

16 Species of Insects Approved for Human Consumption

Analysis by Dr. Joseph Mercola



April 29, 2023

STORY AT-A-GLANCE

- > While it's not uncommon for insect parts to accidentally make it into processed food, Singapore has approved the sale of 16 insect species for human consumption. Insects that haven't historically been eaten by humans will undergo approval through a different framework
- > The industry is unsure how consumers will accept eating whole insects, but proponents anticipate that campaigns to normalize the behavior will make it more acceptable; globalists cloak the idea in sustainability rhetoric and hope to elevate eating insects to "cool kids" status
- Eating insects is justified by saying it may address an impending food crisis. This is the same justification used for reclaiming sewage water for drinking water and cannibalistic practices, such as culturing human cells for meat
- > The "green agenda" cherry-picks flawed ideas and presents them as fact, such as the idea that nitrogen fertilizer is a pollutant that can only be reined in by eliminating farming. Yet, regenerative solutions allow people to eat meat, fruits and vegetables while supporting the environment
- > DARPA is also on the insect bandwagon with the project "Insect Allies," in which genetically modified insects edit mature plants in real time. This leads to questions about what happens to animals and humans bitten by those insects, wild insects that mate with infected insects affect the environment and natural life cycle, and the animals and humans who eat the plants and insects

It's not uncommon for insect parts to accidentally make it into processed foods in plant production. However, Singapore has gone one step further and approved the packaging and sale of 16 species of insects as foodstuff.¹ In this short video, actress Nicole Kidman demonstrates her secret talent — eating fried insects and live worms.

In 2017, Business Insider reported that on average one person accidentally eats 140,000 bits of bug every year.² Food with the highest number of allowed bug bits is hops, used to brew beer. The FDA allows up to 25,000 bits for every 100 grams of hops. Exactly who is counting 25,000 bits of bug for every 2.5 cups of hops?

Interestingly, in 2017, the Business Insider article ended with "We'd better get used to it. After all, insects are the future of food!" Also in 2017,³ a Business Insider article sponsored by Cargill, predicted that "thanks to climate change" the foods of the future will include bugs, beans, GMOs, invasive sea creatures, and "bloody vegan burgers."

Insect-as-food promoters claim humans have a long history of eating insects and "If you think eating insects is gross, you may be in the cultural minority." Yet, historical mentions of eating insects are mostly for survival and not as a delicacy. National Geographic notes, "Ten thousand years ago hunters and gatherers ate bugs to survive."

The Smithsonian⁵ notes that in Africa, where poverty is extreme, locusts are consistently eaten, and military survival guides recommend insects "as a perfect alternative when other food sources are not available." As globalists push for greater control over the food supply, they are also pushing to normalize dehumanizing and gross food options.

Singapore Approves 16 Insect Species To Be Sold as Food

In October 2022, Yahoo! News⁶ reported the Singapore food agency (SFA) was in the process of considering approving insect imports from 10 insect food products or farming companies for human or animal consumption. The media release went on to say that the SFA had conducted scientific reviews and assessed the species of insects it would allow for use in the country.

It listed some of the insects that had traditionally been served in parts of Asia, such as crickets and silkworm pupae. After the Food and Agriculture Organization (FAO) promoted insects for animal feed and human consumption, commercial interest grew. From October 5, 2022, to December 4, 2022, when the SFA was open to public commentary, it received a mere 53 responses in a country with 5.9 million people.⁷

April 7, 2023, The Straits Times⁸ reported that 16 species of insects had received the green light from the SFA and would be released for human consumption in the last half of 2023. The companies importing the insects must provide proof that the insects are farmed under food safety controls and that the substrate used to feed the insects is not contaminated.

Additionally, the insect products will also be subjected to food safety testing and treatment to kill pathogens. Food inspections will also be done to determine if the insects were packed and stored to prevent contamination.

The 16 species of insects approved for consumption could be either eaten directly or used to make snack items. In addition to the insects, the SFA is allowing silkworm cocoons, with the explanation that they are currently consumed in Malaysia and China. Insect species without a history of human consumption, no matter how recent the history, will be considered novel and approval must then go through a different framework.

One of those insects is the black soldier fly larvae that are currently used in Singapore to process food waste. The Straits Times writes, "The larvae consume up to four times their body weight in waste and, in turn, excrete frass, which is used as fertilizer. The larvae are used as fish and shrimp feed."9

Insect Farming: Are Maggots on Your Menu?

