

## FOOD CONSUMPTION TYPOLOGIES: A COMPARISON BETWEEN THE LARGE REGIONS OF THE WORLD

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### REVIEW

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#### Abstract

*This study presents a comparison of the main food consumption patterns between the major regions of the world. Factors influencing food consumption are diverse: from income, price, customs and traditions to availability of local products, environmental care and health.*

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**Keywords:** consum, food, region

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### INTRODUCTION

Food plays a central role in consumers lives. They are a source of nutrition and hedonistic experiences, they perform a social and cultural function, and they have considerable economic significance, since a large part of household income is allocated to the purchase of food. Nevertheless, food consumption behaviour has not attracted much systematic attention from consumer behaviour researchers. At least part of the difficulty of conducting consumer behaviour research in this important area lies in the complexity and diversity of influences involved in food choice and consumption, and the fact that such research requires knowledge of concepts and ideas from a wide range of scientific and social disciplines, including food science, nutrition, medicine, psychology, physiology, psychophysics, sociology, economics, marketing and anthropology.

Several models for determining food consumption behaviour have been proposed in the literature. One of the earliest and most influential models was proposed by Pilgrim (1957) [Sijtsema, 2002].

In his model, food consumption is dependent on perception. Pilgrim discussed food acceptance rather than food consumption. However, he recognized that the operational definition of food acceptance is food consumption.

Among consumers, food perception is based on three main factors: physiological effects of food, perception of sensory attributes and environmental influences.

Pilgrim hypothesized that these determinants would interact to influence food consumption, but did not explore these interrelationships.

The model also incorporates the time factor, with external influences being either recent or long-established, and some physiological influences being relatively stable for an individual, while others will vary over short periods of time with food intake.

### MATERIAL AND METHOD

In the study we have included the top 20 most consumed foods around the world to see which crops and animal products are consumed in different parts of the world.

The data comes from the Food and Agriculture Organization of the United Nations (FAO), which provides the most comprehensive and qualitative datasets for everything related to food consumption, both in total and per capita terms (83 individual food categories are included) The data included largely refer to 2018, as this is the most recent year for which per capita food consumption data are available from FAO worldwide [FAO, 2018].but also from other research in the field.

## RESULTS AND DISCUSSIONS

### 1. Food consumption in Europe

In Europe, food consumption behaviour is influenced by several extrinsic factors such as income and price as well as environmental protection issues and the availability of local products.

Social context and consumption habits also play a decisive role [C].

A European consumes more food than the world average, about 780.6 kg of food per year or 2.13 kg of food per day [FAO, 2018;

Romanian Ministry of Agriculture and Rural Development, 2023].

In Europe, by far the most consumed food is milk, with 175.6 kg per year, which is equivalent to 22% of all food consumed in Europe, followed by wheat (110.3 kg per person), potatoes (74.5 kg per person), pork (34.8 kg per person) and sugar (34.7 kg per person). Pork is the most consumed, with a significant amount, followed by chicken, seafood and beef [FAO, 2018].

