Correlations between the total antioxidant activity and biochemical parameters of cow milk depending on the number of somatic cells
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Table S1. The main biochemical parameters and component composition of milk samples from 33 black-and-white cows (group 1).

| №  | TFP, % | TP1, % | TN2, % | TAWSA mg/g | Lactose, % | SNF, % | TDM, % | FP, °C | pH, units | SCC, 10⁸ cell/ml |
|----|--------|--------|--------|------------|-----------|--------|--------|-------|---------|-----------------|
| 1  | 4.25   | 3.07   | 3.28   | 13.50      | 4.97      | 9.11   | 13.38  | -0.534| 6.68    | 27              |
| 2  | 6.21   | 2.88   | 3.12   | 6.80       | 4.79      | 8.64   | 14.96  | -0.533| 6.5     | 39              |
| 3  | 4.95   | 3.22   | 3.46   | 9.40       | 4.94      | 9.21   | 14.23  | -0.552| 6.61    | 64              |
| 4  | 4.32   | 3.12   | 3.35   | 13.30      | 5.04      | 9.18   | 13.57  | -0.538| 6.63    | 131             |
| 5  | 6.49   | 2.75   | 2.99   | 11.00      | 4.72      | 8.61   | 15.12  | -0.544| 6.54    | 52              |
| 6  | 4.78   | 3.52   | 3.75   | 16.00      | 4.85      | 9.46   | 14.33  | -0.543| 6.52    | 153             |
| 7  | 6.62   | 3.89   | 4.13   | 21.30      | 4.59      | 9.66   | 16.32  | -0.546| 6.47    | 98              |
| 8  | 4.64   | 3.03   | 3.24   | 15.20      | 5.32      | 9.39   | 13.98  | -0.555| 6.64    | 33              |
| 9  | 5.61   | 4.49   | 4.75   | 19.40      | 5.05      | 10.8   | 16.57  | -0.562| 6.84    | 120             |
| 10 | 4.83   | 3.23   | 3.45   | 13.30      | 4.6       | 8.82   | 13.71  | -0.539| 6.58    | 192             |
| 11 | 5.03   | 2.65   | 2.89   | 27.91      | 5.04      | 8.67   | 13.83  | -0.527| 6.61    | 37              |
| 12 | 7.01   | 3.21   | 3.49   | 22.07      | 4.61      | 8.99   | 16.1   | -0.537| 6.51    | 43              |
| 13 | 4.71   | 3.62   | 3.84   | 17.83      | 4.88      | 9.57   | 14.35  | -0.529| 6.53    | 194             |
| 14 | 4.98   | 3.46   | 3.68   | 16.24      | 4.95      | 9.57   | 14.57  | -0.539| 6.56    | 165             |
| 15 | 3.62   | 3.04   | 3.23   | 16.19      | 5.01      | 9.11   | 12.68  | -0.536| 6.58    | 44              |
| 16 | 4.77   | 2.83   | 3.08   | 16.45      | 4.93      | 8.77   | 13.62  | -0.543| 6.56    | 182             |
| 17 | 4.43   | 3.38   | 3.62   | 14.73      | 5         | 9.49   | 14     | -0.536| 6.55    | 82              |
| 18 | 5.31   | 3.06   | 3.3    | 18.24      | 4.96      | 9.12   | 14.52  | -0.540| 6.55    | 54              |
| 19 | 4.88   | 2.84   | 3.04   | 13.78      | 4.73      | 8.6    | 13.45  | -0.536| 6.61    | 46              |
| 20 | 4.93   | 3.13   | 3.38   | 17.31      | 4.82      | 9.02   | 14.11  | -0.538| 6.51    | 73              |
| 21 | 4.98   | 2.67   | 2.9    | 15.81      | 4.99      | 8.7    | 13.68  | -0.543| 6.61    | 49              |
| 22 | 5.64   | 3.06   | 3.31   | 20.92      | 5.04      | 9.21   | 14.82  | -0.556| 6.6     | 68              |
### Table S2. The main biochemical parameters and component composition of milk samples from 15 black-and-white cows (group 2).

