# Consumo per cápita

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### Introducción

# Instalación e importación de las librerias

```
Configuro el repositorio de CRAN de manera no interactiva
```

```
options(repos = c(CRAN = "https://cran.r-project.org"))
Instalo las librerías que voy a utilizar
install.packages("readxl")
## Installing package into 'C:/Users/gilga/AppData/Local/R/win-library/4.3'
## (as 'lib' is unspecified)
## package 'readxl' successfully unpacked and MD5 sums checked
## Warning: cannot remove prior installation of package 'readxl'
## Warning in file.copy(savedcopy, lib, recursive = TRUE): problema al copiar
## C:\Users\gilga\AppData\Local\R\win-library\4.3\00L0CK\readx1\libs\x64\readx1.dl1
## a C:\Users\gilga\AppData\Local\R\win-library\4.3\readxl\libs\x64\readxl.dll:
## Permission denied
## Warning: restored 'readxl'
##
## The downloaded binary packages are in
## C:\Users\gilga\AppData\Local\Temp\Rtmpc9ApZu\downloaded_packages
install.packages("tidyverse")
## Installing package into 'C:/Users/gilga/AppData/Local/R/win-library/4.3'
## (as 'lib' is unspecified)
## package 'tidyverse' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
## C:\Users\gilga\AppData\Local\Temp\Rtmpc9ApZu\downloaded_packages
install.packages("httr")
## Installing package into 'C:/Users/gilga/AppData/Local/R/win-library/4.3'
## (as 'lib' is unspecified)
## package 'httr' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
```

## C:\Users\gilga\AppData\Local\Temp\Rtmpc9ApZu\downloaded\_packages

```
install.packages("rmarkdown")
## Installing package into 'C:/Users/gilga/AppData/Local/R/win-library/4.3'
## (as 'lib' is unspecified)
## package 'rmarkdown' successfully unpacked and MD5 sums checked
## The downloaded binary packages are in
## C:\Users\gilga\AppData\Local\Temp\Rtmpc9ApZu\downloaded packages
install.packages("dplyr")
## Installing package into 'C:/Users/gilga/AppData/Local/R/win-library/4.3'
## (as 'lib' is unspecified)
## package 'dplyr' successfully unpacked and MD5 sums checked
## Warning: cannot remove prior installation of package 'dplyr'
## Warning in file.copy(savedcopy, lib, recursive = TRUE): problema al copiar
## C:\Users\gilga\AppData\Local\R\win-library\4.3\00L0CK\dplyr\libs\x64\dplyr.dll
## a C:\Users\gilga\AppData\Local\R\win-library\4.3\dplyr\libs\x64\dplyr.dll:
## Permission denied
## Warning: restored 'dplyr'
## The downloaded binary packages are in
## C:\Users\gilga\AppData\Local\Temp\Rtmpc9ApZu\downloaded_packages
Y ahora las cargo
library(readxl)
library(tidyverse)
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr 1.1.2
                       v readr
                                  2.1.4
## v forcats 1.0.0 v stringr 1.5.0
## v ggplot2 3.4.3 v tibble 3.2.1
## v lubridate 1.9.2
                     v tidyr
                                  1.3.0
## v purrr
              1.0.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
                 masks stats::lag()
## x dplyr::lag()
## i Use the conflicted package (<a href="http://conflicted.r-lib.org/">http://conflicted.r-lib.org/</a>) to force all conflicts to become error
library(httr)
library(rmarkdown)
library(dplyr)
```

# Importación de los datos

Importo los archivos a un dataframe que anido en una lista

```
ruta <- "https://github.com/DMorgon/portafolios/raw/main"</pre>
rama <- "alimentacion/datos_origen"</pre>
lista_df <- list()</pre>
for (i in seq(from = 1, to = 23, by = 1)) {
  archivo_url <- pasteO(ruta, "/", rama, "/", lista_archivo[i], ".xlsx")</pre>
  response <- GET(archivo_url)</pre>
  archivo_temporal <- tempfile(fileext = ".xlsx")</pre>
  writeBin(content(response, "raw"), archivo_temporal)
  if (i <= 20)
    df <- read_excel(path = archivo_temporal, sheet = 5, skip = 2)</pre>
    df <- read_excel(path = archivo_temporal, sheet = 6, skip = 2)</pre>
  lista_df[[i]] <- df</pre>
}
## New names:
```

# Preparación de los datos

## New names:
## New names:
## New names:
## \* `` -> `...1`

A continuación, examino la estructura interna de cada marco de datos

```
for (i in seq(from = 1, to = 23, by = 1)) {
  nombre_df <- paste0("df_", lista_archivo[i])
  cat("\n", "Nombre de la tabla de datos:", nombre_df, "\n")
  str(lista_df[[i]])
}</pre>
```

