

EN

the Defender[®]

CHILDREN'S HEALTH DEFENSE NEWS & VIEWS

[The Defender](#)[COVID](#)[Health Conditions](#)[Toxic Exposures](#)[Censorship/Surveillance](#)

August 2, 2024 › Agency Capture › Big Food › News

GLOBAL THREATS

All Things Bugs: Bill Gates, U.S. Military Among Investors in GMO Insect Protein for Humans

The Bill & Melinda Gates Foundation in 2012 funded All Things Bugs, a project to “develop a novel food product made from insects to treat malnutrition in children from famine stricken areas of the world.” The company has since expanded into developing genetically modified insects, with help from the U.S. Department of Defense.

by **Michael Nevradakis, Ph.D.**

AUGUST 2, 2024



While regulators in non-U.S. countries, including Singapore, have issued approvals for specific **insect-based foods**, in the U.S., the regulatory landscape is murkier — there is no legal approval process or clear-cut prohibition of insects for human consumption.

As a result, insect-containing foods have reached U.S. consumers, even though one of the few existing U.S. laws that address insects in the food supply refers to them as “**filth**” and a form of “adulteration.”

Crickets and grasshoppers reach U.S. consumers in a variety of forms, from **protein bars** to **protein shakes**. They’re also found on **restaurant menus** and are promoted as pet food and animal feed ingredients.

With few U.S. regulatory barriers to contend with, investors like Bill Gates and **Big Food** giants such as **Tyson Foods** have also begun investing in “alternative protein” startups — despite mainstream media “**fact-checks**” claiming Gates doesn’t support the consumption of insects.

Internist **Dr. Meryl Nass**, founder of **Door to Freedom**, told **The Defender** lax U.S. Food and Drug Administration (FDA) regulations — under which many insect-containing foods can be classified as “**Generally Regarded as Safe**” (GRAS) — “means they don’t require testing” and enable the FDA to “look the other way.”

“How long will it take before we learn whether these foods are safe? It could take generations,” Nass said.



COMING TO A
THEATER NEAR YOU
SEPTEMBER 2024

GET TICKETS

Gates, U.S. military among backers of ‘alternative protein’ startups

The **Bill & Melinda Gates Foundation**’s Grand Challenges Explorations program in 2012 funded **All Things Bugs**, a project to “develop a novel **food product made from insects** to treat malnutrition in children from famine stricken areas of the world,” according to Eurasia Review.

All Things Bugs has since expanded into the development of **genetically modified insects**. With funding from the **Defense Advanced Research Projects Agency (DARPA)**, “we are using **CRISPR/Cas9 gene editing** and other methodologies to develop base technologies for creating insects as a new bioresource,” the company states.

DARPA is a research and development **agency** that operates under the U.S. Department of Defense.

All Things Bugs said that while insects are “a very sustainable source of protein,” it “is innovating to make them a feasible commodity for the food industry.”

Claire Robinson, managing editor of **GMWatch**, told The Defender, “With all GMOs [genetically modified organisms], including insects, it’s vital that they are subjected to a pre-marketing risk assessment for health and the environment.”

Robinson said, “This includes testing them for the presence of pathogens, possible allergens and substances that may be toxic to humans. Then they must be clearly labeled for the consumer.”

Gates’ investments in insect-based foods appear to be part of a broader strategy to invest in alternatives to animal-based foods for consumers.

In a February blog post, **Gates said he invested in Savor**, a startup producing butter made from air (carbon dioxide) and water (hydrogen). And in 2022, the Gates Foundation awarded a **\$4.76 million grant** to Nature’s Fynd, a startup producing foods containing fungi-based protein. In 2020, **Breakthrough Energy Ventures**, founded by Gates, **invested in Nature’s Fynd**.

The U.S. government’s **National Science Foundation (NSF)** also is involved in the insects-as-food space, through its **funding** of the **Center for Environmental Sustainability through Insect Farming (CEIF)**. Established in 2021, CEIF seeks “to develop novel methods for using insects as feed for livestock, poultry, and aquaculture.”

