Introduction to openFoodwrappeR

A wrapper in R for the Open Food Facts API.

```
library(openFoodwrappeR)
```

Retrieving a product

Intuitive method

In order to retrieve a product based a search term, use the `product()` function:

```
y = product('kale smoothie', num=4)
#> Loading required package: httr
#> Loading required package: XML
x = product('nutella', num=3)
class(x)
#> [1] "list"
length(x$product)
#> [1] 283
```

This function returns the parsed `.json` information as a list.

If `R` was running in interactive mode (or if you do not pass `num`), the user would be prompted to enter a number in order to select which product they would like from the printed list.

Get product numbers

If you want to get product numbers, you can use the `search_by_name` function:

```
lst = search_by_name('milk chocolate')
lst
#>                                                                titles
#> 1           Ferrero nutella chocolate hazelnut spread christmas - 200 g
#> 2                            2 x Schokolade - Alpenmilch - Milka - 100g
#> 3                                        Snickers Bar - Mars - 50 g
#> 4                          Fourrés Chocolat au lait BIO - Bjorg - 225 g
#> 5                                                 Toblerone - 100g
#> 6                                              Bounty - Mars - 57 g
#> 7                                                 Côte d'Or - 180g
#> 8                                    Lait d'amande chocolat - Bjorg - 1 L
#> 9                                          Loading... - envia - 4 x 125g
#> 10         Galettes de riz chocolat au lait &amp;amp; coco - Sondey - 100 g
#> 11                                      Choco fresh - Ferrero - 102.5g
#> 12                                   Milk Chocolate - Fin Carré - 100g
#> 13                                                Fin carré - 100g
#> 14                               Milk chocolate - Ferrero Rocher - 90 g
#> 15                         Excellence Extra Fondant Lait - Lindt - 100g
#> 16                                              Nippon - Hosta - 200g
#> 17                                   Soy chocolate flavor - alpro - 1l
```

```
#> 18                                                    Milka Oreo - 100 g
#> 19                                                Unknown - Fin Carré - 100g
#> 20                      M&amp;amp;M's Biscuit x10 - Mars - 198 g (10x19.8g)
#> 21                                  Batonnet Classic - Miko - 370 g
#> 22                             Lapin d'or chocolat au lait - Lindt - 100 g
#> 23 Le Petit Pot de Crème au Chocolat - La Laitière - 400 g (4× 100 g) e
#> 24                                            Milka Tendre au lait - 100 g
#>         prodnums
#> 1       80135463
#> 2  3045140105502
#> 3  5000159461122
#> 4  3229820181950
#> 5  7614500010013
#> 6       40111216
#> 7  7622210995063
#> 8  3229820784946
#> 9  4056489109754
#> 10      20116712
#> 11 8000500309469
#> 12      20005825
#> 13      20005771
#> 14 8000500359488
#> 15 3046920010283
#> 16 4021700900021
#> 17 5411188115458
#> 18 7622300631574
#> 19      20029838
#> 20 5900951251818
#> 21 8712566328352
#> 22 4000539671104
#> 23 3023290035801
#> 24 7622400893124
```

Search by product number

If you already have a product number and want to retrieve information using the exact product number, use the `product_by_prodnum` function:

```
z = product_by_prodnum('3168930010906')
class(z)
#> [1] "list"
length(z$product)
#> [1] 262
```

Retrieving information from a product

Product Name

```
prod_name(x)
#> [1] "nutella biscuits"
prod_name(y)
#> [1] "Smoothie vert à la mangue, chou kale et épinard"
prod_name(z)
```

```
#> [1] "Cruesli Chocolat noir"
```

Food group

```
food_group(x)
#> [1] "biscuits-and-cakes"
food_group(y)
#> [1] "unsweetened-beverages"
food_group(z)
#> [1] "breakfast-cereals"
```

Carbon footprint

```
carbon_footprint(x)
#> [1] 50.1
carbon_footprint(y)
#> [1] 21.1
carbon_footprint(z)
#> [1] 62.22
```

Sugar (per 100g)

```
sugar_per_100g(x)
#> [1] 34.7
sugar_per_100g(y)
#> [1] 13
sugar_per_100g(z)
#> [1] 16
```

