Table S1. Sequences and accession numbers of primers used for the quantitative Real-Time PCR.

| Target genes | Sequences (Forward/Reverse) | Accession Number | Ta (°C) | Product length (bp) |
|--------------|----------------------------|------------------|---------|---------------------|
| Cyp1A1       | GCAGCCACCTTGGGAATCTCT / AGGTCTTGACCACCCAGAAT | NM_214412.1 | 65.3 | 126                 |
| Cyp1A2       | TCCTGAGGAAAATGGTCCAG / GTATCAAATCCGGTCCTCAA | NM_001159614.1 | 61.1 | 175                 |
| Cyp2A19      | GCCACTTTTCGACTGGCTCT / CTCCTCGATACCCCGCTTG | NM_214417.1 | 64.8 | 129                 |
| Cyp2E1       | CTGGAGGCACCTCAGGAAGAC / CTTCAGGCGAGGTAGCGTAG | NM_214421.1 | 64.9 | 230                 |
| Cyp3A29      | ATACGCGCCTACCTGGGAAGC / TACTAGGTGGGGTGATGG | NM_214423.1 | 64.7 | 83                  |
| GAPDH        | GTCGGTTGTGGATCTGACCT / AGCTGCAAGTGTGGTGTT | NM_001206359.1 | 64.6 | 210                 |

1Cyp = Cytochrome; GAPDH = Glyceraldehyde 3-phosphate dehydrogenase, used as housekeeping gene; Ta = Annealing temperature; bp = base pairs
Table S2. Effect of dietary hydrolysable tannin and PUFA level on feeding behavior of grower-finisher pigs.

| Item                          | H       | L       | H       | L       | SEM | T     | P     | T × P |
|-------------------------------|---------|---------|---------|---------|-----|-------|-------|-------|
| Visits of the feeder, n       |         |         |         |         |     |       |       |       |
| Total                         | 704     | 922     | 591     | 821     | 59.8| 0.09  | < 0.01| 0.92  |
| Daily                         | 7.3     | 9.5     | 6.0     | 8.4     | 0.64| 0.08  | < 0.01| 0.91  |
| Time at the feeder, min       |         |         |         |         |     |       |       |       |
| Total                         | 5283    | 5537    | 5396    | 5391    | 174.1| 0.91  | 0.42  | 0.40  |
| Daily                         | 54.3    | 56.9    | 55.3    | 55.2    | 1.95| 0.82  | 0.43  | 0.38  |
| Per visit                     | 7.8     | 6.4     | 9.5     | 6.7     | 0.46| 0.04  | < 0.01| 0.16  |
| Feed intake, g                |         |         |         |         |     |       |       |       |
| Per visit                     | 314     | 232     | 358     | 256     | 21.7| 0.11  | < 0.01| 0.64  |
| Per min                       | 39      | 36      | 38      | 38      | 1.8 | 0.84  | 0.20  | 0.06  |

H = high dietary PUFA level; L = low dietary PUFA level; - = without hydrolysable tannin supplementation; + = with hydrolysable tannin (3%) supplementation. Probability values for hydrolysable tannin supplementation (T), dietary PUFA level (P) and T × P interaction.
Table S3. Effect of dietary hydrolysable tannin supplementation and PUFA level on carcass characteristics determined via dissection and DXA and organ weights of grower-finisher pigs.

