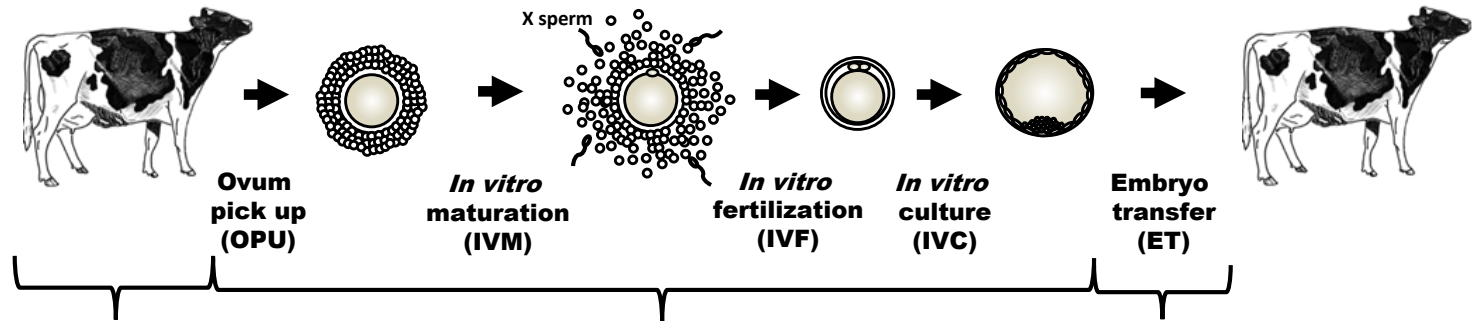


Research

Development of novel *in vitro* production (IVP) system in dairy cows



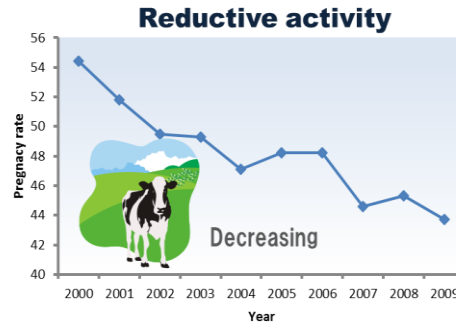
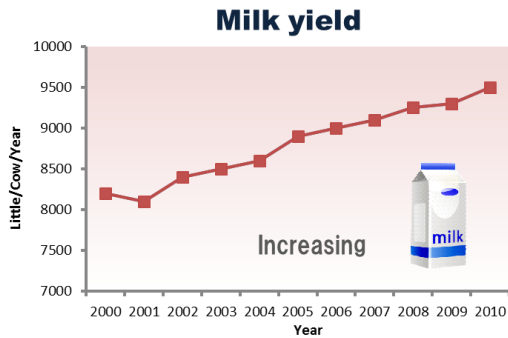
Optimal management of donor cow

