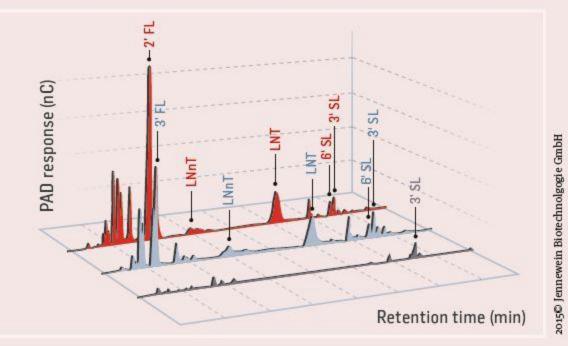
NATURAL OCCURRENCE AND CONCENTRATION

Human secretor

Human non-secretor

Cow



The structural diversity and high concentration of complex oligosaccharides in human milk is unique, and most of these molecules are not found in the milk of dairy animals.

The natural concentration of HMOs ranges from approximately 20–25 grams per liter in the colostrum falling to 5–20 grams per liter over the course of lactation. In contrast to bovine milk, human milk has a much higher concentration of carbohydrates and a significantly lower concentration of proteins.

More than 150 different HMOs have been identified in human milk, ranging from trisaccharides up to much more complex structures comprising 12 or more sugar residues. These diverse structures explain the many different functions of HMOs.