Let's Give Bugs A Chance!

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[First Place]

Bugs are often associated with words like "disgusting" and "parasitic," so it is not surprising that the concept of entomophagy, otherwise known as insect-eating, is disturbing to some (okay...most) of the people in North America and Europe. It reminds me a lot of when I snubbed my nose up at different vegetables as a kid. My parents often told me, "What if it's the best thing in the world? You'll never know unless you try!" which was a good point, and I've been a tryer of things ever since. In fact, just recently at the Orange County fair this year, I saw "PEANUT BUTTER AND JELLY BACON DOG!" in large letters on a food cart. Of course, I had to try it. I heard a couple behind me say, "Peanut butter and jelly bacon dog? Who the hell would eat that?" I do not blame them; it is weird. But, to answer their question...me, I would eat that. It actually tasted good. When I grabbed a napkin to wipe the peanut butter off my face, I noticed some ants marching across the table beside me. And I stopped to wonder, "Could we put that on a hot dog, too?" This led me down an interesting path. As it turns out, insect-eating has been around for a long time, and it is not uncommon today, either. In fact, we're the weird ones for not participating. It is estimated that over 80% of people on the planet eat bugs! (Roberts 8). This fact amazed me, and led me to many other questions: why do we not eat insects here? Are they healthy? More importantly, are they yummy? And if they are, how can we convince others to try them? Where can I try them? These questions may appear trivial to some, in fact the whole concept may seem like a joke. But rest assured, entomophagy is no joke, and I can prove it.

Throughout my research, I've discovered bug eating is an important matter worthy of discussion. One of the more obvious reasons being the nutritional aspect within them, each bug carrying a different nutritional label; for instance, omega-3s are found in mealworms, iron and calcium are within termites, and varying quantities of zinc are present in nearly all insects (Gordon 15). But inarguably, protein has garnered the most attention, and rightfully so. Patrick Huyghe, an editor and freelance science writer, states how "[Insects are] high in protein: the protein content of a dried insect can be as high as 75% of its weight: dried ground beef, on the other hand, is only 43% protein" (9). And just to reiterate, George Gordon, author of The Eat-a-Bug Cookbook, expressed something similar: "Pound for pound, dried grasshoppers have almost the same amount of protein as lean ground beef. And you're not getting the fat that you would by eating a hamburger" (15). That's another reason protein is often mentioned when arguing for insects as a legitimate food source: the fat content. It is packed full of protein, but with such a low fat content, worries about cholesterol are nonexistent. And when considering the unwavering obesity epidemic, that is an insanely powerful argument to be made. Insects can rival meat, and according to the project coordinator of the Toronto Food Policy Council, Wayne Roberts, "bugs and caterpillars generally contain as much protein as beef, pork or chicken, and have more iron, zinc, niacin, thiamine and riboflavin" (9). Judging by the amount of research done on the nutritional content of insects, It is doubtful that this is something widely debated among the bug eat-

ing community. But despite all that, we still do not have packaged insects in grocery stores or in restaurants. This knowledge is readily available, so why isn't America and Europe on board yet? Well, the answer is painfully obvious.

The ick-factor may be the largest barrier between bugs ever being widely consumed by Westerners. It is easy to underestimate psychology, but when we're brought up to crush bugs beneath our feet, how can we expect garnishing them on fancy plates to be easy? Perhaps that's a key to opening minds – exposure. In 2018, a study was conducted at the University of Parma, in Italy, involving a dessert made with crickets. The purpose of the experiment was to uncover which demographics were more likely to eat insects, it was a fairly small study, and though the numbers alone do not necessarily provide insight into the psychology of bug-eating– it proves that convincing those unfamiliar with eating bugs to give it a chance is possible. Some participants may have been overwhelmed with disgust and fear, but even if they could not get the dessert anywhere near their lips, simply considering it for a moment is a big step. In "The Infested Mind: Why Humans Fear, Loathe, And Love Insects," a book which explores the psychology behind the fear of insects, it states how "many psychologists maintain that exposure to the feared stimulus itself is necessary, and often sufficient, to treat phobic individuals." (Lockwood 115)

If entomophagy-advocates truly want people in the Western world to eat insects, we need to spread the word, educate others, and perhaps most importantly: provide samples. It sounds obvious, but we need to convince people not just that it's healthy, but also that it's tasty. And what better way to spread the word than to make them want to come back for more? If we do not prove that bugs can be delicious, it will always be considered a weird niche in Western society. While we provide samples, we can also inform others, and maybe even bring some of the hypocrisy towards insects to light. A strong way to convince others is through making comparisons. For example, "With a closer look at the foods most Americans eat, the general repugnance toward insects becomes not only puzzling but senseless. Other kinds of invertebrate make regular fare- - clams, mussels, oysters, snails, squids and in particular crabs, shrimp, and lobsters, which are closely related to insects" (Huyghe 10). This begs the question, where is this imaginary line we've drawn for what is and is not gross? Perhaps that sentiment could tie it all together. Of course, there will always be people too squeamish to give bugs a chance, and that is okay. The point is not to force it on people, but to get the people who may be on the fence about it to become advocates in order for bug eating to become accepted in Western society and grow.