##

```
## Nombre de la tabla de datos: df 2000
## tibble [334 x 19] (S3: tbl df/tbl/data.frame)
                       : chr [1:334] "TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "GALLINA" ...
                       : num [1:334] 632.79 10.49 164.99 163.62 1.38 ...
## $ .TOTAL ESPAÑA
##
   $ CATALUÑA
                       : num [1:334] 714.9 10.9 172.6 169.9 2.7 ...
## $ ARAGON
                       : num [1:334] 619.14 12.96 204.01 202.29 2.29 ...
                       : num [1:334] 715.63 9.76 152.74 152.42 0 ...
## $ BALEARES
                       : num [1:334] 631.301 9.896 155.05 154.543 0.553 ...
## $ VALENCIA
##
   $ MURCIA
                       : num [1:334] 654.3 10.2 160.3 160 0 ...
## $ ANDALUCIA
                       : num [1:334] 595.45 9.64 151.75 150.42 1.33 ...
## $ MADRID
                       : num [1:334] 615.48 9.99 157.35 155.89 1.46 ...
## $ CASTILLA-LA MANCHA: num [1:334] 598.54 10.28 161.58 160.43 1.26 ...
   $ EXTREMADURA
                       : num [1:334] 601.1 10.4 164 162.9 0 ...
## $ CASTILLA Y LEON : num [1:334] 651.95 13.565 212.785 211.799 0.986 ...
## $ GALICIA
                       : num [1:334] 590.143 7.209 112.83 112.597 0.399 ...
##
   $ ASTURIAS
                       : num [1:334] 728.4 15.3 239.6 238.8 0 ...
## $ CANTABRIA
                       : num [1:334] 625.4 12.8 200.9 199.6 0 ...
## $ PAIS VASCO
                       : num [1:334] 640.07 13.18 209.25 205.39 3.85 ...
                       : num [1:334] 561.6 11.4 178.8 177.3 0 ...
## $ RIOJA
## $ NAVARRA
                       : num [1:334] 674.9 13.4 212 209.8 0 ...
## $ CANARIAS
                       : num [1:334] 575.66 7.04 110.03 109.98 0 ...
## Nombre de la tabla de datos: df_2001
## tibble [334 x 19] (S3: tbl df/tbl/data.frame)
## $ ...1
                      : chr [1:334] "TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "GALLINA" ...
## $ .TOTAL ESPAÑA
                       : num [1:334] 640.03 10.32 162.37 161.01 1.36 ...
## $ CATALUÑA
                       : num [1:334] 706.1 10.3 163.3 160.9 2.3 ...
## $ ARAGON
                       : num [1:334] 643.3 14.6 229.41 227.97 1.57 ...
## $ BALEARES
                       : num [1:334] 714.44 9.87 154.93 154.11 2.44 ...
## $ VALENCIA
                       : num [1:334] 645.37 9.1 142.88 142.12 0.83 ...
## $ MURCIA
                       : num [1:334] 640.2 9.48 148.47 148.02 1.35 ...
##
   $ ANDALUCIA
                       : num [1:334] 615.93 9.64 152.15 150.37 1.77 ...
## $ MADRID
                       : num [1:334] 613.58 9.71 152.74 151.6 1.14 ...
## $ CASTILLA-LA MANCHA: num [1:334] 587.636 9.904 155.014 154.707 0.462 ...
   $ EXTREMADURA
                       : num [1:334] 580 11 172 171 0 ...
## $ CASTILLA Y LEON : num [1:334] 658.8 13.3 208.4 207.2 0 ...
## $ GALICIA
                       : num [1:334] 621.175 8.447 132.441 131.892 0.732 ...
## $ ASTURIAS
                       : num [1:334] 728.03 15.67 245.22 244.69 1.28 ...
                       : num [1:334] 590.77 11.98 187.53 187.1 1.73 ...
   $ CANTABRIA
## $ PAIS VASCO
                       : num [1:334] 652.47 12.13 192.43 189.02 3.41 ...
                       : num [1:334] 652.1 13.6 216.1 211.5 0 ...
## $ RIOJA
## $ NAVARRA
                       : num [1:334] 714 16.1 254.1 251.8 4.5 ...
                       : num [1:334] 581.6 5.7 89.2 89.1 0 ...
   $ CANARIAS
##
## Nombre de la tabla de datos: df_2002
## tibble [361 x 19] (S3: tbl_df/tbl/data.frame)
                       : chr [1:361] "TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "GALLINA" ...
## $ ...1
## $ .TOTAL ESPAÑA
                       : num [1:361] 650.43 10.23 161.07 159.54 1.52 ...
## $ CATALUÑA
                       : num [1:361] 719.49 9.97 157.55 155.43 2.12 ...
## $ ARAGON
                       : num [1:361] 654.62 13.26 209.29 206.74 2.55 ...
## $ BALEARES
                       : num [1:361] 713.45 11.11 174.2 173.4 1.61 ...
## $ VALENCIA
                       : num [1:361] 642.74 8.95 140.71 139.64 1.07 ...
## $ MURCIA
                       : num [1:361] 654.25 7.82 122.79 122.1 1.38 ...
## $ ANDALUCIA
                       : num [1:361] 621.97 9.15 144.85 142.65 2.2 ...
```

```
: num [1:361] 630.35 9.53 150.36 148.71 1.65 ...
   $ CASTILLA-LA MANCHA: num [1:361] 594.065 10.035 157.387 156.689 0.931 ...
                       : num [1:361] 586.36 11.5 179.98 179.58 1.21 ...
  $ CASTILLA Y LEON : num [1:361] 679.67 13.62 213.65 212.64 1.01 ...
   $ GALICIA
                       : num [1:361] 650.61 9.93 155.68 155.12 0 ...
##
                       : num [1:361] 724.01 13.88 217.41 216.82 1.77 ...
   $ ASTURIAS
                       : num [1:361] 604.6 10.6 165.6 165.4 0 ...
   $ CANTABRIA
                       : num [1:361] 662.49 13.11 206.61 204.52 2.51 ...
##
   $ PAIS VASCO
##
   $ RIOJA
                       : num [1:361] 677.69 14.15 225.89 220.27 6.74 ...
##
   $ NAVARRA
                       : num [1:361] 678.21 14.86 233.58 231.84 2.32 ...
   $ CANARIAS
                       : num [1:361] 591.81 6.81 107.18 106.31 0 ...
##
  Nombre de la tabla de datos: df_2003
## tibble [361 x 19] (S3: tbl_df/tbl/data.frame)
   $ ...1
                       : chr [1:361] "TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "GALLINA" ...
##
   $ .TOTAL ESPAÑA
                       : num [1:361] 651.5 10.29 162.18 160.52 1.66 ...
##
   $ CATALUÑA
                       : num [1:361] 733.55 9.97 158.35 155.31 3.04 ...
##
  $ ARAGON
                       : num [1:361] 669.83 12.09 190.9 188.58 2.53 ...
                       : num [1:361] 724.6 10.2 159.8 158.6 2.5 ...
  $ BALEARES
##
   $ VALENCIA
                       : num [1:361] 638.43 9.25 145.55 144.4 1.14 ...
## $ MURCIA
                       : num [1:361] 624.56 6.62 103.94 103.37 1.7 ...
## $ ANDALUCIA
                       : num [1:361] 620.42 9.5 150.21 148.18 2.03 ...
##
   $ MADRID
                       : num [1:361] 614.42 9.42 148.43 146.89 1.54 ...
   $ CASTILLA-LA MANCHA: num [1:361] 623.69 10.98 172.22 171.37 1.13 ...
   $ EXTREMADURA
                       : num [1:361] 609.7 12.9 201.3 201.2 0 ...
  $ CASTILLA Y LEON : num [1:361] 696.61 14.01 219.98 218.78 1.31 ...
##
   $ GALICIA
                       : num [1:361] 609.95 9.38 147.72 146.42 1.3 ...
   $ ASTURIAS
                       : num [1:361] 724.074 13.712 214.478 214.21 0.644 ...
## $ CANTABRIA
                       : num [1:361] 627.3 11.2 175.4 175.1 0 ...
## $ PAIS VASCO
                       : num [1:361] 648.51 12.32 193.95 192.21 1.74 ...
                       : num [1:361] 689.45 14.29 226.42 222.76 5.49 ...
##
   $ RIOJA
##
   $ NAVARRA
                       : num [1:361] 623.5 14.5 226.9 226.3 0 ...
##
   $ CANARIAS
                       : num [1:361] 646.92 7.94 125.38 123.88 1.63 ...
##
  Nombre de la tabla de datos: df 2004
## tibble [448 x 27] (S3: tbl df/tbl/data.frame)
##
  $ ...1
                       : chr [1:448] ".TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "GALLINA" ...
## $ T.ESPAÑA
                        : num [1:448] 663.16 9.87 155.64 153.9 1.74 ...
##
   $ CATALUÑA
                       : num [1:448] 752.08 9.52 151.22 148.32 2.89 ...
## $ ARAGON
                       : num [1:448] 687.46 11 177.44 170.76 6.68 ...
                       : num [1:448] 684.8 7.5 117.7 117.1 0 ...
  $ BALEARES
## $ VALENCIA
                       : num [1:448] 655.029 8.994 141.264 140.387 0.877 ...
                       : num [1:448] 608.02 7.131 111.803 111.342 0.461 ...
   $ MURCIA
## $ T.ANDALUCIA
                       : num [1:448] 632.34 9.25 146.41 144.17 2.24 ...
                        : num [1:448] 636.25 9.37 147.43 146.26 1.17 ...
##
   $ CASTILLA LA MANCHA: num [1:448] 635.7 10.4 164.2 162.9 1.3 ...
   $ EXTREMADURA
                       : num [1:448] 635.6 11.6 181.8 181.4 0 ...
                       : num [1:448] 690.11 12.22 191.79 190.7 1.09 ...
   $ CASTILLA LEON
##
   $ GALICIA
                       : num [1:448] 638.68 10.249 160.498 160.082 0.415 ...
##
   $ ASTURIAS
                       : num [1:448] 715.3 12.8 201.6 200.5 0 ...
## $ CANTABRIA
                       : num [1:448] 655.3 13.1 204.6 204.6 0 ...
## $ PAIS VASCO
                       : num [1:448] 641.56 10.86 172.28 169.26 3.02 ...
## $ LA RIOJA
                       : num [1:448] 652.03 13.88 219.8 216.26 3.54 ...
                       : num [1:448] 635.79 13.23 207.64 206.56 1.08 ...
## $ NAVARRA
```

```
$ CANARIAS
                       : num [1:448] 674.361 8.289 130.184 129.389 0.794 ...
##
   $ NORESTE
                       : num [1:448] 734.77 9.56 152.15 148.87 3.29 ...
  $ LEVANTE
                       : num [1:448] 644.356 8.571 134.579 133.797 0.782 ...
   $ ANDALUCIA
                       : num [1:448] 632.34 9.25 146.41 144.17 2.24 ...
##
   $ CENTRO-SUR
                       : num [1:448] 636.05 9.93 156.07 154.98 1.1 ...
##
   $ CASTILLA Y LEON : num [1:448] 690.11 12.22 191.79 190.7 1.09 ...
                       : num [1:448] 659.55 10.96 171.68 171.09 0.59 ...
   $ NOROESTE
                       : num [1:448] 643.6 11.83 186.76 184.48 2.28 ...
##
   $ NORTE
##
   $ T.CANARIAS
                        : num [1:448] 674.361 8.289 130.184 129.389 0.794 ...
##
   Nombre de la tabla de datos: df_2005
## tibble [465 x 27] (S3: tbl_df/tbl/data.frame)
                       : chr [1:465] ".TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "GALLINA" ...
   $ ...1
##
  $ T.ESPAÑA
                       : num [1:465] 652.42 9.45 149.3 147.31 1.99 ...
   $ CATALUÑA
                       : num [1:465] 725.84 9.43 150.62 146.81 3.81 ...
##
   $ ARAGON
                       : num [1:465] 680.06 10.89 176.21 169.12 7.09 ...
##
   $ BALEARES
                       : num [1:465] 663.201 7.632 119.955 119.111 0.844 ...
##
   $ VALENCIA
                       : num [1:465] 638.84 8.33 131.35 129.88 1.47 ...
##
  $ MURCIA
                       : num [1:465] 547.128 6.896 108.264 107.66 0.605 ...
##
   $ T.ANDALUCIA
                       : num [1:465] 630.24 8.6 136.07 134.15 1.92 ...
##
   $ MADRID
                       : num [1:465] 624.14 9.03 142.18 140.86 1.31 ...
  $ CASTILLA LA MANCHA: num [1:465] 638.86 9.55 150.55 149.01 1.55 ...
