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## BMI and Food Lifestyle Comparison B/W India and Germany and Specific Indian States

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**Abstract:** In this study we discuss the food related lifestyle and Body Mass Index of Germany and India whilst also comparing the same between Andhra Pradesh and West Bengal. We also compare internally for both countries for a better understanding of the topic. Ours results are established solely on raw facts gathered from various reliable sources. The use of graphs and pictorial representations whenever and wherever necessary makes for a better reading. **Keywords:** Body Mass Index Food Lifestyle Nutritional Values.

#### Introduction

Body Mass Index is a tool to analyze the health condition of an individual. It is calculated by either of the following formulas<sup>1</sup>:

(Weight in Kgs)/ [(Height in meters)\*(Height in meters)]

(Or)

(Weight in pounds)\*732/ [(Height in inches)\*(Height in inches)]

A BMI between 18.5 and 25 indicates a healthy person (not fit, healthy).

A BMI below 18.5 indicates a Chronic Energy Deficient (CED) person.

A BMI above 25 indicates an obese person.

Due to different terrain, climatic conditions, vast difference in geographical location, the food régime between India and Germany is banally different. The differences are profoundly observed and investigated in the following pages of this document.

But what one who is a tenderfoot with respect to Indian lifestyle might not expect is the stark difference in lifestyles within the country, which is also scrutinized in this paper using Andhra Pradesh and West Bengal as references.

#### **Materials and Methods**

Comparison between German and Indian Food Lifestyles

## **German Food Habits**

#### Meals

An old-fashioned breakfast includes a cup of tea or coffee, along with bread and/or rolls, honey, eggs, meats, such as salami and ham and miscellaneous cheeses. With snowballing weight and health consciousness,

lunches are becoming lighter, and generally are something of a snack.

Customarily, the German dinner or "Abendbrot", which translates to "evening bread", consists of whole grain bread, meats and sausages, cheese and a drink.

Pork, beef, and poultry dishes are the favored main courses. But in this circumstance as well, changes are occurring. Seafood used to be the principal régime of the northern areas. But seawater fish like herring, salmon and sardines or freshwater fish like trout, salmon, are widespread all over the contemporary German society.

#### **Side Dishes**

Noodles, potatoes and dumplings in any form are very common - especially in the south of Germany. A wide variety of vegetables can be found nationwide.

## **Beverages**

The most common problem in Germany with respect to food habits is "Alcohol abuse". Drinking is very common here. People can be seen procuring and consuming alcohol at public places especially beer. This one custom tips to an increase of chances of obesity...commonly known as "Beer Bellies".

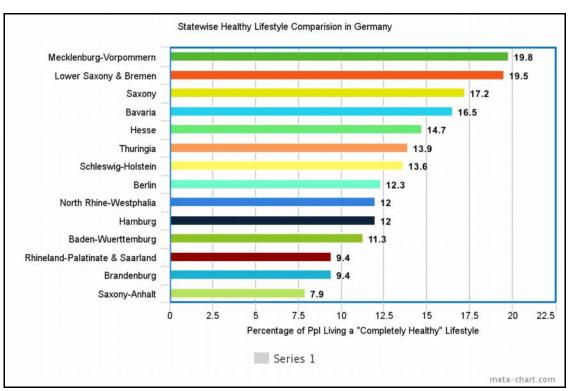
### **Physical Outlook on Citizens**

The food habits coupled with average physical activity overall, has led to obesity in the country.

Obesity in Germany has been cited as a major health hazard in recent years leading to the Federal government declaring it as a major issue.

Data released by the WHO in 2014 has shown that Germany has an incidence of overweight and obese adults as a percentage of the total population at 54.8%. This is a cause for concern though the incidence cited for Germany was lower than other European nations, Spain, UK, France to name a few.

As per a census conducted in 2011 67.1% of all men between 18 and 79 years were considered cumbersome with a BMI of 25 or greater<sup>2</sup>.



#### **Indian Food Habits**

#### Meals

Indian breakfast has an extensive range, from the heavy parathas in the north to the lighter idly and dosa in the south. Apart from the traditional breakfast many opt to have western food such as bread and cheese today.

