CSE/DTE present an investigation into the mother of all food frauds based on laboratory tests in India and abroad

CSE's latest investigation is bigger than our exposé on pesticides in Colas; bigger than our study on antibiotics in honey; bigger and far more devastating for our health

IT'S ALSO ABOUT WHAT AND WHO WE TRUST

It's also about the deceit and criminal intent of the adulteration business, promoted by companies from our neighbouring country and superpower

IT'S ABOUT HEALTH. PEOPLE AND THE PLANET

HONEY WE CONSUME IS ADULTERATED

- Almost all honey we consume is adulterated with sugar syrup, advanced lab test find
- Out of 13 brands tested, only 3 passed the test for adulteration
- Out of the 22 samples tested, only 5 passed the test for adulteration
- 77 per cent of the honey tested was found adulterated/ with the addition of sugar syrup

BAD FOR OUR HEALTH; COVID-19 WILL BE MADE WORSE

- Bad for our health; COVID-19 will be made worse
- Honey is sugar but special and full of nature's goodness

 So consuming honey that is sugar will make us more vulnerable;

But overweight people

are more at risk to

more ill

COVID-19

We are consuming more honey to build immunity against

the COVID-19 infection



SYRUP IS DESIGNED TO PASS INDIAN STANDARDS

- Laboratory in
 India does not find
 adulteration by sugar
 syrup in big brands
- Most of the smaller brands fail the laboratory tests for Indian standards
- Adulterated with C4 sugar (cane sugar) in most cases or C3 suger (rice sugar)
- But when all samples are sent to a top laboratory in Germany, the picture changes



 Almost all samples fail on NMR—advanced test to detect modified sugar syrup

for rice syrup adultration

NEARLY ALL THE TOP BRANDS FAILED IN ADVANCED NMR TESTS

Dabur

Patanjali

Apis-Himalaya

Baidyanath

Zandu

Hitkari













SMALLER BRANDS ALSO FAILED

Dadev

Indigenous

Hi Honey

Societe Naturelle



In the case of Dadev and Hi Honey adulteration was more basic—caught in Indian tests

ONLY 3 BRANDS WERE FOUND TO BE NOT ADULTERATED USING ADVANCED NMR

Saffola

Markfed Sohna

Nature's nectar (one of the two samples)

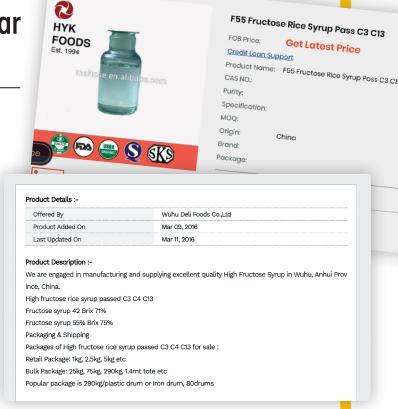






INDIAN STANDARDS FOR HONEY PURITY CANNOT 'CATCH' ADULTERATION

- Chinese companies advertise that they have sugar syrup that can bypass Indian tests
- We tracked down this all-pass sugar syrup from China and India
- We spiked honey with sugar and it passed the test
- Then we sent honey of 13 brands for advanced tests to Germany
- Same samples that passed in India failed adulteration tests in Germany



THE BUSINESS OF ADULTERATION IS DEVIOUS AND CHANGING

- Honey is the most adulterated food in the world
- The business of adulteration has constantly evolved to beat the laboratory tests
- Honey fraud is a big concern across the world
- In India, the government knows (but is not telling) that something is seriously wrong

- Standards for honey purity have been revised again and again
- Government has mandated NMR tests for honey that will be exported



CHINESE COMPANIES ARE IN THE LEAD

■ FSSAI directive on import of golden syrup, invert sugar syrup and rice syrup used for adulteration is a dead end

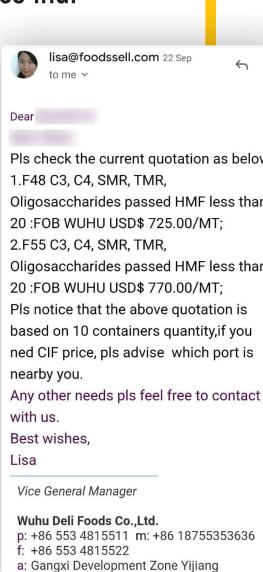
 Chinese trade portals like Alibaba advertise fructose syrup that can bypass tests

■ Same Chinese companies that advertise this fructose syrup that can beat C3 and C4 tests also export to India



HOW WE BROKE HONEYGATE?

- We sent emails to Chinese companies soliciting syrups that could pass tests in India
- These are the same Chinese companies that export fructose syrup to India
- Replies received that syrups are available and can be sent to India
- Chinese companies inform us that even if 50-80 per cent of the honey is adulterated with syrup, it would pass all stipulated tests
- Chinese company export syrup as paint pigment
- Company routes sample through Hong Kong to bypass custom clearance



District, Wuhu, Anhui, China

CHINESE TECHNOLOGY NOW IN INDIA

We track down

 a factory that
 manufactures syrup
 to adulterate honey in
 Jaspur, Uttarakhand

We learn that the code word is "all pass" syrup

We make contact and procure a sample of this "all pass" syrup

It will pass all stipulated tests for honey purity says the owner



WE SPIKED HONEY WITH CHINESE AND INDIAN ALL-PASS SYRUPS

- We adulterated samples of pure honey
- Mixed raw honey with Chinese and Indian "all pass" syrups at 25%, 50% and 75%
- Sent samples to laboratory
- Adulterated samples with 25% and 50% sugar syrup passed the test of purity
- We confirm that sugar syrups exist that can bypass the 2020 FSSAI standard for honey

BEES ARE CRITICAL FOR HEALTH OF FOOD SYSTEM

- Because of adulteration, beekeepers are going out of business
- Farmers are losing livelihoods
- Without beekeepers there will be decline in bees
- Bees provide crucial service as pollinators
- Without bees we lose productivity of food; we lose life



WE ASK FROM GOVERNMENT, INDUSTRY AND YOU, THE CONSUMER

- It is time we outwitted the business of adulteration
- Need to stop import of syrups and honey from China
- Need to strengthen enforcement in India through public testing so companies are held responsible. Cannot play with our health
- Every honey company must be required to be

- able to trace back the origins of the honey—from the beekeeper to the hive
- We, the consumers must be able to tell adulteration by the taste, the smell and the colour. Our health is in our hands