It is easy to deduce what entomophagy needs to go further is some serious advocacy. Eventually, if it becomes normalized, we can give the act of eating insects a new name. When asked if he thought entomophagy would catch on, George Gordon said he didn't like that term, expressing how "it's a scientific term, that sets it apart from other foods." And when asked by the interviewer what he would call it, he simply stated "Oh, 'bug eating,' I think. I'd love for someone to come out with a really gourmet term for it. You know, if you go out for a steak you don't say, 'I'm going to engage in carnivory.' You say you're 'going to eat a steak'" (15). Which makes perfect sense: it is food, there's no need to use that terminology. Using more familiar vocabulary could also help people accept it more. On the opposite side, according to Alan Yen, an entomologist and invertebrate ecologist, "Encouraging the direct use of insects as food in Westernized societies should not be the major objective at this stage. Changing attitudes to eating insects is paramount to success; the main challenge is to change Westerners to eating insects" (295). I firmly agree with that statement; it is a challenge, however, when Yen goes on to say how we should

start with insects as "food supplements," and as part of "livestock food" to implement them into western culture, I strongly disagree. Yen's analysis fails to acknowledge that if we establish a precedent as insects being for livestock, or something that is to be hidden inside a capsule, then nobody will take it seriously as actual human food. We didn't start eating cows by putting beef in little pills. So I think a method similar to that of ripping off a band-aid would be much more effective. Exposure is the way to go, and the gradual method Yen is advocating for will not change minds. Especially when you consider the widely available public knowledge of the FDA. Many Americans actually already know they are eating insects to some degree. For chocolate, the limit is 60 or more insect fragments per 100 grams. That means if there's 59 insect fragments, it is good to go ("Food Defect Levels"). Not everybody, but a lot of people are aware of that, and yet those same people would most likely not consume insects. That's why hiding it would probably never work.

What if it doesn't have to do with the ick factor, or the psychology behind it at all? What if bugs simply do not taste good enough? But no, that can't be. When asked what scorpions taste like, Gordon stated "They taste sort of like soft-shell crab. They have long white meat in their claws; like a little lobster, basically" (14). Admittedly, not all bugs are created equal. Gordon states how South Eastern Asian centipedes do not "have much culinary value," as they have "a chemical taste to them," Which begs the question, just how much do bugs differ in flavor? That's a discovery we could uncover for ourselves, if bug eating became more accepted and widely available in the Western world. And as it grows as a food source, it will become more suitable for the American/European palette, just as every food has. Once again, we are the strange ones for not participating, "Anthropologists have documented 2,086 species of insects that are consumed by 3,071 ethnic groups in 113 countries on every inhabited continent." (Lockwood 147) We could join the countries that embrace bugs as food, there is so much to learn from them,"the Bushment and Hottentots relish ants, the Pedi of South Africa and Shona of Rhodesia are locust lovers, the Pange of Cameroon eat twenty-one kinds of caterpillars, the Thai savor water bugs, the Japanese consume rice hoppers cooked in soy sauce and sugar…" the list goes on, and on, and on.

Entomophagy is a nutritious and exciting world of culinary experience yet to be utilized by Westerners. Through marketing, the environmental benefits, the natural human desire to experience new things, and the endless varieties of recipes to try and create...entomophagy has an overwhelming amount of potential. I started with one question, and that was: "why not?" And, yet, for all that's written about it, for all that I have written– that single question remains. Here in North America, and in Europe, our dishes remain insect-free. I used to think we have everything here, but I was wrong. And I will not stop advocating for bug eating until I can order a fried tarantula at a drive-through. There are so many possibilities, and despite never having tried any fancy insect dishes, I am confident bugs are just as delicious as any other food. I remain hopeful for the future of bug eating, and I hope that one day we'll be able to order it off a menu, right here in the USA. Let's give bugs a chance!

WORKS CITED

Center for Food Safety and Applied Nutrition. "Food Defect Levels Handbook." U.S. Food and Drug Administration, 2019, www.fda.gov/food/ingredi-

ents-additives-gras-packaging-guidance-documents-regulatory-information/food-defect-levels-handbook.

Gordon, David George. "The Grubmeister." Virginia Quarterly Review: A National Journal of Literature and Discussion, vol. 92, no. 3, 2016, pp. 12–17.

Huyghe, Patrick. "An Acquired Taste." Sciences, vol. 32, no. 6, Nov. 1992, p. 8.

Roberts, Wayne. "Eating Insects." Alternatives Journal (AJ) - Canada's Environmental Voice, vol. 34, no. 1, Jan. 2008, pp. 8-10.

Sogari, Giovanni, et al. "The Food Neophobia Scale and Young Adults' Intention to Eat Insect Products." International Journal of Consumer Studies, vol. 43, no. 1, Jan. 2019, pp. 68–76.

Yen, Alan L. "Entomophagy and Insect Conservation: Some Thoughts for Digestion." Journal of Insect Conservation, vol. 13, no. 6, Dec. 2009, pp. 667–670.