##
                       : num [1:465] 631.786 10.891 170.494 170.116 0.378 ...
   $ EXTREMADURA
                       : num [1:465] 692.97 11.65 183.5 181.76 1.74 ...
##
   $ CASTILLA LEON
## $ GALICIA
                       : num [1:465] 630.587 9.468 148.291 147.873 0.418 ...
   $ ASTURIAS
                       : num [1:465] 679.7 11.661 182.687 182.114 0.573 ...
##
   $ CANTABRIA
                       : num [1:465] 722.913 12.416 194.621 193.877 0.744 ...
                       : num [1:465] 639.58 11.57 183.57 180.22 3.34 ...
   $ PAIS VASCO
## $ LA RIOJA
                       : num [1:465] 627.9 12.42 197.2 193.47 3.73 ...
## $ NAVARRA
                       : num [1:465] 659.72 13.57 213.33 211.77 1.57 ...
##
   $ CANARIAS
                       : num [1:465] 654.36 8.19 129.05 127.79 1.26 ...
##
   $ NORESTE
                       : num [1:465] 715.41 9.51 152.05 148.03 4.02 ...
##
  $ LEVANTE
                       : num [1:465] 618.34 8.01 126.19 124.91 1.28 ...
                       : num [1:465] 630.24 8.6 136.07 134.15 1.92 ...
##
  $ ANDALUCIA
##
   $ CENTRO-SUR
                       : num [1:465] 628.76 9.41 148.05 146.81 1.24 ...
   $ CASTILLA Y LEON : num [1:465] 692.97 11.65 183.5 181.76 1.74 ...
## $ NOROESTE
                       : num [1:465] 664.213 10.371 162.44 161.966 0.474 ...
##
  $ NORTE
                       : num [1:465] 654.92 12.11 191.42 188.74 2.67 ...
##
   $ T.CANARIAS
                       : num [1:465] 654.36 8.19 129.05 127.79 1.26 ...
##
  Nombre de la tabla de datos: df 2006
## tibble [465 x 27] (S3: tbl df/tbl/data.frame)
                       : chr [1:465] ".TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "GALLINA" ...
   $ ...1
##
  $ T.ESPAÑA
                       : num [1:465] 642.97 9.05 143.07 141.05 2.02 ...
  $ CATALUÑA
                       : num [1:465] 728.34 9.11 145.35 141.72 3.63 ...
##
   $ ARAGON
                       : num [1:465] 661.53 10.48 169.69 162.67 7.02 ...
##
   $ BALEARES
                       : num [1:465] 632.39 6.83 108.36 106.4 1.95 ...
##
                       : num [1:465] 605.06 7.87 124.43 122.75 1.68 ...
   $ VALENCIA
  $ MURCIA
                       : num [1:465] 554.13 7.04 111.16 109.81 1.35 ...
##
   $ T.ANDALUCIA
                       : num [1:465] 616.72 8.34 131.99 130.04 1.95 ...
##
                       : num [1:465] 625.34 8.77 138.21 136.87 1.34 ...
   $ MADRID
## $ CASTILLA LA MANCHA: num [1:465] 614.52 8.92 141.63 138.98 2.65 ...
## $ EXTREMADURA
                       : num [1:465] 614.859 10.196 159.705 159.239 0.465 ...
                       : num [1:465] 702.27 11.09 174.26 173.17 1.09 ...
## $ CASTILLA LEON
```

```
## $ GALICIA
                       : num [1:465] 623.66 9.3 145.466 145.276 0.189 ...
##
   $ ASTURIAS
                       : num [1:465] 664.142 11.343 177.466 177.2 0.266 ...
  $ CANTABRIA
                       : num [1:465] 712.53 10.84 171.29 168.96 2.33 ...
  $ PAIS VASCO
                       : num [1:465] 635.58 10.71 169.78 166.92 2.86 ...
   $ LA RIOJA
                       : num [1:465] 636.81 11.49 182.66 178.89 3.77 ...
##
   $ NAVARRA
                       : num [1:465] 657.85 12.47 196.14 194.53 1.61 ...
                       : num [1:465] 648.93 7.55 118.84 117.76 1.08 ...
   $ CANARIAS
                       : num [1:465] 707.7 9.09 145.34 141.34 3.99 ...
##
   $ NORESTE
##
   $ LEVANTE
                       : num [1:465] 593.99 7.69 121.55 119.94 1.61 ...
##
   $ ANDALUCIA
                       : num [1:465] 621.53 8.41 133.02 131.06 1.96 ...
   $ CENTRO-SUR
                       : num [1:465] 621.28 9 141.96 140.42 1.54 ...
   $ CASTILLA Y LEON : num [1:465] 702.27 11.09 174.26 173.17 1.09 ...
##
   $ NOROESTE
                       : num [1:465] 656.722 10.198 159.534 159.316 0.217 ...
                       : num [1:465] 651.99 11.09 175.49 172.85 2.64 ...
##
  $ NORTE
##
   $ T.CANARIAS
                       : num [1:465] 648.93 7.55 118.84 117.76 1.08 ...
##
  Nombre de la tabla de datos: df_2007
## tibble [552 x 27] (S3: tbl df/tbl/data.frame)
                       : chr [1:552] ".TOTAL ALIMENTACION" "HUEVOS KGS" "HUEVOS" "HUEVOS G." ...
   $ ...1
   $ T.ESPAÑA
##
                       : num [1:552] 647.46 8.87 140.41 138.33 12.53 ...
##
   $ CATALUÑA
                       : num [1:552] 725.06 8.82 141 137.18 7.15 ...
  $ ARAGON
                       : num [1:552] 678.39 9.79 157.66 152.07 14.14 ...
##
                       : num [1:552] 632.09 6.88 108.72 107.25 9.92 ...
   $ BALEARES
                       : num [1:552] 623.45 8.24 130.06 128.53 4.82 ...
##
   $ VALENCIA
##
                       : num [1:552] 616.05 7.71 122.52 120.12 9.92 ...
   $ MURCIA
   $ T.ANDALUCIA
                       : num [1:552] 615.04 8.03 127.2 125.08 14.65 ...
##
   $ MADRID
                       : num [1:552] 618.91 8.56 134.95 133.53 3.85 ...
   $ CASTILLA LA MANCHA: num [1:552] 630.96 9.39 147.93 146.48 22.88 ...
## $ EXTREMADURA
                      : num [1:552] 601.05 9.56 150.03 149.16 26.87 ...
   $ CASTILLA LEON
                       : num [1:552] 693.9 11 172.6 170.9 20.2 ...
##
   $ GALICIA
                       : num [1:552] 621.28 8.55 133.91 133.6 26.49 ...
##
   $ ASTURIAS
                       : num [1:552] 677 11.7 183.6 183.1 25.9 ...
##
  $ CANTABRIA
                       : num [1:552] 708.93 9.88 157.39 153.85 5.67 ...
                       : num [1:552] 656.4 10.9 173.7 170.6 12.4 ...
##
  $ PAIS VASCO
##
   $ LA RIOJA
                       : num [1:552] 636.24 11.83 188.26 184.21 4.79 ...
##
   $ NAVARRA
                       : num [1:552] 648.81 11.33 179.18 176.71 4.48 ...
##
  $ CANARIAS
                       : num [1:552] 667.7 7.6 119.57 118.63 9.21 ...
##
  $ NORESTE
                       : num [1:552] 708.3 8.77 140.3 136.44 8.52 ...
##
   $ LEVANTE
                       : num [1:552] 621.82 8.13 128.41 126.69 5.93 ...
##
                       : num [1:552] 615.04 8.03 127.2 125.08 14.65 ...
   $ ANDALUCIA
                       : num [1:552] 619.3 8.9 140.2 138.8 11.7 ...
  $ CENTRO-SUR
##
   $ CASTILLA Y LEON : num [1:552] 693.9 11 172.6 170.9 20.2 ...
   $ NOROESTE
                       : num [1:552] 635.67 9.37 146.75 146.38 26.33 ...
##
   $ NORTE
                       : num [1:552] 662.66 10.9 172.94 169.8 9.27 ...
                       : num [1:552] 667.7 7.6 119.57 118.63 9.21 ...
   $ T.CANARIAS
##
  Nombre de la tabla de datos: df_2008
## tibble [556 x 27] (S3: tbl_df/tbl/data.frame)
                       : chr [1:556] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL HUEV
   $ ...1
   $ T.ESPAÑA
##
                       : num [1:556] 691.25 8.86 140.85 137.95 17.17 ...
## $ CATALUÑA
                       : num [1:556] 746.09 8.49 136.37 131.88 7.57 ...
                       : num [1:556] 738.8 9.74 159.47 150.84 18.82 ...
## $ ARAGON
## $ BALEARES
                      : num [1:556] 701.9 6.7 106.8 104.3 17.8 ...
                       : num [1:556] 664.54 8.17 129.59 127.37 8.03 ...
## $ VALENCIA
```

```
## $ MURCIA
                       : num [1:556] 656.07 6.99 110.89 108.88 7.94 ...
## $ T.ANDALUCIA
                       : num [1:556] 666.74 8.23 131.1 128.13 18.41 ...
                       : num [1:556] 642.98 8.33 132.24 129.76 10.07 ...
  $ CASTILLA LA MANCHA: num [1:556] 667.97 9.14 144.21 142.55 35.2 ...
   $ EXTREMADURA
                       : num [1:556] 651.3 10.4 164.6 162.2 55.5 ...
##
   $ CASTILLA LEON
                       : num [1:556] 751.6 11.4 180 176.9 22.5 ...
                       : num [1:556] 646.93 8.23 128.9 128.47 36.32 ...
   $ GALICIA
                       : num [1:556] 754.2 11.3 176.7 175.8 32.1 ...
##
   $ ASTURIAS
##
   $ CANTABRIA
                       : num [1:556] 767.4 12.8 203.5 198.6 15.6 ...
##
   $ PAIS VASCO
                       : num [1:556] 700.9 11.5 182.5 178.4 16.8 ...
                       : num [1:556] 646.77 10.47 167.89 162.86 5.04 ...
  $ LA RIOJA
##
                       : num [1:556] 623.61 9.58 150.83 149.43 5.28 ...
   $ NAVARRA
   $ CANARIAS
                       : num [1:556] 849.19 9.15 144.53 142.68 15.5 ...
                       : num [1:556] 739.89 8.46 136.35 131.49 10.29 ...
## $ NORESTE
## $ LEVANTE
                       : num [1:556] 662.85 7.91 125.5 123.32 8.01 ...
##
   $ ANDALUCIA
                       : num [1:556] 666.74 8.23 131.1 128.13 18.41 ...
##
                       : num [1:556] 648.61 8.75 138.71 136.44 21.48 ...
   $ CENTRO-SUR
   $ CASTILLA Y LEON : num [1:556] 751.6 11.4 180 176.9 22.5 ...
                       : num [1:556] 675 9.02 141.39 140.84 35.24 ...
  $ NOROESTE
##
   $ NORTE
                       : num [1:556] 692.8 11.2 179 175.1 13.6 ...
## $ T.CANARIAS
                       : num [1:556] 849.19 9.15 144.53 142.68 15.5 ...
##
## Nombre de la tabla de datos: df 2009
## tibble [556 x 27] (S3: tbl df/tbl/data.frame)
##
  $ ...1
                       : chr [1:556] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL HUEV
                       : num [1:556] 683.88 8.96 142.46 139.54 18.66 ...
  $ T.ESPAÑA
## $ CATALUÑA
                       : num [1:556] 736.73 8.63 138.38 134.17 10.12 ...
                       : num [1:556] 726.57 9.57 155.75 148.4 24.7 ...
   $ ARAGON
## $ BALEARES
                       : num [1:556] 721.23 8.28 131.67 128.93 28.81 ...
   $ VALENCIA
                       : num [1:556] 661.79 8.3 132 129.28 6.23 ...
##
   $ MURCIA
                       : num [1:556] 636.78 7.47 118.57 116.34 11.46 ...
##
   $ T.ANDALUCIA
                       : num [1:556] 662.76 8.76 139.47 136.34 25.03 ...
##
   $ MADRID
                       : num [1:556] 643.46 8.42 133.47 131.2 9.32 ...
## $ CASTILLA LA MANCHA: num [1:556] 679.04 9.16 145.19 142.82 26.59 ...
##
   $ EXTREMADURA
                       : num [1:556] 637.6 9.38 148.24 146.24 29.02 ...
##
   $ CASTILLA LEON
                       : num [1:556] 767.1 11.9 188.9 185.6 38.1 ...
## $ GALICIA
                       : num [1:556] 662.51 8.84 138.84 138.06 38.24 ...
## $ ASTURIAS
                       : num [1:556] 734.5 10.1 158.7 157.9 23.6 ...
##
                       : num [1:556] 745 13 205.1 202.6 26.9 ...
   $ CANTABRIA
