

# Effect of protected sodium butyrate and nutrient concentration on early phase of broilers

M. Puyalto<sup>1</sup>, C. Sol<sup>1</sup>, J.J. Mallo<sup>1</sup> and M.J. Villamide<sup>2</sup>

<sup>1</sup>NOREL S.A., Madrid, Spain; <sup>2</sup>Dpt. Producción Agraria. Universidad Politécnica de Madrid, Madrid, Spain

## 1. INTRODUCTION

The benefits of the use of protected sodium butyrate on animal health and performance has been widely described in the literature. Sodium butyrate has shown to improved the digestibility of energy (5.8%) and protein (4.7%) in broilers (Mallo et al., 2011)

In this context, a study was conducted to compare the effect of **GUSTOR N'RGY** (sodium butyrate protected with sodium salts of palm fatty acids distillates) with diets of three different nutrient concentration on broilers growth performance

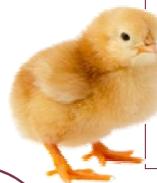
## 2. MATERIAL AND METHODS

**Animals:** 252 Cobb 1-day-old males broiler chickens. The study lasted 21 d

**Basal diet:** wheat, barley and soybean meal

There were 6 replicates/treatment in a 3 x 2 factorial design:

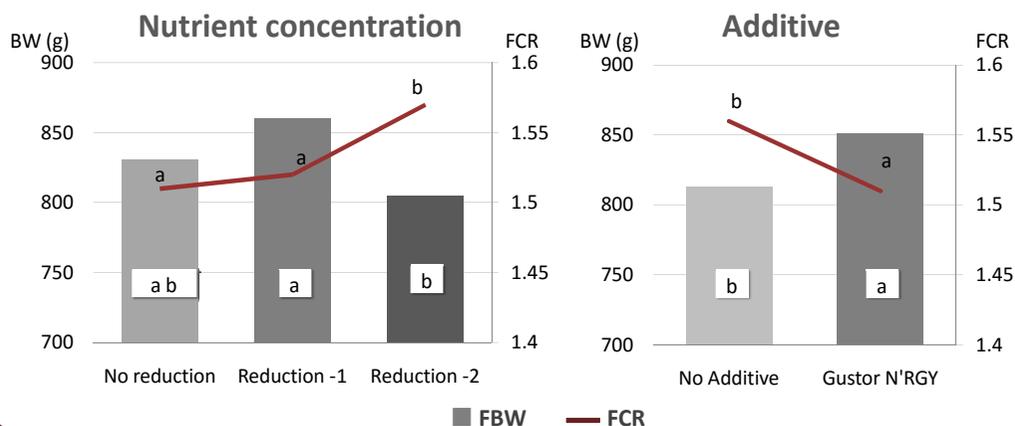
Treatments	No additive	Additive (1Kg/t)
3,000 Kcal AMEn/Kg; 11.6 g/kg dig Lys	CON	N'RGY
- 60 Kcal AMEn/Kg; -2.3% of AA	CON -1	N'RGY -1
-120 Kcal AMEn/Kg; - 4.6% of AA	CON -2	N'RGY -2



## 3. RESULTS

### Final Body Weight and FCR (21 d)

Grafic 1 and 2. Effect of Nutrient Concentration and Aditive addition on FBW and FCR



There were no differences with the interaction of nutrient concentration\*additive. In general, animals fed diets with the inclusion of **Gustor N'RGY** had higher body weight (4.6%) and better FCR (3.2%) than CONTROL

Data were analyzed by 2-way ANOVA using the GLM procedure of SAS

## 4. CONCLUSIONS

It can be concluded that the reduction of energy and amino acids reduce animal performance on its second step, and that the use of **GUSTOR N'RGY** is able to improve the results of performance in the early phase of chickens