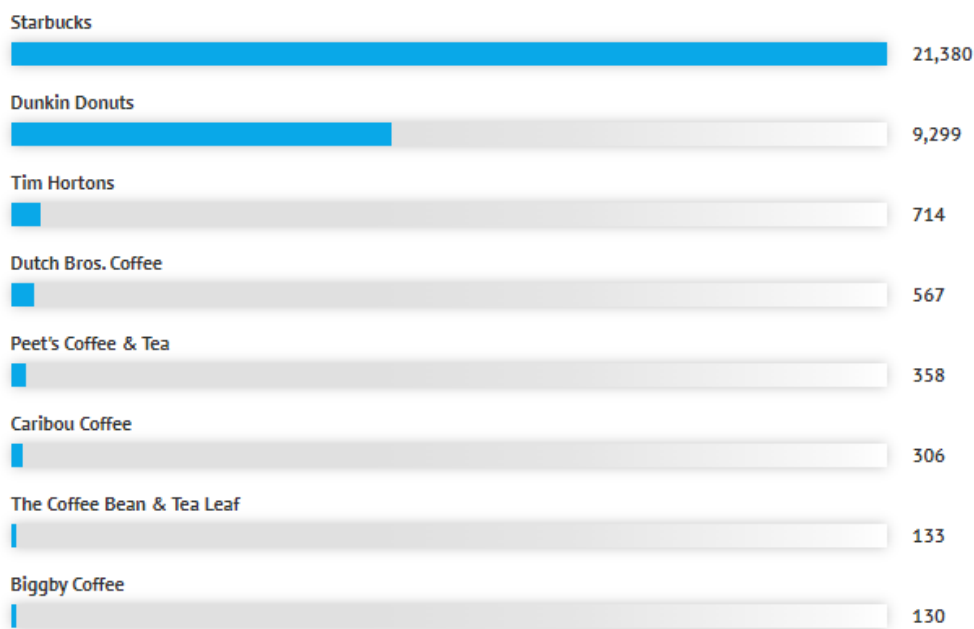


Nutrition facts for Starbucks Menu



Perhaps the most well-known coffee brand in the world, Starbucks has certainly made a name for itself. It is the largest coffee chain in the USA by a very large margin. This super-brand is unquestionably the most successful coffee brand in the United States and the largest coffee shop brand on the planet.

Fig: Market share of Starbucks in comparison with its competitors.



