TUNGAPURAM is a small sleepy village of over a fifty thousand inhabitants, situated not far from the Godavari coast in Andhra Pradesh. While Hindus, both upper and lower castes, constitute the majority of the population, a sizeable number of Muslims and Christians also live in the village.

The people make their living from agriculture, dairying, carpet weaving, beedi making and from petty businesses. The villagers live in perfect harmony, in spite of minor squabbles that keep erupting like those in the Gaulish village of Asterix and Obelix. The majority of the population of Tungapuram has been traditionally meat eaters and the village boasted of several “military” hotels that served, till recently, the finest of the Andhra non-vegetarian cuisine.

About two years back, Tungapuram witnessed the emergence of a strange allergy that spread steadily like a pandemic among the villagers. The attacks would start off with an innocent stuffy nose, followed by sneezing and headache. The hapless victims also developed hives or skin rashes, nausea, stomach cramps, and diarrhoea accompanied by serious asthma attacks and anaphylaxis.

While several people of the village experienced the attacks, the ailment received serious attention when Winny, the fourteen-year-old son of the dynamic carpet merchant of the village, Mr. Border complained of the choking bouts that were turning more and more frequent and painful. Soon, others from the village were frequenting the local Government Hospital and private clinics with similar symptoms, usually late in the nights.

The opinion of the specialists was unanimous – the problem lay in something present in the food that was causing allergy and the patients were recommended to remain on diets that were simple and light. This, together with some doses of anti-allergics worked well and most patients recovered quickly. The allergy however continued to spread.

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Dr. Ranga Rao the middle aged, pot-bellied and lazy family physician, known more for his kindness towards the pa ents than his professional prowess, was the first to be approached by the allergy-affected villagers, being the lone physician in Tungapuram with an M.B.B.S. degree. In spite of his laid back approach to life, Dr. Rao was clever and having examined a number of the allergy pa ents he realized that they were either Muslims, Chris ans, Kammas, Reddys or belonged to scheduled castes – all meat eaters.

Remarkably, there were no allergy pa ents from among the Brahmin families. Mrs. Iyer, the lone Brahmin who approached him with symptoms of allergy confessed to being an avid meat eater. Also, without exception, all those who came to him with symptoms of allergy had binged on meat meals on the day.

It occurred to Dr. Rao that meat might be the real culprit behind the allergies, although he had no idea why so many people who were habitual meat eaters for their en re lives, would suddenly turn allergic to meat. He advised them to stop ea ng meat – the bouts of allergy disappeared like magic.

Dr. Rao soon became a messiah for the allergy-afflicted. He not only warned the pa ents to stay away from meat but asked them to con nue swallowing a red capsule each day before breakfast to prevent recurrence of the allergy. Only Dr. Rao knew that the capsule was nothing but a placebo with just a few milligrams of ground wheat.

But with so many allergy pa ents around, Dr. Rao wanted to know more on meat allergies. His son Venkat, working as a software engineer in the U.K., came to his rescue and helped him search for the literature. Dr. Rao soon learned that some meat allergies in humans are caused by a small sugar called alphagal, made up of two molecules of the sugar galactose, present in the meat of some sheep, goats, and cows but not humans. Meat allergies, Dr. Rao also learned, are very rare and their wide preponderance in the village baffled him.

The allergy con nued to spread reaching each of the non-vegetarian household and within a year’s me no one from the village would risk buy, cook or eat meat. With no takers for meat, the village butchers Haji and Zakir migrated along with their families to nearby Vijayawada. The business of the owners of the ‘military’ hotels was crippled as they were ill equipped to convert their eateries to vegetarian joints; both traditional and “new vegetarians” preferred to dine in the traditional vegetarian hotels. Tungapuram completely transformed into a fully vegetarian hamlet.

