10 Canada's Cities Top 10 Most Common Types of Food Venues/Restaurants and Population Origins

A Data Analysis on The Food Scenery and Its Relation to Population Origins.

Francisco Tosetto da Silva

Capstone Project for the IBM Data Science Professional Certificate

As it is known and can be quantified by data, population origins and food have a strong relation.

Canada has a wide variety in both and in restaurants as well.



But there is room for **more**...

By analysing data from **10** of Canada's biggest cities:

- 10 Cities;
- Top 10 Population Origins;
- Top 10 Most Common Restaurants;
- 2,581 Restaurants/Food Venues;
- 18,368,910 People
 Origins. (Canada 2016 Census)

POWERED BY FOURSQUARE

And using **Machine Learning** to group them in **similarity**, we found the following **data**...

	Food Venues Cluster Labels	1st Most Common Food Venue	2nd Most Common Food Venue	3rd Most Common Food Venue	4th Most Common Food Venue	5th Most Common Food Venue	6th Most Common Food Venue	7th Most Common Food Venue	8th Most Common Food Venue	9th Most Common Food Venue	10th Most Common Food Venue
City									POWI	ERED BY FO	URSQUARE
Montreal	0	French Restaurant	Pizza Place	Japanese Restaurant	Vietnamese Restaurant	Indian Restaurant	Middle Eastern Restaurant	Fast Food Restaurant	Italian Restaurant	Sushi Restaurant	Chinese Restaurant
Ottawa	0	Vietnamese Restaurant	Pizza Place	Ind <mark>i</mark> an Restaurant	Tapas Restaurant	Ita <mark>l</mark> ian Restaurant	Sushi Restaurant	New American Restaurant	Middle Eastern Restaurant	Mexican Restaurant	Chinese Restaurant
Halifax	1	Pizza Place	Seafood Restaurant	Italian Restaurant	Sushi Restaurant	Chinese Restaurant	Japanese Restaurant	Burger Joint	Steakhouse	Gastropub	Diner
Toronto	1	Italian Restaurant	Japanese Restaurant	Gastropub	Sushi Restaurant	French Restaurant	Pizza Place	American Restaurant	Mexican Restaurant	Steakhouse	Diner
Vancouver	1	Japanese Restaurant	Sushi Restaurant	Pizza Place	Seafood Restaurant	Chinese Restaurant	Vietnamese Restaurant	Indian Restaurant	Italian Restaurant	French Restaurant	Gastropub
Quebec City	2	French Restaurant	Pizza Place	Italian Restaurant	Gastropub	Fast Food Restaurant	Bistro	Asian Restaurant	Thai Re <mark>stauran</mark> t	Sushi Restaurant	Steakhouse
Calgary	3	Vietnamese Restaurant	Pizza Place	Italian Restaurant	American Restaurant	Sushi Restaurant	Chinese Restaurant	Mexican Restaurant	Steakhouse	Diner	Burger Joint
Edmonton	3	Chinese Restaurant	Italian Restaurant	Vietnamese Restaurant	Pizza Place	Mexican Restaurant	Thai Restaurant	Gastropub	Asian Restaurant	BBQ Joint	Korean Restaurant
London	3	Pizza Place	Sushi Restaurant	Middle Eastern Restaurant	Italian Restaurant	Mexican Restaurant	American Restaurant	Indian Restaurant	Chinese Restaurant	Thai Restaurant	Asian Restaurant
Winnipeg	3	Sushi Restaurant	Asian Restaurant	Pizza Place	Burger Joint	Chinese Restaurant	American Restaurant	Italian Restaurant	Vietnamese Restaurant	French Restaurant	Greek Restaurant

	Population Origin Cluster Labels	1st Most Common Origin	2nd Most Common Origin	3rd Most Common Origin	4th Most Common Origin	5th Most Common Origin	6th Most Common Origin	7th Most Common Origin	8th Most Common Origin	9th Most Common Origin	10th Most Common Origin
City											
Montreal	0	Canadian	French	Italian	Irish	English	Haitian	Scottish	Chinese	Québécois	German
Quebec City	0	Canadian	French	Irish	Québécois	Scottish	English	German	Italian	Spanish	Belgian
Calgary	1	English	Canadian	Scottish	German	Irish	French	Chinese	Ukrainian	East Indian	Filipino
Edmonton	1	Canadian	English	German	Scottish	Irish	Ukrainian	French	Polish	East Indian	Chinese
Winnipeg	1	English	Canadian	Scottish	German	Ukrainian	Irish	French	Filipino	Polish	East Indian
Halifax	2	Canadian	English	Scottish	Irish	French	German	Dutch	Acadian	Welsh	Italian
Ottawa	2	Canadian	Irish	English	French	Scottish	German	Italian	Chinese	Polish	Dutch
London	2	English	Canadian	Scottish	Irish	German	French	Dutch	Italian	Polish	Portuguese
Toronto	3	Canadian	English	Chinese	East Indian	Irish	Scottish	Italian	Filipino	German	French
Vancouver	3	Chinese	English	Scottish	Canadian	Irish	East Indian	German	French	Filipino	Ukrainian

Analysing that data we have some interesting insights.

Toronto and Vancouver are the only cities in the same group in both Food Venues and Population Origin.

They are the **only cities** with:

- Chinese Origins in the top 3
 (3rd and 1st, the closest city is Calgary in 7th)...
- East Indian Origins in the top
 6 (4th and 6th, the closest cities are 9th).
- Japanese restaurants in the top 2 (2nd and 1st) and having both Japanese and Sushi restaurants in the top 4 (4th and 2nd).

POWERED BY FOURSQUARE

Toronto

2nd most population with Chinese origins (3rd biggest population)

1st in East Indian origins (4th biggest population)

However, Chinese and **Indian** restaurants **do not appear** on the top 10 most common in **Toronto**.

A great market for new Chinese or Indian restaurants.

Calgary, Edmonton and Winnipeg

are in the same group in both Origins and Restaurants

They have:

 A wide variety of restaurant types in their top 10s;

 German origins in the top 4 (4th, 3rd, 4th).

POWERED BY FOURSQUARE

Although Calgary, Edmonton and Winnipeg all have German origins in the top 4 population origins, they have no German restaurants in the top 10 prevalent restaurants.

Great places for German Restaurant Business.

We can see the strong influence of Asian cuisine in Canada. All cities have Asian food on their top 10s, with those venues appearing 38 times (in a 100 total).

Still on that regard, Asian Origins appear 15 times in the Origins top 10s.

Therefore, there is a good market for various styles of asian food in those cities.

As the data shows, people origins in cities have a strong impact on the dominant types of restaurants and food venues in them.

Consequently, it is a great indicator for food business opportunities.

Thank You