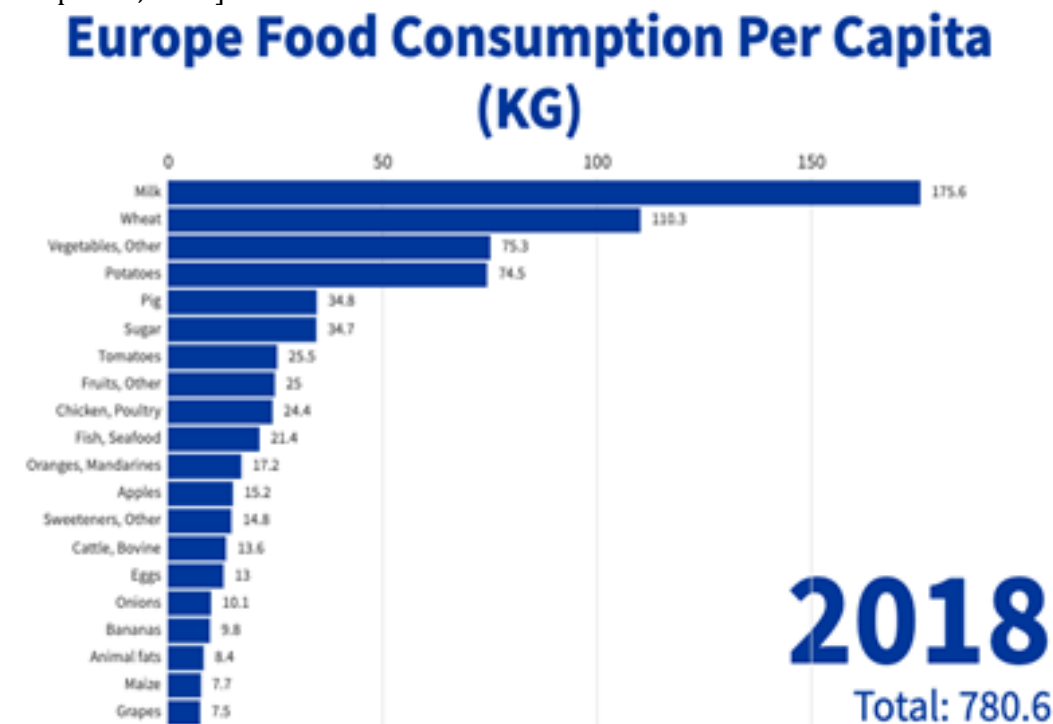


Figure 1 Food consumption in Europe

### 2. Food consumption in North America (USA and Canada)

North Americans consume more food per person than any other continent, at 861.8 kg per person in 2018, or 2.36 kg of food per day [FAO, 2018]. However, it should be noted that this figure only includes North American countries in the United States and Canada and does not include Central American or Caribbean countries. As such, this figure is only representative of 63% of the North American population and not the entire continent. On average, North Americans consume more animal products per capita than any other region of the world, with 3 of the top 5 most

consumed foods being animal products [Schneider, 2008].

Milk is by far the most consumed food, at 217.7 kg per year, equivalent to 25% of all food consumed in North America, followed by wheat (80.6 kg per person), chicken (55 kg per person), potatoes (54.8 kg per person) and cattle (36.1 kg per person). Each year, Americans eat 85.5 kg of fats and oils 110 kg of red meat, including 62.4 kg of beef and 46.5 kg of pork, 73.6 kg of poultry, including 60.4 kg of chicken, 16.1 kg of fish and shellfish and 32.7 kg of eggs, 31.4 kg of cheese each year and 600.5 kg of dairy products other than cheese [FAO, 2018].

