Come out of hibernation to taste Flavors of Freeport

BY KATHLEEN PIERCE
BDN STAFF

FREEPORT — There are now as many food options in Freeport as there are L.L. Bean plaids. And this weekend, they are all rolled out for your delectation. Flavors of Freeport, a smorgasbord of everything from ice-your-own doughnuts to wine tastings to lobster rolls, is spread out across town from Friday through Sunday.

Will there be an ice bar? Most def.

For the ninth year now, food lovers come out of hibernation to sample the latest from Maine's growing dining destination. Run by Freeport USA, a nonprofit marketing association, this year's event is packed with free tastings, live music, fire pits and culinary delights.

"It used to just be the chef signature series," Emily Marquis, marketing and event coordinator for the association, said. The happening has grown to include tours at Wilbur's of Maine Chocolate Confections; demos at shops such as Casco Bay Cutlery and Kitchenware, where Stonewall Kitchen bites will be served; and the decadent draw to decorate your own doughnut at Frostys.

In the evening attendees gather at the Hilton Garden Inn in downtown Freeport. The excitement kicks of Friday with band Motor Booty Affair and an ice bar outside.

On Saturday night, the Chef's Signature Series is a moveable feast expected to draw 450 people who "travel from Connecticut and New York for this," Marquis said.

They will sample tastes from Petrillo's, The Harraseeket Inn, The Muddy Rudder, Linda Bean's Maine Kitchen and Topside Tavern and Gritty McDuff's among others. Food producers such as FIORE Artisan Olive Oils and Vinegars, Frosty's Donuts and When Pigs Fly bread also will be dishing out tastes. Judges — including this reporter — will bestow awards for taste and presentation.

Thirsty? A bevy of beverage companies such as Coffee By Design, Cold River Vodka, New England Distilling, Ebenezer's Brewpub and Norumbega Cidery will offer liquid relief Saturday night.

"It's a full weekend of events. People are looking for something to do and are ready to get out of house," Marquis said. "It's fun for visitors and locals alike. We want people to see Freeport as a multifaceted destination. You can come here for four seasons, dine, shop and explore."

COURTESY OF HERMAN MANTIS

The wintry scene at last year's Flavors of Freeport. The event will warm up taste buds this weekend.

Flavors of Freeport is February 19-21. Tickets are $40 for both nights or one night for $25 each. They can be purchased at eventbrite.com/e/9th-annual-flavors-of-freeport-tickets-19911411568.

NASA searching for good spacemates for Mars mission

MEREDITH COHN
THE BALTIMORE SUN

BALTIMORE — When NASA selects astronauts to travel to Mars sometime after 2030, they will need a small crop of candidates who are smart, skilled — and personable.

For a voyage almost 34 million miles one way, the astronauts will need to work well together in an isolated and uncomfortably tight environment, as well as cope with boredom and the continuous company of the same tiny group of people.

Researchers at the Johns Hopkins University recently won a NASA grant to help the nation's space agency develop a method of sorting elite candidates, identifying those who are also amiable people persons, for space missions that could last three years. Grouchy, moody types who value personal space probably will not be good candidates. Ditto chatty individuals who need lots of outside social interaction.

"NASA is already really good at picking people," said Michael Rosen, a Hopkins psychologist who is leading the effort. "But they'll need to be better."

The project is one of 11 NASA grants awarded to 10 institutions sharing in about $5.7 million in funding to investigate astronaut health and performance on future space missions over the next two or three years. The studies will add to what officials already know about the mental and physical health of astronauts.

Under the new grants, researchers are envisioning new or worsening problems: Missions to Mars, and even far flung asteroids, would take substantially longer than the 18 months or so astronauts now can spend on the International Space Station. They will have less room, no escape pod and far less communication with Earth. It will take more than 20 minutes for communications to reach mission control.

The results are expected to help NASA not only pick the right astronauts, but help preserve their health while they're in space and after they return home, according to NASA officials. The results also could help develop treatments and preventive measures for medical and behavioral problems.

None of these astronauts, however, are available for testing because most eventually chosen for the trip to the Red Planet are likely still in high school. Researchers say they will use their own research and the work of others, conduct interviews, utilize simulators and employ stand-ins.

One project will study workers in a remote marine research station in Antarctica. It will look at what measures are necessary to counter the inevitable stress, fatigue and conflict experienced in space. Workers there will do a combination of cycling and playing a type of video game during their stays of up to 14 months, according to Dr. Mathias Basner, associate professor of sleep and chronobiology in psychiatry in the University of Pennsylvania Perelman School of Medicine.

"We believe this measure will counter some of the negative effects we see in isolated, confined and extreme environments," Basner said.

At the State University of New York, Stony Brook, researchers will examine proteins in blood samples taken from astronauts before, during and after space travel to determine how they might mitigate impacts to the space travelers' immune systems. The lack of gravity and radiation exposure from prolonged time in space causes chronic inflammation that can lead to immune system dysfunction. That can make the astronauts susceptible to infection, not to mention uncomfortable, said Kanokporn Rithidech, a professor of research in SUNY Stony Brooks' department of pathology.

Other researchers at the University of Miami will use NASA simulators that mimic lack of gravity to understand why astronauts develop a syndrome that can cause visual impairment. Deep space travel likely would compound the problem, said Noam Alperin, professor of radiology and biomedical engineering at Miami.

Ultimately researchers will seek to use Alperin's and Rithidech's findings to develop measures to counter the effects of space travel during or after flights.

