



moraes@ualberta.ca

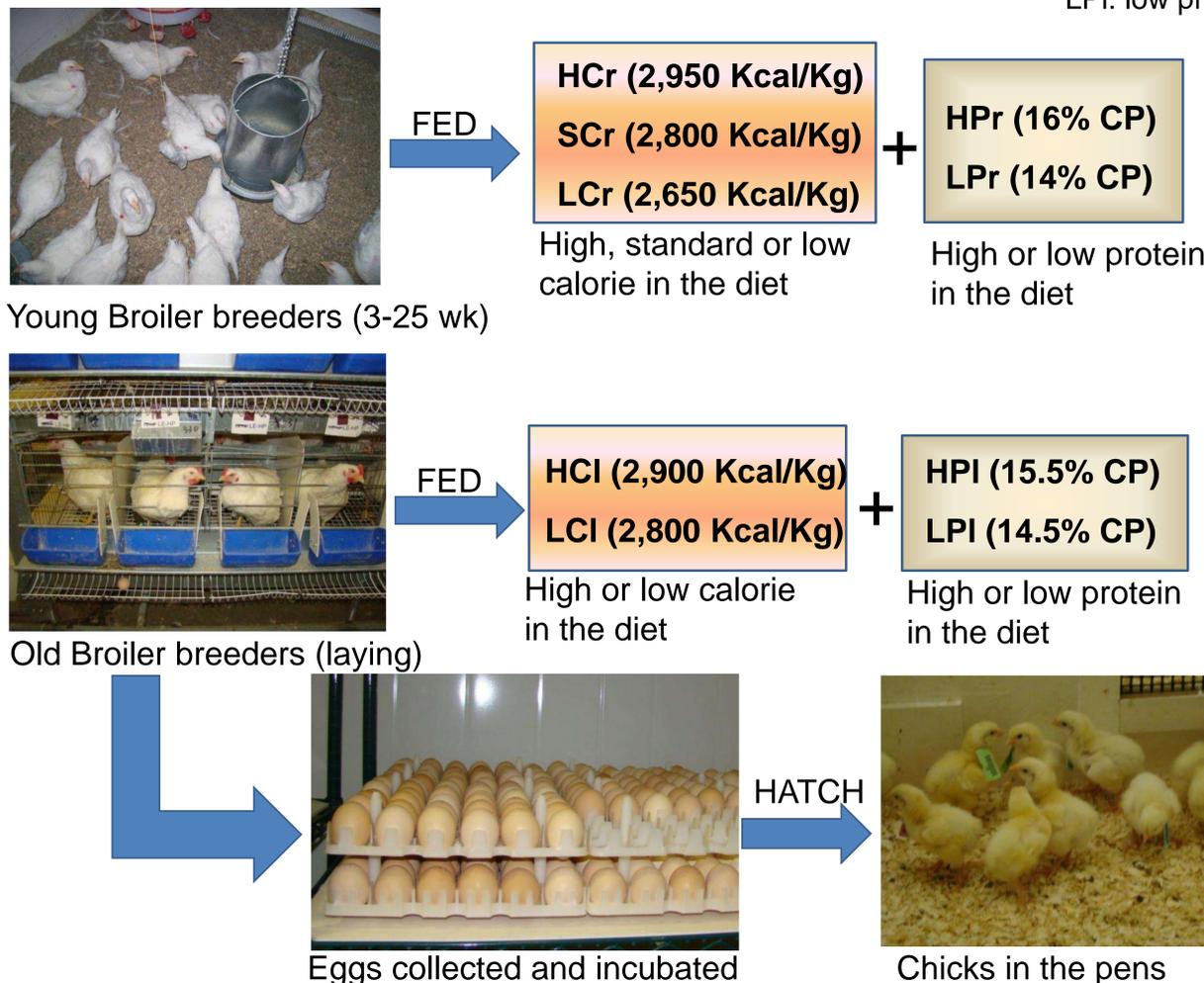
How to feed the mom for a great broiler breast.

TGV Moraes, A Pishnamazi, ET Mba, RA Renema, MJ Zuidhof
Poultry Research Centre, University of Alberta, Canada,

DID YOU KNOW?

