

# White Rice vs. Brown Rice

My API key is stored in .Renviron in my home directory using .Renviron as data\_gov\_api\_key

For information on this API look here. <https://fdc.nal.usda.gov/api-guide.html>

I'm going to install a package called config to keep my API key separate from the notebook.

```
rice <- c(  
  white="Rice, white, cooked, fat not added in cooking",  
  brown="Rice, brown, cooked, fat not added in cooking"  
)
```

```
shortNames <- c("white", "brown")  
white.df <- get_food_data(rice["white"])  
brown.df <- get_food_data(rice["brown"])
```

```
ids <- c(white.df$fdcId, brown.df$fdcId)
```

```
foodItems <- lapply(ids, get_food_by_fdcId)
```

```
library(dplyr)  
library(kableExtra)
```

```
white_rice_ingredients <- foodItems[[1]]$inputFoods %>%  
  transmute(  
    ingredient=ingredientDescription,  
    portion=portionDescription,  
    grams=ingredientWeight  
  )
```

```
brown_rice_ingredients <- foodItems[[2]]$inputFoods %>%  
  transmute(  
    ingredient=ingredientDescription,  
    portion=portionDescription,  
    grams=ingredientWeight  
  )
```

Table 1: White Rice Ingredients

ingredient	portion	grams
Rice, white, long-grain, regular, enriched, cooked	1 cup	158.000
Salt, table	1 teaspoon	1.002

Table 2: Brown Rice Ingredients

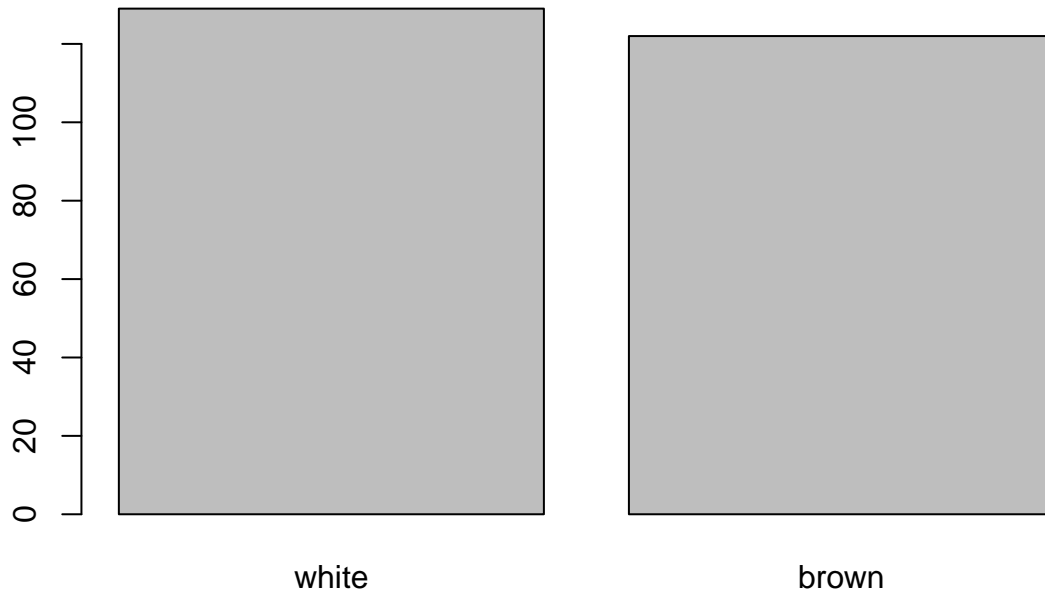
ingredient	portion	grams
Rice, brown, long-grain, cooked	1 cup	195.000
Salt, table	1 teaspoon	1.002

```
## white brown  
## 99.35 100.65
```

Table 3: Nutrient List

nutrient	white	brown
Energy	129.000	122.000
Water	68.010	69.910
Carbohydrate, by difference	27.990	25.450
Protein	2.670	2.730
Fiber, total dietary	0.400	1.600
Total lipid (fat)	0.280	0.960
Fatty acids, total monounsaturated	0.087	0.367
18:1	0.086	0.363
Fatty acids, total saturated	0.077	0.259
Fatty acids, total polyunsaturated	0.076	0.364
16:0	0.069	0.197
18:2	0.062	0.353
Sugars, total including NLEA	0.050	0.240
18:3	0.013	0.011
18:0	0.005	0.022
14:0	0.002	0.009
16:1	0.001	0.001

### Calories



```
barplot(height=as.matrix(compared.df[,2:6]),names.arg=c("Water", "Carbohydrates", "Protein", "Fiber", "Lipids"))
```

