

Supplementary Materials 1: Table used to generate data set used for PCA, consisting of band volumes for the 21 electrophoresis bands quantified (from 174 kDa to 9 kDa). Rows represent the 17 dry-heating treatments (temperature (°C) – time (days)), at each of the 8 digestion times (from gast ti to int tf).

| Dry-heating treatment | Digestion sampling time | Electrophoresis band volume (x10 <sup>6</sup> ) |     |     |     |     |     |     |     |    |     |     |    |    |    |    |    |    |    |    |     |    |
|-----------------------|-------------------------|-------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|----|----|----|----|----|----|----|-----|----|
|                       |                         | 174                                             | 164 | 152 | 130 | 121 | 112 | 93  | 71  | 55 | 42  | 41  | 40 | 35 | 32 | 30 | 21 | 18 | 15 | 14 | 10  | 9  |
|                       |                         | kDa                                             |     |     |     |     |     |     |     |    |     |     |    |    |    |    |    |    |    |    |     |    |
| Control               | Gast ti                 | 8                                               | 19  | 8   | 18  | 12  | 12  | 23  | 111 | 65 | 213 | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 28 | 0   | 0  |
| Control               | Gast t+                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 26  | 0   | 45 | 195 | 0   | 0  | 5  | 0  | 10 | 0  | 0  | 0  | 26 | 24  | 0  |
| Control               | Gast t2                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 20  | 0   | 27 | 225 | 0   | 0  | 9  | 0  | 15 | 0  | 0  | 11 | 33 | 48  | 0  |
| Control               | Gast tf                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 12  | 0   | 0  | 124 | 101 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 35 | 70  | 0  |
| Control               | Int ti                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 8   | 0   | 0  | 78  | 78  | 0  | 0  | 0  | 0  | 0  | 4  | 0  | 31 | 57  | 0  |
| Control               | Int t+                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 6   | 0   | 0  | 40  | 64  | 0  | 0  | 0  | 27 | 0  | 51 | 0  | 39 | 64  | 0  |
| Control               | Int t2                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 9   | 0   | 0  | 41  | 61  | 0  | 0  | 0  | 40 | 0  | 61 | 0  | 41 | 62  | 0  |
| Control               | Int tf                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 39  | 54  | 0  | 0  | 0  | 20 | 0  | 34 | 0  | 27 | 41  | 0  |
| 60°C-1d               | Gast ti                 | 77                                              | 16  | 8   | 23  | 13  | 12  | 28  | 89  | 51 | 179 | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 25 | 0   | 0  |
| 60°C-1d               | Gast t+                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 31  | 0   | 31 | 171 | 0   | 0  | 24 | 0  | 8  | 0  | 4  | 0  | 28 | 34  | 0  |
| 60°C-1d               | Gast t2                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 25  | 0   | 24 | 170 | 0   | 0  | 16 | 0  | 14 | 0  | 4  | 10 | 28 | 37  | 0  |