As The Straits Times notes,¹⁰ the industry is unsure of how consumers will respond to eating insects. Chief executive and co-founder of Future Protein Solutions, Christopher Loew, told reporters his company is creating new ways to incorporate cricket protein to

entice consumers to gobble up Gryllidae, the family of crickets that includes approximately 2,400 species of "leaping insects." 11

Loew believes that "a lot more education" is required for the public to accept eating insects. He added, "So it might take a while before these insects become mainstream at local restaurants." The Times continued, "Globally, both high-end restaurants and casual eateries offering dishes with insects like crickets remain niche, so a lot more needs to be done to normalize insect consumption."¹²

While the idea of eating insects for food may be repulsive, it's apparent that globalists are intent on normalizing the behavior. One company planning a product launch is hoping to generate enough buzz about the product to stir up demand. Startup company Altimate Nutrition is working together with a manufacturer in Thailand to deliver flavored cricket protein bars to Singapore.

They've also developed a partnership with the House of Seafood restaurant for insect-based recipes. Gavriel Tan, co-founder of Altimate Nutrition noted that some consumers find eating insects intriguing while others are repulsed. The company intends to address this issue by "organizing workshops and seminars to raise awareness about the benefits of insect-based foods." 13

William Chen from Nanyang Technological University notes that while people in Asia are used to insects, eating "whole insects" in restaurants "may still be challenging due to the general negative perception of insects." Chen continued:14

"One way to integrate insects into our diet would be to add insect proteins into familiar foods such as pasta, with proper labeling. With no sight of the whole insects and no change in the taste — I can safely say this after tasting spaghetti bolognese made with mealworm protein-based pasta — consumers would slowly accept insect-based foods."

Will Eating Bugs Become Cool?

The idea of eating insect-based foods is cloaked in "sustainable" rhetoric by globalists, which they hope to elevate to foods "the cool kids" eat as Nicole Kidman demonstrates in the video above. One top player in the cabal, the World Economic Forum, posted an article in June 2021¹⁵ categorized under "food security" in which they promote the use of insects writing we "need to give insects the role they deserve in our food systems."

They justify this proposal by saying it will address an impending food crisis. Companies have jumped on the bandwagon in the last five to 10 years and the insect farming industry is estimated to be growing at a rate of 27.8% each year. Aggrotech startups have seized on this financial opportunity and refined the cost-effectiveness of insect farming, also called "minilivestock" farming.

The idea that meat-eating mammals could survive on insects was taught to children in the 1994 Disney film "The Lion King." A meerkat and warthog teach Simba (a lion) to eat live insects instead of killing prey as they sing "Hakuna Matata," which is a Swahili phrase meaning "there are no problems; don't worry about it." ¹⁷

This is exactly what the globalists would like you to do — there are no problems, don't worry about it, globalists will take care of your food supply. You only have to learn how to eat bugs and drink sewer water.

'Green Agenda' Includes Bugs, Cannibalism and Reclaimed Water

Much of the supposed "inspiration" behind promoting unnatural diets is justified by a desire to save the planet. While sustainability is admirable, it is crucial to realize that the "green agenda" currently promoted is nothing but a ruse and scare tactic to bring people to the point of accepting living conditions that would otherwise be unacceptable.

The agenda is based on cherry-picked flawed ideas. For example, the idea that nitrogen fertilizer is a pollutant that can only be reined in by eliminating farming is one of the cherry-picked 'green agenda' ideas. Yes, nitrogen fertilizer is a pollutant, but there are regenerative solutions that continue to allow people to eat meat, fruits and vegetables

without eliminating farming. Without farmers, the globalists want you to eat insects, weeds and possibly, each other.

Although it sounds crazy, they have already started trying to normalize cannibalism. Lab-grown human steak was introduced in December 2020¹⁸ and featured as "art" at the Design Museum in London, U.K. The creator of the "Ouroboros Steak" — a reference to the ancient symbol of a snake that devours its tail and is reborn from itself — claimed the installation was a critique against the meat industry.

Taking this one step further, a company called BiteLabs claimed to plan to sell artisanal salami made from lab-grown celebrity flesh. On their website, ¹⁹ which appears to have been taken down in late 2022, they stated the intention to collect biopsy samples from celebrities, isolate the muscle cells and then grow the celebrity meat using a proprietary bioreactor. The flesh would then be cured, dried, aged and spiced according to Italian tradition.

In January 2022, IFLScience²⁰ followed up on the story and noted that "it's perfectly possible" to create salami from cloned celebrity meet. While the website has been taken down, the Facebook page²¹ remains where the company claims "We've never been so close to celebrities — until now."

