Package 'nhanesA'

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Title NHANES Data Retrieval

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Depends R (>= 3.0.0)

Imports stringr, Hmisc, rvest, magrittr

Description
Utility to retrieve data from the National Health and Nutrition Examination Survey (NHANES).

License GPL (>= 2)

LazyData TRUE

URL https://github.com/cjendres1/nhanes

R topics documented:

nhanes *Download an NHANES table and return as a data frame.*

Description

Use to download NHANES data tables that are in SAS format.

Usage

```
nhanes(nh_table)
```

Arguments

nh_table	The name of the specific table to retrieve.

Details

Downloads a table from the NHANES website in its entirety. NHANES tables are stored in SAS '.XPT' format. Function nhanes uses sasxport.get from package H misc to retrieve the data.

Value

The table is returned as a data frame.

Examples

```
nhanes('BPX_E')
nhanes('FOLATE_F')
```

nhanesAttr *Returns the attributes of an NHANES data table.*

Description

Returns attributes such as number of rows, columns, and memory size, but does not reutrn the table itself.

Usage

```
nhanesAttr(nh_table)
```

Arguments

nh_table	The name of the specific table to retrieve

Details

nhanesAttr allows one to check the size and other charactersistics of a data table before importing into R. To retrieve these characteristics, the specified table is downloaded, characteristics are determined, then the table is deleted.

Value

The following attributes are returned as a list
nrow = number of rows
ncol = number of columns
names = name of each column
unique = true if all SEQN values are unique
na = number of 'NA' cells in the table
size = total size of table in bytes
types = data types of each column

Examples

```
nhanesAttr('BPX_E')
nhanesAttr('FOLATE_F')
```

`nhanesTables` *Returns a list of table names for the specified survey group.*

Description

Enables quick display of all available tables in the survey group.

Usage

```
nhanesTables(nh_surveygroup, year, details = FALSE)
```

Arguments

`nh_surveygroup`	The type of survey (DEMOGRAPHIC, DIETARY, EXAMINATION, LABORATORY, QUESTIONNAIRE). Abbreviated terms may also be used: (DEMO, DIET, EXAM, LAB, Q).
`year`	The year in yyyy format where 1999 <= yyyy <= 2012.
`details`	If true then a more detailed description of the tables is returned.

Details

Data are retrieved via web scraping using html wrappers from package rvest. It is often useful to display the table names in an NHANES survey. In effect this is a convenient way to browse the available NHANES tables.

Value

The names of the tables in the specified survey group.

Examples

```
nhanesTables('EXAM', 2007)
nhanesTables('LAB', 2009, details=TRUE)
```

nhanesTableVars *Displays a list of variables in the specified NHANES table.*

Description

Enables quick display of table variables and their definitions.

Usage

```
nhanesTableVars(nh_surveygroup, nh_table, truncated = FALSE, nchar = 100)
```

Arguments

nh_surveygroup	The type of survey (DEMOGRAPHIC, DIETARY, EXAMINATION, LABORATORY, QUESTIONNAIRE). Abbreviated terms may also be used: (DEMO, DIET, EXAM, LAB, Q).
nh_table	The name of the specific table to retrieve.
truncated	If true then only the variable names and descriptions are returned, which is often sufficient.
nchar	The number of characters in the Variable Description to print. Values are limited to 0<=nchar<=127. This is used to enhance readability, cause variable descriptions can be very long.

Details

Data are retrieved via web scraping using html wrappers from package rvest. Each data table contains multiple, sometimes more than 100, fields. It is helpful to list the field descriptions to ascertain quickly if a data table is of interest.

Value

The names of the tables in the specified survey group

Examples

```
nhanesTableVars('LAB', 'CBC_E')
nhanesTableVars('EXAM', 'OHX_E', truncated=TRUE)
```

nhanesTranslate *Display code translation information for the specified table.*

Description

Returns code translations which is especially useful for categorical tables, which includes most NHANES tables.

Usage

```
nhanesTranslate(nh_table, colname, details = FALSE)
```

Arguments

nh_table	The name of the specific table to retrieve.
colname	The name of the column to translate
details	If TRUE. then all available table translation information is displayed.

Details

Code translation tables are retrieved via webscraping using rvest. Many of the NHANES data tables have encoded values. E.g. 1 = 'Male', 2 = 'Female'. By default, the codes and the translated values are returned in a data frame.

Value

The code translation

Examples

```
nhanesTranslate('DEMO_B', 'DMDBORN')
nhanesTranslate('BPX_F', 'BPACSZ', details=TRUE)
```

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