| 60°C-1d               | Gast tf                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 14  | 0   | 0  | 92  | 84  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 30 | 68  | 0  |
| 60°C-1d               | Int ti                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 15  | 0   | 0  | 123 | 81  | 0  | 0  | 0  | 0  | 0  | 7  | 0  | 41 | 72  | 0  |
| 60°C-1d               | Int t+                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 47  | 51  | 0  | 0  | 0  | 37 | 0  | 42 | 0  | 33 | 63  | 0  |
| 60°C-1d               | Int t2                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 46  | 49  | 0  | 10 | 0  | 25 | 0  | 43 | 0  | 31 | 60  | 0  |
| 60°C-1d               | Int tf                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 45  | 59  | 0  | 8  | 0  | 29 | 0  | 53 | 0  | 35 | 54  | 0  |
| 60°C-2d               | Gast ti                 | 39                                              | 25  | 0   | 68  | 0   | 24  | 61  | 129 | 52 | 331 | 0   | 0  | 0  | 0  | 0  | 4  | 0  | 0  | 35 | 0   | 0  |
| 60°C-2d               | Gast t+                 | 10                                              | 0   | 0   | 0   | 0   | 0   | 58  | 0   | 63 | 317 | 0   | 0  | 11 | 0  | 8  | 10 | 6  | 0  | 40 | 37  | 0  |
| 60°C-2d               | Gast t2                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 120 | 0   | 82 | 398 | 0   | 0  | 0  | 0  | 27 | 9  | 15 | 36 | 70 | 148 | 0  |
| 60°C-2d               | Gast tf                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 65  | 0   | 0  | 149 | 130 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 38 | 23  | 51 |
| 60°C-2d               | Int ti                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 18  | 0   | 0  | 72  | 93  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 19 | 67  | 0  |
| 60°C-2d               | Int t+                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 31  | 45  | 0  | 0  | 0  | 32 | 0  | 53 | 0  | 29 | 64  | 0  |
| 60°C-2d               | Int t2                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 10  | 13  | 0  | 0  | 0  | 32 | 0  | 60 | 0  | 22 | 23  | 0  |
| 60°C-2d               | Int tf                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 30  | 28  | 0  | 0  | 11 | 40 | 0  | 94 | 0  | 26 | 6   | 22 |
| 60°C-5d               | Gast ti                 | 6                                               | 10  | 13  | 27  | 17  | 14  | 41  | 82  | 62 | 221 | 0   | 0  | 0  | 0  | 0  | 4  | 3  | 0  | 28 | 0   | 0  |
| 60°C-5d               | Gast t+                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 55  | 0   | 56 | 162 | 60  | 0  | 7  | 0  | 8  | 5  | 6  | 14 | 38 | 62  | 0  |
| 60°C-5d               | Gast t2                 | 0                                               | 0   | 0   | 12  | 0   | 0   | 43  | 0   | 31 | 165 | 0   | 0  | 12 | 0  | 15 | 0  | 0  | 0  | 33 | 65  | 0  |
| 60°C-5d               | Gast tf                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 26  | 0   | 30 | 82  | 104 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 36 | 79  | 0  |
| 60°C-5d               | Int ti                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 38  | 0   | 0  | 97  | 70  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 30 | 51  | 0  |