Efficient production of IVP embryos

Selection of viable embryos

To practical use IVP-ET in production of dairy cows

Introduction



Low production efficiency of in vivo derived embryos

Decrease in milking efficiency

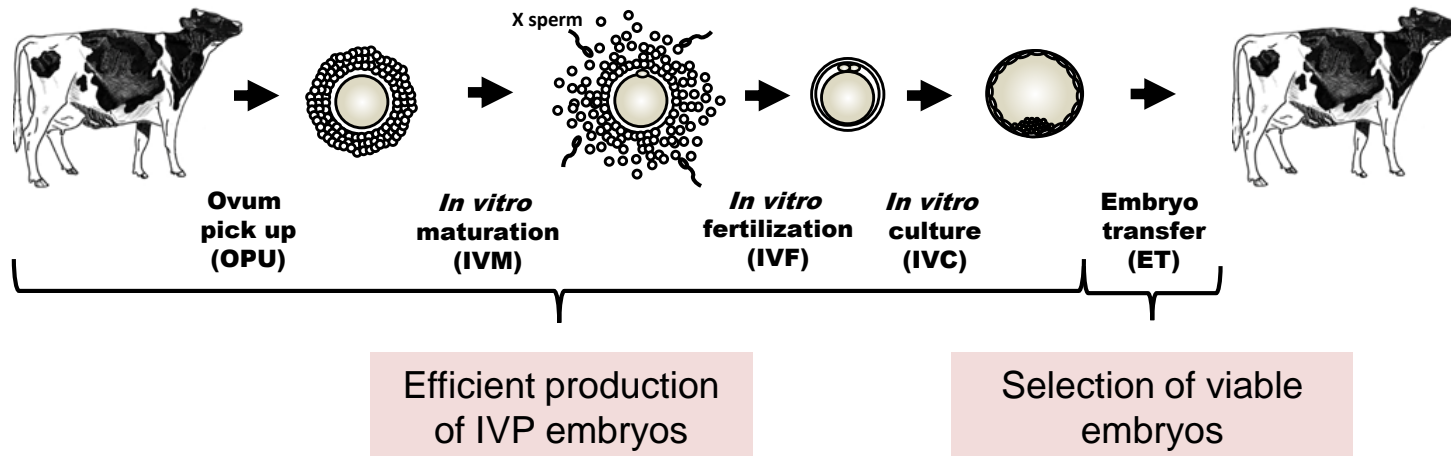
Low efficiency of offspring production

Economic loss in dairy farmer

Problem: Decrease in reproductive efficiency associated with high milk production

Reason: Negative energy balance (NEB), Changes in nutrition and management etc.

In vitro production (IVP) of bovine embryos

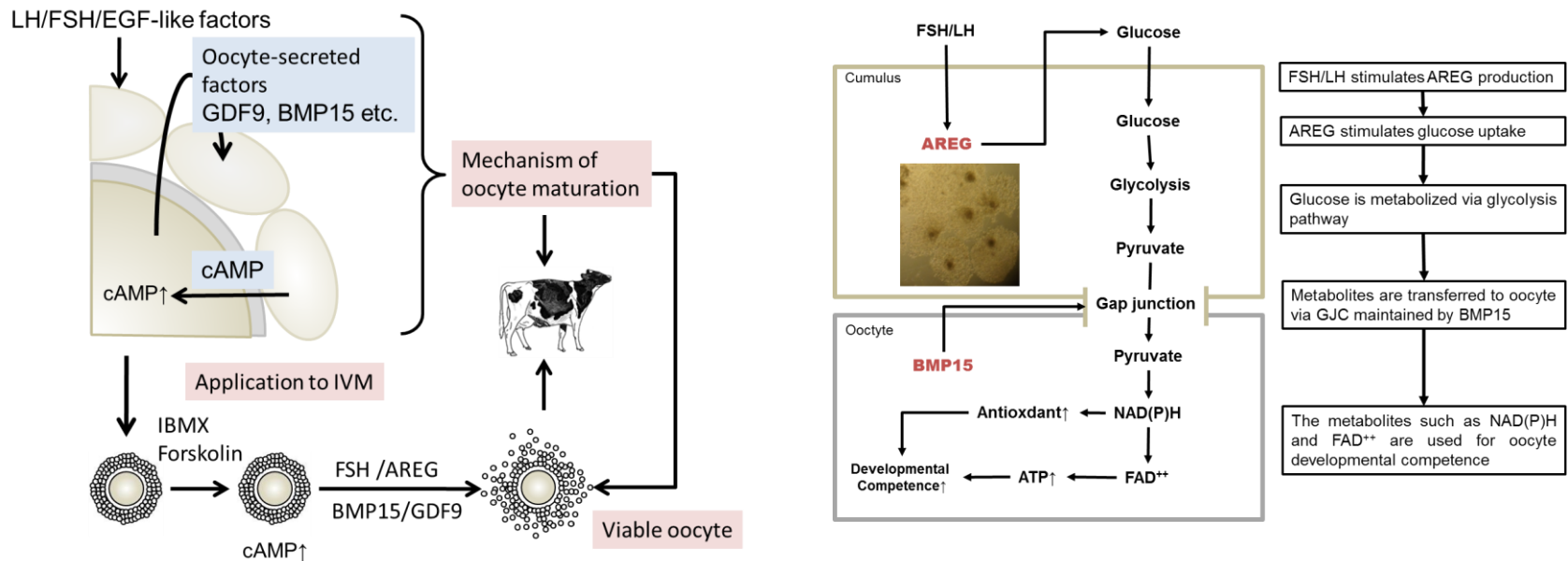


Development of novel IVP system in dairy cows

How do oocytes acquire the viability during IVM?

Basic research: Understand the mechanism of oocyte maturation in cattle

Applied research: Development of novel IVM system



What are viable oocytes and embryos?

Basic research: Identify the difference between viable and no-viable embryos

Applied research: Novel system for selecting healthy IVP embryos

