

Abbott's Food, Spikes And Diabetes Survey Reveals Not 'All Is Well' For People With Diabetes In Urban India

- 8-city study shows that 7 out of 10 people with diabetes have an imbalanced meal plate, heavy in carbohydrates

- Apathy towards eating right impacting health : 62% are overweight or obese, 65% have uncontrolled blood sugar, 62% suffer from other medical conditions

MUMBAI, India, Nov. 5, 2015 [PRNewswire/](#) -- If we are what we eat, then 7 out 10 people with diabetes in urban India seem to be paying little attention to what and how much they eat, according to the findings from the Abbott Food, Spikes and Diabetes survey.

Abbott commissioned Ipsos India, a leading market research agency, to reach out to over 4,100 people with diabetes (Type 2, diagnosed for over eighteen months) between the ages of 36 – 65 years, across socio-economic classes. The objective was to gain insights on what they eat, the meal plate's role on blood sugar variability and impact on overall diabetes management.

Through in-depth interviews, respondents shared details of their diet, monitoring and exercise. The frequency of meals and the quantity was measured through customised bowls, glasses, which was then converted to grams and calories¹.

Key Findings:

- **62% of people with diabetes are overweight or obese** with a BMI reading in excess of 22.9 (the normal cut-off for Indians). 46% of people with diabetes are classified as obese². Men had an average BMI value of 24.1, which is classified as overweight and women had an average BMI of 25.3, indicating obesity.
- **55% were diagnosed below age 45 years** and a substantial number (17%) were diagnosed at an age less than 35 years.
- **65% have uncontrolled blood sugar levels**, with their last blood sugar readings out of the target range³, for fasting or post-prandial (post meal). Blood sugars are also seen to be impacted by the kind of food that is eaten and the intervals at which it is consumed.
- **62% suffer from other medical conditions.** Hypertension (40%) comes out as the most common co-morbidity. Almost 70% of respondents having diabetes for more than five years reported one or more co-morbidity. Eye disorders (retinopathy) and nerve disorders (neuropathy) are relatively high in this group.
- **Monitoring apathy:** While the recommended manner to monitor blood sugar is to do fasting and two-hour post-meal tests, close to 40% of respondents prefer to do only one test and this is usually fasting.

The average interval between meal and post-meal testing is 58 minutes, against the recommended time interval of two hours³.

Dr V Mohan, Chairman and Chief Diabetologist of Dr Mohan's Diabetes Specialities Centre, Chennai says, "Testing of both fasting and post-meal blood sugars are important because the fasting blood sugar tells us about the liver's glucose production, while the post-meal blood sugar tells us about the glucose disposal. Controlling both of these is therefore important. However, the post-meal is even more important because the post-meal blood sugars have been linked to cardiovascular disease in many studies. "

"Unlike in the West, where fasting blood glucose is important, in India post-meal blood glucose is more important due to higher glycemic load in the Indian diet", says **Prof Shashank R Joshi, President, Indian Academy of Diabetes & Senior Endocrinologist, Lilavati Hospital, Mumbai.**

- **Typical diets of people with diabetes:** 7 out of 10 respondents are eating meals that are imbalanced in carbohydrates. The average meal plate for all respondents comprises 68% carbohydrates, significantly higher than the recommended guideline of 60% carbohydrates⁴.

While the average calories consumed per day (men - 2,534 Kcal and women - 2,634 Kcal) are generally in line with the National Institute of Nutrition (NIN) recommendation for sedentary to moderate activity⁵, the source of the calories is a concern. Most of the calories come from simple carbohydrates that are low in fiber.

"The STARCH study that we published last year shows that India is a carbohydrate country across the regions. Indians consume both simple and complex carbohydrates. The current Food, Spike and Diabetes Survey confirms the findings of the STARCH study where cereals, roti and rice are the primary source of carbohydrates in the Indian meal plate", says **Prof Shashank R Joshi.**

Roti and rice are two main sources of carbohydrates in the Indian meal plate. *Upma*, observed to be a popular breakfast item particularly in South India, is seen to add the maximum amount of calories, compared to other regular breakfast items.

Dr V Mohan says "In our epidemiological studies, we find that polished white rice comprises 48% of all the calories consumed by people in Chennai and this is one of the drivers of the diabetes epidemic. Controlling carbohydrate is extremely important because excess carbohydrate can lead to post-meal spikes of blood glucose. Since Indians eat carbs with every meal they get huge post-meal surge in blood glucose which abnormally increases the insulin secretion. Gradually the insulin levels dry up due to beta cell exhaustion and severe diabetes sets in."

- **How people with diabetes eat:** 80% of the respondents eat 3 to 4 meals per day. The gap between meals ranges from 4.5 to 7 hours.

The survey also showed that the first meal of the day, the breakfast, occurs after a substantial time after waking up. The average time gap between waking up and breakfast is 3 ½ hours.

"The biggest challenge for a patient with diabetes is the huge variation in the time interval between meals. Typically, Indians have a 3-4 hour gap between wake-up time and breakfast, which is detrimental for these patients. Therefore, they should have a shorter time gap with breakfast comprising whole grains or balanced meal replacements with diabetes-specific nutrition powders", says **Prof Shashank R Joshi**.

