



**ISTITUTO ZOOPROFILATTICO SPERIMENTALE
DELLA LOMBARDIA E DELL'EMILIA ROMAGNA**
“BRUNO UBERTINI”
(ENTE SANITARIO DI DIRITTO PUBBLICO)

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**CONCORSO PUBBLICO PER TITOLI ED ESAMI PER LA COPERTURA A TEMPO
DETERMINATO DI N. 1 UNITA' DI PERSONALE NEL PROFILO PROFESSIONALE DI
COLLABORATORE PROFESSIONALE DELLA RICERCA SANITARIA, CAT. D – CON
COMPETENZE IN SCIENZE ZOOTECNICHE E TECNOLOGIE DELLE PRODUZIONI
ANIMALI**

GRUPPO N. 1

- 1) Come è suddivisa (gruppi di item) la check list Benessere animale per i ruminanti?
- 2) Come si valutano le lesioni cutanee in funzione del Benessere Animale?
- 3) Quali sono le ABMS dirette nel bovino da carne?
- 4) Come si calcola la mortalità nelle bovine da latte, secondo la checklist Classyfarm?
- 5) Quali sono le 5 libertà fondamentali che stanno alla base del BA?
- 6) Come si suddividono le procedure di biosicurezza e che scopo hanno?
- 7) Cosa sono le cellule somatiche del latte e che significato hanno?
- 8) Quali sono le normative generali (trasversali) che regolano il BA?
- 9) Significato e ruolo del Centro di Referenza Nazionale per il Benessere Animale
- 10) Descrivimi le principali operazioni di biosicurezza durante la mungitura bovina
- 11) Significato e contenuti di Classyfarm
- 12) Quali sono le strategie per il suino che la Comunità Europea sta promuovendo in ambito legislativo?
- 13) Cos'è la “comfort zone” di un animale?
- 14) Come si valuta la zoppia nelle bovine da latte, secondo la checklist Classyfarm?
- 15) Che differenze ci sono tra il controllo ufficiale e l'autocontrollo in termini di valutazione del benessere animale Classyfarm?

GRUPPO N. 2

- 1) Come si valuta il consumo di farmaco in Classyfarm per un allevamento di suini a ciclo aperto
- 2) Come si valuta il consumo di farmaco in Classyfarm per un allevamento di suini da ingrasso
- 3) Come si valuta il consumo di farmaco in Classyfarm per un allevamento di bovini da latte
- 4) Come si valuta il consumo di farmaco in Classyfarm per un allevamento di bovini da carne
- 5) Quali sono le ABMs dirette nel suino
- 6) Quali sono le ABMs indirette nel suino
- 7) Il candidato descriva le check list biosicurezza ufficiale nel suino
- 8) Il candidato descriva come può essere utilizzato il macello per il rilievo dei parametri sanitari e di benessere nel suino
- 9) Quali sono gli score previsti in Classyfarm per la valutazione sanitaria del suino al macello
- 10) Quale è il peso alla macellazione del suino?
- 11) Cosa si intende per materiale manipolabile
- 12) Come si visualizza il consumo di farmaco in Classyfarm
- 13) Quali sono le fonti ufficiali di Classyfarm per il calcolo del consumo di farmaco
- 14) Quali sono i settori dell'allevamento suino in cui il consumo di farmaco è più elevato?
- 15) Quali sono i settori dell'allevamento bovino in cui il consumo di farmaco è più elevato?

DOMANDE INFORMATICA

- 1) Quali sono i requisiti di una password per essere considerata sicura?
- 2) Quali sono le combinazioni rapida da tastiera per i comandi "copia", "incolla", "taglia"?
- 3) Cosa sono le F.A.Q. di un sito?
- 4) A cosa serve il programma Word?

- 5) A cosa serve il programma Excel?
- 6) Che cos'è Powerpoint?
- 7) Che cos'è Outlook?
- 8) Come è possibile visualizzare le proprietà di una cartella?
- 9) cos'è l'hard disk?
- 10) Da quali elementi è composto un indirizzo di posta elettronica?
- 11) In una pagina WEB è possibile effettuare la ricerca di una parola?
- 12) Nell'ambito delle ricerche bibliografiche che puoi svolgere su database nazionali o internazionali, in cosa consiste il sistema logico sviluppato dal matematico inglese George Boole?
- 13) Cosa vuol dire e come si procede per effettuare uno screenshot?
- 14) In Windows dove si trova la Barra delle applicazioni?
- 15) Formattare un testo cosa significa?

PROVA DI INGLESE

- 1) The European Commission requested the European Food Safety Authority (EFSA) to provide a scientific opinion on the welfare of dairy cows, reflecting the most recent scientific knowledge on the topic. This mandate was received in the context of the comprehensive evaluation of the animal welfare legislation undertaken by the European Commission in the framework of its Farm to Fork strategy, including Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes.
- 2) The first Term of Reference (ToR) requested a description of the most prevalent housing systems for dairy cows and practices of keeping them in the EU. The second ToR requested a description of five welfare consequences specific to dairy cows: locomotory disorders (including lameness), mastitis, restriction of movement, inability to perform comfort behaviour and metabolic disorders. The third ToR requested to identify specific relevant hazards, i.e. farm characteristics, leading to the above-mentioned welfare consequences and which can be used to classify the level of risk for animal welfare based on data that are currently collected, or that can easily be collected at farm level (e.g. milk production, herd size, housing system).
- 3) Structure of the scientific opinion: In this scientific opinion, three assessments were performed according to each Term of Reference (ToR): Assessment #1 on the housing systems; Assessment #2 on the welfare consequences, hazards, preventive and corrective measures; and Assessment #3 on the hazards (from here onward called 'farm characteristics') to identify farms at risk of poor welfare. The opinion contains

conclusions and recommendations for each of the three assessments. The level of certainty associated with the conclusion is reported in all conclusions, except for those that are purely descriptive (e.g. description of welfare consequences).

