

# INRAE

## ➤ Summer Course

Feed Efficiency in Meat Sheep  
An example of dataset



*This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement n°772787*

## ➤ INRAE facilities

### Recording of feed intake

#### Bourges experimental unit

- Dairy goats
- Meat sheep



#### La Fage experimental unit

- Dairy sheep
- Meat sheep



H<sub>2</sub>O and BW



concentrate



forage



12 pens of ~ 20 animals



48 Individual troughs



## ➤ INRAE dataset

At the experimental INRAE unit in Bourges



« old-fashion » Automatic Concentrate Feeder

Have been used at INRAE from the early 1990s until 2021.

Each visit is recorded : in duration and quantity

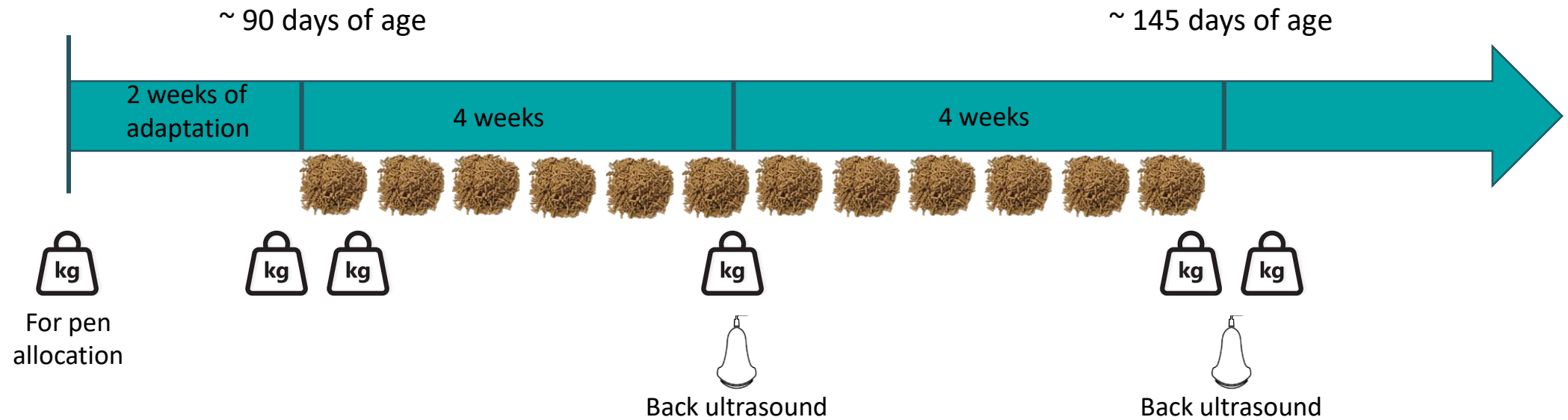
→ Daily feed intakes



## ➤ INRAE dataset

### Protocol

~75 days of age



Without feed recording : national protocol to select on meat traits in main meat sheep breeds.  
At least : 50 lambs phenotyped in the same batch.

# ➤ INRAE dataset

## Structure of the dataset

951 Animals phenotyped from 2009 to 2016

### PERFORMANCE TABLE

Body weights Start and  
End of the control

Muscle depth at half  
and end of the control

Backfat thickness at half  
and end of the control

sex	year	pen	rearing	BW_S	BW_E	ADG	MD_HC	MD_EC	BFT_HC	BFT_EC	numero_animal
M	2010	7	3	35.85	55.1	320.8	2.45	2.63	5.7	6.1	3016
M	2010	3	3	37.7	57.35	327.5	2.76	2.92	5.5	6.1	3017
M	2010	6	3	29.45	49.35	331.7	2.68	2.75	6.5	6.9	3018
M	2010	6	3	32.05	51.95	331.7	2.9	2.94	6.6	7.5	3019
M	2010	5	3	37.7	59.15	357.5	2.48	2.62	6.5	7.1	3020
M	2010	6	3	30.8	48.95	302.5	2.37	2.7	5.8	6.2	3021
M	2010	3	2	42.35	64	360.8	2.89	2.79	7.3	8.2	3023
M	2010	5	3	36.6	54.55	299.2	2.37	2.61	6.3	6.2	3025

Litter size \* rearing  
mode \* nb reared

# ➤ INRAE dataset

## Structure of the dataset

ACF TABLE

date_s	heure_s	Quantity ingested per visit qtecons	Duration of the visit durcons	numero_animal
03DEC09	37517347	279	720	3016
03DEC09	37529695	170	278	3016
03DEC09	37530976	111	160	3016
03DEC09	37535715	149	384	3016
03DEC09	37546688	165	423	3016
03DEC09	37547133	31	121	3016
03DEC09	37550779	151	468	3016
03DEC09	37563005	132	565	3016
03DEC09	37571003	120	256	3016
03DEC09	37577357	124	369	3016
04DEC09	37584856	140	320	3016

→ One observation per visit



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