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SFS Article
Impossible Meat

With our society seemingly obsessed with food and all its latest trends, it can be hard to keep up as practitioners. Albeit, regardless of where you're from, you have likely heard of the new "meatless burger" trend. From fancy restaurants, to the classic fast-food joints, the "meatless burger" phenomenon is unforgivingly breaking food norms in its attempt to become a staple in our unapologetically American style of eating. Honing-in on the Mecca of this alternative meat, the infamous, "Impossible Burger" emerges. Comments about this meat alternative seem to fall on both ends of the spectrum with some alluding to the idea that it is now "healthy" to consume burgers daily if "Impossible meat" is used as a patty, and others stating, "this product is just another "rubbish" processed food, when compared to meat, and is extremely unhealthy." The truth is, there are no right or wrong answers when it comes to this product, because it hasn't been on the market long enough for rigorous scientific research to be conducted.

Being knowledgeable on this topic is crucial for dietetic practitioners, considering it is a popular food trend, and also a food with the potential for a multi-faceted impact on the food system. In other words, one cannot simply judge this product based on nutritional composition, but must also consider the environmental, and economic aspects as well.

Nutritional Composition

Impossible meat is known to have taste and succulence synonymous to a beef burger. Since the patty is comprised of ingredients derived from plants, soy protein isolate to be exact, the marketing “buzz-words” that can be used are infinite. Therefore, much like the word “natural” which has little regulation in the food industry, the unregulated word “plant-based” is becoming popular as well. When it comes to comparing nutritional qualities, specifically macro-nutritional content of a 4oz. “Impossible Burger” patty to a 4oz. 80/20 beef patty, there are only slight differences. The “Impossible Burger” has over 250mg more sodium and 2g more saturated fat, with trivial (<2g) differences in protein and carbohydrate content. However, unlike a traditional beef burger, the impossible burger has 3g of fiber per serving, and is fortified with a significant percentage of the DV of certain vitamins and minerals including Vitamin B12 (130%), Folate(30%), Thiamine (2,350%), Riboflavin (30%), Niacin(35%), and Iron (25%).¹ For vegetarians, this alternative meat is a sufficient source of heme iron that was scientifically created through a process involving soybean DNA and genetically engineered yeast.²

Environmental Sustainability

We are witnessing the environmental effects of climate change, including reduced biodiversity, water shortages, and increased severity of natural disasters. The beef industry is a major contributing factor to climate issues. That quarter-pound beef patty takes over 6 pounds of grains and forage, 50 gallons of water for irrigation and drinking, 74 square feet of land, and over 1,000Btus of fossil fuel energy for feed production and transport. McDonald’s alone sells around 70 burgers a second, that’s a whopping 42,336,000 burger patties a week.³ On the other hand, the mission of “Impossible Foods” is “to replace the use of animals as a food-production

technology, globally, by 2035.” With ingredients derived from plants, (Soy, coconut oil, sunflower oil, starch, yeast extract, methylcellulose, etc.) it’s not unfathomable to see that without the vast use of land, water, and greenhouse gases, they have a near 90% smaller carbon footprint than a beef burger.²

Economic Sustainability

Again, the multi-faceted nature of this product requires an understanding of the economic implications, from a consumer standpoint, as well as from an occupational standpoint. Currently, there are over 700 cattle ranchers across the United States, and over 500,000 people employed in the \$100 billion-dollar beef industry, exporting beef to over 100 countries.⁵ In contrast, Impossible Foods employs 400 people, and exports to 3 countries. From a consumer perspective, the price of the two products varies. At a grocery store, a 12oz. pack of “Impossible Meat” retails for close to \$9.00 and an Impossible Whopper sandwich sells for \$5.99. While an average pound of conventional ground beef sells for \$4.00 and a Whopper sandwich for \$4.19.¹ However, it is important to note that “Impossible Meat” is a fairly new product, so the cost may be linear with production needs as demand increases.

The dietetics profession prides itself on being able to proficiently deliver evidenced-based information when speaking to clients, delivering presentations, working with community members, and discussing new products on the market. Therefore, it is important to analyze the benefits or implications of that product as a whole, and how it plays a part in our food system, rather than just by its nutritional composition. Food ethics can be seen as an umbrella that incorporates nutrition, environment, consumerism, culture, and economics. Being knowledgeable in these different realms of the food system is vital in ensuring professional versatility and strength to understanding one’s potential societal impact as a dietitian.

Citations

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