



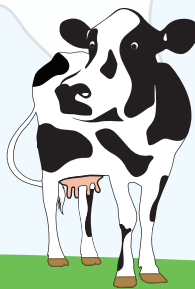
# METHAGENE

## THE MENACE OF COW BURPS

Breeding environment-friendly cows

### METHAGENE FOCUS (CH<sub>4</sub>)

- ✓ Determining factors
- ✓ Best proxies
- ✓ Recording
- ✓ Breeding

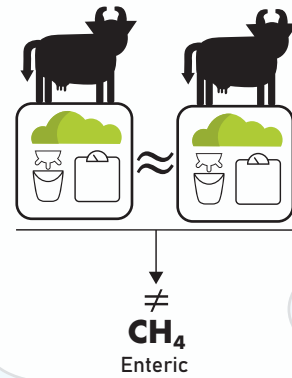


Methane (CH<sub>4</sub>) is a greenhouse gas (GHG) that contributes to climate change.

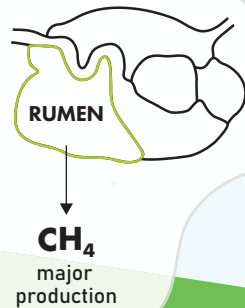
With sufficient data, genetic selection could reduce this emission.

[WWW.METHAGENE.EU](http://WWW.METHAGENE.EU)

- ✓ CH<sub>4</sub> is heritable (10-40%)
- ✓ CH<sub>4</sub> intensities reduced in last decades
- ✓ Selection reduces CH<sub>4</sub> production



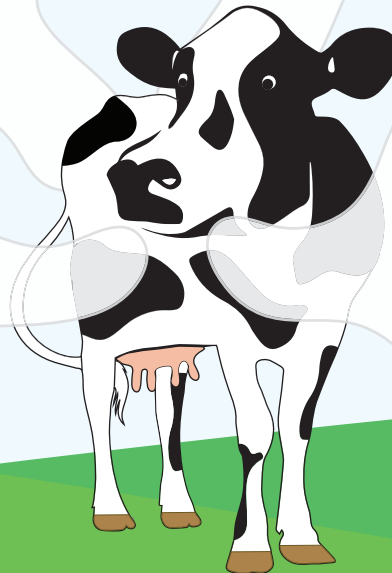
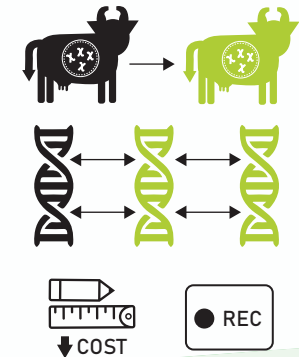
The diagram illustrates the pathways of methane ( $\text{CH}_4$ ) production. At the top,  $\text{CH}_4$  production is shown branching into two main sources: FEED and DIGESTION. Below FEED, there are three rows of green cloud-like shapes, with an arrow pointing down to  $\uparrow \text{CH}_4$  g/day. Below DIGESTION, there are three rows of green cloud-like shapes, with an arrow pointing down to  $\downarrow \text{CH}_4$  per kg milk.



- ✓ Each method has its own specifications
- ✓ Significant underlying agreement between methods

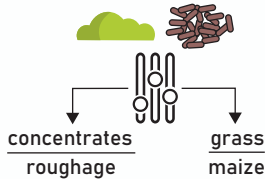
METHOD	ROBUST	COST	THROUGHPUT	INTRUSIVE	ACCURACY
Respiration chamber	👍	👎	👎	👎	👍
GreenFeed	👍	👎	👎	👍	👍
SF <sub>6</sub>	👍	👎	👎	👎	👍
Sniffer methods (CH <sub>4</sub> /CO <sub>2</sub> )	👍	👍	👍	👍	👎

- ✓ Feed intake
- ✓ Diet composition
- ✓ Rumen
- ✓ Milk composition
- ✓ Hindgut
- ✓ Animal itself

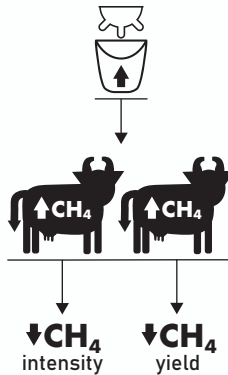


## ENVIRONMENT-FRIENDLY COW RECIPE

### ✓ Optimum diet



### ✓ Higher milk yield



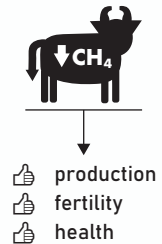
### ✓ Optimal rumen microbial population



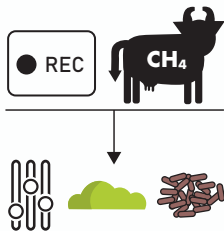
### ✓ Higher feed efficiency



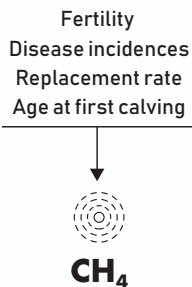
### ✓ The best bull



### ✓ Record her methane output in a non-invasive way



### ✓ No system inefficiencies



## CONTACT DETAILS

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