## What is Welfare?

Animal welfare can be a difficult concept to understand because it has no single definition and can mean different things to different people. Welfare generally refers to "the quality of an animal's life as it is experienced by an <u>individual</u> animal". Animal welfare in its holistic sense encompasses not only the health and physical wellbeing of the animal, but the animal's psychological wellbeing and the ability to express its own important behaviour (right). Welfare can be described as high if the animals are fit and healthy, feeling good and free from suffering <sup>2,3,4</sup>, described by the Five freedoms<sup>5</sup> (below).



1. Freedom from hunger & thirst

by ready access to fresh water and a diet to maintain full health and vigour

2. Freedom from discomfort

by appropriate environment including shelter and a comfortable resting area

3. Freedom from pain, injury or disease by prevention or rapid diagnosis

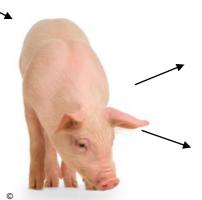
**disease** by prevention or rapid diagnosis and treatment

4. Freedom to express normal

**behaviour** by providing sufficient space, roper facilities and company of the animal's own kind

5. Freedom from fear & distress

by ensuring conditions and care which avoid mental suffering



Experience of

**POSITIVE EMOTIONS** 

A state of

**GOOD WELFARE** 

Sentient Beings...

are intelligent animals, capable of feeling emotions such as fear and pain as well as pleasure and happiness



- Can use deception<sup>6</sup> and understand knowledge held by others when searching for food<sup>7</sup>
- Can identify their home environment at one day old<sup>8</sup>
- Play, explore and become more optimistic when given environmental challenges<sup>9,10</sup>
- Can distinguish people wearing the same clothes<sup>11</sup>
- Can understand and use mirrors to find food<sup>12</sup>



- Have companions<sup>13</sup> and can remember up to 50-70 others<sup>14</sup>
- As calves can recognise their human handlers by their face<sup>15</sup>
- Show excitement when they solve a problem<sup>16</sup>
- Seem aware of others' emotions e.g. by eating less if their companion is stressed<sup>17</sup>
- Play with their mother from only a few days old<sup>18</sup>



- Exert self-control<sup>19</sup> and can show emotional frustration<sup>20</sup>
- When in pain, choose to eat less tasty food containing painkillers<sup>21</sup>
- Use the sun to navigate complex environments<sup>22</sup>
- Can solve mazes to be allowed to dustbathe<sup>23</sup> or access a nest<sup>24</sup>
- Use their memory to find food aged two weeks old<sup>22</sup>
- Communicate with representational noise signals, suggestive of 'language'<sup>25</sup>

## References

- 1. Bracke, M. B. M. Spruijt, B. M., Metz, J. H. M. 1999. Neth. J. Agri. Sci. 47, 279-291.
- 2. Boissy, A., Manteuffel G., Jensen, M. B., Moe, R. O. Spruijt B., Keeling L. J., Winckler, C., Forkman, B., Dimitrov I., Langbein, J., Bakken, M., Veissier, I., Aubert., A. 2007. Phys. Behav.92, 375-397.
- 3. Yeates, J. W., Main, C. J. W. 2008. Vet. J. 175, 293-300.
- 4. Farm Animal Welfare Council 2009. London, UK.
- 5. Farm Animal Welfare Council 1993. Surbiton, Surrey, UK
- 6. Held, S., Mendl, M., Devereux, C., Bryne, R. 2002. Anim. Behav. 64, 157-166.
- 7. Held, S., Mendl, M., Devereux, C., Byrne, R. W. 2000. Anim. Behav. 59, 569–576.
- 8. Horrell, I., J. Hodgson. 1992. App. Anim. Behav. Sci. 33, 329-343.
- 9. Manteuffel, G., Langbein, J. Puppe, B. 2009. Anim. Welfare. 18, 87-95.
- 10. Chaloupkova, H., Illman, G., Bartos, L. 2007. App. Anim. Behav. Sci. 103, 25-34.
- 11. Koba, Y., H. Tanida. 2001. App. Anim. Behav. Sci. 73, 45-58.
- 12. Broom, D. M., H. Sena, Moynihan, K.L.. 2009. Anim. Behav. 78, 1037-41.
- 13. Munksgaard, L., Jensen, M.B., Pedersen, L.J., Hansen, S.W, Matthews, L. 2005. App. Anim. Behav. Sci. 92, 3-14.
- 14. Fraser, A.F., Broom, D.M. 1997. Farm Animal Behaviour and Welfare. CABI Publishing. Chapter 8.
- 15. Rybarczyk, P., Koba, Y. Rushen, J. Tanida, H., Marie de Passillé, A. 2001. App. Anim. Behav. Sci. 74, 175-89.
- 16. Hagen, K., Broom, D.M. 2004. App. Anim. Behav. Sci. 85, 203-213.
- 17. Bouissou, M.F. Boissy A, Le Neindre P, Veissier I. 2001. In: Keeling, L.J., Gonyou, H.W. (eds.) Social behaviour in Farm Animals, CABI Publishing.
- 18. Jensen, M. B. 2011. App. Anim. Behav. Sci. 134, 92-99.
- 19. Abeyesinghe, S. M., Nicol, C.J., Hartnell, S.J., Wathes, C.M. 2005. Anim. Behav. 70, 1-11.
- 20. Zimmerman, P. H., P. Koene, van Hooff., J. A. R. A. 2000. App. Anim. Behav. Sci. 69, 265-73.
- 21. Danbury, T. C., et al. C. Weeks, A. Chambers, J.P., Waterman-Pearson, A.E., Kestin, S.C. 2000. Vet. Rec. 146, 307-311.
- 22. Zimmerman, P. H., Pope, S.J., Guilford, T. Nicol, C.J. 2003. App. Anim. Behav. Sci. 80, 327-36.
- 23. Petherick, J. C., D. Waddington, Duncan, I.J.H. 1990. Behav. Proc. 22, 213-26.
- 24. Weeks, C.A. Nicol, C.J. 2006. World Poultry Sci. J. 62, 296–307.
- 25. Evans, C.S., Evans, L. 2007. Biol. Lett. 3, 8-11.