- Protein restriction during pregnancy of rats altered postnatal growth and appetite of the offspring [1].
- Chinese native chickens fed 10% protein had offspring with heavier breast compared to offspring from hens fed 15% protein [2].
- Protein and energy in dam nutrition can alter the carcass fat and protein deposition of offspring at slaughtering and processing [3].

SUMMARY OF THE EXPERIMENT



WHAT DID WE FIND?

Figure 1. Maternal dietary protein during laying and sex of the offspring on breast

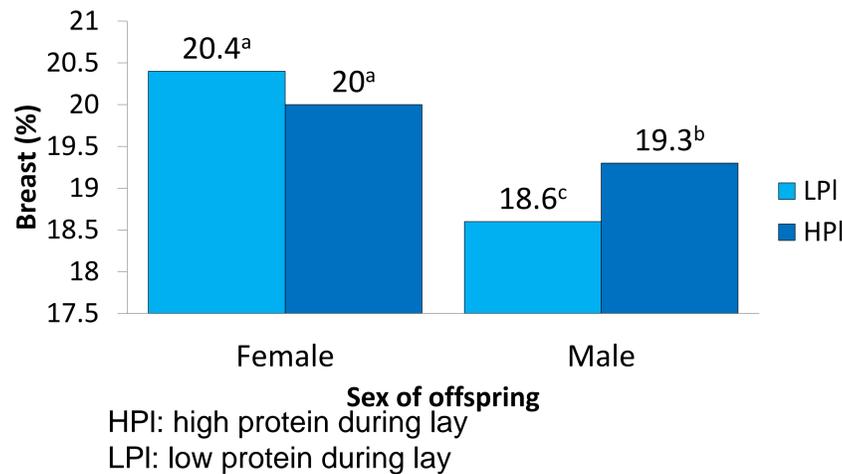
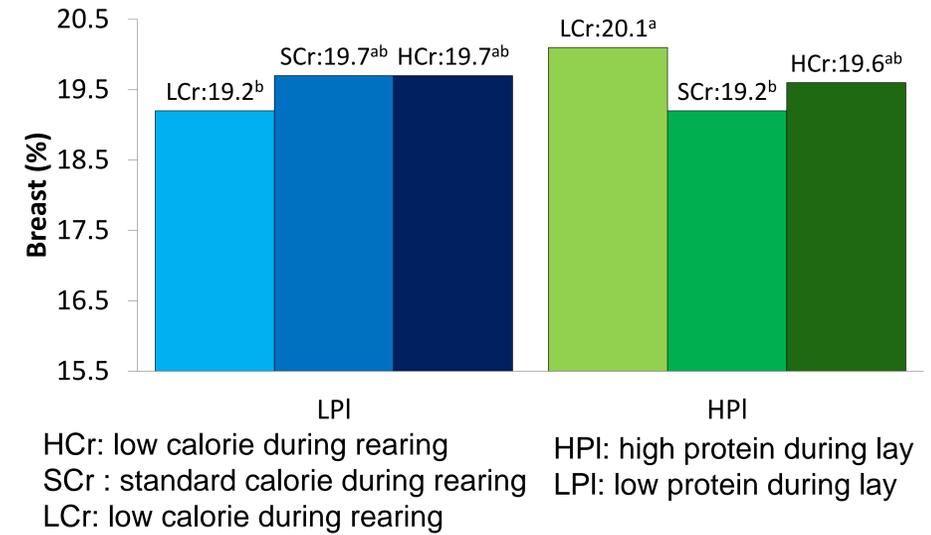


Figure 2. Maternal calorie level early in life and protein during lay on breast muscle of the offspring



WHAT DOES THAT MEAN?

- High protein in maternal laying phase diets increased breast yield of male progeny.
- Male and female broiler breast muscle yield depended on the maternal diet.
- Broiler breeders that were fed low calories early in life (rearing) and high protein during lay had good breast muscle yield.

ACKNOWLEDGEMENTS

PRC colleagues and poultry unit staff.



REFERENCES

- [1] Zambrano et al., 2006.
- [2] Rao et al., 2009.
- [3] Spratt and Leeson, 1987.