| 60°C-5d               | Int t+                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 24  | 0   | 0  | 78  | 49  | 0  | 0  | 0  | 29 | 0  | 42 | 0  | 28 | 49  | 0  |
| 60°C-5d               | Int t2                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 14  | 0   | 0  | 56  | 43  | 0  | 0  | 0  | 26 | 0  | 40 | 0  | 27 | 45  | 0  |
| 60°C-5d               | Int tf                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 20  | 35  | 0  | 0  | 20 | 43 | 0  | 90 | 0  | 38 | 54  | 0  |
| 60°C-10d              | Gast ti                 | 14                                              | 26  | 16  | 33  | 20  | 21  | 45  | 98  | 72 | 250 | 0   | 0  | 0  | 0  | 0  | 4  | 8  | 0  | 43 | 0   | 0  |
| 60°C-10d              | Gast t+                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 70  | 0   | 53 | 258 | 0   | 0  | 0  | 0  | 15 | 8  | 23 | 17 | 55 | 102 | 0  |
| 60°C-10d              | Gast t2                 | 0                                               | 0   | 0   | 17  | 0   | 0   | 77  | 0   | 41 | 252 | 0   | 0  | 28 | 0  | 19 | 6  | 0  | 0  | 53 | 34  | 70 |
| 60°C-10d              | Gast tf                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 31  | 0   | 0  | 132 | 84  | 31 | 0  | 0  | 0  | 5  | 4  | 0  | 61 | 119 | 0  |
| 60°C-10d              | Int ti                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 34  | 0   | 27 | 86  | 90  | 0  | 0  | 0  | 0  | 0  | 6  | 0  | 37 | 64  | 0  |
| 60°C-10d              | Int t+                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 14 | 37  | 45  | 0  | 0  | 0  | 56 | 0  | 81 | 0  | 39 | 62  | 0  |
| 60°C-10d              | Int t2                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 14 | 34  | 44  | 0  | 0  | 0  | 56 | 0  | 84 | 0  | 38 | 59  | 0  |
| 60°C-10d              | Int tf                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 44  | 11  | 0  | 0  | 0  | 37 | 0  | 73 | 0  | 30 | 36  | 0  |
| 70°C-1d               | Gast ti                 | 13                                              | 24  | 24  | 51  | 30  | 30  | 66  | 160 | 53 | 393 | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 35 | 0   | 0  |
| 70°C-1d               | Gast t+                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 103 | 0   | 87 | 408 | 0   | 0  | 0  | 0  | 29 | 15 | 12 | 0  | 82 | 116 | 0  |
| 70°C-1d               | Gast t2                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 51  | 0   | 37 | 322 | 0   | 0  | 23 | 0  | 17 | 7  | 6  | 13 | 43 | 30  | 38 |
| 70°C-1d               | Gast tf                 | 0                                               | 0   | 0   | 0   | 0   | 0   | 57  | 0   | 0  | 220 | 263 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 66 | 112 | 0  |
| 70°C-1d               | Int ti                  | 0                                               | 0   | 0   | 0   | 0   | 0   | 23  | 0   | 0  | 108 | 112 | 0  | 5  | 0  | 0  | 0  | 5  | 0  | 32 | 0   | 52 |

|          |         |    |    |    |    |    |    |     |     |     |     |     |   |    |    |    |    |    |    |    |     |     |
|----------|---------|----|----|----|----|----|----|-----|-----|-----|-----|-----|---|----|----|----|----|----|----|----|-----|-----|