Source: restaurantbusinessonline.com 2020

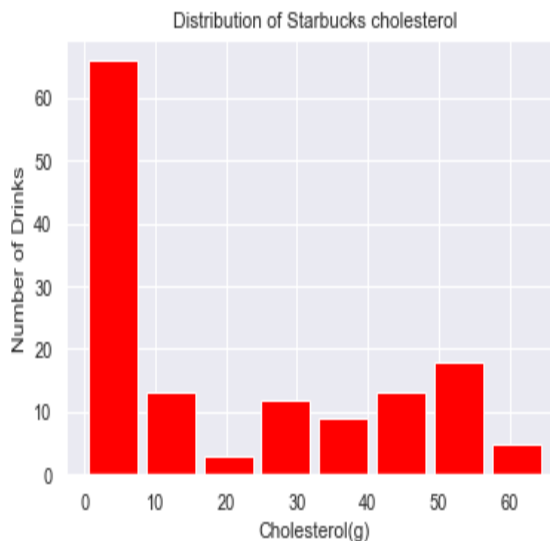
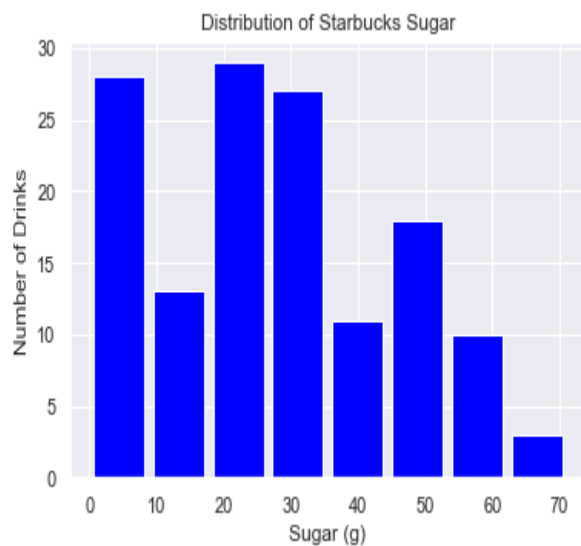
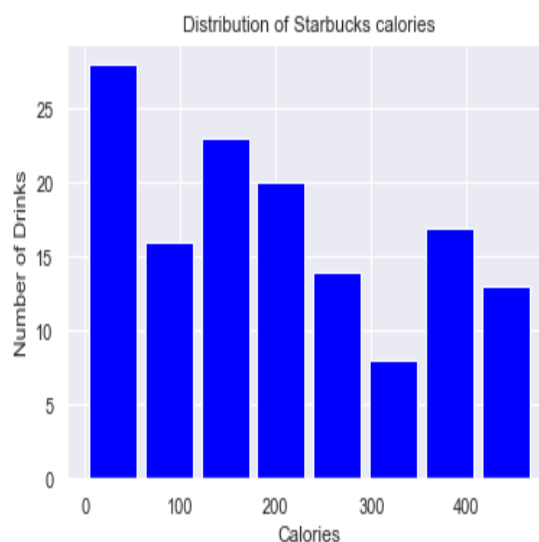
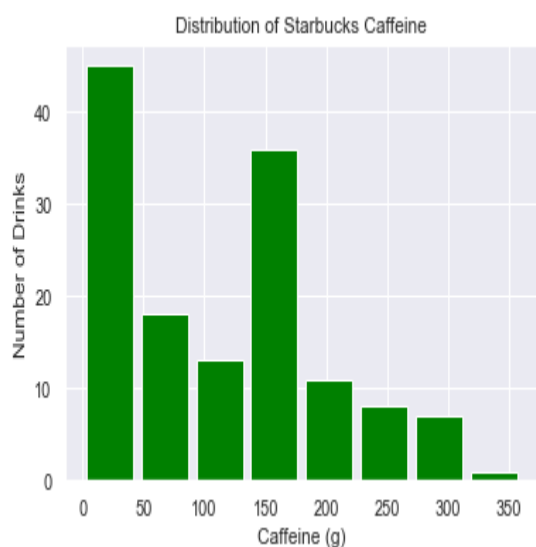
Created by CompareCamp.com

In this report, I will discuss about the nutrients facts of different drinks offered by Starbucks based on the data provided by [Kaggle](#). The goal is to discover the contents in each type of drinks and report the drinks that are not good for health.

