

Consumer perception of eggs and egg production

Animal welfare is an increasingly important factor in the purchasing decisions of consumers (Napolitano et al., 2010), sustained despite the prevailing recession (IGD, 2011). Recent surveys indicate almost half of UK consumers surveyed rated animal welfare as either 'very important' or 'extremely important' (IGD, 2011), whilst 76% (Defra, 2011) and 85% (Clonan et al., 2010) rated welfare as 'an important' issue. In fact, farm animal welfare was rated the single most important sustainability related food issue for British consumers (IGD, 2011; Defra, 2011), above health or safety concerns, and over 70% of U.S citizens surveyed reported 'concern' for farm animal welfare (Norwood and Lusk, 2011a). Within Europe, Dutch and Danish (77%) and Belgian and German (73%) citizens expressed the highest concern for laying hen welfare (European Commission, 2005), and overall laying hens were identified as the animals most in need of animal welfare improvements by EU citizens. Consumers will pay for legislative improvements in animal welfare, especially for eggs (Bennett, 1996) where consumers are better informed about initiatives related to welfare and there is no substitute for the product (Vanhonacker and Verbeke, 2009).

Trends in legislation, consumer behaviour and attitudes

Free-range systems were more highly valued by consumers than eggs produced in barn or aviary systems, which in turn were rated more favourably than caged production; shelter and pasture access further improved consumers' confidence in free-range systems (Norwood and Lusk, 2011). Recent EU legislation banning the use of barren battery cages, reflects public and scientific concern, however enriched-cages are still permitted; 61% of British consumers surveyed believed 'enriched-cages' should be banned (RSPCA, 2011).

Citizens in the U.S., typically not considered to have welfare high on their agenda (Matheny and Leahy, 2007), voted in Arizona, Florida and California to ban the use of cages in egg production (Norwood and Lusk, 2009; Prickett et al., 2010), demonstrating a shift in attitude. Share of spend on cage-free eggs rose significantly (up 51%) in parts of California since the introduction of legislation banning cages, despite a price increase for cage-free eggs whilst conventional egg prices remained static (Lusk, 2010).

In the UK, almost 70% of consumers surveyed bought free-range eggs 'always or often' (Clonan et al, 2010) and only 13% were considered 'not likely to buy free-range eggs in the future'; 49% were 'actively seeking' free-range eggs, and 38% 'considered buying free-range in the future' (Defra, 2011). An EU wide survey found that 57% of citizens were willing to pay more for eggs from higher welfare systems (European Commission, 2005). In 2004, legislation requiring the labelling of shell eggs by method of production came into force. A recent survey showed that almost 70% of UK citizens believed the labelling rules should also be extended to products containing egg (RSPCA, 2011).

Egg quality and animal welfare

Animal welfare can be considered as part of an overall food safety and quality concept (Sossidou et al, 2009) with many consumers inferring taste and quality benefits from cage-free labels (Chang et al., 2010). Zhang and Goddard (2010) carried out a survey of U.S. citizens, finding 72% of people surveyed believed free-range to be 'more natural', free from antibiotics (45%), and tasting better (44%).

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