| 70°C-1d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 56  | 49  | 0 | 0  | 0  | 36 | 0  | 79 | 0  | 31 | 13  | 28  |
| 70°C-1d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 30  | 30  | 0 | 0  | 10 | 37 | 0  | 94 | 0  | 26 | 0   | 37  |
| 70°C-1d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 22  | 26  | 0 | 0  | 0  | 24 | 0  | 51 | 0  | 18 | 24  | 0   |
| 70°C-2d  | Gast ti | 29 | 18 | 33 | 0  | 0  | 0  | 61  | 91  | 72  | 232 | 0   | 0 | 0  | 0  | 0  | 6  | 8  | 0  | 39 | 13  | 0   |
| 70°C-2d  | Gast t+ | 0  | 0  | 0  | 34 | 0  | 0  | 91  | 0   | 73  | 144 | 86  | 0 | 0  | 0  | 18 | 15 | 13 | 13 | 50 | 37  | 50  |
| 70°C-2d  | Gast t2 | 0  | 0  | 0  | 16 | 0  | 0  | 59  | 0   | 39  | 141 | 64  | 0 | 20 | 0  | 28 | 10 | 20 | 15 | 43 | 31  | 62  |
| 70°C-2d  | Gast tf | 0  | 0  | 0  | 10 | 0  | 0  | 52  | 0   | 24  | 114 | 124 | 0 | 0  | 0  | 0  | 0  | 0  | 18 | 48 | 38  | 62  |
| 70°C-2d  | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 37  | 0   | 0   | 126 | 68  | 0 | 0  | 0  | 0  | 0  | 8  | 0  | 42 | 56  | 0   |
| 70°C-2d  | I0nt t+ | 0  | 0  | 0  | 0  | 0  | 0  | 15  | 0   | 0   | 66  | 65  | 0 | 0  | 0  | 40 | 0  | 60 | 0  | 41 | 60  | 0   |
| 70°C-2d  | I0nt t2 | 0  | 0  | 0  | 0  | 0  | 0  | 17  | 0   | 0   | 64  | 66  | 0 | 0  | 0  | 28 | 0  | 41 | 0  | 36 | 54  | 0   |
| 70°C-2d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 16  | 0   | 0   | 60  | 62  | 0 | 0  | 0  | 25 | 0  | 49 | 0  | 39 | 53  | 0   |
| 70°C-5d  | Gast ti | 19 | 22 | 22 | 39 | 25 | 22 | 35  | 116 | 70  | 253 | 0   | 0 | 0  | 0  | 0  | 8  | 10 | 0  | 49 | 0   | 0   |
| 70°C-5d  | Gast t+ | 0  | 0  | 0  | 20 | 0  | 0  | 82  | 0   | 66  | 251 | 0   | 0 | 17 | 0  | 24 | 0  | 0  | 0  | 58 | 78  | 0   |
| 70°C-5d  | Gast t2 | 0  | 0  | 0  | 24 | 0  | 0  | 77  | 0   | 43  | 192 | 0   | 0 | 18 | 0  | 14 | 4  | 19 | 0  | 33 | 70  | 0   |
| 70°C-5d  | Gast tf | 0  | 0  | 0  | 0  | 0  | 0  | 35  | 0   | 35  | 122 | 118 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 47 | 69  | 0   |
| 70°C-5d  | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 42  | 0   | 13  | 107 | 70  | 0 | 0  | 0  | 0  | 0  | 5  | 0  | 39 | 26  | 47  |
| 70°C-5d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 13  | 0   | 20  | 63  | 56  | 0 | 0  | 0  | 66 | 0  | 77 | 0  | 43 | 68  | 0   |
| 70°C-5d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 14  | 0   | 19  | 63  | 55  | 0 | 0  | 0  | 62 | 0  | 73 | 0  | 40 | 67  | 0   |
| 70°C-5d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 11  | 33  | 47  | 0 | 0  | 0  | 41 | 0  | 65 | 0  | 29 | 41  | 0   |
| 70°C-10d | Gast ti | 22 | 17 | 38 | 31 | 34 | 24 | 45  | 83  | 52  | 181 | 0   | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 28 | 0   | 0   |
| 70°C-10d | Gast t+ | 0  | 0  | 0  | 0  | 26 | 0  | 88  | 0   | 48  | 183 | 0   | 0 | 0  | 0  | 25 | 0  | 0  | 0  | 60 | 49  | 0   |
| 70°C-10d | Gast t2 | 0  | 0  | 22 | 0  | 50 | 0  | 106 | 0   | 50  | 85  | 52  | 0 | 0  | 0  | 23 | 0  | 0  | 0  | 39 | 31  | 60  |
| 70°C-10d | Gast tf | 0  | 0  | 0  | 9  | 0  | 0  | 36  | 0   | 0   | 76  | 69  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 35 | 68  | 0   |
| 70°C-10d | Int ti  | 0  | 0  | 0  | 0  | 10 | 0  | 49  | 0   | 27  | 81  | 61  | 0 | 0  | 0  | 4  | 0  | 9  | 0  | 46 | 64  | 0   |