## $ PAIS VASCO
                       : num [1:556] 637.3 10.2 162.6 158.5 15.8 ...
                       : num [1:556] 658.3 10.5 167.9 162.6 3.5 ...
## $ LA RIOJA
## $ NAVARRA
                       : num [1:556] 612.29 9.93 158.53 154.46 4.37 ...
   $ CANARIAS
                       : num [1:556] 759.28 7.84 123.33 122.31 15.59 ...
## $ NORESTE
                       : num [1:556] 733.73 8.73 140.15 135.65 14.24 ...
  $ LEVANTE
                       : num [1:556] 656.43 8.12 129.06 126.44 7.4 ...
                       : num [1:556] 662.76 8.76 139.47 136.34 25.03 ...
##
   $ ANDALUCIA
                       : num [1:556] 650.06 8.69 137.74 135.48 15.7 ...
   $ CENTRO-SUR
##
   $ CASTILLA Y LEON : num [1:556] 767.1 11.9 188.9 185.6 38.1 ...
  $ NOROESTE
                       : num [1:556] 681.68 9.18 144.11 143.33 34.38 ...
                       : num [1:556] 650.8 10.6 168.6 164.6 14.4 ...
##
   $ NORTE
##
   $ T.CANARIAS
                       : num [1:556] 759.28 7.84 123.33 122.31 15.59 ...
##
## Nombre de la tabla de datos: df_2010
## tibble [556 x 27] (S3: tbl df/tbl/data.frame)
```

```
: chr [1:556] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL HUEV
   $ T.ESPAÑA
                       : num [1:556] 662.83 8.24 131.16 128.27 15.51 ...
                       : num [1:556] 709.98 7.99 128.4 124.19 8.15 ...
   $ CATALUÑA
##
   $ ARAGON
                       : num [1:556] 688.89 8.67 141.19 134.36 15.11 ...
   $ BALEARES
                       : num [1:556] 718.59 8.25 130.87 128.54 15.81 ...
   $ VALENCIA
                       : num [1:556] 663.27 7.76 123.44 120.76 6.05 ...
##
   $ MURCIA
                        : num [1:556] 626.2 7.2 114.2 112.27 7.92 ...
                        : num [1:556] 651.3 7.9 126.6 122.8 18.8 ...
##
   $ T.ANDALUCIA
##
   $ MADRID
                        : num [1:556] 635.24 8.25 130.51 128.59 10.84 ...
   $ CASTILLA LA MANCHA: num [1:556] 640.39 8.73 138.02 136.1 29.43 ...
##
   $ EXTREMADURA
                       : num [1:556] 619.85 8.05 126.96 125.63 26.31 ...
                        : num [1:556] 703.8 10.3 162.9 159.8 30.3 ...
##
   $ CASTILLA LEON
##
   $ GALICIA
                        : num [1:556] 644.65 7.87 123.47 122.8 27.83 ...
##
   $ ASTURIAS
                        : num [1:556] 662.05 9.28 145.93 144.9 23.14 ...
   $ CANTABRIA
##
                       : num [1:556] 693.5 11.8 185.7 184.5 15.4 ...
##
   $ PAIS VASCO
                       : num [1:556] 632.01 9.29 148.54 144.59 14.31 ...
                       : num [1:556] 645.83 8.87 144.91 137.37 6.7 ...
##
   $ LA RIOJA
##
   $ NAVARRA
                       : num [1:556] 581.61 8.84 140.36 137.72 4.83 ...
                       : num [1:556] 681.71 6.69 105.55 104.42 15.69 ...
##
   $ CANARIAS
##
   $ NORESTE
                       : num [1:556] 707.88 8.11 130.49 126.11 9.96 ...
##
   $ LEVANTE
                       : num [1:556] 655.25 7.64 121.44 118.92 6.46 ...
   $ ANDALUCIA
                       : num [1:556] 651.3 7.9 126.6 122.8 18.8 ...
   $ CENTRO-SUR
                       : num [1:556] 634.7 8.34 131.87 130.02 16.98 ...
##
                       : num [1:556] 703.8 10.3 162.9 159.8 30.3 ...
##
   $ CASTILLA Y LEON
##
   $ NOROESTE
                       : num [1:556] 649.35 8.25 129.54 128.77 26.56 ...
   $ NORTE
                       : num [1:556] 633.86 9.56 152.42 148.8 12.19 ...
##
   $ T.CANARIAS
                        : num [1:556] 681.71 6.69 105.55 104.42 15.69 ...
  Nombre de la tabla de datos: df_2011
## tibble [556 x 27] (S3: tbl_df/tbl/data.frame)
                       : chr [1:556] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL HUEV
##
   $ ...1
##
   $ T.ESPAÑA
                       : num [1:556] 658.96 8.21 130.98 127.84 14.49 ...
   $ CATALUÑA
                       : num [1:556] 699.57 7.74 125.47 120.08 6.45 ...
##
                       : num [1:556] 705.57 8.65 141.07 133.99 14.07 ...
##
   $ ARAGON
##
   $ BALEARES
                       : num [1:556] 710.51 8.08 128.1 125.92 9.57 ...
##
   $ VALENCIA
                       : num [1:556] 662.41 8.09 128.72 125.93 5.99 ...
##
   $ MURCIA
                        : num [1:556] 638.43 7.33 117.48 113.93 6.27 ...
##
   $ T.ANDALUCIA
                        : num [1:556] 642.37 7.79 124.38 121.19 15.96 ...
   $ MADRID
                        : num [1:556] 631.73 8.15 129.01 127.09 9.2 ...
##
   $ CASTILLA LA MANCHA: num [1:556] 635.76 8.77 138.45 136.78 27.18 ...
##
                       : num [1:556] 627.87 8.29 131.48 129.1 33.19 ...
   $ EXTREMADURA
##
   $ CASTILLA LEON
                        : num [1:556] 705.6 10.6 167.9 165.4 34.5 ...
##
   $ GALICIA
                        : num [1:556] 632.09 7.48 117.37 116.81 28.95 ...
##
   $ ASTURIAS
                        : num [1:556] 664.97 9.03 141.84 140.99 18.16 ...
   $ CANTABRIA
                        : num [1:556] 689.4 11.3 177.6 176 16.6 ...
                        : num [1:556] 626.87 9.39 151.14 145.87 16.06 ...
##
   $ PAIS VASCO
##
   $ LA RIOJA
                       : num [1:556] 663.91 9.39 150.95 145.9 5.83 ...
                       : num [1:556] 600.87 9.29 152.57 143.87 6.35 ...
##
   $ NAVARRA
##
   $ CANARIAS
                       : num [1:556] 675.5 6.88 108.72 107.3 11.66 ...
##
   $ NORESTE
                       : num [1:556] 702.37 7.91 128.05 122.79 7.86 ...
##
   $ LEVANTE
                       : num [1:556] 658.13 7.93 126.43 123.47 6.06 ...
##
  $ ANDALUCIA
                       : num [1:556] 642.08 7.78 124.33 121.13 15.95 ...
## $ CENTRO-SUR
                       : num [1:556] 633.84 8.33 131.84 129.92 16.24 ...
   $ CASTILLA Y LEON : num [1:556] 700.9 10.5 166.8 164.3 34.3 ...
```

```
$ NOROESTE
                       : num [1:556] 646.72 7.97 125.12 124.47 26.25 ...
##
   $ NORTE
                       : num [1:556] 628.77 9.56 153.85 148.63 13.52 ...
   $ T.CANARIAS
                       : num [1:556] 675.5 6.88 108.72 107.3 11.66 ...
##
   Nombre de la tabla de datos: df 2012
## tibble [556 x 27] (S3: tbl df/tbl/data.frame)
                       : chr [1:556] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL HUEV
   $ ...1
   $ T.ESPAÑA
                       : num [1:556] 660.67 8.26 132.11 128.56 13.45 ...
##
##
   $ CATALUÑA
                       : num [1:556] 704.77 7.93 128.36 123.15 7.76 ...
##
   $ ARAGON
                       : num [1:556] 681.83 8.52 139.59 131.91 14.06 ...
   $ BALEARES
                       : num [1:556] 711.92 8.04 127.84 125.25 9.97 ...
##
                       : num [1:556] 648 8.35 132.84 130.03 7.45 ...
   $ VALENCIA
   $ MURCIA
                       : num [1:556] 668.95 7.97 127.4 124.01 7.34 ...
## $ T.ANDALUCIA
                       : num [1:556] 637.48 7.86 126.06 122.19 14.45 ...
                       : num [1:556] 634.65 8.2 130.57 127.73 7.79 ...
   $ MADRID
##
   $ CASTILLA LA MANCHA: num [1:556] 639.02 8.48 134.71 132.08 21.1 ...
                       : num [1:556] 608.43 7.03 111.24 109.67 15.8 ...
   $ EXTREMADURA
   $ CASTILLA LEON
                       : num [1:556] 705.52 9.92 157.41 154.48 24.3 ...
                       : num [1:556] 651.44 7.58 119.7 118.26 33.38 ...
##
  $ GALICIA
##
   $ ASTURIAS
                       : num [1:556] 656.94 8.74 137.28 136.47 18.52 ...
##
   $ CANTABRIA
                       : num [1:556] 711.2 11.6 184.5 181.2 17.7 ...
                       : num [1:556] 648.05 9.73 156.66 151.16 17.68 ...
  $ PAIS VASCO
##
   $ LA RIOJA
                       : num [1:556] 635.56 8.56 139.14 132.72 8.17 ...
                       : num [1:556] 614.5 9.8 160.49 151.68 8.21 ...
##
   $ NAVARRA
## $ CANARIAS
                       : num [1:556] 686.66 7.17 113.58 111.78 9.56 ...
## $ NORESTE
                       : num [1:556] 703.28 8.04 130.07 124.8 8.92 ...
##
   $ LEVANTE
                       : num [1:556] 654.76 8.29 132.01 129.06 7.45 ...
   $ ANDALUCIA
                       : num [1:556] 637.44 7.86 126.05 122.18 14.45 ...
## $ CENTRO-SUR
                       : num [1:556] 634.48 8.15 129.61 126.97 11.89 ...
   $ CASTILLA Y LEON : num [1:556] 712.9 10 159 156.1 24.5 ...
##
   $ NOROESTE
                       : num [1:556] 660.8 8 126.2 124.9 29.5 ...
##
   $ NORTE
                       : num [1:556] 645.23 9.85 158.78 153.01 15.06 ...
##
   $ T.CANARIAS
                       : num [1:556] 686.66 7.17 113.58 111.78 9.56 ...
##
  Nombre de la tabla de datos: df 2013
## tibble [580 x 27] (S3: tbl df/tbl/data.frame)
##
  $ ...1
                           : chr [1:580] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL ?
##
  $ T.ESPAÑA
                            : num [1:580] 669.73 8.61 137.33 134.06 118.98 ...
##
   $ CATALUÑA
                           : num [1:580] 734.47 8.51 136.59 132.24 121.76 ...
##
   $ ARAGÓN
                           : num [1:580] 685.78 8.98 147.46 138.97 125.14 ...
  $ ILLES BALEARS
                           : num [1:580] 720.09 8.69 138.82 135.27 124.34 ...
##
  $ COMUNITAT VALENCIANA : num [1:580] 676.89 8.95 142.27 139.3 132.73 ...
                           : num [1:580] 627.27 7.21 115.12 112.26 101.48 ...
   $ REGIÓN DE MURCIA
## $ ANDALUCÍA
                            : num [1:580] 620.79 7.77 124.21 120.81 104.56 ...
  $ COMUNIDAD DE MADRID
                           : num [1:580] 634.88 8.48 134.89 132.14 125 ...
   $ CASTILLA - LA MANCHA : num [1:580] 609.67 8.19 130.47 127.57 110.13 ...
##
   $ EXTREMADURA
                            : num [1:580] 628.3 7.6 119.7 118.5 97.1 ...
##
  $ CASTILLA Y LEÓN
                            : num [1:580] 726.8 10.4 164.4 161.5 138.7 ...
   $ GALICIA
                            : num [1:580] 637.79 7.69 120.9 120.05 82.95 ...
##
   $ PRINCIPADO DE ASTURIAS: num [1:580] 697 10.1 158.9 157.2 132.7 ...
## $ CANTABRIA
                           : num [1:580] 764 14 222 219 190 ...
## $ PAIS VASCO
                           : num [1:580] 731.5 11.4 182.1 177.5 153.9 ...
## $ LA RIOJA
                           : num [1:580] 773 11.1 178.3 171.7 151.3 ...
## $ C. FORAL DE NAVARRA : num [1:580] 655.1 11.2 180.5 173.4 160.5 ...
```

```
$ CANARIAS
                          : num [1:580] 675.97 6.97 110.14 108.71 96.78 ...
##
   $ NORESTE