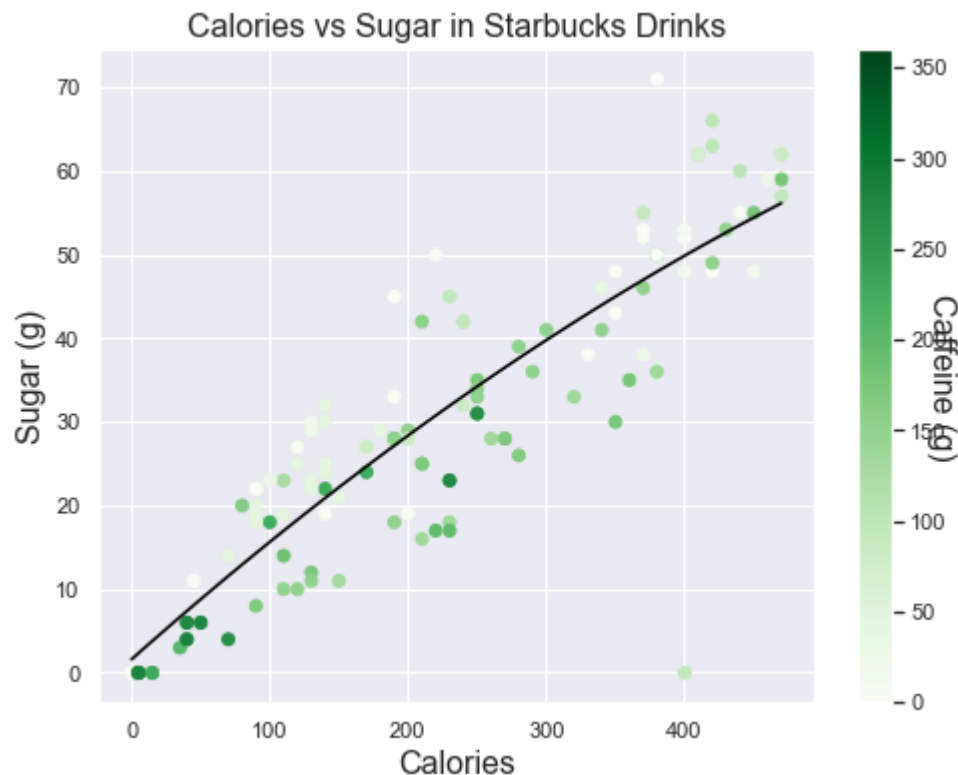
Data outlook

	drink_name	type	size	calories	fat	cholesterol	sodium	carb	sugar	protein	caffeine
2	Caffè Americano	Hot Coffees	Grande	15.0	0.0	0.0	10.0	2.0	0.0	1.0	225.0
6	Blonde Roast	Hot Coffees	Grande	5.0	0.0	0.0	10.0	0.0	0.0	1.0	360.0
10	Caffè Misto	Hot Coffees	Grande	110.0	4.0	15.0	100.0	10.0	10.0	7.0	150.0
14	Featured Starbucks® Dark Roast Coffee	Hot Coffees	Grande	5.0	0.0	0.0	10.0	0.0	0.0	1.0	260.0
18	Pike Place® Roast	Hot Coffees	Grande	5.0	0.0	0.0	10.0	0.0	0.0	1.0	310.0

Nutrition distribution



The distributions shows that drinks are slightly left skewed for caffeine, calories, sugar, and cholesterol. Which makes sense because Starbucks has options for zero calories, decaf, or no sugar drinks included in their menu.



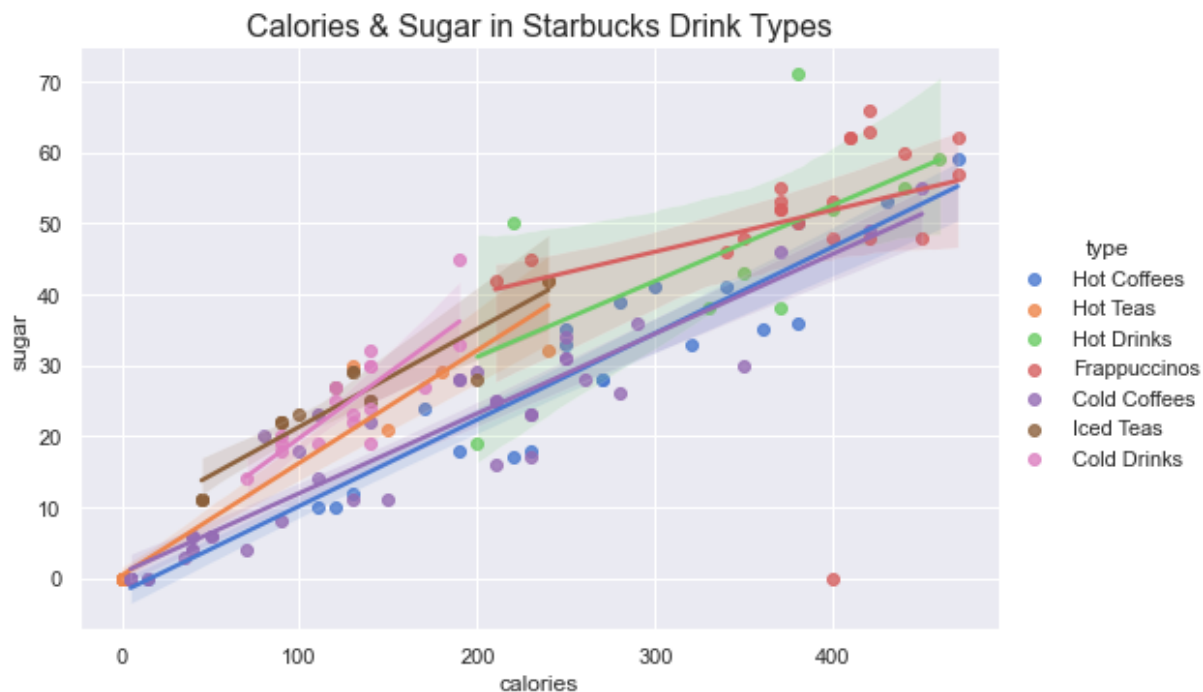
The scatterplot shown above represents the relationship between calories and sugar in all Starbucks drinks. Caffeine is denoted by color, where darker color means more caffeine. As expected, there is a clear and consistent positive relationship between calories and sugar. Caffeine looks to have no clear relationship with the other two variables, with the exception where drinks with very little to no calories and sugar contain a high amount of caffeine. This makes a clear sense since coffee roasts (expresso shots) do not contain any milk or additional sugar generally have a very high amount of caffeine relative to other drinks.

