

Chapter 55

Normality, Naturalness, Necessity, and Nutritiousness of the New Meat Alternatives

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ABSTRACT

In the West, meat is acceptable, tasty, delicious, palatable, and enjoyable. It has a well-established position in the consumers' food habits shaping the taste of the affluent eating culture and accepted as normal, natural, necessary, and nutritious. Although recent scientific evidence recognizes that meat has a high negative environmental impact, there is still lack of attention on the fact that we live on a planet with limited resources which need to be preserved. Part of this is a transition to more sustainable consumption habits and diets. This chapter examines the social readiness and acceptability of new meat alternatives as normal, natural, necessary, and nutritious amongst Gen Y and Gen Z consumers. It concludes that a reduction in meat consumption should be an essential part of creating a more sustainable diet in light of the projected increase of the world population, expected human health benefits, and improved environmental wellbeing of the planet.

INTRODUCTION

In this day and age, consumption, and especially meat consumption, has moved beyond its primary utilitarian function of serving basic human needs. The culture of the wealthiest societies is imbued with the idea of excessive meat consumption as absolutely normal part for everyone's equal opportunities to have abundant access to meat protein, often taken for granted and constantly fulfilling consumers' voracious appetites. Over the past fifty years, global meat production and consumption have increased five to ten-fold and the trends are expected to rise by 2050 (Ritchie & Roser, 2018). In a Western diet

DOI: 10.4018/978-1-7998-5354-1.ch055

type, the prevalent excessive, unsustainable meat eating is based on consumption levels from daily to at least 4–5 days a week (Bogueva, Marinova, & Raphaely, 2017). In a wealthy country like Australia, meat consumption has reached 116 kg per person a year (Ritchie & Roser, 2018). Such consumption levels are environmentally harmful and have major repercussions on several related global crises linked with water, climate, and energy (Steinfeld, Gerber, Wassenaar, Castel, Rosales & de Haan, 2006).

It is indeed indisputable that all serious environmental problems the world is facing today, including climate change, resource depletion, degradation of the planet's ecosystems, biodiversity depletion, and pollution of air, water and soil, are human-made (Cook, Oreskes, Doran, Anderegg, Verheggen, Maibach, ... Green, 2016; Raphaely & Marinova, 2016; Springmann, Mason-D'Croz, Robinson, Garnett, Godfray, Gollin, ... Scarborough, 2016; Myers, Gaffikin, Golden, Ostfeld, Redford, Ricketts ... Osofsky, 2013; Steinfeld, Gerber, Wassenaar, Castel, Rosales & de Haan, 2006) and connected with our consumption and production patterns. The Earth's ecosystems cannot survive without urgent changes in human behaviour.

The environmental problems are further compounded with health issues caused by people's voluntarily dietary choices of high animal protein intake. This leads to early mortality risk (Sarich, 2013), higher incidence of heart disease (Quintana Pacheco, Sookthai, Wittenbecher, Graf, Stübel, Johnson ... Kühn, 2018), diabetes (Mari-Sanchis, Gea, Basterra-Gortari, Martinez-Gonzalez, Beunza, & Bes-Rastrollo, 2016; Bernard, Levin, & Trapp, 2014), cancer (Lippi, Mattiuzzi, & Cervellin, 2016), including colon cancer (Singh & Fraser, 1998; Giovannucci, Rimm, Stampfer, Colditz, Ascherio, & Willett, 1994), prostate cancer (Dagnelie, Schuurman, Goldbohm, & Van den Brandt, 2004; Giovannucci, Rimm, Colditz, Stampfer, Ascherio, Chut, & Willett, 1993; Kolonel, 1996), breast cancer (Carroll & Braden, 1985), and obesity (You & Henneberg, 2016). Future dietary change directions need to be identified to reduce the burden of diseases and predisposing factors.

There is a pressing need for re-evaluation of consumer dietary choices. As the effects from meat consumption and production are detrimental, humanity's long-term survival prospects are dependent on shifting to alternative proteins, including new plant-based meat alternatives, emerging insect or algae-based foods and lab-grown meat products (Schmidinger, Bogueva, & Marinova, 2018). Meat alternatives will have to play an essential role in replacing meat products or supplementing them, so that people consume less animal-based meat. The market for new meat alternatives is still developing. Those producing and promoting these new products are trying to influence consumers by portraying the new meat alternatives as good, sustainable options, with the hope to establish them as regular food choices.

This chapter aims to fill in the gap in understanding consumer attitudes toward what is normal, natural, necessary and nutritious in relation to meat alternatives. It also aims to explore the future prospects for their acceptability.

BACKGROUND

From soy-based tofu to chopped nuts, almond and peanut meatless meat, plant-based blood and lab-grown steaks, science continues to work to take the animal out of the flesh. It is not about culinary delights, experiments, or something special, but about looking for global solutions to global problems. According to data gathered by the Food and Agriculture Organization of the United Nations, by 2050 the world's population will grow by 34 per cent reaching 9.1 billion and will require a 70 per cent increase in food production (FAO, 2009). Scientists are trying to find food alternatives that will save humankind from starvation and feed the next generation of humans because most of the world's population is estimated

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