Institutions participating in CEIF include **Texas A&M University**, Indiana University-Purdue University in Indianapolis and Mississippi State University — along with Tyson Foods, Protix and Innovafeed, **backed by food processing giant ADM**, formerly the Archer-Daniels-Midland Company.

Insect protein start-ups raised ‘over \$1 billion in venture capital since 2020’

The production of insects for human food is expanding in the U.S. and globally, with support from the **United Nations** and the **World Economic Forum (WEF)**.

In 2013, the Food and Agriculture Organization of the United Nations released a seminal report, "**Edible insects: future prospects for food and feed security**," which promotes the environmental and nutritional benefits of insect consumption."

A 2022 WEF paper, "**5 reasons why eating insects can reduce climate change**," suggests people are "conditioned to think of animals and plants as our primary sources of proteins ... but there's an unsung category of sustainable and nutritious protein that has yet to widely catch on: insects."

According to a November 2023 Washington Post report, "**Insect start-ups** have raised over \$1 billion in venture capital since 2020."

A **2021 report** by Netherlands-based Rabobank claimed the demand for insect protein, "mainly as an animal feed and pet food ingredient, could reach half a million metric tons by 2030, up from today's market of approximately 10,000 metric tons."

A report by Grand View Research forecasted the global **insect protein market** will expand by an annual compound growth rate of 16.9% by 2030, while European projections estimate "the number of **Europeans consuming insect-based food** will [reach] a total of 390 million by 2030," according to **EuroNews**.

Ynsect, for instance, has built factories in France and the Netherlands, and is erecting factories in the U.S. and Mexico, according to **Feed Navigator**. The company claims its insect-producing farms are "climate positive," "benefit biodiversity" and are aligned with the **Paris Agreement** and the European Union's "**Fit for 55**" goal.

In March 2022, Ynsect acquired Nebraska-based **Jord Producers** — a mealworm farm. And in December 2022, **Ynsect signed an agreement** with U.S. flour milling company Ardent Mills to build a factory in the Midwestern U.S. **Ardent Mills** is a joint venture between ConAgra Foods, Cargill and **CHS**, a global agribusiness cooperative.

Investors in Ynsect include actor Robert Downey Jr.'s **FootPrint Coalition** and France's Crédit Agricole bank — along with support from the FAO and the European Commission. The company has raised over \$600 million.

Celebrity chefs also are embracing insect food. In November 2023, the **Financial Times** featured Joseph Yoon, founder of **Brooklyn Bugs**, whose "goal is to popularise edible insects and build up this food source to help support global food security."

This article was funded by critical thinkers like you.

The Defender is 100% reader-supported. No corporate sponsors. No paywalls. Our writers and editors rely on you to fund stories like this that mainstream media won't write.

PLEASE DONATE TODAY

Your dog can eat insects, too

In addition to a lack of FDA regulations governing the use of insects in foods for humans, the FDA also does not regulate the use of **insects for pet food ingredients**.

According to **Animal Frontiers**, "pet food is under the nongovernment **Association of American Feed Control Officials (AAFCO)**" in the U.S. In January, French firm Ynsect became the first company to receive AAFCO authorization for commercial production of **mealworm protein for dog food** in the U.S.

In October 2023, Big Food giant Tyson Foods announced the acquisition of an ownership stake in the Dutch **insect ingredient producer Protix**. Tyson said the new joint venture would construct "the first at-scale facility of its kind to upcycle food manufacturing byproducts into **high-quality insect proteins** and lipids which will primarily be used in the pet food, aquaculture, and livestock industries."

Although the announcement did not definitively exclude the production of insect-containing foods for humans, a **Reuters "fact check"** published in May stated, "Tyson Foods does not put insects into products for human consumption."

Tyson has invested in **Upside Foods**, which in June 2023 won approval from the U.S. Department of Agriculture (USDA) to produce **lab-grown chicken**. Upside garnered more than \$600 million in **research and development investments**, including from **Gates, Richard Branson**, Elon Musk's brother Kimbal Musk and **Cargill**.

Vanguard and BlackRock, the world's two largest institutional investment firms, are also the two top institutional **holders of Tyson Foods shares**. BlackRock, and its CEO, **Larry Fink**, have promoted "**sustainable**" corporate practices.