Table A1. Fatty acid composition of starch sugar by-product

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Fatty acid (%) | Chemical  formula | Mean | Median | SD | MIN | MAX | Skewness1 | 2×SES2 | Kurtosis3 | 2×SEk4 |
| Caprylic acid | C8:0 | 0.02 | 0.01 | 0.01 | 0.01 | 0.04 | 0.86 | 1.55 | -0.91 | 3.10 |
| Lauric acid | C12:0 | 0.02 | 0.01 | 0.02 | 0.01 | 0.05 | 1.03 | 1.55 | -0.78 | 3.10 |
| Myristic acid | C14:0 | 0.09 | 0.08 | 0.02 | 0.05 | 0.11 | -0.65 | 1.55 | 1.54 | 3.10 |
| Palmitic acid | C16:0 | 40.11 | 40.24 | 5.85 | 30.52 | 47.28 | -0.44 | 1.55 | -1.37 | 3.10 |
| Margaric acid | C17:0 | 0.19 | 0.15 | 0.08 | 0.06 | 0.30 | -0.16 | 1.55 | 1.45 | 3.10 |
| Stearic acid | C18:0 | 3.24 | 3.13 | 0.65 | 2.24 | 4.23 | 0.06 | 1.55 | -0.86 | 3.10 |
| Arachidic acid | C20:0 | 0.29 | 0.27 | 0.06 | 0.19 | 0.37 | 0.05 | 1.55 | -0.67 | 3.10 |
| Behenic acid | C22:0 | 0.11 | 0.08 | 0.07 | 0.03 | 0.24 | 1.21 | 1.55 | 0.54 | 3.10 |
| Palmitoleic acid | C16:1 | 0.17 | 0.14 | 0.07 | 0.09 | 0.28 | 0.86 | 1.55 | -1.17 | 3.10 |
| Magaoleic acid | C17:1 | 0.11 | 0.11 | 0.06 | 0.04 | 0.22 | 0.29 | 1.55 | -1.04 | 3.10 |
| Oleic acid | C18:1n9 | 14.01 | 13.96 | 1.43 | 11.9 | 16.62 | 0.22 | 1.55 | 0.07 | 3.10 |
| Linoleic acid | C18:2n6 | 36.77 | 33.45 | 7.10 | 29.1 | 49.26 | 0.53 | 1.55 | -1.12 | 3.10 |
| Linolenic acid | C18:3n3 | 1.87 | 1.39 | 0.86 | 0.96 | 3.33 | 0.67 | 1.55 | -1.10 | 3.10 |
| Arachidonic acid | C20:4n6 | 0.25 | 0.28 | 0.11 | 0.05 | 0.37 | -0.79 | 1.55 | -0.76 | 3.10 |

DM, dry matter; CP, crude protein; EE, ether extract; NDF, neutral detergent fiber; ADF, acid detergent fiber; WSC, water soluble carbohydrate; GE, gross energy; SD, Standard deviation; MIN, Minimum value in database, MAX, Maximum value in database.

1The degree of asymmetry of a distribution around its mean where 0 ± 2 × Ses = normal.

2SEs, square root (6/n).

3Characterizes the relative peakedness or flatness of a distribution, where 0 ± 2 × Sek = normal.

4SEk, square root (24/n)