| Item                                      | H  | L  | H+ | L+ | SEM | T  | P  | T × P |
|-------------------------------------------|----|----|----|----|-----|----|----|-------|
| Hot carcass weight, kg                    |    |    |    |    |     |    |    |       |
| Carcass yield, %                          | 79.71 | 80.33 | 80.06 | 80.54 | 0.305 | 0.32 | 0.05 | 0.80  |
| Cold Loss, %                              | 1.92 | 1.72 | 2.24 | 1.66 | 0.251 | 0.59 | 0.12 | 0.44  |
| Lean meat, %                              | 58.13 | 58.87 | 58.14 | 56.93 | 0.707 | 0.45 | 0.23 | 0.44  |
| Loin                                      | 27.01 | 26.70 | 26.86 | 26.89 | 0.265 | 0.91 | 0.52 | 0.44  |
| Ham                                       | 18.40 | 18.54 | 18.33 | 17.70 | 0.318 | 0.16 | 0.44 | 0.23  |
| Shoulder                                  | 12.75 | 12.69 | 12.92 | 12.31 | 0.287 | 0.69 | 0.19 | 0.28  |
| Belly                                     | 16.56 | 16.62 | 16.41 | 16.23 | 0.249 | 0.19 | 0.75 | 0.55  |
| Backfat, %                                | 7.35  | 7.09  | 7.14  | 7.42  | 0.374 | 0.84 | 0.98 | 0.43  |
| 10th rib backfat thickness, mm            | 20.49 | 17.04 | 17.65 | 18.01 | 1.346 | 0.40 | 0.17 | 0.09  |
| Subcutaneous fat, %                       | 12.68 | 12.46 | 12.35 | 12.68 | 0.503 | 0.91 | 0.90 | 0.54  |
| Omental fat, %                            | 1.04  | 1.02  | 1.02  | 1.13  | 0.084 | 0.54 | 0.60 | 0.38  |
| DXA measurements                          |     |     |     |     |     |     |     |       |
| Total mass, kg                            | 42.29 | 41.30 | 40.68 | 41.73 | 1.514 | 0.63 | 0.98 | 0.40  |
| Bone mass, kg                             | 1.09  | 1.05  | 1.05  | 1.08  | 0.035 | 0.74 | 0.96 | 0.52  |
| Fat mass, kg                              | 7.48  | 7.09  | 7.16  | 7.56  | 0.578 | 0.88 | 1.00 | 0.45  |
| Lean mass, kg                             | 33.70 | 33.16 | 33.47 | 33.12 | 1.060 | 0.44 | 0.95 | 0.47  |
| Organ weight, g                           |     |     |     |     |     |     |     |       |
| Liver                                     | 1663 | 1643 | 1482 | 1506 | 0.051 | <0.001 | 0.95 | 0.60  |
| Kidney                                    | 320  | 299  | 310  | 306  | 0.011 | 0.88 | 0.24 | 0.39  |
| Testis                                    | 522  | 538  | 490  | 472  | 0.040 | 0.14 | 0.97 | 0.62  |
| Bulbourethral gland                       | 153  | 149  | 134  | 138  | 0.013 | 0.16 | 0.98 | 0.67  |
| Salivary gland                            | 69   | 75   | 71   | 72   | 0.005 | 0.87 | 0.39 | 0.53  |

1 H = high dietary PUFA level; L = low dietary PUFA level; - = without hydrolysable tannin supplementation; + = with hydrolysable tannin (3%) supplementation; DXA = Dual-Energy X-ray Absorptiometry measurements performed in human thick mode. 2 Probability values for hydrolysable tannin supplementation (T), dietary PUFA level (P) and T × P interaction. 3 Weight loss of the hot carcass during chilling at 2°C for 24 h. 4 Sum of denuded shoulder, loin, and ham weight as a percentage of cold carcass weight. 5 Sum of external fat from the shoulder, loin, and ham expressed as a percentage of cold carcass weight. 6 Omental fat weight expressed as a percentage of cold carcass weight.
Table S4. Effect of dietary hydrolysable tannin and PUFA level on meat quality traits of the loin and androstenone, skatole and indole level in the loin and adipose tissue of grower-finisher pigs.