Giving up meat ea ng was however not easy for the Tungapuram residents. The human craving for the protein-rich animal meat is very strong, having evolved over 2.5 million years, contributing remarkably to the development of big brains in our ancestors. This also may be the reason that of the over six billion global popula on, only a little over ten percent are vegetarians; this in spite of the widespread recognition that meat may contribute towards the development of diabetes, atherosclerosis and several forms of cancers. The human carnivores of Tungapuram also yearned for their favourite meats but were too scared of the painful allergy to take the risk.

Chandrasekharulu was among those from Tungapuram who missed meat. He and his family were meat enthusiasts and could afford regular indulgence in meat meals because of the good income the family business generated. The hives, itching and breathlessness that followed each me Chandrasekharulu risked feas ng on meat, either at home or in marriage lunches, however made him completely give up his favourite food. The serious allergy a’ acks convinced him that the allergy might one day turn fatal.

Chandrasekharulu’s palate, however, con nued to long for meat and months of abs nence only increased his craving. He would often dream of mutton biryani, kebabs and grilled mutton chops cooked with curds, coconut and mint leaves and wake up deeply frustrated. After one year on total vegetarian ra ons he nearly forgot the pains of the allergy a’ acks and began thinking of giving his favourite meat another chance.

Chandrasekharulu discussed his frustra on with his childhood friends Kumar and Ratnam. They too were eager to take the risk. It was decided that Ratnam would quietly bring meat from Vijaywada, Kumar would cook it in his hotel after serving dinner to the last customer and they would all feast starting from the middle of the night.

On the appointed night, Chandrasekharulu reached Kumar’s hotel. It was eleven o’clock in the night and the aroma of meat being cooked with curds, coconut and garam masala entered his nostrils till a ng and boos ng his appe te manifold. Ratnam was yet to arrive and with Kumar’s cooking reaching the final stages, Chandrasekharulu was turning impa ent.

“He can never make it in time.”

Kumar was a little more accommoda ve, “He surely will come,” he pleaded. “He’ll never miss this rare treat and must be on his way.”

“It was my mistake to invite him,” Chandrasekharulu’s anger was ge ng out of control, “let him go hungry if he doesn’t reach in five minutes.”

Ratnam arrived finally and quietly entered the dining room through the kitchen door. “I’m sorry,” he apologised with folded hands, “my wife wouldn’t allow me to leave without taking dinner, I had to make excuses.”

Chandrasekharulu’s anger disappeared on seeing that Ratnam had brought along three bottles of chilled locally ‘tadi’. “It’s okay, it’s okay,” he blurted with happiness, “let’s not waste any more me.” Kumar laid the table with his hot and sizzling dishes and without was ng any time the threesome se’ led down.

“Kumar is the world’s best biryani cook,” screamed Chandrasekharulu with joy after tas ng the first morsel of biryani. Ratnam was too busy ea ng to talk but heartily endorsed the culinary skills of Kumar by repeatedly shaking his head in circular motion. They had their fill of biryani and kebabs with the tadi, conveniently ignoring the dreaded allergy.

The feas ng went on ll the early hours of morning. Booze and meat cooked with rice and ghee made them drowsy and they fell asleep with their heads res ng on the dining table.

Around five o’ clock in the morning, Ratnam woke up with a burning sensa on in the throat. He realized that it was the allergy. Chandrasekharulu and Kumar woke up with great difficulty but
quickly grasped the seriousness of Ratnam's allergy attack. They quickly put him on Kumar's old bicycle and dragged him to Dr. Rao's residence. Ratnam's condition deteriorated on the way, he could not breathe and collapsed before he could reach to Dr. Rao's residence. Dr. Rao declared him brought dead!

Chandrasekharulu and Kumar were luckier. While they too suffered allergy attacks the an allergy medicine prescribed by an angry Dr. Rao gave them relief. The meat binge at Kumar's restaurant did not naturally remain a secret and the villagers did not forgive him and Chandrasekharulu for the death of Ratnam.

While the whole town mourned Ratnam's death, Madhav Pillay, the 25-year-old son of the red head master of the local municipal high school, was sad and greatly upset. He was feeling guilty, culpable and visited Ratnam's family repeatedly to console his shocked wife and ten year old daughter.