## North America Food Consumption Per Capita (KG)

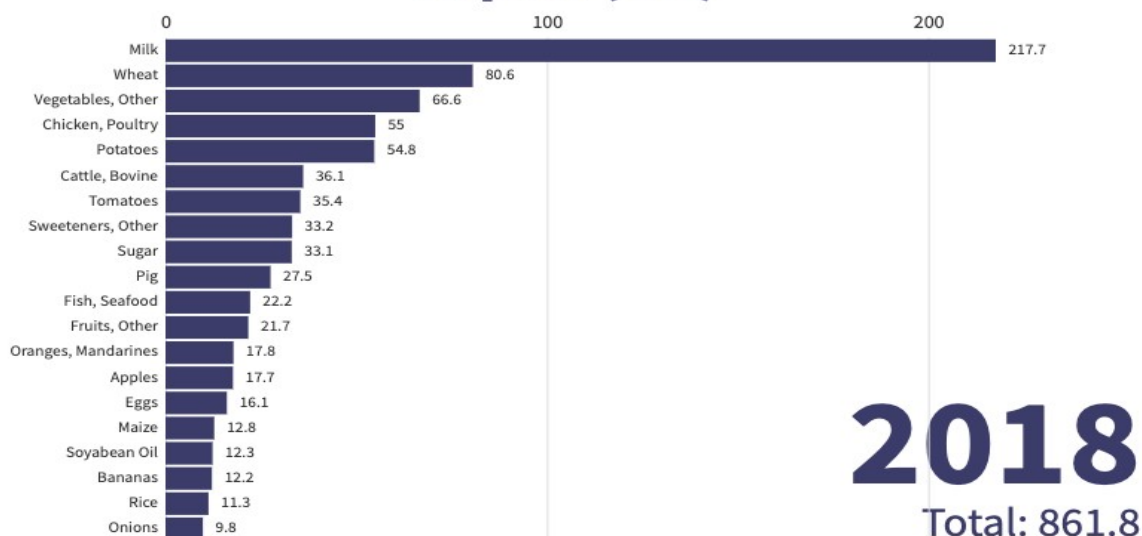


Figure 2 Food consumption in North America (USA and Canada)

### 3. Food consumption in Asia

Diets and nutrition in the Asia-Pacific region vary widely and depend on many factors, such as religion, food security, income, education and emerging food trends. Some religions that are intensely practised throughout the region avoid the consumption of certain animals and meats. Hinduism, which is the most practiced religion in India, considers cows as a sacred symbol of life, so they are not consumed. A large proportion of Hindus also follow a strict vegetarian diet, opting not to eat any animal meat at all. Islam is another religion that follows certain dietary and meat-eating practices, with many Muslims eating only foods that are halal. The emergence of new dietary trends and the fact that nutritional information is becoming increasingly available through different channels has also had an impact on diet and nutrition in these regions [Wang, 2021; Wei, 2022].

Another important aspect is that in the Asia-Pacific region a large number of people suffer from malnutrition and undernourishment. The region is still affected by problems of hunger and food insecurity. The

coronavirus outbreak in December 2019 further exacerbated these problems as food production and distribution were disrupted by the pandemic [Septiani, 2019].

In Asia, food consumption behaviours are very different from those in Europe and North America, with vegetables and fruit consumed in large quantities and animal products consumed in much smaller quantities per person. The average person in Asia consumes about the same amount of food as the global average (675.2 kg per person), consuming 679.7 kg of food per year or 1.86 kg of food per day [FAO, 2018].

Rice is by far the most consumed food in Asia, with 113 kg per person, equivalent to 16% of all food consumed in Asia, followed by wheat (65.2 kg per person), milk (60.2 kg per person), potatoes (29.9 kg per person) and seafood (23.7 kg per person). Seafood is by far the most consumed meat, followed by pork and chicken, with only a relatively small amount of beef consumed [FAO, 2018].

