Ramen data set from #TidyTuesday

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Introduction

Practice to summarize and arrange data to make meaningful charts with ggplot2, tidyr, dplyr, and other tools in the tidyverse ecosystem.

Data

3180 ramen ratings from The Ramen Rater (https://www.theramenrater.com/resources-2/the-list). CSV version available at: https://raw.githubusercontent.com/rfordatascience/tidytuesday/master/data/2019/2019-04/ramen_ratings.csv (https://raw.githubusercontent.com/rfordatascience/tidytuesday/master/data/2019/2019-06-04/ramen_ratings.csv)

Variable (class):	Description			
review_number (integer)	Ramen review number, increasing from 1			
brand (character)	Brand of the ramen			
variety (character)	The ramen variety, eg a flavor, style, ingredient			
style (character)	Style of container (cup, pack, tray,)			
country (character)	Origin country of the ramen brand			
stars (double)	0-5 rating of the ramen, 5 is best, 0 is worst			

Missing Values

There are only 17 missing values involving features: stars, style and review number.

[1] "Total number of missing values in Ramen data set: 17"

Missing values by variable:

	X
review_number	1
brand	0
variety	0
style	2
country	0

stars 14

General statistics

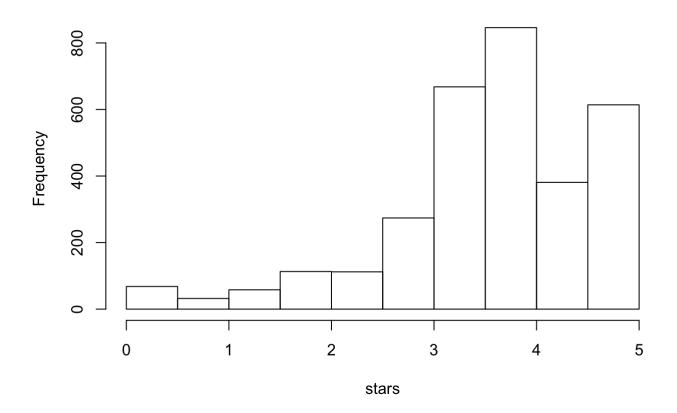
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## [1] "Countries considered: 44"

## [1] "Number of distinct styles: 9"

## [1] "Number of distinct brands: 456"

## [1] "Average stars: 3.7"
```

Histogram of stars



Brand

[1] "Average number of varieties by brand 7"

Style

Average stars by style

style	Freq	Rel.freq	Avg	SD
Pack	1832	57.6	3.7	0.99
Bowl	612	19.2	3.7	1.05
Cup	559	17.6	3.5	1.04
Tray	138	4.3	3.6	1.14
Вох	32	1.0	4.2	1.29
Restaurant	3	0.1	3.6	1.42
NA	2	0.1	3.4	0.53
Bar	1	0.0	5.0	NA
Can	1	0.0	3.5	NA

Ramen rated with 5 stars by style and % vs cases within style

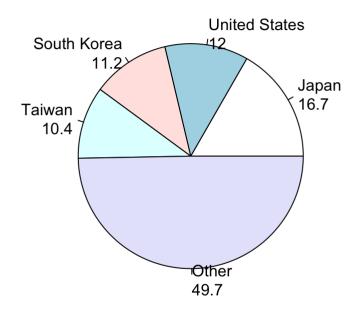
style	Freq	Freq5	%
Pack	1832	326	17.8
Bowl	612	94	15.4
Cup	559	68	12.2
Tray	138	20	14.5
Вох	32	19	59.4
Restaurant	3	NA	NA
NA	2	NA	NA
Bar	1	1	100.0
Can	1	NA	NA

Country

Ramen rated by country

country	Freq	Rel.freq	Cum.rel.freq
Japan	532	16.7	16.7
United States	382	12	28.7
South Korea	357	11.2	39.9
Taiwan	330	10.4	50.3
Other	1579	49.7	100

Ramen rated by country



Average stars by country

country	Avg	SD
Japan	3.9	0.99
South Korea	3.8	0.85
Taiwan	3.8	1.13
United States	3.5	1.08

Varieties by country and style: Freq5=varieties rated with 5 stars, % 5 stars vs cases within style

country	style	Freq	Avg	SD	Freq5	%
Japan	Bowl	185	4.0	0.92	37	20.0
Japan	Box	8	4.9	0.23	6	75.0
Japan	Cup	100	3.7	1.05	16	16.0
Japan	Pack	198	3.8	0.97	32	16.2
Japan	Tray	41	4.1	1.11	14	34.1
South Korea	Bowl	83	3.8	0.85	12	14.5
South Korea	Cup	45	3.5	0.79	1	2.2
South Korea	Pack	211	3.9	0.85	39	18.5
South Korea	Tray	18	3.5	0.91	1	5.6
Taiwan	Bowl	51	3.5	1.45	13	25.5
Taiwan	Box	8	3.9	1.38	4	50.0
Taiwan	Cup	2	3.2	0.71	NA	NA
Taiwan	Pack	265	3.8	1.05	68	25.7
Taiwan	Tray	3	3.4	1.42	1	33.3
United States	Bowl	82	3.5	1.02	7	8.5
United States	Box	2	0.8	1.06	NA	NA
United States	Cup	84	3.4	1.06	10	11.9
United States	Pack	156	3.6	1.09	24	15.4
United States	Tray	53	3.4	1.08	3	5.7

The highest rating goes for ramen in box in Japan and there are 6 leading brands (with 5 stars)

Ramen in box in Japan with 5 stars

review_number brand variety style country stars

2871 | Island | Chiba · Matsudo Tsukemen (Dipping noodles) - Box | Japan | 5 |
Foods | Chuka Soba Tomita

review_number	brand	variety	style	country	stars
2868	Island Foods	Yokohama Ramen - Samurai	Box	Japan	5
2822	Nagatanien	Chanko Shio Ramen	Box	Japan	5
2765	Island Foods	Kichijoji Hopuken Hompo Backfat Tonkotsu	Box	Japan	5
2441	MyKuali	Penang Hokkien Prawn Flavor Noodle	Box	Japan	5
2419	MyKuali	Penang Red Tom Yum Goong	Box	Japan	5

Summary

- · Ramen has been tested in 44 countries
- There are 9 diffent styles of ramen where "pack" accounts for more than half of the ratings, followed by "bowl" and "cup"
- · 456 different brands had been tested
- The total rating average is 3.7 stars (out of 5)
- Almost 600 hundred varieties had been rated with 5 stars (out of 3180)
- The average number of varieties by brand is 7
- the mayority (59%) of the varieties from the "box" have a 5 stars rate, while the others have less than 18% 5 stars
- Japan, United States, South Korea and Taiwan account for half of the varieties tested
- Differences in ratings become apparent until the information is analized by country and style. Japan with ramen in box stands out with an average of 4.9 stars. Although there are only 8 varieties rated, 6 of them have 5 stars and they correspond to 3 brands: Island Foods, Nagatanien and MyKuali