00		7	1.51	12/05/1944	Female	57.00
10	8	07/06/1944	Female	1.51	69.00		8	1.5	07/06/1944	Female	69.00
11	9	26/06/1944	Male	1.71	62.00		9	1.71	26/06/1944	Male	62.00
12	10	15/10/1944	Male	1.70	65.50		10	1.69	15/10/1944	Male	65.50
13	11	20/12/1944	Female	1.57	53.70		11	1.57	20/12/1944	Female	53.70
14	12	20/03/1945	Male	1.72	71.50		12	1.71	20/03/1945	Male	73.80
15	13	12/04/1945	Male	1.72	72.50		13	1.72	12/04/1945	Male	72.50
16	14	17/06/1945	Female	1.53	51.70		14	1.52	17/06/1945	Female	51.70
17	15	22/06/1945	Male	1.69	62.20		15	1.69	22/06/1945	Male	62.20

It is important at this point that the formats of the variables are comparable between tables for example: Height in Metres (this will need to be converted to m as usually it is recorded in cm), weight to two decimal places, DOB is displayed dd/mm/yyyy, otherwise Excel may say there is a difference when actually it is just because one is formatted/entered differently.

We can compare between cells by using the 'If' function in Excel

e.g. Checking IDs

Label a blank column to the right of the two sets of information 'ID check', use the following equation:

$$=IF(I3=A3, TRUE, FALSE)$$

i.e. If the contents of cell I3 is the same as the contents of A3 the equation will return the word 'TRUE' in the cell, if it is different the word 'FALSE' is returned.

1	MASTER											
2	Interact_ID	DoB	Gender	Height	Weight	UserID	Height	DOB	Sex	Startweight	ID	
3	1	15/09/1942	Male	1.77	70.00	1	1.77	15/09/1942	Male	70.00	TRUE	
4	2	30/10/1942	Female	1.67	51.40	2	1.67	30/10/1942	Female	51.40		
5	3	24/03/1943	Female	1.65	82.20	3	1.65	24/03/1943	Female	82.50		
6	4	31/05/1943	Male	1.74	70.60	4	1.73	31/05/1943	Male	70.60		
7	5	08/06/1943	Male	1.65	84.20	5	1.65	08/06/1943	Male	84.20		
8	6	17/04/1944	Female	1.65	88.60	6	1.65	17/04/1944	Female	88.60		
9	7	12/05/1944	Female	1.51	57.00	7	1.51	12/05/1944	Female	57.00		
10	8	07/06/1944	Female	1.51	69.00	8	1.5	07/06/1944	Female	69.00		
11	9	26/06/1944	Male	1.71	62.00	9	1.71	26/06/1944	Male	62.00		
12	10	15/10/1944	Male	1.70	65.50	10	1.69	15/10/1944	Male	65.50		
13	11	20/12/1944	Female	1.57	53.70	11	1.57	20/12/1944	Female	53.70		
14	12	20/03/1945	Male	1.72	71.50	12	1.71	20/03/1945	Male	73.80		
15	13	12/04/1945	Male	1.72	72.50	13	1.72	12/04/1945	Male	72.50		
16	14	17/06/1945	Female	1.53	51.70	14	1.52	17/06/1945	Female	51.70		
17	15	22/06/1945	Male	1.69	62.20	15	1.69	22/06/1945	Male	62.20		
18	16	22/06/1945	Female	1.62	61.30	16	1.62	29/06/1945	Female	61.30		

As you can see from the example above, 'TRUE' has been returned in the cell where the formula was written, now if we click on the bottom right corner of the cell we can copy (drag) the formula down to check all the rows for ID errors.

Ensure that you are copying the formula and not simply the word "TRUE" to make sure that it will detect real differences.