## Asia Food Consumption Per Capita (KG)

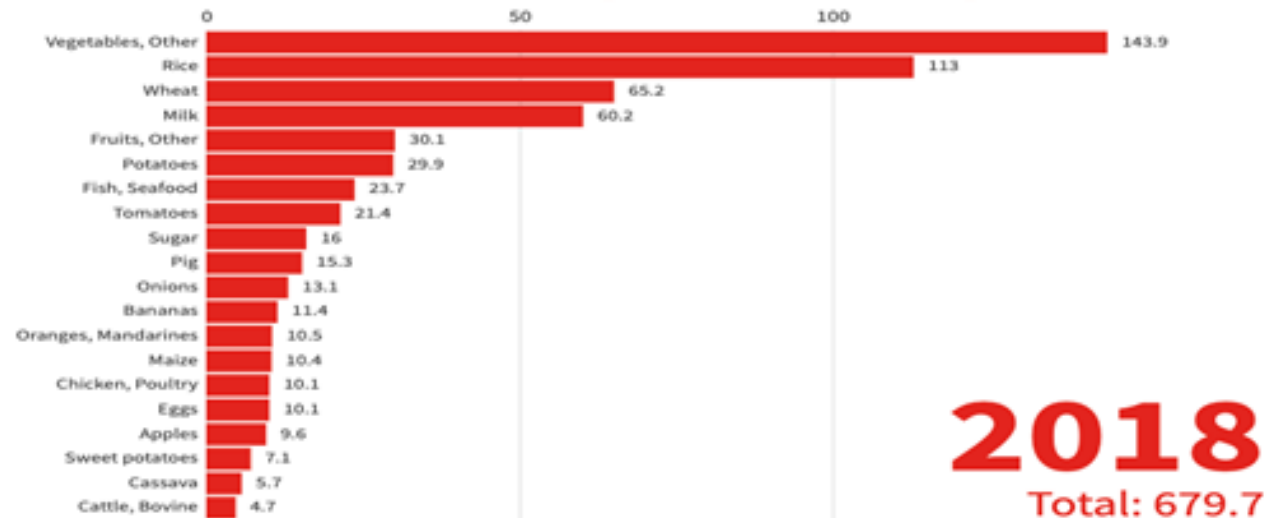


Figure 3 Food consumption in Asia

#### 4. Food consumption in South America

In South America, food consumption behaviours are almost the opposite of those in Asia, with vegetables and fruit consumed in relatively small quantities, while animal products are consumed in much larger quantities. The average South American consumes slightly less food than the global average (675.2 kg per person) and the Asian average (679.7 kg per person), at 668.3 kg of food per year or 1.83 kg of food per day [FAO, 2018].

In South America, by far the most consumed food per person is again milk, with 120.7 kg per year, which is equivalent to 18% of all food consumed in South America. The next most consumed foods are Wheat (59.4 kg per person), Rice (44.7 kg per person), Chicken (38.2 kg per person) and Sugar (35.2 kg per person) .[ FAO, 2018]. Chicken is the most consumed meat, followed by beef, with pork and seafood consumed in smaller quantities.

## South America Food Consumption Per Capita (KG)

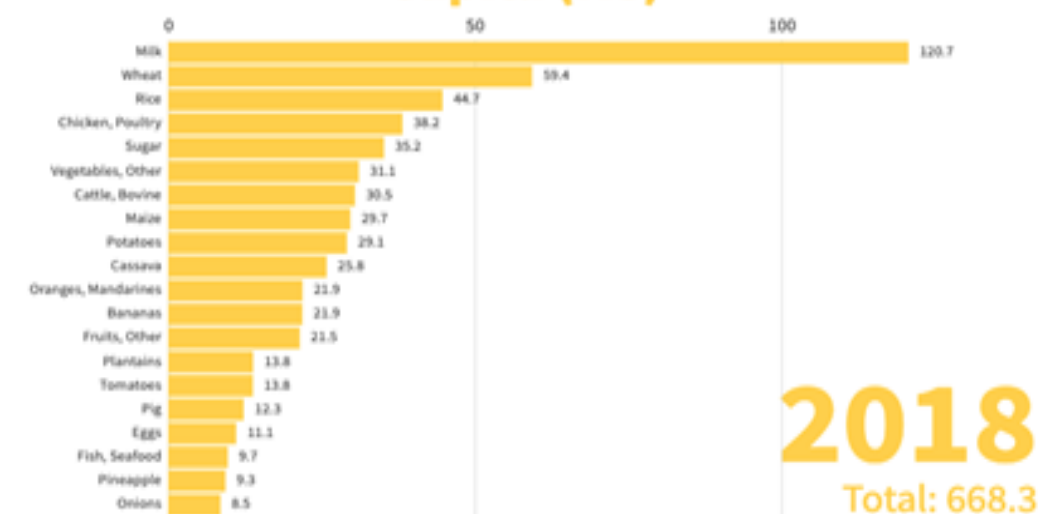


Figure 4 Food consumption in South America

### 5. Food consumption in Africa

Africa has perhaps the most unique and diverse food consumption behaviours of any continent, largely due to the fact that the African climate is on average much drier and warmer than other continents. For this reason, various crops, such as cassava and yams, are grown and consumed in Africa that are not commonly consumed on other continents. On average, an African consumes less food than a person on any other continent and well below the global average (675.2 kg per person), consuming 540.8 kg of food per year or 1.48 kg of food per day [FAO, 2018].