                           : num [1:580] 727.74 8.62 138.82 133.94 122.89 ...
  $ LEVANTE
                          : num [1:580] 665.42 8.55 136.02 133.08 125.54 ...
                          : num [1:580] 621.85 7.78 124.42 121.02 104.74 ...
##
  $ ANDALUCIA
                           : num [1:580] 629.49 8.33 132.35 129.74 118.36 ...
   $ CENTRO-SUR
                          : num [1:580] 713.2 10.2 161.3 158.4 136.1 ...
   $ CASTILLA Y LEON
                          : num [1:580] 664.85 8.48 133.41 132.32 98.07 ...
   $ NOROESTE
                           : num [1:580] 706.1 11.4 183 178 156.6 ...
##
   $ NORTE
##
   $ T.CANARIAS
                           : num [1:580] 675.97 6.97 110.14 108.71 96.78 ...
##
  Nombre de la tabla de datos: df_2014
## tibble [580 x 27] (S3: tbl_df/tbl/data.frame)
                           : chr [1:580] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL
   $ ...1
  $ T.ESPAÑA
                           : num [1:580] 661.23 8.47 135.01 131.79 115.93 ...
  $ CATALUÑA
                           : num [1:580] 727.58 8.69 139.48 135.14 123.31 ...
##
   $ ARAGÓN
                           : num [1:580] 702.66 9.44 154.11 146.35 124.39 ...
   $ ILLES BALEARS
                           : num [1:580] 719.02 8.62 136.94 134.26 121.49 ...
   $ COMUNITAT VALENCIANA : num [1:580] 657.5 8.7 138.4 135.5 127.3 ...
  $ REGIÓN DE MURCIA
                           : num [1:580] 599.8 6.9 109.9 107.5 92.7 ...
## $ ANDALUCÍA
                           : num [1:580] 620.39 7.66 122.6 119.23 101.05 ...
   $ COMUNIDAD DE MADRID
                          : num [1:580] 633.63 8.32 131.91 129.61 122.15 ...
  $ CASTILLA - LA MANCHA : num [1:580] 600.32 7.95 127.72 123.55 104.91 ...
   $ EXTREMADURA
                           : num [1:580] 622.49 7.36 116.81 114.61 92.94 ...
##
   $ CASTILLA Y LEÓN
                           : num [1:580] 699.67 9.48 150.94 147.64 126.85 ...
                           : num [1:580] 648.1 8.13 128.07 126.91 88.74 ...
## $ GALICIA
  $ PRINCIPADO DE ASTURIAS: num [1:580] 677.83 9.43 149.11 147.07 127.14 ...
##
   $ CANTABRIA
                           : num [1:580] 654.9 11.3 179.3 175.7 158.8 ...
   $ PAIS VASCO
                           : num [1:580] 686.6 10.5 167.9 163.2 142.6 ...
## $ LA RIOJA
                          : num [1:580] 709.2 10.5 166.7 162.9 148.4 ...
## $ C. FORAL DE NAVARRA : num [1:580] 676.1 11.1 177.7 173.2 158.2 ...
##
   $ CANARIAS
                           : num [1:580] 678.62 7.07 111.85 110.3 100.43 ...
##
   $ NORESTE
                           : num [1:580] 723.4 8.8 141.4 136.7 123.3 ...
##
  $ LEVANTE
                           : num [1:580] 646.27 8.31 132.23 129.49 119.67 ...
                           : num [1:580] 616.88 7.62 121.91 118.56 100.48 ...
##
  $ ANDALUCIA
   $ CENTRO-SUR
                           : num [1:580] 626.02 8.14 129.47 126.71 114.76 ...
                          : num [1:580] 714.46 9.68 154.13 150.76 129.53 ...
   $ CASTILLA Y LEON
## $ NOROESTE
                          : num [1:580] 665.6 8.62 135.84 134.41 100.9 ...
##
  $ NORTE
                           : num [1:580] 669.5 10.6 168.5 164.2 146 ...
##
   $ T.CANARIAS
                           : num [1:580] 678.62 7.07 111.85 110.3 100.43 ...
##
  Nombre de la tabla de datos: df 2015
## tibble [580 x 27] (S3: tbl df/tbl/data.frame)
                           : chr [1:580] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL :
   $ ...1
##
  $ T.ESPAÑA
                           : num [1:580] 655.68 8.44 134.78 131.39 114.39 ...
  $ CATALUÑA
                           : num [1:580] 722.34 8.62 138.33 134.1 123.05 ...
   $ ARAGÓN
                           : num [1:580] 691.77 9.86 162.72 152.38 125.71 ...
##
                           : num [1:580] 702.1 8.13 129.18 126.66 112.57 ...
   $ ILLES BALEARS
   $ COMUNITAT VALENCIANA : num [1:580] 655.96 8.97 143.06 139.64 129.35 ...
  $ REGIÓN DE MURCIA
                           : num [1:580] 661.4 8.1 129.4 126.1 109.4 ...
##
   $ ANDALUCÍA
                           : num [1:580] 615.39 7.72 123.45 120.12 100.01 ...
   $ COMUNIDAD DE MADRID
                          : num [1:580] 617.4 8.35 132.39 130.05 121.96 ...
## $ CASTILLA - LA MANCHA : num [1:580] 610.04 7.79 124.86 121.23 103.37 ...
## $ EXTREMADURA
                           : num [1:580] 609.39 7.34 115.99 114.46 92.35 ...
                        : num [1:580] 659.71 8.81 141.44 136.93 117.18 ...
## $ CASTILLA Y LEÓN
```

```
: num [1:580] 658.9 8.29 130.72 129.27 80.53 ...
## $ PRINCIPADO DE ASTURIAS: num [1:580] 642.95 8.94 140.81 139.47 115.29 ...
                          : num [1:580] 716.5 11.9 187.7 186.2 165.7 ...
##
  $ PAIS VASCO
                           : num [1:580] 655.66 9.55 153.85 148.34 135.24 ...
   $ LA RIOJA
                           : num [1:580] 676.7 9.1 146.5 141.4 130.6 ...
   $ C. FORAL DE NAVARRA : num [1:580] 624.72 9.46 150.57 147.23 135.43 ...
                          : num [1:580] 689.5 7.4 116.5 115.5 103.8 ...
   $ CANARIAS
                           : num [1:580] 715.71 8.74 140.72 135.83 122.22 ...
##
   $ NORESTE
##
   $ LEVANTE
                           : num [1:580] 651 8.7 138.8 135.4 123.8 ...
##
  $ ANDALUCIA
                           : num [1:580] 614.62 7.71 123.29 119.97 99.89 ...
  $ CENTRO-SUR
                           : num [1:580] 622.8 8.2 130.3 127.7 115.3 ...
##
   $ CASTILLA Y LEON
                           : num [1:580] 664.69 8.88 142.51 137.96 118.07 ...
                           : num [1:580] 657.54 8.51 134.19 132.76 90.71 ...
   $ NOROESTE
## $ NORTE
                           : num [1:580] 642.19 9.57 153.23 148.86 135.47 ...
   $ T.CANARIAS
                           : num [1:580] 689.5 7.4 116.5 115.5 103.8 ...
##
  Nombre de la tabla de datos: df_2016
## tibble [580 x 27] (S3: tbl_df/tbl/data.frame)
                           : chr [1:580] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL
  $ ...1
## $ T.ESPAÑA
                           : num [1:580] 661.43 8.57 136.58 133.4 115.68 ...
## $ CATALUÑA
                          : num [1:580] 649.8 7.91 126.73 123.09 110.36 ...
  $ ARAGÓN
                           : num [1:580] 665.6 10.1 165 155.6 128.6 ...
##
   $ ILLES BALEARS
                           : num [1:580] 650.79 7.71 122.59 120.03 108.41 ...
   $ COMUNITAT VALENCIANA : num [1:580] 624.78 8.36 133.26 130.19 121.17 ...
  $ REGIÓN DE MURCIA
                         : num [1:580] 615 7.25 114.66 113.03 102.42 ...
  $ ANDALUCÍA
                           : num [1:580] 611.06 7.67 122.95 119.35 98.95 ...
## $ COMUNIDAD DE MADRID : num [1:580] 559.39 7.63 120.67 118.96 112.88 ...
   $ CASTILLA - LA MANCHA : num [1:580] 648.1 8.23 131.68 127.96 110.36 ...
## $ EXTREMADURA
                           : num [1:580] 613.59 7.53 119.55 117.24 97.06 ...
## $ CASTILLA Y LEÓN
                           : num [1:580] 671.12 9.54 151.76 148.6 126.89 ...
##
   $ GALICIA
                           : num [1:580] 669.22 7.95 125.52 123.97 72.96 ...
   $ PRINCIPADO DE ASTURIAS: num [1:580] 707.35 9.96 157.58 155.34 129.78 ...
## $ CANTABRIA
                          : num [1:580] 587.7 10.1 160 157.8 132.2 ...
## $ PAIS VASCO
                           : num [1:580] 613.37 9.33 148.91 145.15 129.28 ...
##
   $ LA RIOJA
                           : num [1:580] 545.03 8.48 135.76 131.83 121.5 ...
## $ C. FORAL DE NAVARRA : num [1:580] 612.22 8.86 140.05 138.08 125.7 ...
## $ CANARIAS
                          : num [1:580] 705.54 7.42 117.04 115.81 103.06 ...
##
  $ NORESTE
                           : num [1:580] 652.05 8.18 131.44 127.13 112.6 ...
##
   $ LEVANTE
                           : num [1:580] 622.52 8.11 129 126.26 116.88 ...
##
   $ ANDALUCIA
                          : num [1:580] 611.06 7.67 122.95 119.35 98.95 ...
                           : num [1:580] 584.87 7.75 122.93 120.72 110.52 ...
  $ CENTRO-SUR
##
  $ CASTILLA Y LEON
                          : num [1:580] 671.12 9.54 151.76 148.6 126.89 ...
                           : num [1:580] 679.8 8.51 134.44 132.7 88.77 ...
   $ NOROESTE
## $ NORTE
                          : num [1:580] 603.3 9.3 148 144.8 128.5 ...
                           : num [1:580] 705.54 7.42 117.04 115.81 103.06 ...
  $ T.CANARIAS
##
  Nombre de la tabla de datos: df_2017
## tibble [580 x 27] (S3: tbl_df/tbl/data.frame)
  $ ...1
                          : chr [1:580] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL :
## $ T.ESPAÑA
                           : num [1:580] 632.2 8.39 133.85 130.62 114.92 ...
## $ CATALUÑA
                          : num [1:580] 675.97 8.39 134.4 130.47 119.05 ...
## $ ARAGÓN
                          : num [1:580] 646.2 9.28 152.55 143.59 124 ...
                      : num [1:580] 707.4 8.4 134.6 130.6 117.2 ...
## $ ILLES BALEARS
## $ COMUNITAT VALENCIANA : num [1:580] 645.23 8.87 140.75 138.13 131.35 ...
```

```
$ REGIÓN DE MURCIA
                          : num [1:580] 658.19 8.19 130.18 127.6 115.4 ...
   $ ANDALUCÍA
                           : num [1:580] 598.56 7.62 122.28 118.53 99.92 ...
## $ COMUNIDAD DE MADRID : num [1:580] 572.6 7.93 125.86 123.46 119.23 ...
  $ CASTILLA - LA MANCHA : num [1:580] 630 8 128 124 113 ...
   $ EXTREMADURA
                           : num [1:580] 566.24 7.36 116.53 114.81 94.93 ...
##
   $ CASTILLA Y LEÓN
                           : num [1:580] 649.5 9.37 149.11 145.97 125.89 ...
                           : num [1:580] 661.22 8.86 140.14 138.19 80.58 ...
   $ PRINCIPADO DE ASTURIAS: num [1:580] 665.08 9.36 147.38 146.01 126.06 ...
##
                           : num [1:580] 639 11 173 172 146 ...
   $ CANTABRIA
##
                           : num [1:580] 625.93 9.97 160.18 155 141.32 ...
   $ PAIS VASCO
  $ LA RIOJA
                           : num [1:580] 545.52 8.64 139.54 134.07 119.2 ...
##
   $ C. FORAL DE NAVARRA
                          : num [1:580] 624 9.7 153 151.3 138.3 ...
                           : num [1:580] 691.82 7.52 118.15 117.45 104.6 ...
   $ CANARIAS
                           : num [1:580] 676.63 8.53 137.24 132.59 119.77 ...
## $ NORESTE
## $ LEVANTE
                           : num [1:580] 648.43 8.72 138.4 135.79 127.77 ...
##
   $ ANDALUCIA
