

# Poulin Grain Equine Feed Carbohydrate Contents

FEED	ESC	STARCH	NSC
<b>E-TEC®</b>			
Balancer	6.6	7.3	13.8
ONE	4.2	10.0	14.2
Senior Low Carb	4.3	10.8	15.1
Carb Safe	2.9	2.5	5.4
Fibre-Max	9.3	7.4	16.7
<b>EQUI-PRO®</b>			
Performance	6.3	22.9	29.2
PerforMax	6.7	20.8	27.5
Pro-Max	6.0	15.8	21.8
Premium Senior	6.5	18.3	24.7
Mare & Foal	6.4	31.3	37.7
East Coast Race	11.2	19.9	31.1
<b>DECADE®</b>			
Endurance Sport	5.5	24.1	29.5
Challenger	5.6	20.7	26.3
Sprint Extreme	9.8	22.5	32.3
Race Formula	12.1	13.5	25.6
Complete Diet	5.9	12.1	18.0
Stable Sweet Tradition	8.3	18.3	26.6
<b>Forage Extender™</b>			
Pellet Mini Bites	3.0	6.3	9.3
Pellet Super Bites	3.0	6.3	9.3

## NON STRUCTURAL CARBOHYDRATES (NSC):

Non-Structural Carbohydrates are the plant cell contents. These can be broken into: Ethanol Soluble Carbohydrate (ESC) and Starch. The NSC value is roughly equivalent to ESC + Starch. Nutritionists are slowly removing the term NSC and are only referring to ESC and starch.

## ETHANOL SOLUBLE CARBOHYDRATES (ESC):

These carbohydrates are extracted from a sample using an ethanol solution. This represents the sugar fractions that directly influence blood sugar, and the most rapidly fermentable fructans. The simple sugars are digested in the small intestine and fructans are fermented in the hind gut.

## STARCH:

A polysaccharide composed of repeating glucose units. Starch is found mainly in cereal grains and is typically digested in the small intestine. Starch is also found in small amounts in many types of hay.

## RECOMMENDATIONS FOR HORSES AT RISK FOR OR SUFFERING FROM CARBOHYDRATE SENSITIVE DISORDERS:

Disorders include: Obesity, Insulin Resistance, Cushings, Laminitis, Metabolic Syndrome, Tying-Up, and Grain Intolerance.

- Evaluate the ESC + Starch value of the total ration (forage, concentrate & supplements).
  - Sick Horse: ESC + Starch < 10%
  - Non-Sick Sensitive Horse: ESC + Starch <10%
  - Concerned Customer: ESC + Starch <12%

**If you would like help balancing an appropriate diet for your horse including forage carbohydrate analysis, contact your local Poulin Grain representative.**

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