University of Reading

UNIVERSITY OF READING SURVEY ON INJURIOUS PECKING IN EGG PRODUCING FLOCKS

A. Some questions about you and your purchases of eggs

1. Are you? Male ☐ Female ☐ 2. Your age? ☐

3. The age you left full-time education? ☐ 4. Have you ever worked with or kept hens? Yes ☐ No ☐

5. Your employment status?

Student	☐	In part-time work	☐	Retired	☐
Self-employed	☐	In full-time work	☐	Out of work	☐

6. Which of the categories below is closest to your annual household income BEFORE tax?

Up to £20,000	☐	£20,001-£40,000	☐	£40,001-£60,000	☐	Over £60,000	☐

7. How often do you or others buy eggs for your household? (please circle) Daily Weekly Monthly Never

8. How many eggs do you or others buy for your household each month? ☐

9. Does your household buy free range eggs? Always ☐ Sometimes ☐ Never ☐

10. If you buy free range eggs, please indicate why in the following table by scoring each reason from 0 to 5 where 5 is very important. Please score all the boxes below:

They are fresher than other eggs	☐	Free range hens are happy	☐
They taste better than other eggs	☐	They are healthier than other eggs	☐
Hen welfare is better	☐	Other (specify):	☐

B. Your views on how farm animals are treated and free range egg production

11. Please indicate to what extent you agree/disagree with the following statements:

	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree
I feel well-informed about how laying hens are treated in egg production					
I am concerned about the way laying hens are treated in the process of producing eggs					
Eggs from birds with high welfare are healthier and better tasting					
It is wrong to eat eggs from hens that have not had a good life					
Free range production provides higher levels of welfare than cage production					
Eggs from hens with high welfare are safer to eat					
I am happy to pay more for free range eggs					
It is important that hens can display normal behaviour					

C. Injurious pecking in egg producing flocks

Injurious pecking, sometimes known as feather pecking, is a behavioural problem that occurs quite often in hens kept for egg production. All production systems are prone to it including free range. It happens when birds repeatedly peck each other leading to feather loss, damage to the skin and bleeding and sometimes death and cannibalism. It is believed that injurious pecking occurs in 6 out of 10 free range egg flocks and, in bad cases, up to 80% of birds in a flock can be affected, with severe impacts on hen welfare.

There are a number of things that can be done to promote hen welfare by controlling injurious pecking such as changing chicken breeds, careful regulation of diet, improving the quality of the floor covering in the hen house, encouraging birds outside during the day and the provision of shelters on ranges such as planting trees. However, all these changes/improvements increase the costs of production to the farmer.

A typical supermarket price for 6 free range medium-sized eggs is £1.65, but prices do vary according to brand and location. Therefore you may currently pay a slightly different price to this.

12. Would you be willing to pay an extra 2 pence on top of what you currently pay per half dozen for free range eggs to help poultry farmers ensure that hens do not suffer from injurious pecking? Yes ☐ No ☐ No opinion ☐

13. If 'Yes' to question 12, would you be willing to pay an extra 4 pence on top of what you currently pay per half dozen free range eggs to help poultry farmers ensure that hens do not suffer from injurious pecking? Yes ☐ No ☐ No opinion ☐

14. If 'No' to question 12, would you be willing to pay an extra 1 pence on top of what you currently pay per half dozen free range eggs to help poultry farmers ensure that hens do not suffer from injurious pecking? Yes ☐ No ☐ No opinion ☐

15. Please describe briefly the reasoning behind your answers to questions 12-14.

…… …… ……

16. Before reading this questionnaire did you know that injurious pecking was a common problem in all egg laying flocks of hens, including free range? Yes ☐ No ☐

17. If we measure the welfare of hens on a scale of 0 to 100 (where 0 denotes the poorest welfare and 100 the highest welfare possible), the overall welfare of laying hens in cages can be rated as 40. Where on this scale would you score the welfare of free range hens? Please mark **your** score from 0-100 on the scale below.

|----------|----------|----------|---------|----------|---------|----------|---------|----------|----------|

0 40 100

18. Does knowing about injurious pecking change your attitude towards free range eggs?

Yes ☐ No ☐

If so, how?

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Thank you for your help. Please return the questionnaire in the reply paid envelope provided.

1 **Appendix 2. List of potential determining variables evaluated in the WTP analysis**

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Variable name	Format	Description
Employ	Categorical variable (5 categories)	Employment status
Income	Ordinal variable (4 point scale)	Household income category, values given as central value in 4 categories
Eggfreq	Integer (interval scale)	Frequency of egg purchases, where 1=daily or weekly; 0=less than weekly
Rank_ch	Integer (ordinal scale 0-100)	Difference between respondent welfare rating and stated current average welfare rating
A1	Binary variable (M or F)	Gender
A2	Integer (interval scale)	Respondent age
A3	Integer (interval scale)	Age left full-time education
A8	Integer (interval scale)	Number of eggs bought each month
A10a	Ordinal variable (5 point scale)	Attitudinal variable. Ranking of agreement with statement: 'They are fresher than other eggs'
A10b	Ordinal variable (5 point scale)	Attitudinal variable. Ranking of agreement with statement: 'Free range hens are happy'
A10c	Ordinal variable (5 point scale)	Attitudinal variable. Ranking of agreement with statement: 'They taste better than other eggs'
A10d	Ordinal variable (5 point scale)	Attitudinal variable. Ranking of agreement with statement: 'They are healthier than other eggs'
A10e	Ordinal variable (5 point scale)	Attitudinal variable. Ranking of agreement with statement: 'Hen welfare is better'
B1	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'I feel well informed about how laying hens are treated'
B2	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'I am concerned about the way laying hens are treated in the process of producing eggs'
B3	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'Eggs from birds with high welfare are healthier and better tasting'
B4	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'It's wrong to eat eggs from hens that have not had a good life'

B5	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'Free range production provides higher levels of welfare than cage production'
B6	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'Eggs from high welfare are safer to eat'
B7	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'I am happy to pay more for free range eggs'
B8	Binary variable (1=agreement; 0= neutral or disagreement)	Attitudinal variable. Ranking of agreement with statement: 'It is important that hens can display normal behaviour'
C1	Integer (interval scale)	Bid level accepted
C3	Binary variable (yes / no)	Prior knowledge of feather pecking as a problem
C5a	Binary variable (yes / no)	Knowledge of feather pecking changes attitudes to free range eggs

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