| 70°C-10d | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 26  | 0   | 40  | 50  | 45  | 0 | 0  | 0  | 40 | 0  | 44 | 0  | 43 | 60  | 0   |
| 70°C-10d | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 102 | 0   | 49  | 67  | 59  | 0 | 0  | 0  | 40 | 0  | 43 | 0  | 36 | 61  | 0   |
| 70°C-10d | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 14  | 0   | 0   | 57  | 34  | 0 | 0  | 0  | 23 | 0  | 34 | 0  | 25 | 40  | 0   |
| 80°C-1d  | Gast ti | 18 | 14 | 17 | 25 | 28 | 15 | 30  | 91  | 41  | 177 | 0   | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 24 | 0   | 0   |
| 80°C-1d  | Gast t+ | 0  | 0  | 0  | 17 | 0  | 0  | 67  | 0   | 63  | 178 | 0   | 0 | 25 | 0  | 16 | 0  | 0  | 0  | 40 | 58  | 0   |
| 80°C-1d  | Gast t2 | 0  | 0  | 0  | 0  | 0  | 0  | 41  | 0   | 44  | 150 | 38  | 0 | 15 | 0  | 15 | 4  | 9  | 12 | 37 | 62  | 0   |
| 80°C-1d  | Gast tf | 0  | 0  | 0  | 0  | 0  | 0  | 29  | 0   | 0   | 106 | 49  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 30 | 60  | 0   |
| 80°C-1d  | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 27  | 0   | 0   | 120 | 88  | 0 | 9  | 0  | 0  | 0  | 8  | 0  | 47 | 71  | 0   |
| 80°C-1d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 47  | 46  | 0 | 0  | 13 | 30 | 0  | 67 | 0  | 40 | 57  | 0   |
| 80°C-1d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 25  | 34  | 0 | 0  | 21 | 41 | 0  | 85 | 0  | 35 | 41  | 0   |
| 80°C-1d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 12  | 0   | 0   | 48  | 48  | 0 | 0  | 0  | 27 | 0  | 43 | 0  | 28 | 36  | 0   |
| 80°C-2d  | Gast ti | 22 | 17 | 39 | 39 | 34 | 24 | 58  | 88  | 59  | 216 | 0   | 0 | 0  | 0  | 0  | 3  | 0  | 0  | 24 | 0   | 0   |
| 80°C-2d  | Gast t+ | 0  | 0  | 0  | 33 | 0  | 0  | 102 | 0   | 68  | 208 | 0   | 0 | 22 | 0  | 15 | 9  | 6  | 11 | 37 | 61  | 0   |
| 80°C-2d  | Gast t2 | 0  | 0  | 0  | 0  | 0  | 0  | 62  | 0   | 51  | 215 | 38  | 0 | 35 | 0  | 29 | 6  | 0  | 15 | 46 | 30  | 50  |
| 80°C-2d  | Gast tf | 0  | 0  | 0  | 9  | 0  | 0  | 50  | 0   | 31  | 95  | 78  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 34 | 70  | 0   |
| 80°C-2d  | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 31  | 0   | 0   | 112 | 85  | 0 | 0  | 0  | 0  | 0  | 5  | 0  | 40 | 62  | 0   |
| 80°C-2d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 11  | 31  | 48  | 0 | 0  | 0  | 50 | 0  | 74 | 0  | 34 | 51  | 0   |
| 80°C-2d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 12  | 30  | 43  | 0 | 0  | 0  | 62 | 0  | 91 | 0  | 47 | 70  | 0   |
| 80°C-2d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 14  | 0   | 21  | 62  | 56  | 0 | 0  | 0  | 63 | 0  | 77 | 0  | 40 | 65  | 0   |
| 80°C-5d  | Gast ti | 44 | 23 | 64 | 49 | 46 | 37 | 85  | 97  | 89  | 239 | 0   | 0 | 0  | 0  | 0  | 3  | 0  | 0  | 35 | 9   | 0   |
| 80°C-5d  | Gast t+ | 0  | 10 | 29 | 75 | 0  | 0  | 190 | 0   | 108 | 294 | 0   | 0 | 0  | 0  | 27 | 16 | 0  | 23 | 60 | 41  | 50  |
| 80°C-5d  | Gast t2 | 0  | 0  | 21 | 57 | 0  | 0  | 158 | 0   | 97  | 266 | 0   | 0 | 0  | 0  | 25 | 15 | 0  | 31 | 55 | 123 | 0   |
| 80°C-5d  | Gast tf | 0  | 0  | 0  | 48 | 0  | 0  | 93  | 0   | 64  | 250 | 0   | 0 | 0  | 0  | 3  | 4  | 0  | 15 | 69 | 116 | 0   |
| 80°C-5d  | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 42  | 0   | 23  | 102 | 67  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 45 | 80  | 0   |