For lunch, most Indians incline towards boiled rice or Indian breads such as roti or naan. These being the staple diet across most of the country, they're taken with sides including non-vegetarian and vegetarian dishes. Amongst the non-vegetarian sides, chicken is the most consumed meat followed by seafood and mutton. Pork is consumed mostly in the north eastern states. Vegetarian foods take account of a wide variety of vegetables and cottage cheese and occasionally mushrooms.

The Dinner is generally much lighter than the lunch, with commonly a lower quantity of rice or lighter breads such as Chapattis or Phulkas being preferred. The sides are more naive compared to those consumed during the day in terms of spices and curd is an integral part of most Indian Dinners<sup>3</sup>.

## **Beverages**

India is one of the paramount consumers of coffee and tea around the globe. Due to this, there is a high caffeine intake amongst Indians as paralleled to the rest of the world. This leads to increasing chances of insomnia and cardiac arrest in Indians.

|           | Germany                          | India                          |
|-----------|----------------------------------|--------------------------------|
| Breakfast | Bread/Rolls, Honey, eggs, ham,   | Paratha, Dosa/Idly             |
|           | cheese                           |                                |
| Lunch     | Light snacks                     | Rice/Roti, Veg/Non veg dish    |
| Dinner    | Whole grain bread, sausage, meat | Chapati and side dish and curd |
| Beverages | Beer                             | Tea/ Coffee                    |

## **Physical Outlook on Citizens**

Indian diet is stable, not excessive. Therefore even though Indians get moderate physical activity, the average Indian is neither obese nor underweight. In fact the average Indian BMI stands at a very healthy and encouraging 20.4. This needn't necessarily mean that the average Indian is fit, it's just that he/she isn't obese or underweight<sup>4</sup>.

| EAG States          |      | BMI Status |       | Number of Mothers |  |
|---------------------|------|------------|-------|-------------------|--|
|                     | CED  | Normal     | Obese |                   |  |
| <u> Uttaranchal</u> | 25.6 | 58.1       | 16.4  | 1873              |  |
| Rajasthan           | 32.3 | 56.3       | 11.3  | 2796              |  |
| Uttar Pradesh       | 29.8 | 53.5       | 16.5  | 7508              |  |
| Bihar               | 38.6 | 53.4       | 8.0   | 2566              |  |
| Jharkhand           | 39.9 | 51.8       | 8.4   | 1973              |  |
| Orissa              | 39.0 | 52.2       | 9.0   | 2986              |  |
| Chattisgarh         | 38.6 | 52.7       | 8.9   | 2488              |  |
| Madhya Pradesh      | 34.9 | 50.9       | 14.1  | 4531              |  |

#### Results and Discussions

## Comparison of Food Habits between Andhra Pradesh and West Bengal

#### **Andhra Pradesh Food Habits**

#### Meals

The traditional Andhra breakfast contains usual south Indian breakfast dishes, such as idly, dosa, puri, upma etc. along with a strong cup of coffee or tea, preferably coffee for the most part.

But with the western culture dominance growing, especially in the urban areas, it has greatly influenced the food habits. With growing work pressure and increasing urbanization, the schedules of the working class people are tightening up. This leads to consumption of portable foods such as breads and instant noodles, mostly amongst the younger generation.

The lunch in Andhra Pradesh comprises mostly of boiled rice along with sides made from various vegetables, amid the vegetarian contingent. In the non-vegetarian demographic the coastal regions prefer seafood while the ones inland prioritize chicken and mutton over other meats. The vegetables or meats are largely cooked in a spicy and flavor-packed fashion, something of an emblem for the state of Andhra Pradesh. The use of chilies and peppers is very conventional causing the cuisine to be a little daunting for outsiders, exclusively those not used to such a hefty usage of spices. The capital city of Hyderabad is eminent over a large radius for its "Hyderabadi Dum Biryani", the metaphoric poster boy for Andhra Cuisine.

The supper, to compensate the sumptuous midday meal is a light one, with utmost of the population electing for trivial servings of rice or oil-free breakfast items such as idly or dosa.

## Beverages

The traditional beverages disbursed by the people of Andhra comprise of coffee in the morning, buttermilk for the period of lunch or dinner and, tea during the evening, which is the wide-ranging mundane.

#### **Physical Outlook on Citizens**

The livelihood of most of the AP demographic is agri-business. While some of them may lead a opulent and in the pink life, most aren't that fortunate. Owing to the many factors which plague the untutored, not only in AP but across the globe, most of the farmers lead a glum life well below the poverty line. It is ironic that the people who are accountable for the rich partaking 3 meals a day, scrap to make ends meet.

