Package ‘ddp’

May 8, 2021

Type Package

Title Desirable Dietary Pattern

Version 0.0.3

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Description The desirable Dietary Pattern (DDP)/ PPH score
measures the variety of food consumption. The (weighted) score is calculated
based on the type of food. This package is intended to calculate
the DDP/ PPH score that is faster than traditional method via
a manual calculation by BKP (2017) <http://bkp.pertanian.go.id/storage/app/uploads/public/5bf/ca9/06b/5bfca906bc654274163456.pdf> an
pler than the nutrition survey
<http://www.nutrisurvey.de>. The database to create weights and baseline values
is the Indonesia national survey in 2017.

Depends R (>= 2.10)

License GPL-3

LazyData TRUE

RoxygenNote 7.1.1

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

Author Weksi Budiaji [aut, cre]

Maintainer Weksi Budiaji <budiaji@untirta.ac.id>

Repository CRAN

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R topics documented:

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kalori *Calory calculation*

Description

This function calculates the total calory of each responden.

Usage

```
kalori(data, output = "all")
```

Arguments

`data`	A data set of (*n x 218*) (*see* **Details**).
`output`	A desirable output, the default is "all" (*see* **Details**).

Details

The data set is an *n x 218* data frame. The first column is the name of the respondent. The rest columns are types of food. The type of food can be listed as in the data simulation (*see* in the data example of `simulasi` or `vignette("ddp")`).

The `output` argument has "all" as the default, meaning that all of the calories are yielded. They are energy, protein, fat, and carbohydrate. Single calory can be produced by writing the output argument with "protein" for the calory of protein, for example. The possible inputs for `output` argument are "all", "energi", "protein", "lemak" for fat, and "karbohidrat".

Value

Function returns a matrix of *n x 4* for "all" and *n x 1* for other "output" arguments.

Author(s)

Weksi Budiaji
Contact: `<budiaji@untirta.ac.id>`

References

BKP, Kementan. 2017. Aplikasi Harmonisasi Analisis PPH Data Susenas 2017. Badan Ketahanan Pangan Kementrian Pertanian.

Examples

```
#data simulation of 10 person
set.seed(2020)
n <- 10
matsim <- matrix(0, n, 218)
datsim <- as.data.frame(matsim)
datsim$V1 <- LETTERS[1:n]

#calory for boiled rice
datsim$V2 <- rnorm(n, 200, 50)
#calory for boiled egg
datsim$V73 <- rnorm(n, 60, 5)
#calory for fresh milk
datsim$V79 <- rnorm(n, 100, 10)
#calory for tomato
datsim$V93 <- rnorm(n, 19, 2)
#caloty for pineapple
datsim$V134 <- rnorm(n, 20, 2)

kalori(datsim)
```

`simulasi` *Simulation data*

Description

A dataset containing 218 columns and 5 rows. The first column is the name of the respondents, while the rest is the type of food. The type of food is expalined in Indonesian. The simulation data set is a family data set with 5 members. They eat rice (nasi) in a particular weight (in gram), cat fish, spinach (bayam), and banana (pisang lainnya). Three family members drink milk powder. Thus, the data have values in column 1, 28, 81, 85, and 135 only.

Usage

```
simulasi
```

Format

A data frame with 5 rows and 218 columns:

Nama The name of respondents

X1 Beras:beras lokal, kualitas unggul, impor

X2 Beras ketan

X3 Jagung basah dengan kulit

X4 Jagung pipilan/beras jagung

X5 Tepung beras

X6 Tepung jagung:maizena

X7 Tepung terigu

X8 Padi-padian lainnya

X9 Ketela pohon/singkong

X10 Ketela rambat/ubi jalar

X11 Sagu:bukan dari ketela pohon

X12 Talas/keladi

X13 Kentang

X14 Gaplek

X15 Tepung Gaplek: tiwul

X16 Tepung ketela pohon: tapioka/kanji

X17 Umbi-umbian lainnya

X18 Ekor kuning segar

X19 Tongkol/tuna/cakalang segar

X20 Tenggiri segar

X21 Selar segar

X22 Kembung segar

X23 Teri segar

X24 Bandeng segar

X25 Gabus segar

X26 Mujair/Nila segar

X27 Mas segar

X28 lele segar

X29 Kakap segar

X30 Baronang segar

X31 Patin segar

X32 Bawalsegar

X33 Gurame segar

X34 Ikan segar/basah lainnya

X35 Udang segar

X36 Cumi-cumi/sotong segar

X37 Ketam/kepiting/rajungan segar

X38 Kerang/siput segar

X39 Udang dan hewan air lainnya yang segar lainnya

X40 Kembung diawetkan/peda

X41 Tenggiri diawetkan

X42 Tongkol/tuna/cakalang diawetkan

X43 Teri diawetkan

X44 Selar diawetkan

X45 Sepat diawetkan

X46 Bandeng diawetkan

X47 Gabus diawetkan

X48 Ikan dalam kaleng

X49 Ikan diawetkan lainnya

X50 Udang: ebi, rebon diawetkan

X51 Cumi-cumi/sotong diawetkan

X52 Udang dan hewan air lainnya yang diawetkan

X53 Daging sapi segar

X54 Daging kerbau segar

X55 Daging kambing segar

X56 Daging babi segar

X57 Daging ayam ras segar

X58 Daging ayam kampung segar

X59 Daging bebek/itik segar

X60 Daging unggas segar lainnya

X61 Daging segar lainnya

X62 Dendeng

X63 Abon: sapi, ayam, rusa, dsb

X64 Daging dalam kaleng: kornet, dsb

X65 Sosis, nuget, daging asap, bakso diawetkan

X66 Daging diawetkan lainnya

X67 Hati

X68 Jeroan: usus, paru, limpa, babat, ampela, dsb

X69 Tetelan

X70 Tulang

X71 Kategori daging lainnya selain dari 53 s.d 70

X72 Telur ayam ras

X73 Telur ayam kampung

X74 Telur itik/manila

X75 Telur puyuh

X76 Telur lainnya

X77 Telur asin

X78 Susu murni

X79 Susu cair pabrik

X80 Susu kental manis

X81 Susu bubuk

X82 Susu bubuk bayi

X83 Keju

X84 Hasil lain dari susu

X85 Bayam

X86 Kangkung

X87 Kol/kubis

X88 Sawi putih/ petsai

X89 Sawi hijau

X90 Buncis

X91 Kacang panjang

X92 Tomat sayur

X93 Wortel

X94 Mentimun

X95 Daun ketela pohon/ daun singkong

X96 Terung

X97 Tauge

X98 Labu

X99 Jagung muda

X100 Bahan sayur sop/ cap cay

X101 Bahan sayur asem/ lodeh

X102 Nangka muda

X103 Pepaya muda

X104 Jamur

X105 Petai

X106 Jengkol

X107 Bawang merah

X108 Bawang putih

X109 Cabe merah

X110 Cabe hijau

X111 Cabe rawit

X112 Sayur dalam kaleng

X113 Sayur-sayuran lainnya

X114 Kacang tanah tanpa kulit

X115 Kacang tanah dengan kulit

X116 Kacang kedelai

X117	Kacang hijau
X118	Kacang mede
X119	Kacang lainnya
X120	Tahu
X121	Tempe
X122	Tauco
X123	Oncom
X124	Hasil lain dari kacang-kacangan
X125	Jeruk
X126	Mangga
X127	Apel
X128	Alpokat
X129	Rambutan
X130	Duku
X131	Durian
X132	Salak
X133	Nanas
X134	Pisang ambon
X135	Pisang lainnya
X136	Pepaya
X137	Jambu
X138	Sawo
X139	Belimbing
X140	Kedondong
X141	Semangka
X142	Melon
X143	Nangka
X144	Tomat buah
X145	Buah dalam kaleng
X146	Buah-buahan lainnya
X147	Minyak kelapa
X148	Minyak jagung
X149	Minyak goreng
X150	Kelapa
X151	Margin
X152	Minyak dan kelapa lainnya
X153	Gula pasir

X154	Gula merah/ gula cair
X155	Teh bubuk
X156	Teh celup: sachet
X157	Kopi: bubuk, biji
X158	Kopi instan: sachet
X159	Coklat instan
X160	Coklat bubuk
X161	Sirup
X162	Bahan minuman lainnya
X163	Garam
X164	Kemiri
X165	Ketumbar/ jinten
X166	Merica/ lada
X167	Asam
X168	Terasi/ petis
X169	Kecap
X170	Penyedap masakan/ vetsin
X171	Sambal jadi
X172	Saos tomat
X173	Bumbu masak jadi/ kemasan
X174	Bumbu dapur lainnya: pala, jahe, kunyit, dsb
X175	Mie instan
X176	Mie basah
X177	Bihun
X178	Makaroni/ mie kering
X179	Kerupuk
X180	Emping
X181	Bahan agar-agar
X182	Bubur bayi kemasan
X183	Konsumsi lainnya selain nomor 175 s.d 182
X184	Roti tawar
X185	Roti manis/ lainnya
X186	Kue kering/ biskuit
X187	Kue basah
X188	Makanan gorengan
X189	Bubur kacang hijau
X190	Gado-gado/ ketoprak/ pecel