| 80°C-5d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 6   | 0   | 17  | 47  | 35  | 0 | 0  | 15 | 38 | 0  | 61 | 0  | 41 | 65  | 0   |
| 80°C-5d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 4   | 0   | 16  | 42  | 32  | 0 | 0  | 14 | 35 | 0  | 57 | 0  | 39 | 59  | 0   |
| 80°C-5d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 12  | 0   | 19  | 56  | 43  | 0 | 0  | 11 | 29 | 0  | 53 | 0  | 36 | 67  | 0   |
| 80°C-10d | Gast ti | 34 | 27 | 49 | 47 | 42 | 43 | 73  | 121 | 88  | 309 | 0   | 0 | 0  | 0  | 0  | 4  | 4  | 0  | 42 | 5   | 0   |
| 80°C-10d | Gast t+ | 0  | 0  | 16 | 37 | 0  | 0  | 122 | 0   | 99  | 286 | 0   | 0 | 32 | 0  | 20 | 14 | 16 | 18 | 68 | 62  | 42  |
| 80°C-10d | Gast t2 | 0  | 0  | 36 | 0  | 0  | 0  | 93  | 0   | 69  | 136 | 32  | 0 | 24 | 0  | 20 | 73 | 8  | 12 | 39 | 31  | 70  |
| 80°C-10d | Gast tf | 0  | 0  | 0  | 11 | 0  | 0  | 60  | 0   | 27  | 181 | 128 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 50 | 0   | 108 |
| 80°C-10d | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 51  | 0   | 18  | 104 | 72  | 0 | 0  | 0  | 6  | 0  | 8  | 0  | 45 | 77  | 0   |
| 80°C-10d | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 16  | 0   | 33  | 57  | 42  | 0 | 0  | 0  | 62 | 0  | 56 | 0  | 44 | 66  | 0   |

|          |         |    |    |    |    |    |    |     |     |    |     |     |    |    |   |    |    |    |    |    |     |    |
|----------|---------|----|----|----|----|----|----|-----|-----|----|-----|-----|----|----|---|----|----|----|----|----|-----|----|
| 80°C-10d | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 26  | 0   | 36 | 62  | 49  | 0  | 0  | 0 | 50 | 0  | 49 | 0  | 45 | 68  | 0  |
| 80°C-10d | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 22  | 0   | 24 | 74  | 68  | 0  | 0  | 0 | 44 | 0  | 60 | 0  | 44 | 56  | 0  |
| 90°C-1d  | Gast ti | 15 | 18 | 33 | 79 | 0  | 25 | 81  | 103 | 71 | 291 | 0   | 0  | 0  | 0 | 0  | 2  | 0  | 0  | 31 | 0   | 0  |
| 90°C-1d  | Gast t+ | 0  | 0  | 0  | 19 | 0  | 0  | 76  | 0   | 54 | 280 | 0   | 0  | 13 | 0 | 14 | 9  | 0  | 0  | 46 | 74  | 0  |
| 90°C-1d  | Gast t2 | 0  | 0  | 0  | 0  | 0  | 0  | 48  | 0   | 42 | 175 | 34  | 0  | 21 | 0 | 23 | 5  | 24 | 12 | 53 | 38  | 67 |
| 90°C-1d  | Gast tf | 0  | 0  | 0  | 0  | 0  | 0  | 50  | 0   | 20 | 145 | 148 | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 45 | 28  | 82 |
| 90°C-1d  | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 20  | 0   | 0  | 79  | 112 | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 19 | 37  | 0  |
| 90°C-1d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0  | 24  | 7   | 0  | 0  | 0 | 31 | 0  | 63 | 0  | 22 | 23  | 0  |
| 90°C-1d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0  | 9   | 13  | 0  | 0  | 0 | 43 | 0  | 70 | 0  | 28 | 27  | 0  |
| 90°C-1d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 15 | 37  | 46  | 0  | 0  | 0 | 57 | 0  | 85 | 0  | 34 | 50  | 0  |
| 90°C-2d  | Gast ti | 38 | 37 | 65 | 0  | 0  | 0  | 33  | 99  | 53 | 172 | 0   | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 32 | 17  | 0  |
| 90°C-2d  | Gast t+ | 0  | 13 | 29 | 0  | 63 | 0  | 130 | 0   | 68 | 82  | 75  | 0  | 0  | 0 | 46 | 0  | 0  | 0  | 46 | 26  | 34 |