Dr V Mohan says, "It is essential to have the breakfast quite early as having a long gap after the dinner can lead to triggering of the counter regulatory hormones. For a person with diabetes, it is always better to have a small frequent feeds rather than having infrequent large meals".

- **Festive feasting and fasting:** Indians take festive occasions seriously and people with diabetes also seem to follow the trend – 30% of surveyed respondents claimed to go easy on their diet during festive occasions. Sweets, rice, potatoes and ice creams rank as the top items that people with diabetes have during festivals. These additional carbohydrate-rich foods, over and above a regular diet that is already laden with carbs, indicate how difficult it is for Indians suffering with diabetes to manage diet properly.

On the other extreme are those respondents who observe fasts. 10% of the survey respondents stated that they observe fasts, mostly once a week. Thrice as many women reported to observe fasts as compared to men. 45% of those who fast skip diabetes medications during fasting and 54% of those who fast eat only one meal that day.

"Indians also fast and feast which is leading to spikes and variances in glucose levels", comments **Prof Shashank R Joshi**.

- **Exercise:** Only 40% of the surveyed respondents claim to do any form of exercise. Walking seems to be the most popular, with 93% saying that they walk regularly.

"Diabetes is one of the major conditions affecting people's health and lifestyle in India. Through its continuum of care approach, Abbott in partnership with various stakeholders is seeking to advance understanding and drive greater awareness around effective diabetes management. Greater insights on people's behaviour are needed to effectively manage the condition. Insights from this study will allow people to Take Back Control of their diabetes, helping them live a full life", says **Bhasker Iyer, Vice President, Abbott**

- **Take Back Control:** While there are multiple sources of advice on elements of managing diabetes, diet management can get confusing. People with diabetes can now give a missed call to **0777 1003 003** and get free professional diet advice, specific to Indian food.

About the Abbott Food, Spikes and Diabetes survey:

Ipsos India covered eight Indian cities [Mumbai, New Delhi, Kolkata, Chennai, Lucknow, Bengaluru, Hyderabad and Trivandrum] and through random listing interviews, spoke to 4,148 adult, Type 2 diabetics in the age group of 35 – 65 years. The survey covered 1,867 men and 2,281 women and the selected respondents were those diagnosed with diabetes for at least eighteen months. Through personal interviews based on a structured questionnaire, Ipsos collated information about the dietary habits and patterns, monitoring aspects and factors influencing diabetes management. The Ipsos team measured the quantity of food consumed through custom-sized bowls, plates and glasses that they showed to the respondents. Through this, grams of food and calories were subsequently determined, based on Dr Mohan's Atlas of Indian Foods.

About Abbott:

At Abbott (NYSE: ABT), we're committed to helping you live your best possible life through the power of health. For more than 125 years, we've brought new products and technologies to the world -- in nutrition, diagnostics, medical devices and branded generic pharmaceuticals -- that create more possibilities for more people at all stages of life. Today, 73,000 of us are working to help people live not just longer, but better, in the more than 150 countries we serve.

Connect with us at www.abbott.com, on Facebook at www.facebook.com/Abbott and on Twitter @AbbottNews and @AbbottGlobal.

References:

1. Conversion and classification of the meal plate done with the support of Dr. Mohan's Atlas of Indian Foods (First ed., 2013). A first-of-its-kind book in India, featuring more than 200 foods eaten across regions in various portion sizes along with main nutritional values.
2. Normal BMI: 18.0-22.9 kg/m² , Overweight: 23.0-24.9 kg/ m² , Obesity: >25 kg/m² : Consensus Statement for Diagnosis of Obesity, Abdominal Obesity and the Metabolic Syndrome for Asian Indians and Recommendations for Physical Activity, Medical and Surgical Management (Feb 2009) : A Misra, P Chowbey, BM Makkar, NK Vikram, JS Wasir, D Chadha, Shashank R Joshi, S Sadikot, R Gupta, Seema Gulati, YP Munjal for Consensus Group
3. Target Range : Fasting Blood Sugar - 70 – 130 mg/dl; Post Prandial Sugar, done after two hours – less than 180 mg/dl : American Diabetes Association. Diabetes Care 2013;36(1):s11-s66
4. National Institute of Nutrition – Dietary Guidelines for Indians (Second ed., 2011); page 15 – 'What is a balanced diet?.....a balanced diet should provide up to 60% of total calories from carbohydrates, preferably from complex carbohydrates'.
5. National Institute of Nutrition – Dietary Guidelines for Indians (Second ed., 2011); Annexure 3 - Recommended Dietary Allowances for Indians (Macronutrients and Minerals) : Man – 60 kg body weight: 2,320 – 2,730 Kcal/day; Woman – 55 kg body weight: 1,900 – 2,230 Kcal /day

PDF - http://origin-qps.onstreammedia.com/origin/multivu_archive/ENR/284369-Abbott-Food-Spikes-and-Diabetes-Survey-Infographic.pdf



Logo - <http://photos.prnewswire.com/prnh/20150928/271488LOGO>

For further information: Abbott Media: Varsha Chainani varsha.chainani@abbott.com +91 99873 40055, or Rajan Srinivas rajan.srinivasan@abbott.com + 91 99301 09372

Additional assets available online:

