

中国标准化协会标准

T/CAS

STANDARDS OF CHINA ASSOCIATION

267-2017

FOR STANDARDIZATION

农场动物福利要求 肉鸡

Farm animal welfare requirements:

Meat-type chicken

2017-07-14 发布



索引号

T/CAS 267-2017 (C)

该标准为中国标准化协会制定，其版权为中国标准化协会所有。除了用于国家法律或事先得到中国标准化协会文字上的许可外，不许以任何形式再复制该标准。

中国标准化协会地址：北京市海淀区增光路 33 号中国标协写字楼
邮政编码：100048 电话：010-68487160 传真：010-68486206
网址：www.china-cas.org 电子信箱：cas@china-cas.org

目 次

| | |
|----------------|-----|
| 前 言..... | III |
| 引 言..... | IV |
| 1 范围 | 1 |
| 2 规范性引用文件..... | 1 |
| 3 术语和定义..... | 1 |
| 4 雏鸡 | 2 |
| 5 饲喂和饮水..... | 3 |
| 6 养殖环境..... | 4 |
| 7 饲养管理..... | 7 |
| 8 健康计划..... | 7 |
| 9 运输 | 8 |
| 10 屠宰..... | 8 |
| 11 记录与可追溯..... | 9 |
| 参考文献..... | 10 |

前 言

中国标准化协会（CAS）是组织开展国内、国际标准化活动的全国性社会团体。制定中国标准化协会标准（以下简称：中国标协标准），满足企业需要，推动企业标准化工作，这是中国标准化协会的工作内容之一。中国境内的团体和个人，均可提出制、修订中国标协标准的建议并参与有关工作。

中国标协标准按《中国标准化协会标准管理办法》进行管理，按CAS 1.1《中国标准化协会标准结构及编写规则》的规定编制。

中国标协标准草案经向社会公开征求意见，并得到参加审定会议的75%以上的专家、成员的投票赞同，方可作为中国标协标准予以发布。

考虑到本标准中的某些条款可能涉及专利权，中国标准化协会不负责任何该类专利权的鉴别。

本标准为首次制定。

在本标准实施过程中，如发现需要修改或补充之处，请将意见和有关资料寄给中国标准化协会，以便修订时参考。

引 言

0.1 总则

为了保障动物源性食品的质量、安全和畜牧养殖业的健康良性可持续发展，填补我国农场动物——肉鸡福利标准的空白，特制定本标准。

本标准基于国际先进的农场动物福利理念，结合我国现有的科学技术和社会经济条件，规定了农场动物——肉鸡福利生产要求。

本标准 of 农场动物福利要求中肉鸡的养殖、运输、屠宰全过程的要求。

0.2 基本原则

动物福利五项基本原则是农场动物福利系列标准的基础，五项基本原则为：

- a) 为动物提供保持健康所需要的清洁饮水和饲料，使动物免受饥渴；
- b) 为动物提供适当的庇护和舒适的栖息场所，使动物免受不适；
- c) 为动物做好疾病预防，并给患病动物及时诊治，使动物免受疼痛和伤病；
- d) 保证动物拥有避免心理痛苦的条件和处置方式，使动物免受恐惧和精神痛苦；
- e) 为动物提供足够的空间、适当的设施和同伴，使动物得以自由表达正常的行为。