| 90°C-2d  | Gast t2 | 0  | 0  | 0  | 21 | 0  | 0  | 62  | 0   | 39 | 153 | 0   | 0  | 0  | 0 | 16 | 0  | 0  | 16 | 39 | 100 | 0  |
| 90°C-2d  | Gast tf | 0  | 0  | 0  | 0  | 20 | 0  | 66  | 0   | 39 | 157 | 0   | 0  | 0  | 0 | 0  | 0  | 0  | 0  | 34 | 60  | 0  |
| 90°C-2d  | Int ti  | 0  | 0  | 0  | 0  | 0  | 0  | 34  | 0   | 0  | 87  | 49  | 0  | 7  | 0 | 0  | 0  | 10 | 0  | 31 | 50  | 0  |
| 90°C-2d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 15  | 0   | 0  | 67  | 35  | 0  | 0  | 0 | 27 | 0  | 41 | 0  | 30 | 50  | 0  |
| 90°C-2d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 13  | 0   | 0  | 60  | 37  | 0  | 0  | 0 | 32 | 0  | 47 | 0  | 33 | 63  | 0  |
| 90°C-2d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 33  | 0   | 30 | 64  | 46  | 0  | 0  | 0 | 35 | 0  | 37 | 0  | 44 | 60  | 0  |
| 90°C-5d  | Gast ti | 12 | 28 | 60 | 0  | 0  | 0  | 80  | 76  | 68 | 244 | 0   | 0  | 0  | 0 | 0  | 0  | 5  | 0  | 30 | 13  | 0  |
| 90°C-5d  | Gast t+ | 0  | 0  | 72 | 0  | 0  | 0  | 123 | 0   | 83 | 152 | 73  | 0  | 19 | 0 | 23 | 13 | 16 | 30 | 46 | 35  | 40 |
| 90°C-5d  | Gast t2 | 0  | 0  | 7  | 25 | 0  | 0  | 99  | 0   | 67 | 186 | 103 | 0  | 28 | 0 | 16 | 7  | 21 | 7  | 57 | 43  | 77 |
| 90°C-5d  | Gast tf | 0  | 0  | 15 | 0  | 0  | 0  | 59  | 0   | 34 | 133 | 85  | 0  | 14 | 0 | 0  | 0  | 4  | 0  | 47 | 94  | 0  |
| 90°C-5d  | Int ti  | 0  | 0  | 0  | 0  | 7  | 0  | 43  | 0   | 0  | 139 | 61  | 0  | 0  | 0 | 0  | 0  | 5  | 0  | 42 | 70  | 0  |
| 90°C-5d  | Int t+  | 0  | 0  | 0  | 0  | 0  | 0  | 20  | 0   | 58 | 68  | 64  | 0  | 0  | 0 | 54 | 0  | 56 | 0  | 43 | 65  | 0  |
| 90°C-5d  | Int t2  | 0  | 0  | 0  | 0  | 0  | 0  | 18  | 0   | 24 | 70  | 67  | 0  | 0  | 0 | 52 | 0  | 68 | 0  | 47 | 70  | 0  |
| 90°C-5d  | Int tf  | 0  | 0  | 0  | 0  | 0  | 0  | 21  | 0   | 33 | 58  | 47  | 0  | 0  | 0 | 51 | 0  | 55 | 0  | 42 | 67  | 0  |
| 90°C-10d | Gast ti | 26 | 61 | 71 | 0  | 0  | 0  | 141 | 150 | 52 | 151 | 0   | 0  | 0  | 0 | 0  | 6  | 6  | 0  | 30 | 15  | 0  |
| 90°C-10d | Gast t+ | 0  | 11 | 0  | 0  | 65 | 0  | 147 | 0   | 68 | 108 | 45  | 32 | 13 | 0 | 26 | 13 | 26 | 0  | 42 | 37  | 43 |
| 90°C-10d | Gast t2 | 0  | 0  | 0  | 0  | 31 | 0  | 98  | 0   | 47 | 112 | 27  | 36 | 26 | 0 | 24 | 9  | 27 | 0  | 59 | 35  | 89 |
| 90°C-10d | Gast tf | 0  | 0  | 0  | 0  | 14 | 0  | 63  | 0   | 30 | 89  | 55  | 32 | 18 | 0 | 11 | 4  | 13 | 0  | 54 | 40  | 71 |
| 90°C-10d | Int ti  | 0  | 0  | 0  | 0  | 8  | 0  | 46  | 0   | 30 | 73  | 56  | 0  | 0  | 0 | 5  | 0  | 8  | 0  | 39 | 73  | 0  |
| 90°C-10d | Int t+  | 0  | 0  | 0  | 0  | 6  | 0  | 32  | 0   | 23 | 61  | 50  | 0  | 0  | 0 | 29 | 0  | 32 | 0  | 37 | 47  | 0  |
| 90°C-10d | Int t2  | 0  | 0  | 0  | 0  | 5  | 0  | 34  | 0   | 22 | 63  | 53  | 0  | 0  | 0 | 28 | 0  | 30 | 0  | 38 | 59  | 0  |
| 90°C-10d | Int tf  | 0  | 0  | 0  | 0  | 6  | 0  | 34  | 0   | 24 | 64  | 51  | 0  | 0  | 0 | 25 | 0  | 27 | 0  | 35 | 57  | 0  |

Supplementary Materials 2: Table used to generate data set considered for MFA, consisting of the band volumes for the 21 electrophoresis bands quantified (from 174 kDa to 9 kDa) for each of the 17 dry-heating treatments, at each of the four selected digestion times. Values are the same as those given in Supplementary Materials 1 but organized in a different way.