The following example shows an incorrect UserID detection:

1	MASTER											
2	Interact_ID	DoB	Gender	Height	Weight	UserID	Height	DOB	Sex	Startweight	ID	
3	1	15/09/1942	Male	1.77	70.00	1	1.77	15/09/1942	Male	70.00	TRUE	
4	2	30/10/1942	Female	1.67	51.40	2	1.67	30/10/1942	Female	51.40	TRUE	
5	3	24/03/1943	Female	1.65	82.20	3	1.65	24/03/1943	Female	82.50	TRUE	
6	4	31/05/1943	Male	1.74	70.60	4	1.73	31/05/1943	Male	70.60	TRUE	
7	5	08/06/1943	Male	1.65	84.20	5	1.65	08/06/1943	Male	84.20	TRUE	
8	6	17/04/1944	Female	1.65	88.60	6	1.65	17/04/1944	Female	88.60	TRUE	
9	7	12/05/1944	Female	1.51	57.00	7	1.51	12/05/1944	Female	57.00	TRUE	
10	8	07/06/1944	Female	1.51	69.00	8	1.5	07/06/1944	Female	69.00	TRUE	
11	9	26/06/1944	Male	1.71	62.00	9	1.71	26/06/1944	Male	62.00	TRUE	
12	10	15/10/1944	Male	1.70	65.50	10	1.69	15/10/1944	Male	65.50	TRUE	
13	11	20/12/1944	Female	1.57	53.70	11	1.57	20/12/1944	Female	53.70	FALSE	
14	12	20/03/1945	Male	1.72	71.50	12	1.71	20/03/1945	Male	73.80	TRUE	
15	13	12/04/1945	Male	1.72	72.50	13	1.72	12/04/1945	Male	72.50	TRUE	
16	14	17/06/1945	Female	1.53	51.70	14	1.52	17/06/1945	Female	51.70	TRUE	
17	15	22/06/1945	Male	1.69	62.20	15	1.69	22/06/1945	Male	62.20	TRUE	
18	16	22/06/1945	Female	1.62	61.30	16	1.62	29/06/1945	Female	61.30	TRUE	

Incorrect ID has been detected

This formula and process can now be used to check the other User information (height, weight, DOB and sex).

MRC:
 Larger MRC studies are checked via a database. Please refer to 'User information checking through Microsoft Access_internal.doc'

Changing discrepancies in User Information

If there are any discrepancies between the two sets of information, we would usually trust the master database (as normally double entered) and so any changes would be so that information corresponds with this source. However, if a value looks unlikely from the master database, e.g. Height=164m, highlight such issues with the study co-ordinator concerned. The source documentation (measurement form) will need to be checked in order to obtain the correct information.

Now that it is known what errors there are (if any) and what the correct values should be, these must be changed in the appropriate database. This can be done through the software under, Utilities, then Database and selecting the ID that needs information changing and clicking Edit.

*****All changes to data should be logged so that you know how your original raw data now differs from this cleaned copy. This is very important in order to keep an audit trail (see section 4 on Discrepancies)*****

MAKE SURE YOU ARE STILL USING THE "FOR PROCESSING" COPY OF YOUR DATABASE

The screenshot shows the 'Actiheart Settings and Utilities' window. The 'Database selection' section contains a text field with the path 'V:\New\Functional_Groups\PhysicalActivity\Edinburgh_2008_FOR PROCESSING.mdb' and a 'New' button. The 'Users in this database' section shows a list of IDs: 501131L, 501176Q, 501471W, 501569X, 501577P, 501582M, and 501585G. The 'Current Computer Login' section has 'Computer Name' set to 'EPIDPC166' and 'Login name' set to 'kw255'. Two callout boxes are present: one pointing to the database path field with the text 'Ensure you are using the correct database', and another pointing to the 'Edit' button in the users list with the text 'Most user info can be changed through the edit tab'.

The only piece of information that cannot be changed through the software is the ID number. This must be done through the access file itself.

*****Be very careful when making these ID changes, particularly if there have been instances where the file has been saved under the wrong ID number. Remember to log any changes on the discrepancy log*****

To edit an ID number for a participant, open the database in Access and open the UserInfo table. Find the ID you wish to change and type in the correct ID number.

