Business World Markets **Breakingviews** Video

More

HEALTHCARE & PHARMA JUNE 10, 2015 / 1:10 PM / UPDATED 6 YEARS AGO

Honey-based mead may curb antibiotic resistance, say makers

By Ilze Filks 5 MIN READ

Scientists in Sweden are launching their own mead - an alcoholic beverage made from a fermented mix of honey and water - based on old recipes which they say could help in the fight against antibiotic resistance.



Together with a brewery, the scientists who have long studied bees and their honey, have launched their own mead drink - Honey Hunter's Elixir.

Lund University researcher Tobias Olofsson said mead had a long track record in bringing positive effects on health.

"Mead is an alcoholic drink made with just honey and water and it was regarded as the drink of the gods and you could become immortal or sustain a better health if you drank it. It was drunk by the Vikings for example and other cultures such as the Mayas, the Egyptians and it was a drink that was regarded as a very beneficial drink," said Olofsson.

Honey production is key to the research. In previous research published in 2014, Olofsson and Alejandra Vasquez discovered that lactic acid bacteria found in the honey stomach of bees, mixed with honey itself, could cure chronic wounds in horses that had proved resistant to treatment.

They said their research had proven that these bacteria have the power to collaborate and kill off all the human pathogens they have been tested against, including resistant ones. They are doing so by producing hundreds of antibacterial antibiotic-like substances.

What makes Honey Hunter's Elixir different from other types of modern mead drinks is that is uses all 13 beneficial honeybee lactic acid bacteria and the wild yeasts from honey that normally ferment mead spontaneously.

According to the team, commercial honey does not contain these bacteria. Since the honey and water mixture is sterilized before later adding industrial wine yeast, all other life in the honey, including wild yeast, is killed off.

The researchers say the drink contains 100 billion of these 13 different living and

collaborating lactic acid bacteria

preventing infections.

Olofsson said they believed mead could have been the most efficient historical equivalent to today's antibiotics and they see Honey Hunter's Elixir as a possible way of

"Well, we've seen in our research that the honey bees actually add great flora of lactic acid bacteria in honey so the mead, when produced, is actually fermented by these lactic acid bacteria together with wild yeasts and the lactic acid bacteria can really kill off all the dangerous pathogens that are even resistant against antibiotics. So our thinking is that the mead, when you consume the mead, these (antibacterial substances in) lactic acid bacteria in the drink can actually be transferred to your blood and help you when you are infected with dangerous bacteria or promote health, preventing infections," Olofsson said.

In 2005 Olofsson and Vasquez discovered that many beneficial bacteria reside within honey-bees in a structure called honey crop, which is the organ where honeybees collect nectar for honey production.

As a result, their research has since focused on how this can be applied to functional foods, as alternative medical tools against infections and bee health.

The mead is part of this research which is summarized on the website livingantibiotics.com/

"We will have volunteers drinking this drink and measure different parameters to see if the compounds the bacteria produce could end up in the blood system and for that to cause a prevention or a cure for infections," Vasquez said, adding that more research was needed.

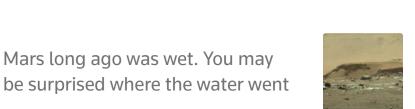
"We don't really know at the moment exactly which kind of infectious disease we could counteract in the future because we need to understand this thoroughly. At the moment we know that the bacteria produce very interesting compounds, a lot of different weapons like antibiotics but a lot of them that collaborate and those weapons or the key in use in this viable bacteria in the future," she said.

If human trials are successful it could help doctors overturn the growing threat of antibiotic resistant bacteria, in both First World countries and also in the developing world where fresh honey is more readily accessible than antibiotics.

In recent years antibiotic resistance has become a critical issue for global health, with

TRENDING STORIES

Facing 'crisis of century', EU threatens ban on COVID vaccine exports to UK

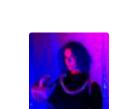


Meet the woman shaping post-

pandemic cybersex

Atlanta day spas

Mars long ago was wet. You may



Fed expects growth surge, inflation jump in 2021 but no rate hike



Eight killed, including six women of Asian descent, at shootings at



Apps Newsletters Advertise with Us Advertising Guidelines Cookies Terms of Use Privacy

All quotes delayed a minimum of 15 minutes. See here for a complete list of exchanges and delays.