| №  | TFP, % | TP1, % | TN2, % | TAWSA mg/g | Lactose, % | SNF, % | TDM, % | FP, °C | pH, units | SCC, 10³ cell/ml |
|----|--------|--------|--------|------------|------------|--------|--------|-------|----------|-----------------|
| 1  | 4.37   | 3.42   | 3.63   | 8.90       | 4.61       | 9.06   | 13.51  | -0.519| 6.57     | 243             |
| 2  | 5.28   | 3.18   | 3.41   | 11.90      | 4.87       | 9.14   | 14.56  | -0.541| 6.61     | 348             |
| 3  | 5.52   | 2.96   | 3.19   | 13.10      | 5.23       | 9.26   | 14.8   | -0.556| 6.67     | 291             |
| 4  | 5.36   | 3.78   | 4.03   | 18.99      | 4.28       | 9.15   | 14.61  | -0.529| 6.42     | 408             |
| 5  | 4.50   | 3.45   | 3.69   | 17.44      | 4.74       | 9.35   | 13.97  | -0.538| 6.52     | 244             |
| 6  | 4.84   | 3.31   | 3.53   | 15.83      | 4.67       | 9.1    | 13.98  | -0.536| 6.51     | 208             |
| 7  | 3.61   | 3.19   | 3.42   | 14.35      | 4.84       | 9.11   | 12.79  | -0.533| 6.5      | 231             |
| 8  | 5.04   | 3.61   | 3.84   | 17.30      | 4.89       | 9.63   | 14.68  | -0.544| 6.53     | 478             |
| 9  | 4.84   | 3.16   | 3.4    | 17.08      | 4.93       | 9.12   | 14     | -0.542| 6.5      | 452             |
| 10 | 5.27   | 3.18   | 3.39   | 18.36      | 4.79       | 9.06   | 14.29  | -0.552| 6.6      | 325             |
| 11 | 3.91   | 3.48   | 3.73   | 16.73      | 4.76       | 9.37   | 13.44  | -0.538| 6.52     | 297             |
| 12 | 3.83   | 3.38   | 3.63   | 10.65      | 4.91       | 9.33   | 13.21  | -0.551| 6.56     | 499             |
| 13 | 4.75   | 3.33   | 3.57   | 10.46      | 5.07       | 9.46   | 14.25  | -0.542| 6.45     | 299             |
| №  | TFP, % | TP1, % | TN2, % | TAWSA mg/g | Lactose, % | SNF, % | TDM, % | FP, °C | pH, units | SCC, 10^3 cell/ml |
|----|--------|--------|--------|------------|------------|--------|--------|--------|-----------|-----------------|
| 1  | 4.68   | 4.06   | 4.27   | 17.70      | 3.51       | 8.58   | 13.3   | -0.526 | 6.5       | 687             |
| 2  | 5.61   | 3.39   | 3.61   | 15.30      | 4.73       | 9.24   | 14.88  | -0.551 | 6.49      | 940             |
| 3  | 5.08   | 2.87   | 3.06   | 15.40      | 4.55       | 8.41   | 13.53  | -0.542 | 6.54      | 903             |
| 4  | 6.35   | 3.49   | 3.72   | 13.60      | 4.01       | 8.61   | 15.09  | -0.546 | 6.47      | 973             |
| 5  | 6.46   | 3.55   | 3.78   | 16.70      | 4.15       | 8.78   | 15.28  | -0.547 | 6.42      | 556             |
| 6  | 5.37   | 4.57   | 4.81   | 14.80      | 4.55       | 10.36  | 15.82  | -0.552 | 6.65      | 933             |
| 7  | 4.06   | 3      | 3.24   | 16.09      | 5.14       | 9.18   | 13.27  | -0.538 | 6.58      | 658             |
| 8  | 4.74   | 3.4    | 3.63   | 17.37      | 4.72       | 9.2    | 14.03  | -0.540 | 6.56      | 910             |
| 9  | 6.08   | 4.47   | 4.75   | 16.46      | 4.85       | 10.6   | 16.76  | -0.551 | 6.68      | 681             |
| 10 | 4.76   | 2.48   | 2.71   | 22.25      | 4.43       | 7.92   | 12.72  | -0.519 | 6.52      | 542             |
| 11 | 5.35   | 3.62   | 3.85   | 14.24      | 4.46       | 9.3    | 14.72  | -0.544 | 6.42      | 809             |
| 12 | 4.86   | 3.42   | 3.62   | 13.89      | 4.97       | 9.46   | 14.35  | -0.544 | 6.67      | 973             |
| 13 | 6.84   | 4.26   | 4.54   | 14.79      | 4.57       | 10.07  | 17.02  | -0.541 | 6.49      | 903             |

**Table S3.** The main biochemical parameters and component composition of milk samples from 13 black-and-white cows (group 3).

| №  | TFP, % | TP1, % | TN2, % | TAWSA mg/g | Lactose, % | SNF, % | TDM, % | FP, °C | pH, units | SCC, 10^3 cell/ml |
|----|--------|--------|--------|------------|------------|--------|--------|--------|-----------|-----------------|
| 1  | 5.00   | 4.16   | 4.39   | 13.00      | 4.05       | 9.35   | 14.47  | -0.519 | 6.58      | 3149            |
| 2  | 4.92   | 3.47   | 3.7    | 5.80       | 4.92       | 9.48   | 14.54  | -0.542 | 6.56      | -*              |
| 3  | 5.13   | 2.38   | 3.6    | 12.50      | 4.47       | 8.93   | 14.18  | -0.545 | 6.52      | -*              |
| 4  | 6.29   | 3.97   | 4.25   | 17.80      | 3.63       | 8.68   | 15.06  | -0.524 | 6.54      | 1567            |
| 5  | 6.97   | 3.35   | 3.55   | 11.30      | 4.63       | 9      | 14.01  | -0.535 | 6.62      | 1326            |
| 6  | 5.34   | 4.24   | 4.48   | 14.20      | 4.19       | 8.47   | 13.88  | -0.517 | 6.44      | 7493            |

**Table S4.** The main biochemical parameters and component composition of milk samples from 12 black-and-white cows (group 4).
|   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 4.71 | 3.49 | 3.72 | 20.30 | 4.3 | 8.83 | 13.61 | -0.537 | 6.42 | 4803 |
| 8 | 4.69 | 3.18 | 3.45 | 16.90 | 4.15 | 8.44 | 16.27 | -0.517 | 6.36 | 2614 |
| 9 | 6.28 | 2.94 | 3.18 | 18.73 | 4.69 | 8.72 | 14.08 | -0.541 | 6.47 | 1358*|
| 10 | 4.86 | 3   | 3.21 | 13.08 | 4.87 | 8.99 | 13.89 | -0.538 | 6.65 | 1004 |
| 11 | 3.80 | 3.57 | 3.83 | 18.68 | 5.04 | 9.79 | 13.69 | -0.554 | 6.57 | 2466 |
| 12 | 4.21 | 2.79 | 3.01 | 12.70 | 4.71 | 8.44 | 12.71 | -0.536 | 6.52 | 4910 |

Notes: total fat percentage (TFP); true protein percentage (TP1); total nitrogen percentage (TN2); lactose; solids-not-fat (SNF); total dry matter (TDM); freezing point (FP); somatic cell count (SCC).