Allergens

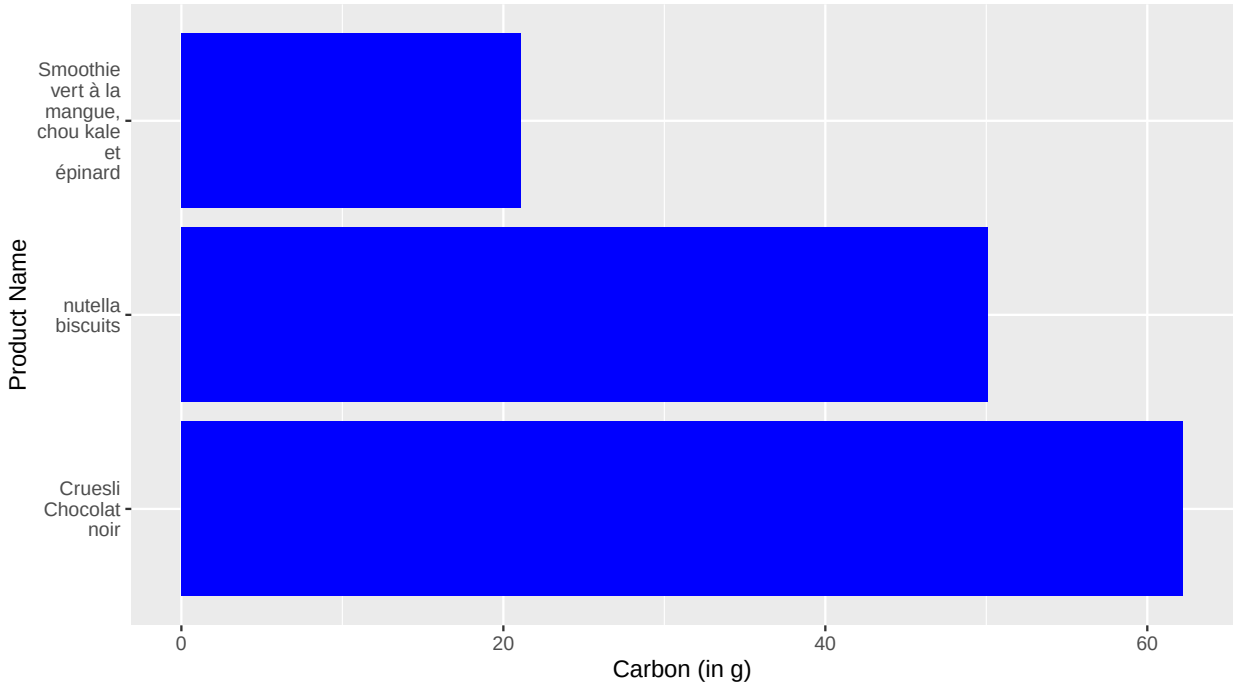
```
view_allergens(x)
#> [[1]]
#> [1] "gluten"
#>
#> [[2]]
#> [1] "milk"
#>
#> [[3]]
#> [1] "nuts"
#>
#> [[4]]
#> [1] "soybeans"
#>
#> [[5]]
#> [1] "Gs1"
view_allergens(y)
#> list()
view_allergens(z)
#> [[1]]
#> [1] "gluten"
```

```
#>
#> [[2]]
#> [1] "soybeans"
```

Plotting

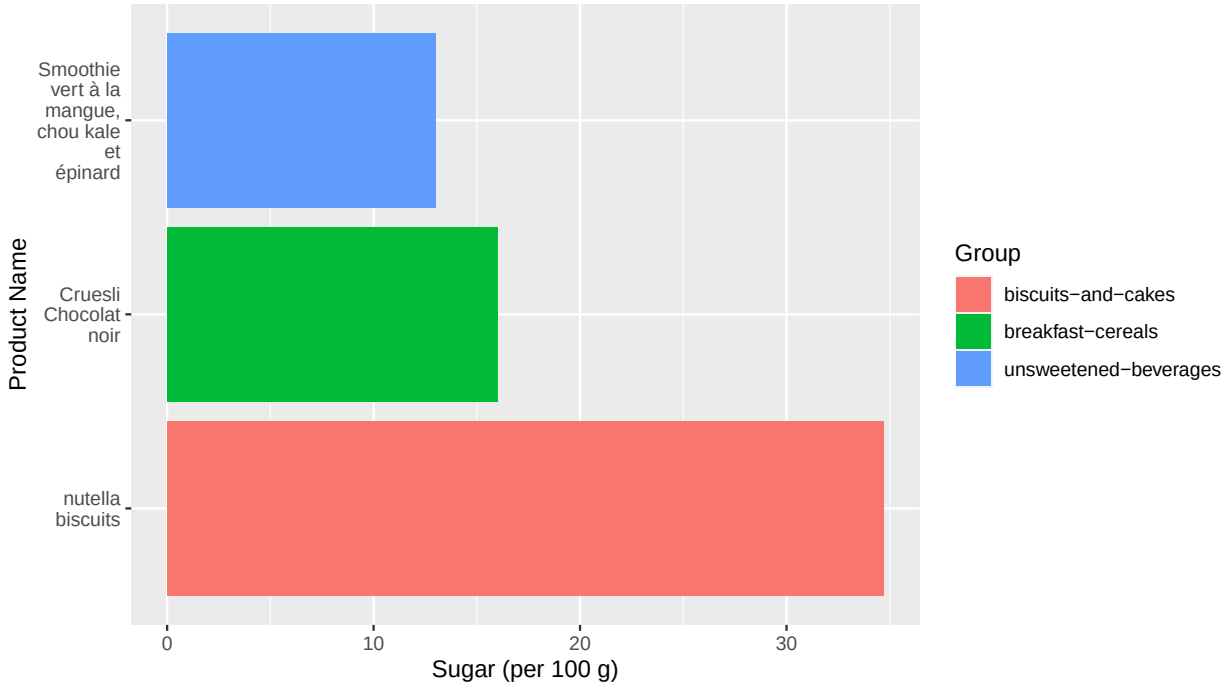
Carbon footprint

```
plot_carbon(list(x, y, z))
```



Sugar (per 100g)

```
plot_sugar(list(x, y, z))
```


Smoothie vert à la mangue, chou kale et épinard
Cruesli Chocolat noir
nutella biscuits
Product Name
0
10
20
30
Sugar (per 100 g)
Group
biscuits−and−cakes
breakfast−cereals
unsweetened−beverages