X191 Nasi campur/ rames

X192 Nasi goreng

X193 Nasi putih

X194 Lontong/ ketupat sayur

X195 Soto/ gulai/ sop/ rawon/ cincang

X196 Sayur matang

X197 Sate/ tongseng

X198 Mie bakso/ rebus/ goreng

X199 Mie instan makanan jadi

X200 Makanan ringan anak-anak

X201 Ikan matang

X202 Ayam/ daging matang

X203 Daging olahan matang

X204 Bubur ayam

X205 Siomay/ batagor

X206 Makanan jadi lainnya

X207 Air kemasan

X208 Air kemasan galon

X209 Air teh kemasan

X210 Saribuah kemasan

X211 Minuman ringan C02: soda

X212 Minuman kesahatan/ energi

X213 Minuman jadi: kopi, susu, teh, susu coklat, dsb

X214 Es krim

X215 Es lainnya

X216 Bir

X217 Minuman beralkohol lainnya

`skorpph` *Desirable dietary pattern calculation*

Description

This function calculates the desirable dietary pattern (DDP).

Usage

```
skorpph(data, wilayah = "Indonesia", baseline = 2000)
```

Arguments

`data`	A data set of (*n x 218*) (*see* **Details**).
`wilayah`	An origin of the responden residence. (*see* **Details**).
`baseline`	A baseline value of personal calory required.

Details

The data set is an *n x 218* data frame. The first column is the name of the respondent. `wilayah` argument has "Indonesia" as the default, meaning that the DPP are calculated based on the national (Indonesia) baseline. The other possible inputs for `wilayah` are "Aceh", "Sumut", "Sumbar", "Riau", "KepRiau", "Jambi", "Sumsel", "Babel", "Bengkulu", "Lampung", "Jakarta", "Jabar", "Banten", "Jateng", "DIY", "Jatim", "Bali", "NTB", "NTT", "Kalbar", "Kalteng", "Kalsel", "Kaltim", "Kalut", "Sulut", "Sulteng", "Sultra", "Sulsel", "Gorontalo", "Sulbar", "Maluku", "Malut", "Papua", "Papbar". For `baseline` argument, it is 2000 as the default value because the minimal calory required in Indonesia is 2000 calory.

Value

Function returns a vector with *n* length indicates the index/ indices of the DDP per peson.

Author(s)

Weksi Budiaji
Contact: `<budiaji@untirta.ac.id>`

References

BKP, Kementan. 2017. Aplikasi Harmonisasi Analisis PPH Data Susenas 2017. Badan Ketahanan Pangan Kementrian Pertanian.

Examples

```
#data simulation of 10 person
set.seed(2020)
n <- 10
matsim <- matrix(0, n, 218)
datsim <- as.data.frame(matsim)
datsim$V1 <- LETTERS[1:n]

#calory for boiled rice
datsim$V2 <- rnorm(n, 200, 50)
#calory for boiled egg
datsim$V73 <- rnorm(n, 60, 5)
#calory for fresh milk
datsim$V79 <- rnorm(n, 100, 10)
#calory for tomato
datsim$V93 <- rnorm(n, 19, 2)
#caloty for pineapple
datsim$V134 <- rnorm(n, 20, 2)
```

```
skorpph(datsim)
```

valid *Validity and Reliability check.*

Description

This function calculates the item-rest correlation.

Usage

```
valid(data, alpha = 0.05, total = NULL)
```

Arguments

`data`	A data set/ matrix (*see* **Details**).
`alpha`	An alpha value (*see* **Details**).
`total`	A single numeric value of the index column (*see* **Details**).

Details

The data set is a data frame/ matrix *n x k*. The row is the name of the respondent as many as *n*, while the column is the variables (*k*). The alpha value is set between 0.0001 and 0.20, the default is 0.05. If the `total` input is `NULL`, it means that the total score will be calculated first, the column index of the total score can be also stated otherwise. The index of the column is a numeric value with a length of one. It has to be between 1 and (*k*).

Value

Function returns a data frame with *k* row and four columns. the columns indicate the item-rest correlation, correlation threshold, p value, and validity and reliability conclusion.

Author(s)

Weksi Budiaji
Contact: `<budiaji@untirta.ac.id>`

Examples

```
#data simulation of 10 person 5 variables
set.seed(1)
dat <- matrix(sample(1:7,10*5, replace = TRUE), 10,5)
valid(dat)
```

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