| Dry-heating treatment | Temperature (°C) | Time (days) | band volume of gast ti | band volume of gast t+ | band volume of gast tf | band volume of int tf |
|-----------------------|------------------|-------------|------------------------|------------------------|------------------------|-----------------------|
|                       |                  |             | 174 ... 9              | 174 ... 9              | 174 ... 9              | 174 ... 9             |
| Control               | 20               | 0           |                        |                        |                        |                       |
| 60°C-1d               | 60               | 1           |                        |                        |                        |                       |
| 60°C-2d               | 60               | 2           |                        |                        |                        |                       |
| 60°C-5d               | 60               | 5           |                        |                        |                        |                       |
| 60°C-10d              | 60               | 10          |                        |                        |                        |                       |
| 70°C-1d               | 70               | 1           |                        |                        |                        |                       |
| 70°C-2d               | 70               | 2           |                        |                        |                        |                       |
| 70°C-5d               | 70               | 5           |                        |                        |                        |                       |
| 70°C-10d              | 70               | 10          |                        |                        |                        |                       |
| 80°C-1d               | 80               | 1           |                        |                        |                        |                       |
| 80°C-2d               | 80               | 2           |                        |                        |                        |                       |
| 80°C-5d               | 80               | 5           |                        |                        |                        |                       |
| 80°C-10d              | 80               | 10          |                        |                        |                        |                       |
| 90°C-1d               | 90               | 1           |                        |                        |                        |                       |
| 90°C-2d               | 90               | 2           |                        |                        |                        |                       |
| 90°C-5d               | 90               | 5           |                        |                        |                        |                       |
| 90°C-10d              | 90               | 10          |                        |                        |                        |                       |

Supplementary Materials 3: PCA correlation matrix of the variables with the first two principal components; correlation coefficients equal to or higher than 0.5 are in bold.

| Variables               | PC1          | PC2          |
|-------------------------|--------------|--------------|
| 174 kDa                 | <b>0.76</b>  | <b>-0.50</b> |
| 164 kDa                 | <b>0.76</b>  | -0.46        |
| 152 kDa                 | <b>0.73</b>  | -0.21        |
| 130 kDa                 | <b>0.75</b>  | -0.01        |
| 121 kDa                 | <b>0.51</b>  | -0.16        |
| 112 kDa                 | <b>0.72</b>  | -0.46        |
| 93 kDa                  | <b>0.68</b>  | <b>0.59</b>  |
| 71 kDa (ovotransferrin) | <b>0.79</b>  | <b>-0.53</b> |
| 55 kDa                  | <b>0.82</b>  | 0.38         |
| 42 kDa (ovalbumin)      | <b>0.79</b>  | 0.34         |
| 41 kDa                  | <b>-0.50</b> | 0.10         |
| 40 kDa                  | 0.05         | 0.26         |
| 35 kDa                  | 0.17         | <b>0.57</b>  |
| 32 kDa                  | -0.24        | -0.17        |
| 30 kDa                  | -0.49        | 0.04         |
| 21 kDa                  | <b>0.52</b>  | 0.67         |
| 18 kDa                  | <b>-0.60</b> | -0.26        |
| 15 kDa                  | 0.26         | <b>0.67</b>  |
| 14 kDa (lysozyme)       | 0.16         | <b>0.74</b>  |
| 10 kDa                  | -0.40        | <b>0.53</b>  |
| 9 kDa                   | 0.13         | 0.48         |
| Dry-heating temperature | 0.14         | 0.08         |
| Dry-heating time        | 0.15         | 0.11         |