                           : num [1:580] 597.67 7.61 122.1 118.36 99.77 ...
##
                           : num [1:580] 587.81 7.92 125.92 123.29 115.41 ...
   $ CENTRO-SUR
   $ CASTILLA Y LEON
                           : num [1:580] 636.18 9.18 146.05 142.97 123.31 ...
                           : num [1:580] 665.05 9.04 142.73 140.94 93.53 ...
  $ NOROESTE
## $ NORTE
                           : num [1:580] 616.5 9.9 158.1 154.1 138.6 ...
## $ T.CANARIAS
                           : num [1:580] 691.82 7.52 118.15 117.45 104.6 ...
## Nombre de la tabla de datos: df_2018
## tibble [580 x 27] (S3: tbl df/tbl/data.frame)
                          : chr [1:580] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL :
## $ ...1
                           : num [1:580] 630.58 8.45 134.81 131.48 116.63 ...
  $ T.ESPAÑA
## $ CATALUÑA
                           : num [1:580] 689.21 8.94 143.2 139.09 127.44 ...
   $ ARAGÓN
                           : num [1:580] 634.74 9.28 150.89 143.85 120.13 ...
##
## $ ILLES BALEARS
                           : num [1:580] 729.12 8.84 141.26 137.53 125.58 ...
  $ COMUNITAT VALENCIANA : num [1:580] 655.08 8.93 141.76 139.05 131.83 ...
                           : num [1:580] 643.41 8.64 136.68 134.75 123.03 ...
##
   $ REGIÓN DE MURCIA
##
   $ ANDALUCÍA
                           : num [1:580] 595.42 7.83 125.68 121.74 103.08 ...
## $ COMUNIDAD DE MADRID
                          : num [1:580] 569.39 7.91 126.16 123.06 118.95 ...
## $ CASTILLA - LA MANCHA : num [1:580] 633.6 7.66 121.71 119.4 109.46 ...
##
   $ EXTREMADURA
                           : num [1:580] 562.29 7.51 118.62 117.02 94.71 ...
   $ CASTILLA Y LEÓN
                           : num [1:580] 636 9.22 147.06 143.56 126.12 ...
                           : num [1:580] 663.29 8.52 135.51 132.63 82.26 ...
  $ PRINCIPADO DE ASTURIAS: num [1:580] 629.98 8.62 136.02 134.41 120.89 ...
   $ CANTABRIA
                           : num [1:580] 618 10.5 164.2 163.2 137 ...
##
   $ PAIS VASCO
                           : num [1:580] 632.91 9.88 158.9 153.52 144.52 ...
                           : num [1:580] 526.91 7.47 120.91 115.86 101.61 ...
  $ LA RIOJA
## $ C. FORAL DE NAVARRA
                          : num [1:580] 574.17 7.98 125.7 124.46 116.69 ...
                           : num [1:580] 667.13 7.66 120.51 119.61 106.39 ...
   $ CANARIAS
## $ NORESTE
                           : num [1:580] 686.61 8.99 144.22 139.73 126.32 ...
  $ LEVANTE
                           : num [1:580] 652.18 8.86 140.55 138.01 129.75 ...
                           : num [1:580] 593.79 7.81 125.34 121.41 102.8 ...
##
   $ ANDALUCIA
                           : num [1:580] 588.22 7.88 125.43 122.66 114.93 ...
   $ CENTRO-SUR
## $ CASTILLA Y LEON
                           : num [1:580] 623.13 9.04 144.08 140.66 123.57 ...
## $ NOROESTE
                           : num [1:580] 657.25 8.59 136.34 133.81 93.6 ...
##
   $ NORTE
                           : num [1:580] 607.42 9.38 149.83 145.88 133.99 ...
## $ T.CANARIAS
                          : num [1:580] 667.13 7.66 120.51 119.61 106.39 ...
## Nombre de la tabla de datos: df_2019
## tibble [686 x 19] (S3: tbl df/tbl/data.frame)
```

```
: chr [1:686] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL :
   $ T.ESPAÑA
                          : num [1:686] 621.57 8.33 132.95 129.64 115.4 ...
  $ CATALUÑA
                          : num [1:686] 677.72 8.62 138.1 134.01 125.65 ...
## $ ARAGÓN
                           : num [1:686] 613.44 8.98 146.36 139.16 120.08 ...
   $ ILLES BALEARS
                           : num [1:686] 751.89 8.36 134.26 129.96 121.36 ...
  $ COMUNITAT VALENCIANA : num [1:686] 637.3 8.59 136.73 133.77 125.5 ...
  $ REGIÓN DE MURCIA
                       : num [1:686] 604 8 127 125 117 ...
   $ ANDALUCÍA
                           : num [1:686] 583.04 7.75 124.25 120.45 102.72 ...
##
   $ COMUNIDAD DE MADRID : num [1:686] 565.73 7.94 126.59 123.62 117.96 ...
  $ CASTILLA - LA MANCHA : num [1:686] 611.5 7.3 116.3 113.6 104 ...
  $ EXTREMADURA
                           : num [1:686] 566.99 7.09 111.95 110.58 89.08 ...
##
   $ CASTILLA Y LEÓN
                           : num [1:686] 644.74 9.18 146.8 142.86 122.76 ...
                           : num [1:686] 653.86 8.96 141.97 139.61 85.91 ...
   $ GALICIA
## $ PRINCIPADO DE ASTURIAS: num [1:686] 620.09 8.26 129.75 128.86 112.99 ...
                           : num [1:686] 621.2 10.2 161.1 160 140.5 ...
  $ CANTABRIA
##
   $ PAIS VASCO
                           : num [1:686] 612.1 10.1 162.1 157.9 149.5 ...
                          : num [1:686] 537.63 8.19 132.25 127.14 118.49 ...
##
   $ LA RIOJA
  $ C. FORAL DE NAVARRA : num [1:686] 606.8 9.1 144 141.9 131.5 ...
                          : num [1:686] 675.57 7.68 121.11 119.75 106.87 ...
  $ CANARIAS
##
## Nombre de la tabla de datos: df_2020
## tibble [681 x 19] (S3: tbl_df/tbl/data.frame)
## $ ...1
                           : chr [1:681] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL
                           : num [1:681] 689.52 9.73 155.09 151.43 3.66 ...
   $ T.ESPAÑA
## $ CATALUÑA
                          : num [1:681] 750.55 10.45 166.83 162.55 4.28 ...
## $ ARAGÓN
                           : num [1:681] 698.8 11.14 180.89 172.75 8.14 ...
## $ ILLES BALEARS
                           : num [1:681] 833.56 10.47 167.95 162.76 5.19 ...
   $ COMUNITAT VALENCIANA : num [1:681] 692.35 9.61 153.06 149.7 3.36 ...
## $ REGIÓN DE MURCIA : num [1:681] 697.24 9.42 149.94 146.72 3.22 ...
## $ ANDALUCÍA
                          : num [1:681] 648.6 8.84 141.59 137.57 4.03 ...
## $ COMUNIDAD DE MADRID : num [1:681] 635.09 9.63 153.45 149.86 3.59 ...
   $ CASTILLA - LA MANCHA : num [1:681] 664.84 8.35 132.76 130.06 2.7 ...
## $ EXTREMADURA
                          : num [1:681] 622.58 7.77 123.3 120.98 2.33 ...
## $ CASTILLA Y LEÓN
                           : num [1:681] 704.78 9.92 157.68 154.59 3.09 ...
                           : num [1:681] 709.42 10.3 162.75 160.59 2.16 ...
   $ GALICIA
   $ PRINCIPADO DE ASTURIAS: num [1:681] 708.31 10.48 164.78 163.57 1.21 ...
  $ CANTABRIA
                          : num [1:681] 674.76 11.04 173.55 172.38 1.17 ...
##
  $ PAIS VASCO
                           : num [1:681] 690.44 11.93 191.71 185.42 6.29 ...
   $ LA RIOJA
                           : num [1:681] 611.04 9.78 155.62 152.23 3.39 ...
##
   $ C. FORAL DE NAVARRA : num [1:681] 700.55 11.76 185.37 183.39 1.98 ...
                          : num [1:681] 753.86 8.66 136.86 134.96 1.9 ...
##
## Nombre de la tabla de datos: df_2021
## tibble [681 x 19] (S3: tbl_df/tbl/data.frame)
                          : chr [1:681] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL
  $ ...1
## $ T.ESPAÑA
                           : num [1:681] 639.13 8.74 139.54 135.97 3.57 ...
   $ CATALUÑA
                          : num [1:681] 693.91 9.1 145.61 141.48 4.13 ...
##
## $ ARAGÓN
                          : num [1:681] 653.48 9.88 161.41 153.1 8.31 ...
  $ ILLES BALEARS
                           : num [1:681] 770.72 8.79 141.67 136.48 5.18 ...
##
   $ COMUNITAT VALENCIANA : num [1:681] 637.92 8.73 139.22 135.83 3.4 ...
## $ REGIÓN DE MURCIA
                          : num [1:681] 678.19 8.63 137.6 134.4 3.19 ...
                          : num [1:681] 598.72 7.85 125.89 122.11 3.77 ...
## $ ANDALUCÍA
## $ COMUNIDAD DE MADRID : num [1:681] 576.43 8.63 137.21 134.49 2.72 ...
## $ CASTILLA - LA MANCHA : num [1:681] 631.97 8.33 132.49 129.76 2.73 ...
```

```
$ EXTREMADURA
                            : num [1:681] 579.14 6.94 110.3 108.12 2.18 ...
                            : num [1:681] 651.04 8.92 143.23 138.59 4.64 ...
##
   $ CASTILLA Y LEÓN
   $ GALICIA
                            : num [1:681] 652.31 8.87 140.57 138.18 2.4 ...
   $ PRINCIPADO DE ASTURIAS: num [1:681] 658.779 9.136 143.313 142.655 0.658
##
   $ CANTABRIA
                            : num [1:681] 626.44 10.32 162.59 161.05 1.54 ...
                            : num [1:681] 652.07 11.09 179.23 172.16 7.07 ...
##
   $ PAIS VASCO
                            : num [1:681] 563.9 8.2 131.2 127.6 3.6 ...
   $ LA RIOJA
##
   $ C. FORAL DE NAVARRA
                            : num [1:681] 676.6 11.25 178.29 175.35 2.95 ...
##
   $ CANARIAS
                            : num [1:681] 709.12 8.42 132.51 131.44 1.08 ...
##
   Nombre de la tabla de datos: df_2022
## tibble [689 x 19] (S3: tbl_df/tbl/data.frame)
                            : chr [1:689] ".TOTAL ALIMENTACION" "T.HUEVOS KGS" "T.HUEVOS UNDS." "TOTAL I
##
   $ ...1
   $ T.ESPAÑA
                            : num [1:689] 583.48 8.11 129.46 126.24 3.22 ...
##
##
   $ CATALUÑA
                            : num [1:689] 635.72 8.35 134.04 129.73 4.32 ...
##
   $ ARAGÓN
                            : num [1:689] 569.65 8.62 139.84 133.81 6.03 ...
   $ ILLES BALEARS
##
                            : num [1:689] 681.28 6.75 108.9 104.85 4.05 ...
   $ COMUNITAT VALENCIANA
                           : num [1:689] 590.09 8.4 133.68 130.76 2.92 ...
   $ REGIÓN DE MURCIA
                            : num [1:689] 607.76 7.41 118.4 115.33 3.07 ...
##
   $ ANDALUCÍA
##
                            : num [1:689] 552.12 7.56 120.89 117.63 3.26 ...
##
  $ COMUNIDAD DE MADRID
                            : num [1:689] 524.55 7.84 124.39 122.2 2.19 ...
  $ CASTILLA - LA MANCHA : num [1:689] 576.76 7.41 118.8 115.2 3.6 ...
                            : num [1:689] 537.4 6.11 96.96 95.22 1.74 ...
##
   $ EXTREMADURA
   $ CASTILLA Y LEÓN
                            : num [1:689] 610.59 8.3 132.37 129.21 3.16 ...
##
##
  $ GALICIA
                            : num [1:689] 594.12 7.97 126.89 124.03 2.85 ...
  $ PRINCIPADO DE ASTURIAS: num [1:689] 607.09 8.77 137.93 136.89 1.04 ...
##
                            : num [1:689] 529.545 9.871 155.064 154.075 0.989
   $ CANTABRIA
   $ PAIS VASCO
                            : num [1:689] 580.03 10.63 171.1 165.15 5.95 ...
## $ LA RIOJA
                            : num [1:689] 531.5 9.11 144.94 141.93 3.01 ...
  $ C. FORAL DE NAVARRA
                            : num [1:689] 601.43 10.49 165.74 163.6 2.14 ...
## $ CANARIAS
                            : num [1:689] 650.3 8.23 129.71 128.3 1.41 ...
```

