BIOTECHNOLOGY: A TOOL TO ENHANCE SUSTAINABLE PRODUCTION OF ANIMAL-SOURCED FOODS

Biotechnology refers to technologies and products that harness the cellular and biomolecular processes of living organisms to help advance human health, improve animal health and welfare, enhance animal products, and provide environmental and conservation benefits (1).

Rationale:

Nearly 795 million people throughout the world are hungry and lack food security (2). The United Nations Food and Agriculture Organization (FAO) predicts that 60% more animal-sourced foods will be needed to meet the growing global demand for meat, milk, and eggs (3). In North America, production technologies enable farmers and ranchers to produce more animal-source foods with greater efficiency and less land, water, and greenhouse gases, thereby, minimizing the environmental footprint of food production (4).

Application of biotechnology to food production has been a controversial issue for some consumers. However, consumer resistance to biotechnology may be waning. A comprehensive survey of more than 97,000 people from 26 nations revealed that about 95% of people are either neutral or fully supportive of using technology to produce their food (4). In addition, in the U.S., two-thirds of those surveyed agree that the overall healthfulness of food is more important than the use of biotechnology to produce food (5).

ASAS accepts the use of biotechnologies to meet the growing demand for sustainable production of animal-source foods. ASAS recommends that decisions and regulations regarding the use of biotechnology in the production of animal-source foods should be based upon, and informed by, sound scientific evidence. ASAS supports consumers' rights to make decisions based on their individual values, emotions, or ethics in choosing animal source foods from a variety of management systems. ASAS supports farmers' or ranchers' rights to use biotechnologies to increase the efficiency of food production and conserve natural resources.

Objectives:

- ASAS endorses the importance of research, including the development of new biotechnologies and innovative solutions to address the grand challenge of providing abundant, safe, nutritious, and affordable animal-source foods to feed the growing global population.
- ASAS endorses the use of rational, science-based policies and regulations to support research on agricultural biotechnologies, including the production, marketing, and global trade of plant and animal products derived from the use of biotechnology.
- ASAS members are a trusted and credible source of unbiased, scientific information on the use of biotechnology to produce meat, milk, and eggs.
- ASAS members have experience delivering educational programs on animal biotechnology and are willing to share their knowledge with the public.
- ASAS encourages funding for research to discover new knowledge about livestock and poultry production and

educational programs to transfer this information to farmers and ranchers.

References:

1. https://www.bio.org/articles/what-biotechnology Accessed 15June2015.
2. FAO, IFAD and WFP. 2015. The State of Food Insecurity in the World 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress. Rome, FAO. http://www.fao.org/3/a4ef2d16-70a7-460a-a9ac-2a65a533269a/i4646e.pdf Accessed 22June2015.
3. 2011. World Livestock 2011: Livestock in Food Security. Rome. http://www.fao.org/docrep/014/i2373e/i2373e.pdf
4. Capper, J.L., and D.E. Bauman. 2013. The Role of Productivity in Improving the Environmental Sustainability of Ruminant Production Systems. Annu. Rev. Anim. Biosci. 1:9.1-9.21.
5. Simmons, J. 2011. Technology's role in the 21st Century: Making safe, affordable and abundant food a global reality. http://www.elanco.com/pdfs/2011_11068_three-rights-white-paper-revision_ai11224.pdf Accessed 15June2015.
6. Food & Health Survey 2015. International Food Information Council Foundation. http://www.foodinsight.org/2015-food-health-survey-consumer-research Accessed 15June2015.

Developed by the ASAS Public Policy Committee and adopted by the ASAS Board of Directors on August 28, 2015.