农场动物福利要求 肉鸡

1 范围

本标准规定了肉鸡福利的术语和定义、雏鸡、饲喂和饮水、养殖环境、饲养管理、健康计划、运输、屠宰以及记录与可追溯。

本标准适用于肉鸡的养殖、运输、屠宰全过程的动物福利管理。

2 规范性引用文件

下列文件对于本文件的应用是必不可少的。凡是注日期的引用文件，仅注日期的版本适用于本文件。凡是不注日期的引用文件，其最新版本（包括所有的修改单）适用于本文件。

GB 5749 生活饮用水卫生标准

NY/T 388 畜禽场环境质量标准

3 术语和定义

下列术语和定义适用于本文件。

3.1 动物福利 animal welfare

为动物提供适当的营养、环境条件，科学地善待动物，正确地处置动物，减少动物的痛苦和应激反应，提高动物的生存质量和健康水平。

3.2 农场动物 farm animal

用于食物（肉、蛋、奶）生产，毛、绒、皮加工或者其他目的，在农场环境或类似环境中培育和饲养的动物。

3.3 农场动物福利 farm animal welfare

农场动物在养殖、运输、屠宰过程中得到良好的照顾，避免遭受不必要的惊吓、疼痛、痛苦、疾病或伤害。

3.4 环境富集 environmental enrichment

农场通过提供自然和人造物体或环境，供动物社交、娱乐、觅寻和探究，以增强动物机体和心理刺激，达到满足动物行为习性正常表达和心理、机体健康需要的管理方式。

3.5 异常行为 abnormal behavior

当肉鸡的心理或生理需求未得到满足时，所表现的一类重复且无明显目的、或对自己及

同伴造成伤害的行为。

3.6 白羽肉鸡 white feather meat-type chicken

生长速度快的白色肉鸡，通常指 35 日龄~42 日龄屠宰、体重达 1.8kg 以上的肉鸡，也称为快大肉鸡。

3.7 黄羽肉鸡 yellow feather meat-type chicken

羽毛为黄色或有色羽的肉鸡，通常根据生长速度和上市日龄分为快速型（8 周龄~10 周龄）、中速型（10 周龄~13 周龄）和慢速型（13 周龄以上）。

3.8 散养 free-range farming

可自由出入鸡舍，自由活动、自由采食和饮水，并得以庇护的养殖方式。

3.9 垫料平养 feeding on litter floor

在圈舍内地面垫料饲养的养殖方式。

3.10 网上平养 feeding on the net rack

在圈舍内人工架设的网架（单层或多层）上饲养的养殖方式。

3.11 大笼饲养 feeding in the large cage

在圈舍内单层或多层大笼内饲养的养殖方式。

3.12 致晕屠宰 stunning slaughter

通过使用致晕设备使动物在放血前处于完全无知觉状态的屠宰方法。

4 雏鸡

4.1 来源

雏鸡应来源于具有种畜禽生产经营许可证的肉鸡孵化场，其种鸡是经过疾病净化的健康鸡群。

4.2 处置

4.2.1 出雏当天宜进行雌雄鉴别，鉴别方法以伴性遗传鉴别法为宜。若采用翻肛鉴别法，鉴别员应做好消毒卫生工作。

4.2.2 出雏当天应实施相关疫苗的免疫接种。

4.2.3 宜在出雏当天采用红外线断喙技术实施断喙。断喙操作人员应经过专门的培训，掌握有关动物福利知识。

4.2.4 雏鸡应采用标准雏鸡箱存放、转运，每 100 只雏鸡所占面积不应少于 0.25m²。

4.2.5 存放雏鸡的室温在 22℃~26℃，湿度在 60%~70%，存放时间不宜超过 4h。雏鸡转运宜采用专用运输车辆，车厢温度控制在 22℃~26℃，且通风良好。