Another example of an ongoing effort to normalize cannibalism is a 2018 article published in the journal Nature,²² which promoted the rejuvenating effects of drinking young people's blood. A 2.5-liter order was said to cost about \$8,000 at the time.²³

In a bit of predictive programming, the 1973 film "Soylent Green" — in which the protagonist realizes the government food being handed out is made from humans — was set in the year 2022.²⁴

Another gross answer that globalists have proposed is drinking reclaimed sewage water. In 1965, Frank Herbert imagined recycled urine in his novel "Dune." In an article in the Verge in 2021,²⁵ the writer laments the fact that the remake of the movie "flushed away a chance to talk about wastewater," since the film director and writer didn't include it.

In May 2021, Bloomberg announced that "The Future of Water Is Recycled Sewage, And We'll All Be Drinking It." In Singapore, the future is now. Singapore's National Water Agency uses a NEWater process to recycle sewage water in five plant operations. California doesn't have to wait on the future since the government has already started a toilet-to-tap transition in the state.

Coming full circle, you may unintentionally participate in cannibalism in the coming years. According to the Cremation Association of North America,²⁹ several states use alkaline hydrolysis and water to accelerate natural decomposition. This leaves a liquid effluent that is "discharged with all other wastewater and is a welcome addition to the water systems."

The organization claims that there is no tissue or DNA left when the process is completed. What could possibly go wrong when water used to dissolve human remains is flushed into the sewer system and then the same water is repurposed for drinking water? Even if it is technically symbolic, this is also a form of cannibalism.

Insect Allies Are Anything But

The Defense Advanced Research Project Agency (DARPA) is also on the insect bandwagon. In 2016 they began a project called "Insect Allies"³⁰ designed to infect insects with a genetically modified virus that could edit mature plants in real-time. This is different from the controversial release of **genetically modified mosquitoes** in Florida and four counties in California to suppress wild mosquito populations.

In the 2016 release,³¹ the agency stated that the program could provide an "alternative to pesticides, selective breeding, slash-and-burn clearing and quarantine, which are often ineffective against rapidly emerging threats and are not suited to securing mature plants."

The release goes on to say that since the beginning of the program, the teams have been working on molecular and synthetic biology, seeking technical breakthroughs in plant virus gene editing and disease vector biology. Yet, the short-term and long-term effects on plants, people and animals are unknown and it may be that DARPA doesn't care. The first DARPA-funded "Insect Allies" paper was published in 2020 in which the researchers stated:32

"Mutant progeny are recovered in the next generation at frequencies ranging from 65 to 100%; up to 30% of progeny derived from plants infected with a virus expressing three sgRNAs have mutations in all three targeted loci."

In other words, the mosquitoes released into the environment pass along their mutations to the next generations, leaving questions about what happens to animals and humans bitten by those insects, wild insects that mate with infected insects, and the animals and humans who eat the plants and insects.

Once genetically mutated insects are released into the wild, it seems unreasonable to assume that insect farms, producing edible insects for human consumption, would not also be contaminated. Yet would the integration of mutated insects be considered contamination?

Sources and References

- 1, 8, 9, 10, 12, 13, 14 The Straits Times, April 7, 2023
- ² Business Insider, June 21, 2017
- ³ Business Insider, February 6, 2017
- ⁴ National Geographic, July 15, 2004
- 5 Smithsonian, Insects as Food for Humans
- ⁶ Yahoo! News, October 17, 2022
- ⁷ WorldoMeter, Singapore
- 11 Britannica, Crickets
- ¹⁵ World Economic Forum, June 12, 2021
- ¹⁶ Hive Life, October 8, 2020
- 17 Merriam Webster, Hakuna Matata
- ¹⁸ The New York Times, December 7, 2020
- ¹⁹ BiteLabs
- ²⁰ IFLScience, January 18, 2022
- ²¹ Facebook, BiteLabs
- ²² Nature September 5, 2018
- ²³ New York Post September 10, 2018

- ²⁴ Radical Media, July 27, 2022
- ²⁵ The Verge, November 5, 2021
- ²⁶ Bloomberg, May 19, 2021
- ²⁷ Pub.gov.sg, NEWater
- ²⁸ Los Angeles Times, July 22, 2022
- ²⁹ Cremation Association of North America, Alkaline Hydrolysis, Overview
- 30, 31 DARPA, Insect Allies
- 32 Nature Plants, 2020;6