Revisando los datos, he localizado los siguientes errores:

- Los marcos de datos df\_2000, df\_2001, df\_2002, df\_2003, df\_2019, df\_2020, df\_2021 y df\_2022 tienen 19 variables, mientras que los restantes tiene 27.
- El nombre de las variables difieren de un marco de datos de otros.
- Toda las variables son de tipo número, a excepción de "...1" que es de tipo cadena de texto, ya que contiene las categorías de alimentos.
- El numero de registro de cada marco de datos varía, con lo que la categorías de alimentos también.

A continuación, procedo a eliminar las variables de más que he podido localizar

Ahora, unifico el nombre de las variables de los marcos de datos

```
for (i in seq(from = 1, to = 23, by = 1)) {
   if (i >= 5 && i <=19)
      colnames(lista_df[[i]]) <- c("Categorias", "Cataluña", "Aragon", "Baleares",</pre>
```

```
"Valencia", "Murcia", "Madrid", "Castilla La Mancha",

"Extremadura", "Galicia", "Asturias", "Cantabria",

"Pais Vasco", "La Rioja", "Navarra", "Canarias",

"Andalucia", "Castilla Y Leon")

else

colnames(lista_df[[i]]) <- c("Categorias", "Cataluña", "Aragon", "Baleares",

"Valencia", "Murcia", "Andalucia", "Madrid",

"Castilla La Mancha", "Extremadura", "Castilla Y Leon",

"Galicia", "Asturias", "Cantabria", "Pais Vasco",

"La Rioja", "Navarra", "Canarias")
}
```

Añado la variable "Año" en cada marco de datos y le asigno el valor del año que le corresponde

```
for (i in seq(from = 1, to = 23, by = 1)) {
   lista_df[[i]] <- cbind(lista_df[[i]], Año = as.numeric(x = lista_archivo[[i]]))
}</pre>
```

Ordeno cada marco de datos por el nombre de las variables

```
for (i in seq(from = 1, to = 23, by = 1)) {
  lista_df[[i]] <- lista_df[[i]][, order(colnames(lista_df[[i]]))]
}</pre>
```

Junto todos los marcos de datos en uno sólo denominado df\_final

```
df_total <- data.frame()

for (i in seq(from = 1, to = 23, by = 1)) {
   df_total <- rbind(df_total, lista_df[[i]])
}</pre>
```

Realizo un filtro, para sólo quedarme con determinadas categorias dea alimentos

```
filtro <- c("T.HUEVOS KGS", "MIEL", "TOTAL CARNE", "TOTAL PESCA",

"TOTAL LECHE LIQUIDA", "TOTAL OTRAS LECHES", "DERIVADOS LACTEOS",

"PAN", "BOLL.PAST.GALLET.CERE", "PRODUCTOS NAVIDEÑOS",

"CHOCOLATES/CACAOS/SUC", "ARROZ", "TOTAL PASTAS", "AZUCAR",

"EDULCORANTES", "LEGUMBRES", "TOTAL ACEITE", "MARGARINA",

"ACEITUNAS", "BEBIDAS DERIVADAS VI", "TOTAL VINOS", "CERVEZAS",

"SIDRAS", "T.BEBIDAS ESPIRITUOSA", "VINAGRE", "TOTAL ZOMO Y NECTAR",

"TOTAL PATATAS", "T.HORTALIZAS FRESCAS", "T.FRUTAS FRESCAS",

"FRUTOS SECOS", "T.FRUTA&HORTA.TRANSF", "PLATOS PREPARADOS",

"CAFES E INFUSIONES", "CALDOS", "SALSAS", "AGUA DE BEBIDA ENVAS.",

"GASEOSAS Y BEBID.REFR", "BASES PIZZAS&MASAS HO",

"HARINAS Y SEMOLAS", "ENCURTIDOS", "ESPECIAS Y CONDIMENTO", "SAL",

"OTROS PROD.EN PESO", "OTROS PROD.EN VOLUMEN", "ALGAS")

df_filtrado <- subset(df_total, Categorias %in% filtro)
```

