

Practical guides Sustainability series



HealthyLife Promoting resilience and longevity to reduce carbon footprint of milk

HealthyLife principles have been shown through Life Cycle Assessment (LCA) to have the potential to decrease the carbon footprint (CO2e) per kg fat protein corrected milk (FPCM) by 5%.* An LCA is a methodology used to assess the carbon footprint of milk production by considering the entire life cycle of the cow.

What is HealthyLife?

The HealthyLife platform is designed to support resilience and longevity in dairy cow production systems leading to improved health and welfare, increased Lifetime Daily Yield and reduced carbon emissions. The primary focus of the HealthyLife program is on the transition to lactation phase, often where most problems occur, and supporting that cow to achieve her optimal 5th lactation. Research has demonstrated that the likelihood of achieving the next lactation increases by one single intervention directly after calving, supporting that cow to achieve her full potential.



KPIs





How does HealthyLife impact carbon footprint?

Supporting cows through their transition to lactation and beyond gives a clear sustainable return, through robust, resilient and high performing cows. This allows Lifetime Daily Yield to be optimised, which is key to improving efficiency in dairy farming and reducing carbon footprint.

From a baseline scenario when applying HealthyLife principles we can achieve:

Example farm	Baseline	HealthyLife
Age at 1st calving (months)	25.5	25.5
Replacement rate (%)	30	20
Milk production (litres)	9926	9926
Milk fat (%)	4.43	4.53
Milk protein (%)	3.61	3.71
CO2e reduction (%)		5% vs. baseline

HealthyLife principles can achieve a 5% reduction in carbon footprint

Improved efficiency, productivity and reduction in carbon footprint are achieved by:

- Healthy animals that milk well
- Fewer animals
- Less feed
- Reduced enteric emissions
- Improved longevity

Example of how HealthyLife interventions can improve carbon footprint by 5% by emissions category:



trouw nutrition

a Nutreco company

* Trouw Nutrition sought to assess the potential environmental implications of innovative feed strategies and health solutions for milk production, with the dual objectives of enhancing animal health and reducing environmental impact. An LCA model was developed following ISO standards (14040:2006, 14044:2006) and guidelines from IDF (2022), PEF Guide (2019), PEFCR of dairy products (EDA, 2018), PEFCR of animal feed (FEFAC, 2020) and related references.

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