

**Table S1**

Main declared ingredients of analyzed dog foods.

| Item | Main animal ingredients                                                                 | Main plant ingredients                                                                                     | Source of animal fat    | Source of plant oil          |
|------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------|
| F1   | salmon, freshly prepared trout, freshly prepared haddock, dried herring                 | sweet potatoes, beet pulp, lentils, tapioca, chickpeas                                                     | salmon oil              | olive oil                    |
| F2   | dehydrated herring meat, fresh whole herring, fresh whole flap, fresh whole silver hake | oat, whole red lentils, whole green peas, all green lentils, whole chickpeas, whole yellow peas, whole oat | herring oil             | canola oil                   |
| F3   | salmon protein (partially dried and hydrolyzed), fresh salmon                           | potato flakes                                                                                              | salmon oil              | sunflower oil                |
| F4   | fresh salmon, dried fish                                                                | dried sweet potatoes, shelled peas, potato starch, amaranth                                                | poultry fat, salmon oil | NDP                          |
| F5   | fresh salmon, dried herring, dried plaice, dried cod, dried saithe                      | dried sweet potato, dried potato, peas                                                                     | salmon oil              | NDP                          |
| F6   | dried baltic fish                                                                       | dried potatoes, potato starch                                                                              | salmon oil              | NDP                          |
| F7   | cod, dehydrated cod protein                                                             | spelt, oat                                                                                                 | fish oil                | NDP                          |
| F8   | fresh fish                                                                              | hydrolysed starch                                                                                          | NDP                     | NDP                          |
| F9   | salmon, trout                                                                           | sweet potatoes, peas, potatoes                                                                             | salmon oil              | NDP                          |
| F10  | freshly prepared tuna, dried tuna                                                       | sweet potatoes, potatoes, peas                                                                             | salmon oil              | NDP                          |
| F11  | salmon                                                                                  | sweet potatoes, peas, potatoes                                                                             | salmon oil              | sunflower oil                |
| F12  | dried boneless salmon                                                                   | dried potatoes, potato starch, dried pumpkin                                                               | salmon oil              | NDP                          |
| F13  | salmon, trout                                                                           | sweet potatoes, peas, potatoes, beet pulp, linseed                                                         | NDP                     | NDP                          |
| P1   | fresh poultry, powdered poultry meat                                                    | barley, corn, millet                                                                                       | animal fat, fish oil    | NDP                          |
| P2   | dried chicken, dried turkey meat                                                        | dried potato, dried sweet potato                                                                           | poultry fat, salmon oil | NDP                          |
| P3   | fresh poultry meat, dried duck protein, poultry protein                                 | dried potato chunks                                                                                        | poultry fat             | sunflower oil                |
| P4   | fresh chicken meat, poultry protein                                                     | potato flakes, potato starch                                                                               | poultry fat, salmon oil | sunflower oil                |
| P5   | fresh poultry meat, dried poultry protein                                               | dried sweet potatoes, dried potatoes                                                                       | salmon oil, poultry fat | sunflower oil, safflower oil |
| P6   | dried poultry protein                                                                   | rice, oats, maize                                                                                          | poultry fat             | NDP                          |
| L1   | lamb meat meal                                                                          | rice                                                                                                       | chicken fat, salmon oil | NDP                          |
| L2   | fresh lamb meat, dried lamb protein                                                     | potato flakes, potato starch, dried peas                                                                   | lamb fat                | sunflower oil                |
| L3   | lamb, dried lamb protein                                                                | potato flakes, potato protein, dried peas                                                                  | lamb fat, salmon oil    | sunflower oil                |
| L4   | lamb                                                                                    | sweet potatoes, peas, potatoes                                                                             | NDP                     | NDP                          |
| L5   | dehydrated lamb                                                                         | rice, vegetable fibers                                                                                     | animal fat, salmon oil  | NDP                          |

|    |                                                                                                                   |                                                                        |                         |                        |
|----|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|------------------------|
| L6 | lamb                                                                                                              | sweet potatoes, peas, pea protein, potatoes, linseed, sugar beet fiber | NDP                     | NDP                    |
| B1 | fresh beef, dried beef protein                                                                                    | potato flakes, dried lentils                                           | beef fat                | sunflower oil          |
| B2 | beef                                                                                                              | brown rice, maize                                                      | NDP                     | rapeseed oil, hemp oil |
| B3 | fresh beef, dried beef protein, poultry protein                                                                   | sweet potatoes, peas, potato starch, chickpeas                         | poultry fat, salmon oil | NDP                    |
| B4 | beef                                                                                                              | pea starch, tapioca starch, dried beet pulp, pea protein               | chicken fat             | sunflower oil          |
| B5 | dried veal meat (beef)                                                                                            | peas, wheat bran, wheat germ                                           | beef fat, salmon oil    | NDP                    |
| B6 | beef                                                                                                              | sweet potatoes, potatoes, peas, linseed, beet pulp                     | beef fat                | NDP                    |
| M1 | meat and animal derivatives                                                                                       | cereals (whole grains)                                                 | fats                    | oils                   |
| M2 | fresh beef, fresh poultry                                                                                         | potato starch, dried potatoes                                          | fish oil                | NDP                    |
| M3 | meat and animal derivatives                                                                                       | corn, bran, rice                                                       | animal fat              | NDP                    |
| M4 | meat and animal by-products                                                                                       | rye bran, rice flour                                                   | animal fat              | NDP                    |
| M5 | freshly prepared duck, dried pork, freshly prepared turkey, freshly prepared venison, freshly prepared angus beef | sweet potatoes, beet pulp, tapioca, lentils, chickpeas                 | salmon oil              | NDP                    |
| M6 | venison, dried lamb, freshly prepared lamb, dried duck, dried rabbit, lamb liver, freshly prepared venison        | vegetable glycerol, dried sweet potatoes, alfalfa, tapioca             | lamb fat                | coconut oil            |
| O1 | deer meat                                                                                                         | potatoes, dried apples                                                 | chicken fat, salmon oil | NDP                    |
| O2 | fresh ostrich meat, dried ostrich meat                                                                            | dried sweet potatoes, dried red beet                                   | NDP                     | pressed linseed oil    |
| O3 | fresh kangaroo meat, dried kangaroo meat                                                                          | dried celery, dried pumpkin                                            | NDP                     | linseed oil            |
| O4 | insects                                                                                                           | amaranth, peas                                                         | NDP                     | sunflower oil          |

NDP, not declared by producer