At the University of Central Florida, C. Shawn Burke, a research scientist in the Institute for Simulation and Training, will work on ways that crews from different countries can handle cultural differences. She will use existing research and conduct interviews with people familiar with astronaut living and working conditions to develop training programs for astronauts before they travel and mechanisms they can employ if a conflict arises, a "refresher for in flight," she said.

Cultural differences can lead to difficult situations, such as when crew members are used to working for one designated leader and other crew members expect a more democratic approach, Burke said.

"When crews go up there, we want them to go as a cohesive team, remain a cohesive team and come back that way," she said.

Her research will complement the work at Johns Hopkins, where Rosen plans to partner with researchers at Rice University in Houston on a three-year, $975,000 project to develop a means of identifying the best team to send into deep space in the first place.

At Hopkins, Rosen plans to recruit surgical and critical-care residents who already spend a month at a time in Johns Hopkins intensive care units. They are smart, adaptable and faced with stressful and complex situations in socially isolated settings for up to 80 hours a week, providing good stand-ins for astronauts, he said.

The residents will answer questionnaires and also be subjected to sensors such as wrist bands and smartphone applications that track their heart rates and other physiological responses to their situations. Eventually, the researchers' assessment model will be tested in a spacecraft simulator at NASA in Houston.

The Johns Hopkins researchers hope to determine, for example, not just how someone performs under pressure and what they contribute to the group, but how the group responds to that person.

If their voice is too loud, for example, "they may not be great to have on a long mission," said Rosen, an associate professor in Johns Hopkins' department of anesthesiology and critical-care medicine and a faculty member in the Johns Hopkins Armstrong Institute for Patient Safety and Quality.

Rosen said he and the team at Rice have long studied such team-based performance in high-risk environments, and he expects to use the findings not just to benefit NASA's astronaut selection process but perhaps to help customize doctor training at Johns Hopkins and beyond. Doctors with innate abilities in such stressful situations may need less time in training, while others may need more time and better coping mechanisms, he said.

The final tool won't be a one-size-fits-all assessment but a method of picking the proper team, with each member bringing complementary characteristics.

"What does this team to Mars need to be successful?" Rosen asked. "The right mix of people."

In pregnancy, eating too much fish can raise a child's obesity risk

BY MELISSA HEALY
LOS ANGELES TIMES

Newborns whose mothers ate fish more than three times a week during pregnancy grew faster in their first two years of life and were more likely to be overweight or obese at 4 and 6 years old than were babies born to mothers who ate little to no fish during pregnancy, a new study says.

In a large study conducted across several countries, researchers found that the weight-related effects of a mother's high fish consumption was more pronounced when the offspring was female.

Researchers suggested two explanations for their finding: that the Omega-3 fatty acids found plentifully in fish might predispose fetal stem cells to differentiate into fat cells, or that pollutants found in fish disrupt fetal hormones related to metabolism and prompt greater fat storage. But they acknowledged that the possibility that contaminants are to blame for the effect is "speculative," since the study's authors had no measure of the persistent organic pollutants in the fish the women ate.

In July 2014, the Food and Drug Administration and the Environmental Protection Agency recommended that pregnant women eat two to three servings (8-12 ounces) of fish per week. The agencies' advisory recommended that pregnant women steer clear of fish known to be contaminated with mercury (tilefish from the Gulf of Mexico, shark, swordfish and king mackerel, for example) and choose instead salmon, shrimp, pollock, light canned tuna, tilapia, catfish and cod.

The authors of the new study, published Monday in the journal JAMA Pediatrics, said their findings "are in line with" the EPA and FDA advisory.

The study tracked 26,184 pregnant women and their children, born between 1996 and 2011 in the United States and across Europe. They observed the growth patterns and weight status of the children up to the age of 6 years old. The pregnant women, who answered questionnaires about their food intake, reported they ate anywhere from less than half a serving of fish weekly (in the Netherlands, Belgium and Ireland) to as many as seven servings of fish per week (in Spain and Portugal).

The Massachusetts women that made up the U.S. study cohort ate an average of one to two servings of fish per week.

At 4 and 6 years old, children born to women who had had the highest level of fish consumption during pregnancy were 14 percent and 22 percent more likely to be overweight or obese than were babies born to women who ate the least fish. In their first two years of life, the babies of heavy fish eaters were 22 percent more likely to have had a rapid increase in growth than were the babies of women who ate little fish in pregnancy.

Largely scared by reports of mercury poisoning, U.S. women have been eating little fish during pregnancy, and public health campaigns have urged them to consumer more. Omega-3 fatty acids, which are plentiful in many kinds of fatty fish, are critical building blocks for the development of the fetal brain and retinal tissues. These essential fatty acids may also help determine the length of fetal gestation and ward off a mother's depression during pregnancy or after giving birth.

Women who eat at least 12 ounces of oily fish per week have been shown to give birth to children who have better childhood IQ scores, fine motor coordination, and communication and social skills, along with other benefits.

But, as a 2014 article on the subject noted, the U.S. government's new advice on fish consumption is "complicated." The new research findings are likely to make it even more so, underscoring the importance of not eating too little or too much.

The authors of the current study — a team of researchers hailing from the 11 countries where women and their babies were participants — say the next step might be to try to better understand why a pregnant woman's fish consumption, as well as other dietary patterns, appears to have different effects on a female baby than it does on a male child. They suggested that researchers should delve more closely into placental tissue to glean how intrauterine factors such as diet could have sex-specific effects.