Breaking down nutrients pattern of different drink categories

The categorical linear regression shown above compares calories to sugar in Starbucks drinks. We can see the direct relation between calories and sugar. Meaning, as calories increase sugar increases too.

From the graph it is clear that:

- Frappuccino appears to contain higher calories and sugar
- Hot teas have lower amount of calories and sugar
- Both hot and cold coffees have wide range of calories distribution



So, what are the unhealthiest drinks?

	drink_name	type	size	calories	fat	cholesterol	sodium	carb	protein	caffeine
98	Salted Caramel Mocha	Hot Coffees	Grande	23.5	20.512821	16.666667	16.086957	24.727273	26.0	43.75
216	Caramel Ribbon Crunch Frappuccino	Frappuccinos	Grande	23.5	25.641026	21.666667	12.173913	24.000000	10.0	21.25
213	Mocha Cookie Crumble Frappuccino	Frappuccinos	Grande	23.5	29.487179	18.333333	11.304348	22.909091	12.0	23.75
166	Salted Caramel Hot Chocolate	Hot Drinks	Grande	23.0	20.512821	16.666667	15.217391	24.000000	26.0	6.25
386	Iced Salted Caramel Mocha	Cold Coffees	Grande	22.5	23.076923	18.333333	13.913043	23.272727	18.0	43.75
234	Java Chip Frappuccino	Frappuccinos	Grande	22.0	23.076923	15.000000	11.304348	23.636364	12.0	26.25
207	Pumpkin Spice Coffee Frappuccino	Frappuccinos	Grande	21.0	17.948718	15.000000	12.173913	24.363636	12.0	25.00
210	Salted Caramel Mocha Coffee Frappuccino	Frappuccinos	Grande	21.0	19.230769	15.000000	15.652174	24.363636	10.0	25.00
237	White Chocolate Mocha Frappuccino	Frappuccinos	Grande	20.5	20.512821	15.000000	11.304348	22.909091	10.0	23.75
261	Matcha Green Tea Crème Frappuccino	Frappuccinos	Grande	20.5	19.230769	16.666667	10.434783	22.909091	12.0	17.50
222	Caffè Vanilla Frappuccino	Frappuccinos	Grande	20.0	17.948718	15.000000	10.000000	23.636364	8.0	23.75

After analyzing the data, I came with a conclusion that 'the salted caramel is the unhealthiest coffee among all. But Vast majority of 'Frappuccino' drinks dominates the chart. It is no surprise because almost everyone agrees there are too many calories and too much sugar in those Frappuccino drinks.

What's wrong with calories and sugar?

According to a 2016 study published in [JAMA Internal Medicine](#), if a person's daily caloric intake is made up of 25 percent or more sugar, their risk of dying of heart disease more than doubles compared with those whose diets consist of less than 10 percent sugar.

High average doses of sugar have also been found to contribute to [weight gain](#), insulin resistance, liver failure, and pancreatic cancer.

So, if you are an avid Starbucks fan specially of salted caramel mocha and Frappuccino, it's time to think twice. Choose your coffee wisely.