- 4) Assessment #1 of this opinion describes the following housing systems: 1. tie-stalls, 2. cubicle (free-stall) housing, 3. open-bedded systems (bedded systems with straw yards, compost or dry manure) and 4. systems with access to outdoor areas (systems with access to outdoor loafing area and systems with access to pasture). For each system, the distribution in the EU is reported as well as an overview of the main strengths, weaknesses and hazards for welfare of dairy cows.
- 5) A comparison of the different housing systems was included in the second assessment (#2). The most prevalent housing systems in the EU are cubicle housing systems, followed by open-bedded systems and tie-stalls. The proportion of farms offering access to pasture has declined in several EU MSs in the last decades, with an increasing number of farms converting to zero-grazing systems. The number of grazing days per year varies markedly between and within countries.
- 6) The impact on animal welfare of each housing system is highly variable and affected by the quality of the physical environment and management on a specific farm. However, there is substantive evidence that cows permanently tied in stalls have impaired welfare due to behavioural restriction compared to loose-housing systems (where cows are not tied). The main hazards for reduced cow welfare in tie-stalls are the duration of tethering, the adequacy of tethering design, the dimensions of the stall and the characteristics of the lying surface.
- 7) The main hazards for reduced cow welfare in cubicle housing systems are a non-deformable lying surface including shallow bedding, inappropriate dimension and design of the cubicles including positioning of cubicle fittings, rough or slippery flooring in the alleys, low total space allowance and overstocking at the cubicle.
- 8) The main hazards for reduced cow welfare in systems with access to loafing area are poor hygienic conditions and lack of shelter in extreme climatic conditions. The main animal welfare hazards in managing cows at pasture are: insufficient shelter from adverse climatic conditions, insufficient access to water, insufficient or discontinuous nutrient supply, inadequate parasite control, poorly maintained walking tracks or roads and rushing cattle while walking.
- 9) Lameness is one of the major welfare issues in dairy cows and is often associated with pain and reduced ability to perform natural behaviour. Gait and foot lesion scoring are feasible ABMs to identify and score lameness. There is no clear evidence that one housing system is consistently better in terms of lameness reduction. Foot and leg disorders are multifactorial, resulting from interactions between the farm environment, management, nutrition and animal characteristics including genetic background, age and lactation stage.
- 10) Regarding system comparison, temporary access to pasture is associated with a lower prevalence of integument damage compared to zero-grazing systems. Cubicles with shallow beds or mats (i.e. bedding less than 30 cm on concrete surfaces or less than 5 cm of compressed material on mats (compressed as a result of the animal lying on it))

are associated with an increased risk of claw disorders and a higher prevalence of lameness compared to a pasture-based system.

- 11) Preventing lameness includes regular gait scoring followed by early treatment of lame cows. Dimensions and design of the lying area(s) and cubicle furniture should match the size of cow ensuring that comfort is optimised, freedom of lying behaviour (natural postural changes) is allowed and risk of injury is minimised. Dairy cows should be provided with dry, soft and deformable lying surfaces. The walking and standing surface should be clean, dry, non-slip and avoiding sharp edges. Tracks for pasture access should be suitable for long-distance walking (e.g. even surfaced, free from stones and debris).
- 12) Mastitis is a disease characterised by inflammation of the mammary gland commonly caused by an intramammary infection (IMI), mainly bacterial. The condition can be divided into clinical mastitis (i.e. associated with clinical signs) and subclinical mastitis, despite there is no clear-cut respective definition of the two types. Clinical mastitis affects dairy cow welfare due to, e.g. the painfulness of the condition and associated changes in behaviour. The welfare relevance of subclinical mastitis is unknown. Suitable ABMs for the occurrence of mastitis are the incidence rate of clinical disease and routine (monthly or daily in case of automatic milking systems) measurement of individual cow somatic cell counts.
- 13) Regarding system comparison, mastitis is a multifactorial disease, the hazards of which are diverse and no housing system (including pasture access) has been consistently identified as superior to others with regards to the incidence or prevalence of mastitis. Type of bedding is the only housing-related hazard associated with mastitis prevalence. Cows housed in sand-bedded cubicles have lower somatic cell counts than those housed in cubicles with organic bedding materials.
- 14) Restriction of movement refers to the inability of the animal to move freely or walk comfortably due to e.g. restrictive space allowance or inadequate floor properties resulting in pain, discomfort or frustration. Closely related to restriction of movement are resting problems due to inadequate design and properties of the lying area resulting in the cow's inability to lie or rest comfortably, or to perform unimpaired lying down or rising up movements. ABMs for restriction of movement and resting problems are gait, hygiene and lesion scoring, as well as deviations from normal lying down and rising up movements and agonistic interactions.
- 15) Regarding system comparison, restriction of movement in dairy farming is related to the housing system itself, to the design and features of particular housing systems, to the stocking densities and to the extent of outdoor access. Tethering imposes severe restriction of movement. Compared to loose-housing systems, it particularly restricts lying down and rising up movements, lying postures, oestrus, calving and social behaviour. Both tie-stalls and cubicles are associated with more resting problems and restriction of the lying down and rising up movement compared to open-bedded systems (straw, compost or dry manure bedded-packs), in particular when the size of stalls and cubicles are inappropriate for the size of the cows.