

## COMMENTARY

# The Gendered Health and Environmental Impacts of a Meat Culture

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The global shift to intensive livestock farming has forced many small Canadian farming operations to close, as well as increased the industry's reliance on technology. Intensive livestock farming is characterized by large-scale housing of livestock relative to land area and the use of high-efficiency mechanized methods, as well as regular use of antibiotics, hormones, and other synthetic drugs that increase productivity.<sup>[1]</sup> Many intensive practices not only compromise animal well-being,<sup>[2-4]</sup> but are also damaging to the environment and have health implications for humans – particularly women and girls.

The livestock industry has been identified as a major contributor to the most serious environmental problems, including land degradation, loss of biodiversity, water shortage, water and air pollution, and climate change.<sup>[5]</sup> The adverse effects of these ecological shifts are likely to be gendered given the connection between poverty and vulnerability to environmental changes – with women as a group being poorer and having less formalized power than men.<sup>[6,7]</sup> For example, women in developing countries are more likely to be affected by environmental degradation, as it is their livelihoods that revolve around using and managing natural resources such as firewood, forest products, and water for food preparation and production.<sup>[6,7]</sup>

In addition to environmental hazards, intensive meat production has also been linked to serious health problems and safety risks for humans.<sup>[2]</sup> New approaches to meat production rely heavily on unskilled workers who generally work part-time for low wages, and have few health benefits.<sup>[8]</sup> These positions are most often held by women, immigrants, racialized groups, and workers with low levels of education – who, because of their social and economic positions in society, experience barriers to accessing health care services and hold very little power within the meat production industry to increase health and safety on the job.

Women and girls face heightened health and safety risks from changes in both the scale and method of meat production. Within the meat industry, women are typically relegated to cutting and wrapping. The physical acts associated with these jobs require small repetitive movements, which can result in strain injuries such as carpal tunnel syndrome. Although serious and debilitating, these chronic conditions are more frequently minimized or disregarded by employers than injuries related to more physically intensive labour, typically performed by men.<sup>[9]</sup> Consequently, many women working in the meat production industry fail to receive proper medical attention for job-related injuries. Furthermore, the prevalence of women in jobs that require the handling of meat also makes them more susceptible to coming in contact with toxic chemicals, which have been linked to increased risks of breast cancer.<sup>[10]</sup>

In addition to meat production practices, the consumption of meat and its products appear to affect women and men differently. Research has shown that women and girls are susceptible to health problems associated with hormones and drugs used to artificially accelerate livestock growth and production. For example, eating meat that contains high levels of estrogen has been linked to endometriosis and early menarche, as well as increased risk of breast, cervical, and uterine cancers in women.<sup>[11]</sup> While we know very little about the effects of the consumption of chemically enhanced meat on the health and well-being of boys and men, there is some evidence to suggest that environmental estrogens decrease sperm count and may cause infertility in men.<sup>[12]</sup>

In addition to synthetic drugs and hormones, the consumption of contaminated meat is also harmful. In particular, pregnant women, the very young, the elderly (the largest percent being women) and those with weakened immune systems are at a heightened risk of contracting food-borne infections caused by tainted meat products – such as in the case of the 2008 listeriosis outbreak at an Ontario meat processing plant.<sup>[13]</sup> Processed meats – such as those infected at Maple Leaf with listeria bacteria – are at an increased risk of contamination because they combine meat sources, which requires more handling than, for example, a cut of meat from a single animal.<sup>[14]</sup> During the outbreak, women were at a greater risk of listeria infection because they were more likely to live in places, such as retirement and nursing homes, which received the processed meat.<sup>[15]</sup> In fact, many of the women who died as a result of the listeriosis contamination were elderly women.

The health effects of consuming contaminated or chemically enhanced meat and women's roles in the meat industry are often overlooked in meat production policies and practices. Without explicit research attention to sex and gender in the relationship between health and meat production and consumption, we may be underestimating the impact that dietary patterns and food production have on the health and well-being of girls and women, as well as boys and men.

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