This means that Africans eat 20% less food than the global average, 31% less than the European average and 37% less than the North American average. In Africa, the most consumed food is Cassava at 66.7 kg per

person per year, which equals 12% of the total food consumed in Africa, followed by Wheat (50.8 kg per person), Maize (44.2 kg per person), Rice (34.3 kg per person) and Yam (33.5 kg per person) .[ FAO, 2018].

Africa is the only continent in the world with no animal products in the top five most consumed foods, with only milk and seafood in the top 20 most consumed foods. Therefore, 18/20 of the most consumed foods in Africa are plants, while only 2/20 come from animals. Thus, the average African consumes by far the least amount of meat compared to all other continents in the world [FAO, 2018, FAO, 2015].

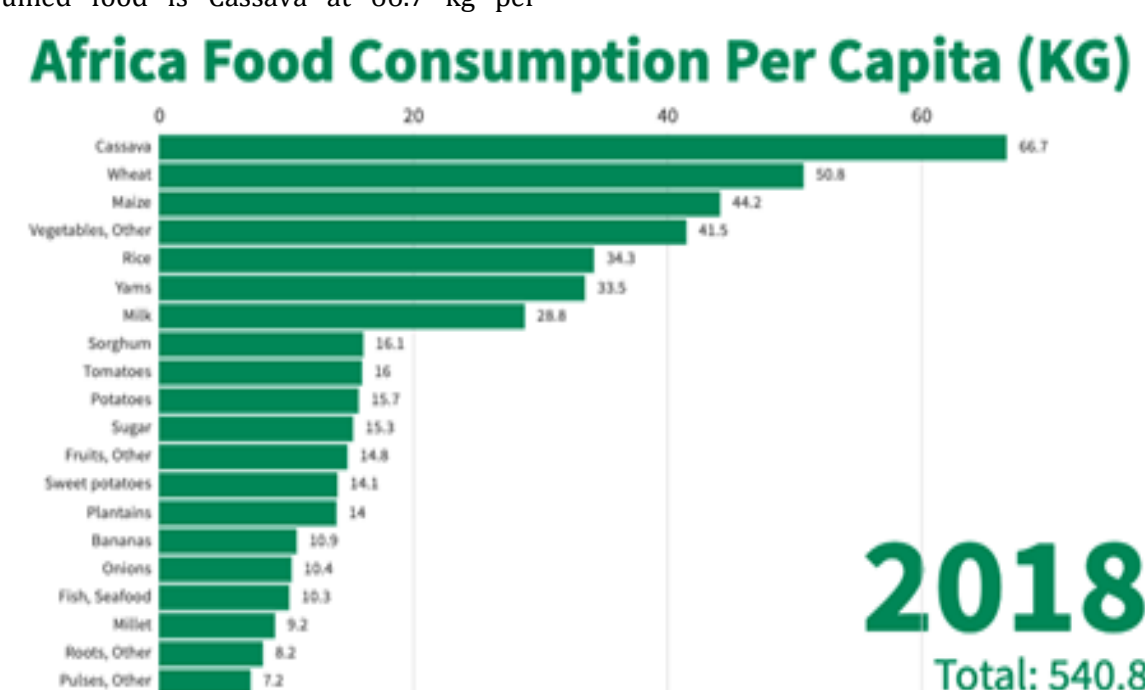


Figure 5 Food consumption in Africa

### 6. Food consumption in Oceania

Last but not least is Oceania. Oceania is a continent made up of 14 countries, with 61% of Oceania's inhabitants living in Australia, 20% in Papua New Guinea and 11% in New Zealand, and the remaining 8% living in one of the 11 island countries in the Pacific Ocean. Oceanians consume more food on average than the global average, consuming about 769.1 kg of food per year or 2.11 kg of food per day [FAO 2018; Pearson, 2013 ].