If an ID number in the user info table is altered, all the files for this participant will have been saved under the previous (incorrect) ID and so these need to be changed as well.

To edit the ID number of a file, open the ReadInfo table:

ReadNo	ComputerName	ComputerUser	ReadTime	Starttime	SerialNo	BatVolts	Calfactor	UserID	TestType
1	NSHD-EPI01	NSHD-Admin	12/Aug/2008 08:07	31/Jul/2008 14:38	H83001333	2.51 V	196	1	Variability
2	NSHD-EPI01	NSHD-Admin	12/Aug/2008 08:50	31/Jul/2008 14:38	H83001333	2.51 V	196	2	Variability
3	NSHD-EPI01	NSHD-Admin	15/Aug/2008 14:47	15/Aug/2008 14:36	H83001324	2.98 V	190	1_Step test	Waveform
4	NSHD-EPI01	NSHD-Admin	21/Aug/2008 15:11	21/Aug/2008 14:58	H83001326	2.98 V	172	2_Step test	Waveform
5	NSHD-EPI01	NSHD-Admin	22/Aug/2008 10:36	14/Aug/2008 16:00	H83001322	2.45 V	172	3	Variability
6	NSHD-EPI01	NSHD-Admin	05/Sep/2008 10:37	21/Aug/2008 15:15	H83001326	2.98 V	172	4	Variability
7	NSHD-EPI01	NSHD-Admin	05/Sep/2008 10:46	15/Aug/2008 14:51	H83001324	3.01 V	190	5	Variability
8	NSHD-EPI01	NSHD-Admin	11/Sep/2008 14:16	11/Sep/2008 14:06	H83001336	3.03 V	180	3_walk_Step te	Waveform
9	NSHD-EPI01	NSHD-Admin	18/Sep/2008 14:34	18/Sep/2008 14:22	H83001325	3.01 V	200	4_Step test	Waveform
10	NSHD-EPI01	NSHD-Admin	18/Sep/2008 15:08	18/Sep/2008 14:56	H83001335	2.96 V	184	5_Step test	Waveform
11	NSHD-EPI01	NSHD-Admin	19/Sep/2008 13:03	19/Sep/2008 12:51	H83001327	2.95 V	164	6_Step test	Waveform
12	NSHD-EPI01	NSHD-Admin	19/Sep/2008 14:26	19/Sep/2008 14:14	H83001321	2.98 V	156	7_Step test	Waveform
14	NSHD-EPI01	NSHD-Admin	21/Sep/2008 11:27	09/Nov/2008 14:18	H83001336	2.52 V	180	6	Variability
15	NSHD-EPI01	NSHD-Admin	24/Sep/2008 14:22	24/Sep/2008 14:15	H83001324	2.96 V	190	8_Step test	Waveform
16	NSHD-EPI01	NSHD-Admin	25/Sep/2008 12:24	25/Sep/2008 12:12	H83001337	2.95 V	166	9_Step test	Waveform
17	NSHD-EPI01	NSHD-Admin	26/Sep/2008 11:45	18/Sep/2008 15:00	H83001325	2.51 V	200	7	Variability

In this table, IDs can be edited in the UserID column (ID is everything before the "_"). Long Term files can be identified as they are Variability files, Step tests are Waveform & Short term files are IBI files.

BE CAREFUL TO EDIT ID NUMBERS SO THE ID REFERENCES IN THE USER INFO AND READ INFO TABLES MATCH EXACTLY, OTHERWISE USER INFO WILL NOT MATCH UP WITH TRACE (it is case sensitive!).

Changes are automatically saved to the database. If you close a table that you have altered and it asks you if you want to save changes this is only referring to table formatting changes. For example if you sorted the data by ID number, it is best to click 'no' and keep the data in the order it was originally entered.

By the end of this section all of the User Information in the Actiheart database should match the Master List.