

# WHAT IS FIBER ENERGY BY DLF?



***DLF Fiber Energy is a quality standard given to forage varieties with increased dNDF.***

**D**igestible **N**eutral **D**etergent **F**iber (dNDF) is a benchmark for Fiber digestibility and palatability. DLF forages with the Fiber Energy badge are all tested and evaluated to have overall increased Fiber digestibility year after year.

### **dNDF Explained:**

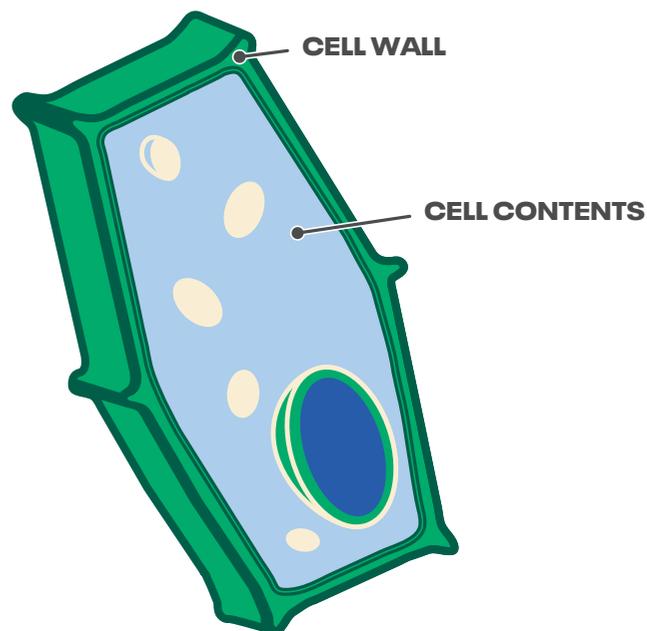
In the simplest terms, plant cells are made up of two components, the cell wall and the cell contents.

Cell contents are made up of highly digestible components: proteins, crude fats, starch, and sugars, and cannot be improved upon. DLF instead turns its attention to the determining factor for digestibility: the cell wall. The cell wall is not very digestible, and it is comprised of **cellulose**, **hemicellulose** and **lignin**. Lignin is indigestible to livestock, so we cannot improve the digestibility of that component. Therefore, DLF's focus area to improve on forage digestibility lies within the complex problem of improving the palatability of cellulose and hemicellulose.

Cellulose, hemicellulose, and lignin combined together is what we refer to here as Neutral Detergent Fiber (NDF). The digestibility of this Fiber is referred to as dNDF and is what we call here at DLF; Fiber Energy.

### **Fiber Energy:**

Through breeding, screening, and lab analysis, our DLF research teams can identify the varieties that have been developed to have high cell wall digestibility - we call them DLF Fiber Energy varieties. Animals that consume our forage varieties with the Fiber Energy logo are eating the same amount of forage, but with higher digestibility, leading to increased feed uptake and higher animal production rates. Simply put, your animals are eating the same amount as before, but absorbing more nutrients and therefore, producing more milk and meat.



## **EQUATION:**

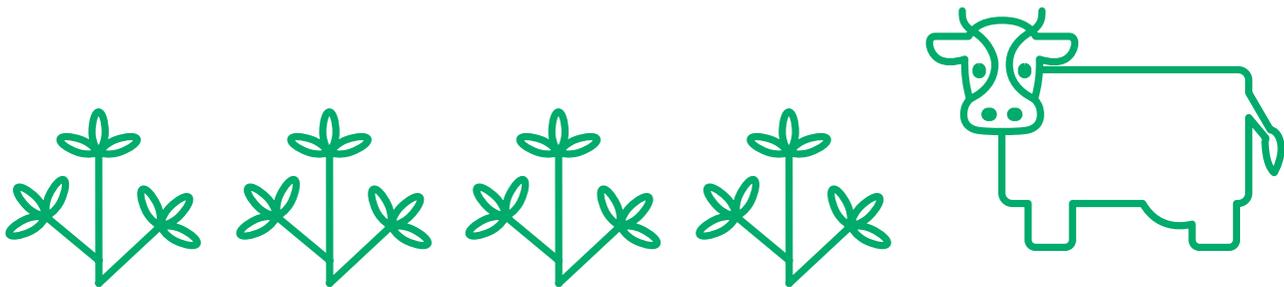
**1% increase in Fiber digestibility (DNDF) = + 0.25 litres milk per cow per day, or 24g of live weight gain per day.**

It's a simple equation for growers, and DLF takes care of the backend research. The global demand for meat and milk is high, and as the world's population increases exponentially, the demand of tomorrow will be even higher, so trust in DLF's vetted Fiber Energy varieties!



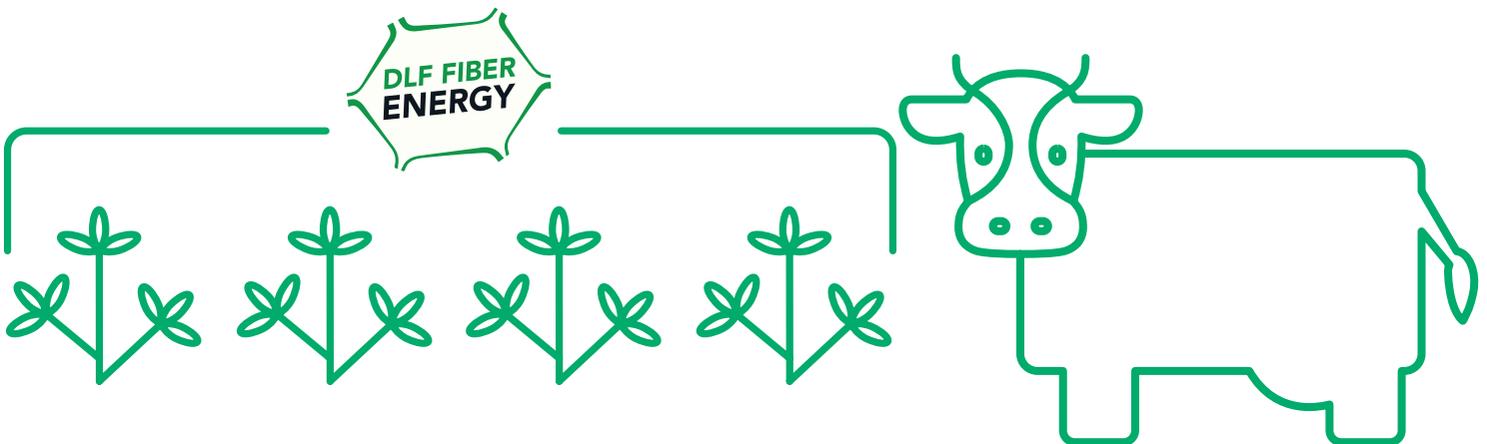
# FIBER ENERGY IN SIMPLE TERMS:

*Forages without Fiber Energy badge:*



**YOUR NORMAL MILK OR WEIGHT YIELD**

*Forages with Fiber Energy badge:*



**AT LEAST**

**+0.25 LITRES OF MILK PER DAY OR  
+24G OF LIVE WEIGHT GAIN PER DAY**