In Oceania, by far the most consumed food is milk, at 194 kg per year, which is equivalent to 25% of all food consumed in Oceania, followed by wheat (76.2 kg per person), potatoes (43.6 kg per person), chicken (43.2 kg per person) and sugar (35.8 kg per person). Chicken is the most consumed meat, followed by seafood, cattle, pigs, sheep and goats and offal [FAO, 2018].

# Oceania Food Consumption Per Capita (KG)

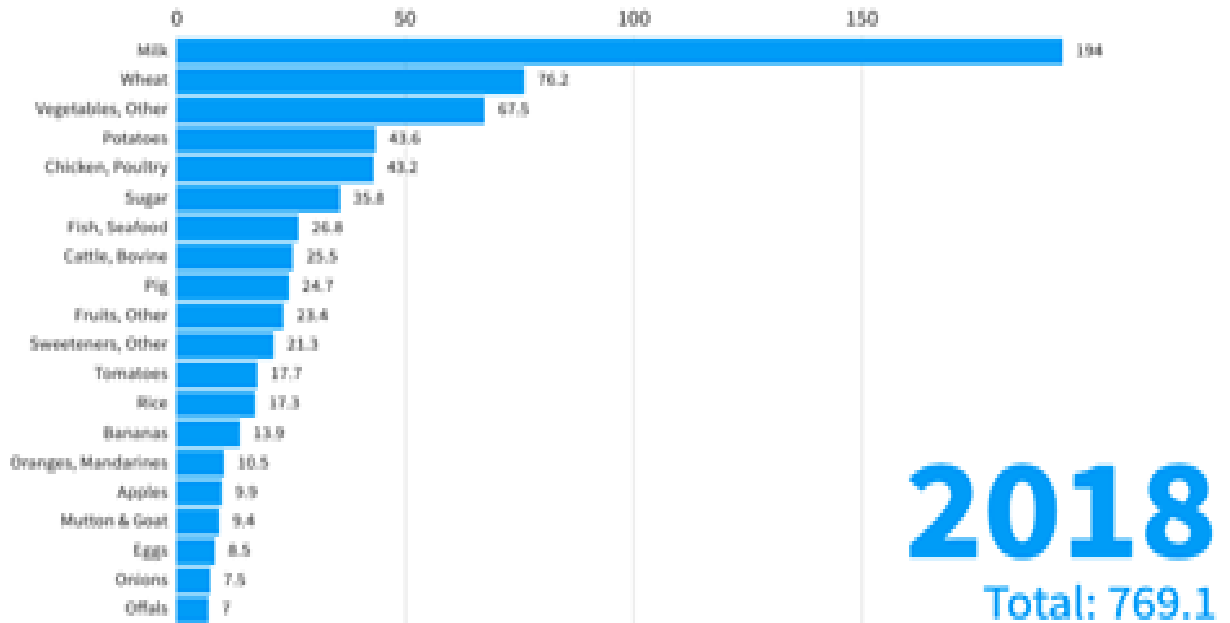


Figure 6 Food consumption in Oceania

## CONCLUSIONS

There are significant differences in food consumption patterns between the world's major regions.

The differences are both qualitative and structural.

The main influencing factors are those related to economic aspects but also to consumption traditions and habits. From the data presented above it appears that the most consumed food in the world is milk (79.3 kg per person), which is equivalent to 12% of the total food consumed in the world, followed by rice (78.4 kg per person), wheat (67 kg per person) and potatoes (32.9 kg per person).

The most consumed meat worldwide is fish and seafood, followed by pork, chicken and beef. Also on average, a person consumes about 675 kg of food per year, or 1.85 kg of food per day.

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