| Item                          | H  | L  | H  | L  | SEM | T  | P  | T × P |
|-------------------------------|----|----|----|----|-----|----|----|-------|
| pH 45 min                     | 6.50 | 6.18 | 6.50 | 6.24 | 0.208 | 0.91 | 0.17 | 0.90 |
| pH 24 h                       | 5.54 | 5.56 | 5.56 | 5.50 | 0.028 | 0.42 | 0.37 | 0.13 |
| Temperature 45 min            | 6.50 | 6.18 | 6.50 | 6.24 | 0.208 | 0.91 | 0.17 | 0.90 |
| Temperature 24 h              | 4.75 | 4.88 | 4.39 | 4.95 | 0.356 | 0.58 | 0.19 | 0.41 |
| Color L*                      | 47.17 | 46.67 | 47.64 | 49.21 | 0.755 | 0.04 | 0.45 | 0.15 |
| Color a*                      | 5.36 | 5.09 | 4.78 | 4.81 | 0.287 | 0.08 | 0.62 | 0.55 |
| Color b*                      | 2.58 | 2.35 | 2.55 | 2.76 | 0.250 | 0.29 | 0.96 | 0.23 |
| Chroma value                  | 5.96 | 5.63 | 5.45 | 5.57 | 0.348 | 0.30 | 0.71 | 0.41 |
| Water-holding capacity, %     | 2.01 | 2.18 | 2.06 | 2.38 | 0.161 | 0.36 | 0.10 | 0.60 |
| Drip loss                     | 5.70 | 6.81 | 5.85 | 5.52 | 0.755 | 0.46 | 0.61 | 0.35 |
| Thaw loss                     | 24.73 | 24.79 | 25.67 | 25.32 | 0.549 | 0.09 | 0.73 | 0.63 |
| Cook loss                     | 31.80 | 32.67 | 33.65 | 33.30 | 0.687 | 0.04 | 0.65 | 0.30 |
| Total loss                    | 8.00<sup>y</sup> | 8.17<sup>y</sup> | 8.85<sup>y</sup> | 7.41<sup>x</sup> | 0.432 | 0.91 | 0.15 | 0.07 |

<sup>x,y</sup> Values within a row with different superscripts tend to differ significantly at P ≤ 0.10.

<sup>1</sup> H = high dietary PUFA level by including 2% soy oil; L = low dietary PUFA supplementation by including 2% tallow; - = without hydrolysable tannin supplementation; + = with hydrolysable tannin (3%) supplementation

<sup>2</sup> Probability values for hydrolysable tannin supplementation (T), dietary PUFA level (P) and T × P interaction

<sup>3</sup> L* = lightness (greater values equal lighter color); r* = Redness (greater values equal redder color); b* = yellowness (greater values equal more yellow color); chroma value (color saturation) = √a*² + b*²
Table S5. DNA purity and quality per each sample.

| Animal | DNA purity | GQN$^1$ |
|--------|------------|---------|
| 8755   | 1.9        | 3.5     |
| 8756   | 1.96       | 4.6     |
| 8758   | 2.07       | 3.1     |
| 8759   | 1.88       | 4.1     |
| 8768   | 2          | 1.9     |
| 8769   | 2          | 2.8     |
| 8771   | 1.89       | 4       |
| 8772   | 1.96       | 5.1     |
| 8781   | 1.96       | 3       |
| 8783   | 1.95       | 3.7     |
| 8786   | 2.05       | 5.2     |
| 8794   | 1.85       | 4.3     |
| 8797   | 1.85       | 3.7     |
| 8799   | 2.01       | 3.8     |
| 8805   | 1.93       | 3.6     |
| 8806   | 2.03       | 4       |
| 8807   | 1.92       | 4.1     |
| 8808   | 2.02       | 3.5     |
| 8812   | 1.96       | 4.4     |
| 8813   | 2.05       | 2.3     |
| 8815   | 1.79       | 4.7     |
| 8820   | 1.85       | 5.1     |
| 8822   | 1.99       | 5.2     |
| 8823   | 2.04       | 4.8     |
| 8826   | 2.13       | 3.2     |
| 8831   | 1.83       | 2.9     |
| 8832   | 2.03       | 4.2     |
| 8835   | 2.2        | 2.9     |
| 8836   | 1.9        | 3.1     |
| 8847   | 1.91       | 2.4     |
| 8848   | 2.09       | 2.9     |
| 8849   | 2.14       | 3.3     |
| 8852   | 2.13       | 5.1     |
| 8853   | 1.86       | 5.3     |
| 8854   | 2.05       | 4.9     |
| 8855   | 2.14       | 5.8     |
| 8860   | 2.07       | 4.9     |
| 8861   | 2          | 6.3     |
| 8862   | 1.82       | 4.7     |
| 8863   | 1.89       | 4.7     |
| 8886   | 2.07       | 3.5     |
| 8888   | 1.94       | 4.9     |
| 8889   | 1.97       | 5.1     |
| 8890   | 1.97       | 3.5     |

$^1$GQN = Genomic Quality Number, to assess the quality of gDNA