Madhav had returned to Tungapuram about three years back after an apparently unsuccessful stay at the University of Oxford. He was tall, thin, fair complexioned and extremely polite. Madhav's brilliance was recognized in the rural village right from his childhood and he topped every exam on.

Madhav's researches at Oxford on ticks were highly successful and appeared in renowned journals including Nature. Madhav, however, was smiled on with the activities of PETA, the organization working against cruelty towards animals and became a protagonist in their raids against use of animals in research at Oxford. He led groups that held loud and aggressive protests and damaged animal houses in and around the campus. He was warned repeatedly by the university authorities. Releasing of African primates, being used in AIDS vaccine researches by the Biotechnology Department, in the nearby forest was the last straw that lead to the cancellation of his graduate school admission and visa to study in the UK.

Madhav had no choice but to return to Tungapuram, much to the dismay of his old father, who after remeeting was supporting the family by offering private tuitions to school children. Madhav joined his father in offering tuitions to the local children and soon endeared himself to the people of the village.

Madhav did not give up his love for entomology. He would carefully collect insects and culture them in containers made up of discarded PET bottles and ns in his backyard. He fed and bred them with love and studied their behaviour very carefully. The subject that was most dear to him however was the crusade against animal slaughter and promotion of vegetarianism.

Madhav would visit, one by one, houses of each family in Tungapuram and try to charm them with his erudite arguments against meat eating. He would show evidence published in internat onal journals that meat eating can cause diabetes, cardiovascular complications as well as colorectal and other forms of cancer. He would also address the uneducated peasants at every possible opportunity and persuade them not to eat meat even invoking God's possible wrath on meat eaters, but with little success; Madhav was desperate!

While working for his doctoral studies on ticks, Madhav made the chance observation on that one species of the tick lone star (Amblyomma americanum), could cause allergy in people that was exacerbated by eating meat. He could deduce this from the problems experienced by his friends who spent some me hiking in the forests and were bitten by the ticks. His friends even brought the ny strange looking ticks with a prominent white spot back to Madhav as trophies. He was successful in cultivating the lone star in the laboratory, but even before he could study them, he had to leave Oxford. Eggs of the lone star tick and some other insects were among the material he smuggled with his luggage from UK on way to Tungapuram.

The lone star ticks are tiny 2-5 mm long gregarious feeders on the blood of animals and humans. Initially Madhav had problems in cultivating them but to his delight, they survived and bred very well in his back yard when the larvae and adults were fed with goat blood collected from the slaughterhouse. He soon had a large number of the bugs in his "home insectary." The lone stars some days escaped from the jars and could be seen sucking the blood of cows and buffaloes in the neighbourhood. Madhav soon began to believe that the nyck could be used to prevent people from killing and eating animals.

Now every me he visited families in Tungapuram, Madhav would quietly release some pairs of the lone star in the house, which quickly moved in to the niches of furnitures and walls, came out in the night to feed on animal and human blood. Madhav believed that the tick would cause moderate meat allergy and discourage people from consuming meat. His prediction was wrong; the allergy caused by the lone star was serious!

Going by the number of allergy patients, some of whom experienced nearly deadly attacks, convinced Madhav that the ticks were doing their job a little too well. He was also happy that Dr. Ranga Rao was able to help control allergies and all those who gave up meat were not experiencing the allergy attacks. Madhav's joy knew no bounds when the local slaughter house and all the military hotels of Tungapuram finally closed down.

Ratnam's death shook his conscience once again, but he tried to convince himself that it is, at best, a small price the village was paying to save hundreds of animals from slaughter and ensuring the good health of residents (by converting them to vegetarians). Madhav was confident that his endeavours would remain a secret, because the link between meat allergy and the lone star tick was only known to him.

Madhav was wrong once again! The work on meat allergy-promoting action of the lone star bite was presented at the annual Scientific Meeting of the American College of Allergy, Asthma and Immunology (ACAAI) on November 9, 2012 by scientists of the Auburn University, Alabama, USA.