# What link can we make between nutriscore grade (A,B,C,D,E) and nutritional values for the products 'en:poultry' in France?

Main objective: Present to English consumers consistant data about the link between french products and nutriscore grade to make them inform better than before.

What is the nutriscore?: The nutriscore is a grade system with letters and colors, starting to A and dark green and finishing by E and red, trying to inform consumers when they buy a product about the nutritional value of it. More the letter is closer to A and more the product can be considered healthy.

Which products will I study?: The products I'm studying are on the family "en:poultry" in France.

How many observations do I have ? : 9345 observations of 27 variables at the start. 3297 observations of 27 variables with the "en:french-poultry" constraint.

Organization of this document: The rest of this document contains 4 bar chart and 1 table chart. Each graphic has an analysis and interpretation below them.

First graphic: This is a bar chart presents the average quantity of sugar on the y axis according to each nutriscore per 100 g of 'en:poultry' products" on the x axis.

### Average quantity of sugar for each nutriscore per 100 g of products



The average quantity of sugar for the products "en:poultry" in France is pretty weak except for the products with the E nutriscore contain 3 times more sugar than the

products with the D nutriscore to reach above 3 grams of sugar for 100 grams of product. More the nutriscore is worse and more the products have a chance to contain more sugar.

Second graphic: This is a bar chart presents the average quantity of salt on the y axis according to each nutriscore per 100 g of 'en:poultry' products" on the x axis.

## Average quantity of salt for each nutriscore per 100 g of products



The average quantity of salt is pretty high except for the products with the A nutriscore. The products with the B nutriscore have almost 4 times more salt than those with the A nutriscore and those with the D nutriscore contain 2 times more salt than those with the B nutriscore. The products with the C nutriscore are between both.

On top of that, we can say the products "en:poultry" in France are more salted than sugared in general.

Third graphic: This is a bar chart presents the average quantity of fat on the y axis according to each nutriscore per 100 g of 'en:poultry' products" on the x axis.

# Average quantity of fat for each nutriscore per 100 g of products

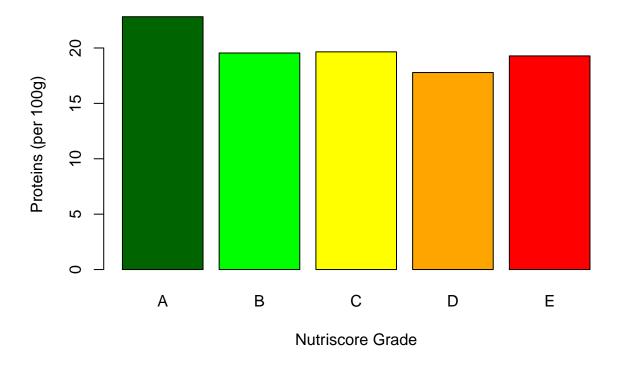


The average quantity of fat is really high in general. In average, only The products with the A nutriscore have a weak average quantity of fat because these are 2 times less fat than products with the B nutriscore. The other products contain between under 10 grams to 15 grams of fat per 100 grams of product except the products with the E nutriscore which reach beyond 25 grams of fat per 100 grams of product in average.

On top of that, we can say the products "en:poultry" in France are really more fat than sugared and salted.

Last graphic: This is a bar chart presents the average quantity of proteins on the y axis according to each nutriscore per 100 g of 'en:poultry' products" on the x axis.

#### Average quantity of proteins for each nutriscore per 100 g of produc



The products "en:poultry" in France are really proteined. In average, all products contain at least more than 15 grams proteins per 100 grams of product. The products with the A nutriscore have beyond 20 grams of proteins and they are the only one in this case. The B and C nutriscore contain the same average of proteins on their products to reach almost 20 grams of proteins per 100 grams. The products with the D and E nutriscore have a little bit less proteins than the products with a better nutriscore.

The table: This is a table presents the average quantity of fat on the y axis according to each nutriscore per 100 g of 'en:poultry' products" on the x axis.

Table 1: Proportion of products for each nutriscore grade

Nutriscore_grade	Proportion (in%)
a	41.6
b	27.6
c	21.4
d	9.0
e	0.4

This table shows that over 40% of products has the A nutriscore and 48% of these represent the B and C nutriscore. Moreover, less than 1% of products gets the E nutriscore. We might say the majority of "en;poultry" products are healthy.

To conclude, the products of the family "en:poultry" in France are more proteined and fat than salted and sugared. We can notice with all these graphics that the products with E nutriscore have a high average for all of them so we may say the E nutriscore products have bad nutritional values in all case but these products represent less than 1% of "en:poultry" product, combined with D nutriscore products, it always represents

less than 10% of products in total. We can understand the "en:poultry" products in France are probably a proteined range of product with the majority of these products have at least the C nutriscore.