### Detección y tratamiento de los datos ausentes

A continuación, examino la estructura interna de df\_final

```
str(df_filtrado)

## 'data.frame': 910 obs. of 19 variables:
## $ Andalucia : num 0.322 44.09 21.158 84.143 0.701 ...
```

```
2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 ...
##
   $ Año
                        : num
##
                               0.433 61.729 25.773 102.486 0.351 ...
   $ Aragon
                        : niim
##
   $ Asturias
                        : num
                               0.978 54.609 31.158 147.333 0.35 ...
                               0.445 50.477 17.748 84.511 0.754 ...
##
   $ Baleares
                        : num
##
   $ Canarias
                        : num
                               0.261 36.165 15.554 95.065 2.187 ...
##
   $ Cantabria
                        : num 0.463 50.872 26.725 115.274 0.935 ...
                               0.434 54.666 22.535 104.029 0.429 ...
   $ Castilla La Mancha: num
   $ Castilla Y Leon
                               0.566 68.354 30.888 123.591 0.422 ...
##
                        : num
##
    $ Cataluña
                        : num
                               0.494 56.969 26.709 89.447 0.428 ...
##
                        : chr
                               "MIEL" "TOTAL CARNE" "TOTAL PESCA" "TOTAL LECHE LIQUIDA" ...
   $ Categorias
   $ Extremadura
                        : num
                               0.31 51.63 19.467 108.24 0.257 ...
##
                               0.327 52.364 25.053 110.085 0.286 ...
   $ Galicia
                        : num
##
   $ La Rioja
                        : num
                               0.533 58.395 26.072 95.725 0.527 ...
##
   $ Madrid
                        : num
                               0.558 52.111 27.095 108.718 0.369 ...
##
   $ Murcia
                               0.437 45.547 21.036 93.315 0.67 ...
                        : num
##
   $ Navarra
                        : num
                               0.914 61.093 25.793 116.052 0.327 ...
##
   $ Pais Vasco
                              0.423 56.687 28.767 117.537 0.44 ...
                        : num
    $ Valencia
                              0.553 55.028 21.345 86.467 0.741 ...
                        : num
```

Y ahora obtengo un resumen de cada variable

### summary(df\_filtrado)

```
##
      Andalucia
                         Año
                                       Aragon
                                                        Asturias
##
          : 0.000
                           :2000
                                          : 0.000
                                                            : 0.000
                    Min.
    1st Qu.: 1.012
                                                     1st Qu.: 1.067
##
                     1st Qu.:2006
                                   1st Qu.: 1.000
   Median : 3.114
                     Median:2012
                                   Median : 3.686
                                                     Median: 3.753
##
##
   Mean
                                                     Mean
         :14.889
                    Mean
                          :2012
                                   Mean
                                          : 16.161
                                                           : 16.663
    3rd Qu.:22.550
                     3rd Qu.:2017
                                    3rd Qu.: 17.155
                                                     3rd Qu.: 18.867
   Max.
          :91.493
                           :2022
                                          :120.320
                                                     Max.
                                                            :147.333
##
                    Max.
                                   Max.
##
       Baleares
                         Canarias
                                          Cantabria
                                                          Castilla La Mancha
##
          : 0.0000
                             : 0.000
                                               : 0.000
                                                                 : 0.000
   Min.
                      Min.
                                        Min.
                                                          Min.
    1st Qu.: 0.9677
                       1st Qu.: 1.040
                                        1st Qu.: 0.947
                                                          1st Qu.: 0.857
##
   Median: 4.2110
                      Median: 3.909
                                                          Median: 3.170
                                        Median : 4.022
##
   Mean
         : 16.6899
                      Mean
                            : 15.706
                                        Mean
                                              : 16.062
                                                          Mean : 15.110
##
    3rd Qu.: 18.8255
                       3rd Qu.: 16.725
                                        3rd Qu.: 19.640
                                                          3rd Qu.: 20.294
          :132.9643
##
   Max.
                      Max.
                             :146.474
                                        Max.
                                               :126.893
                                                          Max.
                                                                 :104.029
##
   Castilla Y Leon
                         Cataluña
                                          Categorias
                                                             Extremadura
          : 0.0000
##
   Min.
                             : 0.0000
                                         Length:910
                                                                   : 0.0000
                      Min.
                                                            Min.
##
    1st Qu.: 0.9866
                       1st Qu.: 0.9999
                                         Class : character
                                                            1st Qu.: 0.8408
   Median : 3.4475
                      Median: 4.1248
                                         Mode :character
##
                                                            Median: 3.1159
##
   Mean : 16.6875
                       Mean : 16.8953
                                                            Mean : 14.6880
##
   3rd Qu.: 18.2198
                       3rd Qu.: 20.2392
                                                            3rd Qu.: 20.4173
                      Max.
   Max.
          :142.1307
                             :118.0356
                                                                  :108.2402
##
##
      Galicia
                         La Rioja
                                                                Murcia
                                             Madrid
                                                            Min. : 0.0000
##
   Min.
          : 0.0000
                      Min.
                             : 0.0000
                                         Min.
                                              : 0.0000
##
   1st Qu.: 0.7973
                       1st Qu.: 0.9673
                                          1st Qu.: 0.8469
                                                            1st Qu.: 0.9586
   Median: 4.0367
                       Median: 3.5119
                                         Median: 3.2751
                                                            Median: 3.6352
         : 15.6515
                            : 15.1334
                                                                   : 14.9758
##
   Mean
                       Mean
                                         Mean : 14.9237
                                                            Mean
##
   3rd Qu.: 19.3517
                       3rd Qu.: 18.1508
                                          3rd Qu.: 18.1340
                                                            3rd Qu.: 22.0395
   Max.
##
                       Max.
                             :133.6706
          :112.6312
                                         Max.
                                                :115.0327
                                                            Max.
                                                                   :108.3371
##
      Navarra
                        Pais Vasco
                                            Valencia
##
   Min.
          : 0.0000
                      Min.
                             : 0.0000
                                         Min.
                                                : 0.000
   1st Qu.: 0.9288
                      1st Qu.: 0.9531
                                          1st Qu.: 1.037
   Median: 3.4526
                      Median : 3.6702
                                         Median: 3.804
```

```
## Mean : 15.5968 Mean : 15.7979 Mean :15.384
## 3rd Qu.: 18.0519 3rd Qu.: 16.6248 3rd Qu.:20.988
## Max. :126.2099 Max. :134.0782 Max. :98.049
```

He comprobado que df\_filtrado tiene 910 registros y 19 variables.

Todas las variables son numéricas a excepción de "Categorias" que es una cadena de texto.

Además, no se han localizados datos ausentes

```
View(df_filtrado)
```

# Analizo gráficamente el marco de datos resultantes.

En este apartado, voy a anlizar, con gráficos, el consumo per capita de alimentos de los hogares españoles. Como se trata de los hogares españoles, en general, no me detendre en ir viendo los datos por territorios.

Para ello, en primer lugar continuación transformo el marco de datos de forma ancho a formato largo

```
df_largo <- df_filtrado %>%
  pivot_longer(
    cols = -c("Categorias", "Año"),
    names_to = "Territorios",
    values_to = "Consumo"
)
```

Analizo el consumo per cápita por año.

```
consumoxcapita_año_territorio <- df_largo %>%
  select("Año", "Territorios", "Consumo") %>%
  group_by(Año, Territorios) %>%
  summarise(
   consumoxcapita = sum(Consumo),
)
```

## `summarise()` has grouped output by 'Año'. You can override using the `.groups`
## argument.

```
print(consumoxcapita_año_territorio)
```

```
## # A tibble: 391 x 3
## # Groups:
              Año [23]
        Año Territorios
                               consumoxcapita
##
##
      <dbl> <chr>
                                        <dbl>
   1 2000 Andalucia
                                         543.
##
   2 2000 Aragon
                                         562.
##
   3 2000 Asturias
                                         683.
  4 2000 Baleares
##
                                         601.
##
  5 2000 Canarias
                                         504.
##
  6 2000 Cantabria
                                         574.
##
   7 2000 Castilla La Mancha
                                         547.
  8 2000 Castilla Y Leon
##
                                         610.
##
  9 2000 Cataluña
                                         618.
## 10
      2000 Extremadura
                                         555.
## # i 381 more rows
```

```
mean_consumoxcapita_año <- consumoxcapita_año_territorio %>%
group_by(Año) %>%
summarise(
```

```
mean_consumoxcapita = mean(consumoxcapita),
 )
print(mean_consumoxcapita_año)
## # A tibble: 23 x 2
##
       Año mean_consumoxcapita
##
      <dbl>
                         <dbl>
##
  1 2000
                          576.
## 2 2001
                          580.
## 3 2002
                          584.
## 4 2003
                          584.
## 5 2004
                          587.
## 6 2005
                          580.
## 7 2006
                          570.
## 8 2007
                          626.
## 9 2008
                          682.
## 10 2009
                          672.
## # i 13 more rows
median_consumoxcapita_año <- consumoxcapita_año_territorio %>%
 group_by(Año) %>%
  summarise(
   median_consumoxcapita = median(consumoxcapita),
 )
print(median_consumoxcapita_año)
## # A tibble: 23 x 2
##
       Año median_consumoxcapita
##
      <dbl>
                           <dbl>
##
  1 2000
                            567.
## 2 2001
                            578.
## 3 2002
                            595.
## 4 2003
                            580.
## 5 2004
                            578.
## 6 2005
                            582.
## 7 2006
                            572.
## 8 2007
                            614.
## 9 2008
                            655.
## 10 2009
                            653.
## # i 13 more rows
ggplot(
 data = median_consumoxcapita_año,
 aes(
   x = Año,
   y = median_consumoxcapita,
   color = "sthhedeuh")) +
 geom_line()
```

