Package: dietry (via r-universe)

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Type Package

Title Utilities for Calculating Dietary Intake Indicators for Food Security Assessments

Version 0.0.0.9000

Description Food security assessments utilise several dietary intake indicators as proxy measures for diet quality, diet sufficiency, and food availability either at individual or household level. Utilities for recoding and calculating these indicators support in establishing consistent and reliable results.

License GPL (>= 3)

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Suggests knitr, rmarkdown, spelling, testthat (>= 3.0.0)

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BugReports https://github.com/nutriverse/dietry/issues

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VignetteBuilder knitr

Repository https://nutriverse.r-universe.dev

RemoteUrl https://github.com/nutriverse/dietry

RemoteRef HEAD

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`fcs01` *Sample Food Consumption Score (FCS) data from World Food Programme (WFP) VAM Resource Centre*

Description

Sample Food Consumption Score (FCS) data from World Food Programme (WFP) VAM Resource Centre

Usage

```
fcs01
```

Format

A data frame with 18 columns and 26 rows:

Variable	Description
FCSStap	Integer value from 0-7 for consumption frequency of staples
FCSStap_SRf	Staples food source
FCSVeg	Integer value from 0-7 for consumption frequency of vegetables
FCSVeg_SRf	Vegetables food source
FCSFruit	Integer value from 0-7 for consumption frequency of fruits
FCSFruit_SRf	Fruits food source
FCSPr	Integer value from 0-7 for consumption frequency of protein-rich foods
FCSPr_SRf	Protein-rich food source
FCSPulse	Integer value from 0-7 for consumption frequency of pulses
FCSPulse_SRf	Pulses food source
FCSDairy	Integer value from 0-7 for consumption frequency of dairy
FCSDairy_SRf	Dairy food source
FCSSugar	Integer value from 0-7 for consumption frequency of sugary foods
FCSSugar_SRf	Sugary food source
FCSFat	Integer value from 0-7 for consumption frequency of fats
FCSFat_SRf	Fats food source
FCSCond	Integer value from 0-7 for consumption frequency of condiments
FCSCond_SRf	Condiments food source

Source

https://github.com/WFP-VAM/RAMResourcesScripts/blob/main/Static/FCS_Sample_Survey.csv

Examples

```
fcs01
```

`fcs_calculate` *Calculate Food Consumption Score (FCS)*

Description

Calculate Food Consumption Score (FCS)

Usage

```
fcs_calculate(df, var_map, weights = NULL, add = TRUE)
```

Arguments

`df`	A data.frame with FCS data.
`var_map`	A named list of FCS food groups mapped to corresponding variable names in `df`. This can be produced using `fcs_fg_map_variables()`.
`weights`	A numeric vector of FCS weights applied to corresponding food groups. The weights should be ordered as that for staples, pulses, vegetables, fruits, meat and fish, dairy, sugar, oil, and condiments. Default to NULL which uses the weights based on current FCS recommendations. Only change this if new recommendations have been provided or for testing/studying new/experimental FCS weighting systems.
`add`	Logical. Should the resulting FCS scores be added to `df`? Default to TRUE.

Value

If `add = TRUE`, a data.frame based on `df` with a new variable named `fcs` for the calculated food consumption scores. Otherwise, a numeric vector of the calculated food consumption scores.

Author(s)

Ernest Guevarra

Examples

```
var_map <- fcs_fg_map_variables(
  staples = "FCSStap",
  pulses = "FCSPulse",
  vegetables = "FCSVeg",
  fruits = "FCSFruit",
  meatfish = "FCSPr",
  milk = "FCSDairy",
  sugar = "FCSSugar",
  oil = "FCSFat",
  condiment = "FCSCond"
)

fcs_calculate(df = fcs01, var_map = var_map)
```

`fcs_classify` *Classify Food Consumption Score (FCS)*

Description

Classify Food Consumption Score (FCS)

Usage

```
fcs_classify(fcs, cutoff = NULL, add = FALSE, spread = FALSE)
```

Arguments

`fcs`	A vector of food consumption scores.
`cutoff`	A numeric vector of length 2 for the cut-offs to use for classifying FCS. Default to NULL in which case standard recommended cut-off values for FCS are used.
`add`	Logical. Should classification be column bound to fcs? Default to FALSE.
`spread`	Logical. Should classification be spread into columns? Default to FALSE.

Value

If `spread = TRUE`, a data.frame with number of rows equal to the length of `fcs` and number of columns equal to length of `fill` plus an initial column named `fcs` containing the FCS values provided by `fcs` argument if `add = TRUE`. Otherwise, a vector of class factor containing FCS classifications. If `add = TRUE`, this vector is concatenated with the `fcs` values in a data.frame.

Author(s)

Ernest Guevarra

Examples

```
var_map <- fcs_fg_map_variables(
  staples = "FCSStap",
  pulses = "FCSPulse",
  vegetables = "FCSVeg",
  fruits = "FCSFruit",
  meatfish = "FCSPr",
  milk = "FCSDairy",
  sugar = "FCSSugar",
  oil = "FCSFat",
  condiment = "FCSCond"
)

fcs <- fcs_calculate(df = fcs01, var_map = var_map)

fcs_classify(fcs$fcs)
```

`fcs_get_colours` *Get Food Consumption Score (FCS) colours*

Description

Get Food Consumption Score (FCS) colours

Usage

```
fcs_get_colours()
```

Value

A named character vector of recommended FCS classification colours

Author(s)

Ernest Guevarra

Examples

```
fcs_get_colours()
```

fcs_recode *Recode Food Consumption Score (FCS) data*

Description

Recode Food Consumption Score (FCS) data

Usage

```
fcs_recode(x, na_values = NULL)
```

Arguments

x	A vector of numeric values that can range from 0 to 7 for the number of days in a week that a food group is eaten by a household as per FCS guidelines.
na_values	A value or a vector of values that are to be considered as NA. Default to NA.

Value

An integer vector with possible values ranging from 0 to 7.

Author(s)

Ernest Guevarra

Examples

```
fcs_recode(fcs01$FCSStap)
```

map_variables *Map data variables to corresponding indicators*

Description

Map data variables to corresponding indicators

Usage

```
map_variables(...)

fcs_fg_map_variables(
  ...,
  foodgroups = c("staples", "pulses", "vegetables", "fruits", "meatfish", "milk",
    "sugar", "oil", "condiment")
)
```

```
hdds_fg_map_variables(
  ...,
 foodgroups = c("cereals", "roots_tubers", "vegetables", "fruits", "meat", "eggs",
    "fish", "pulses", "milk", "oil", "sugar", "condiments")
)

mddw_fg_map_variables(
  ...,
 foodgroups = c("staples", "pulses", "nuts", "milk", "meat_fish", "eggs", "green_leafy",
    "other_vita", "other_vegetables", "other_fruits")
)
```

Arguments

`...`	Name-value pairs. Name gives the labels for indicators. The value should be the corresponding variable name in a dataset used for that indicator.
`foodgroups`	A character vector of food group labels for a specific dietary intake indicator set.

Value

A named list of variable name/s for corresponding food groups.

Examples

```
## Variable names in fcs01 mapped to corresponding food group labels
map_variables(
  staples = "FCSStap",
  pulses = "FCSPulse",
  vegetables = "FCSVeg",
  fruits = "FCSFruit",
  meatfish = "FCSPr",
  milk = "FCSDairy",
  sugar = "FCSSugar",
  oil = "FCSFat",
  condiment = "FCSCond"
)
```

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