

Benefits of Insect Nutrition

For centuries, eating insects, a practice known as entomophagy, has played a huge role in the diets of many cultures. People around the world choose to eat insects because of their abundance, low cost, benefits to our health and environment, and their particularly good taste. Still however, most Americans are unwilling to partake in the act. This is largely due to the negative stereotypes that Western cultures have crafted around insects over time. “Insects as Food: Perception and Acceptance” is a research based scientific article that elaborates on the overall acceptance of insects as food in Western countries by providing vast amounts of data gathered from studies done with a diverse group of people. Additionally it dives into some of the reasons for such negative reactions towards insects as well as ways to overcome this psychological barrier. This source contributes significantly to my research and topic in that it provides a glimpse as to why Westerners are so unwilling to eat insects, as well as highlighting the importance that overcoming this negative mindset has to our future. In a world where our population is growing so rapidly and the meat industry has become so detrimental to our health and our environment, it has become important that we opt for an alternative source of nutrition such as insects to better sustain ourselves and the world we live in.

Our population is estimated to be 9.7 billion by the year 2050 according to the United Nations Department of Economic and Social Affairs. This means that the already destructive meat industry will have to increase its production by almost 50% in some countries. In doing so, the world faces many problems including skyrocketing prices for animal products making food far more scarce, a rise in demand for coarse grain as feed for livestock, and an increase of several environmental concerns such as climate change, water waste and deforestation. For this reason, as stated in “Potential of Insects as Food and Feed in Assuring Food Security”, a scientific article written by an entomologist from Washington University, edible insects are a serious alternative to the conventional production of meat, either for direct human consumption or for indirect use as feedstock. This source, elaborates on the sustainability of insect based food products for a growing population both economically, and environmentally. Using vast statistical evidence, this source contrasts the efficacy of insect nutrition with the unreliability of the meat industry. In making such valid, scientifically proven points, this article not only supports my thesis but provides credible information for many aspects of my topic.

In addition to being a sustainable source of protein for a growing population, eating insects has massive health benefits. Unlike most meats, insects can be eaten raw and aren't filled with antibiotics or hormones. Moreover, they provide the same amount if not more protein than several meats and fish, and contain high levels of amino acids, healthy fats, carbohydrates, various vitamins and minerals. “In an effort to more fully explore the various facets of edible forest insects, the FAO Regional Office for Asia and the Pacific organized an international

workshop, entitled ‘Forest Insects as Food: Humans Bite Back’ in Chiang Mai, Thailand, in February 2008”. As stated in “Forest insects as food: humans bite back”, a work composed of the findings of the world’s foremost experts on entomophagy, insects represent a significant biological resource that is still not fully utilized around the world. Like the previous source, this dense and highly reliable assortment of articles supports my thesis and provides credible evidence to support the idea that insect nutrition is far more healthy than meat consumption. It provides a list of the specific elements and nutrients found in insects, as well as information regarding the health risks that can be avoided by opting for insect based products such as exposure to diseases like salmonella, questionable chemicals, and antibiotic resistance.

Seeing as to how the meat industry has proven to be one of the leading causes of the environmental damage being done to the world, the alternative use of insects as a source of protein appears to be a promising one. As displayed in “Entomophagy and Italian consumers: An exploratory analysis”, an article focused on showing reasons to consume edible insects in the future, greenhouse gas emissions of insects are far lower than domestic animals as well as the amount of soil used to produce 1kg of protein. Furthermore, insects have a nutritional conversion efficiency rate significantly greater than beef, as they might be fed with organic waste streams and use less quantity of water. This source contributes to this aspect of my research in that it gives statistical evidence as well as visual representations of the comparison between the environmental effects of insect based foods and animal products. In addition to this source, the second article mentioned, “Potential of Insects as Food and Feed in Assuring Food Security”, contributes significantly to this aspect of my research in that it elaborates on the amount of water waste as a result of the meat industry in comparison to that of insect production.

Despite, the negative stereotypes we’ve associated with insects, they provide a sustainable source of protein for the growing population that is not only better for our health but for the environment. These four scientific based sources I’ve touched upon, provide vast amounts of data to prove this idea. They all agree that insects are a preferable alternative to animal based products that can be beneficial to us in more than one way. Additionally, they elaborate on every aspect of my topic and are thus very valuable to my research. In the upcoming expansion of this research I look to include more sources to further support my claim and stress the insufficiency and disastrous effects of the meat industry.

Sources:

1. Hartmann, Christina. *Insects as Food: Perception and Acceptance*. 17 Oct. 2016, www.ernaehrungs-umschau.de/fileadmin/Ernaehrungs-Umschau/pdfs/pdf_2017/03_17/EU03_2017_Hartmann_englisch.pdf.
2. Huis, Arnold Van. *Potential of Insects as Food and Feed in Assuring Food ...* 27 Sept. 2012, www.annualreviews.org/doi/10.1146/annurev-ento-120811-153704.
3. *Forest Insects as Food: Humans Bite Back / Proceedings of ...* 2010, www.fao.org/docrep/012/i1380e/i1380e00.pdf.
4. Sogari, Giovanni. *Entomophagy and Italian Consumers: An Exploratory Analysis*. Dec. 2015, www.researchgate.net/publication/287583409_Entomophagy_and_Italian_consumers_An_exploratory_analysis.