Due to the whys and wherefores stated above the overall BMI in Andhra Pradesh is a scanty 20.1, which might signpost a healthy populace and it does so for the greatest part, but there are many those fall under the Chronic Energy Deficient (CED) category<sup>5</sup>, or to phrase in other words, whose Body Mass Index falls under 18.

## **Bengali Food Habits**

#### Meals

Mustard oil which augments on its own causticness is the medium of cooking. A variety of sweets or mishti as it is called is another very chief component of Bengali gastronomy. Most of them are prepared from chhana (cottage cheese) and are based on milk. The most prevalent among the Bengali sweets are the Roshogolla, Shondesh, Pantua and Mishti Doi and these four sweets are an obligation at every wedding.

The foods of a day-to-day meal are geared to balanced nourishment and are typically modest while making all-embracing use of vegetables. The courses go through numerous tastes and taste cleansers and evolve sketchily from lighter to richer and heavier. Rice is the focal component of the meal and remains common during the course of the meals.

Rice and fish are traditional desired foods. Bengal's cosmic catalogue of fish-based dishes embraces

hilsa preparations, much loved among Bengalis. A sea food assortment and also among the favorites are the preparations of prawns and crabs. Conditional to the consistency, dimensions, fat content and the framework of the fish, there are copious ways of cooking fish. Sweets inhabit a significant place in the diet of Bengalis and at their social ceremonies. What is furthermore striking is the diversity of fruits and vegetables that Bengal has to offer. Several gourds, roots and tubers, leafy greens, luscious stalks, lemons and limes, green and purple eggplant, red onions, broad beans, okra, banana tree stems and flowers, jackfruit and red pumpkins are to be found in the bazaars. Common spices found in a Bengali kitchen are cumin, bay leaf, mustard, ginger, green chilies, turmeric, etc. People of East Bengal use a lot of ajmoda, coriander leaves, tamarind, coconut and mustard in their cooking; while those natively from West Bengal use a lot of sugar, garam masala and red chili powder. Generally Bengalis from East Bengal favor spicy dishes and those from West Bengal have a sweet tooth. Vegetarian dishes are habitually lacking of onion and garlic<sup>6</sup>.

#### **Beverages**

Daybreak tea is a must for the greatest portion of Bengalis, along with quite a few cups throughout the day<sup>7</sup>.

| Food Item/ Meals | Andhra Pradesh                  | West Bengal                               |
|------------------|---------------------------------|---|
| Breakfast        | Upma, Idly, Dosa                | Puri and Potato side dish                 |
| Lunch            | Rice, Veg dish or Meat/Sea food | Rice, Dal, Fish/ Sea food, Curd           |
| Dinner           | Idly, Dosa or light food        | Roti/Chapatti, Non veg side dish- meat or |
|                  |                                 | chicken, Sweets for desert                |
| Beverages        | Tea, Coffee, Buttermilk         | Tea, Coffee                               |

### **Physical Outlook on Citizens**

The Bengalis are very strict when it comes to food, much like the French in Europe. Due to the facts that the Bengalis take their diet very seriously and the fact that most of the demographic lives in the urban areas of the state, the average BMI stands at a pretty healthy 21.7<sup>8</sup>.

## **Results and Discussions**

This brief study concludes that Indians lead a healthier lifestyle while comparing the body mass index of the Germans and Indians. Different studies have also mentioned that the most obese people of Europe are found in Germany. Due to more consumption of alcohol such as beer there is a higher level of obesity in Germany. Meat consumption is also more in Germany as compared to India hence the increased body mass index in more than half of the population is seen. Despite the meals in Germany being lighter than that in India where more spicy and heavy food is preferred.

While associating the food habits and lifestyle between West Bengal and Andhra Pradesh it is anecdotal that more or less both the communities prefer spicy food and there is sufficient intake of both vegetables and meat. Sweets are a must in a Bengali meal whereas the population in Andhra prefer buttermilk along with their meals. Tea is mutual to both the states. BMI in West Bengal is healthier as compared to Andhra Pradesh as Bengalis have a sterner outlook towards their food.

Also because of poverty and dearth of education the farmers of Andhra Pradesh are economically retrograde hence food intake is not proper which leads to a lower BMI.

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