5 饲喂和饮水

5.1 饲料

5.1.1 饲料和饲料原料的使用应符合国家相关法律法规和标准的要求。

5.1.2 饲料供给应符合肉鸡品种特性和生理阶段的营养需求，应满足肉鸡维持良好的身体状况以及正常生长发育的要求。

5.1.3 鸡场购入的配合饲料，应有供方饲料原料组成及营养成份含量的文档记录；自行配料时，应保留饲料配方及配料单，饲料原料来源应可追溯。

5.1.4 不应使用哺乳动物或禽鸟动物蛋白质源的饲料（不包括乳制品）。除治疗目的外，不应在饲料中使用抗生素或类似含抗生素的原料。

5.1.5 饲料应安全、卫生地运输、贮存和输送，防止虫害、受潮、变质及污染。

5.2 饲喂

5.2.1 应提供充足的采食空间，线性食槽 5cm/只（单侧）或 2.5cm/只（双侧），圆形食槽（按其周长计）不应少于 1.8cm/只。

5.2.2 喂料器应均匀地分布在鸡舍，鸡只到达最近喂料器的距离不应超过 4m，应根据鸡只的日龄和大小设置喂料器的最佳高度，以鸡只的背部高度等高为宜。

5.2.3 应保持饲喂设备清洁，及时清理剩余饲料，防止残余饲料的腐败变质。

5.2.4 按照肉鸡的品种不同或生长需要，应按时提供适量砂砾以助消化。

5.2.5 鸡只预防、治疗用药及上市前的休药期，应严格执行国家有关部门的相关规定。

5.3 饮水

5.3.1 应提供充足、清洁、新鲜的饮用水，水质应符合 GB 5749 的要求。

5.3.2 饮水器应均匀分布，鸡只到达饮水器的最大距离为 2m。

5.3.3 应确保每只鸡有足够的饮水空间，饮水器最低设置数量：钟式饮水器 50 只/个~60 只/个，乳头饮水器为 10 只/个。

5.3.4 饮水器高度应根据不同的生产方式和鸡只日龄及大小设置，乳头式饮水器以鸡只的眼线等高为宜，钟式饮水器与鸡只背部等高为宜。

5.3.5 供水系统应定期检测、清洗、消毒和维护，并有完善的卫生管理措施。饮水系统中使用的蓄水设施应封闭，并定期清洗消毒。

5.3.6 若采用散养，应确保供水设施或水源地能够提供充足、干净、新鲜的饮用水。若使用天然水源，应对潜在疾病风险进行评估。

5.3.7 根据兽医医嘱，需在饮水中添加药物或抗应激剂时，应使用专用设备，并做好添加记录。

6 养殖环境

6.1 设施设备

6.1.1 鸡场规划、设计和建设，应满足国家相关法律法规、相关标准和动物福利相关的要求。

6.1.2 鸡场的建设应符合生物安全要求，鸡场员工生活区、饲养区、运动场等分界明显，应设置围栏或隔网。鸡场外围应设防疫隔离区，有专门的净道和污道与外界相通，净道和污道不应交叉。

6.1.3 场区内应设置病死鸡剖检室和废弃物无害化处理设施。

6.1.4 鸡舍及舍内设施设备应使用无毒无害的材料，舍内的电器设备、电线、电缆应符合相关规范，且有防护措施防止鸡只接近和啮齿类动物的啃咬。

6.1.5 鸡舍应满足温度要求，且保温隔热，地面和墙壁应易于清扫、消毒。

6.1.6 鸡舍内外设备噪音应严格控制，舍内设备运行时总噪音不应超过 70dB。

6.1.7 鸡场安装的围栏、隔网、食槽、饮水器等所有与鸡群接触的饲养设施不应造成对鸡群造成伤害。

6.1.8 应设置防止鼠、猫、犬等其他动物闯入的设施，避免鸡群恐慌或受伤等突发事件发生。

6.2 地面和垫料

6.2.1 鸡舍地面应平整、干燥，方便有效清洁和消毒。

6.2.2 垫料平养应覆盖垫料，以利鸡只寻觅、探究、刨食等活动。垫料平均厚度，夏季 2cm~5cm，冬季为 5cm~10cm。应及时补充新鲜垫料，并保持垫面干燥。

6.2.3 垫料应卫生、干燥、易碎、松散，无板结。

6.2.4 网上平养宜使用木制、竹制或塑料制品的底网，底网网眼直径以 1.5cm~1.8cm 为宜。网面应分隔为一若干个小区，每个小区面积不小于 4m²。

6.2.5 大笼饲养不宜超过4层，层间距不宜小于75cm，并进行有效的隔离，防止造成层与层之间的相互污染。

6.3 照明

6.3.1 鸡舍宜引入自然光照，并配备足够的照明设施，确保光线充足、均匀。光照强度育雏期 20lx~30lx，生长期 10lx~20lx。

6.3.2 白羽肉鸡宜采用连续光照制度或间歇光照制度，连续光照时间至少 8h，黑暗时间不应小于 2h。黄羽肉鸡宜采用自然光照或间歇光照制度，即光照与黑暗之比为 8 : 4 或 12 : 12。

6.3.3 人工光源的打开和关闭应以渐进方式进行，保证鸡群适应时间不应小于 15min。

6.4 温、湿度与通风

6.4.1 应根据肉鸡不同生长阶段，施以所需最佳温度，避免温度的骤变。

6.4.2 鸡舍应有效通风，相对湿度宜控制在 50%~70%。

6.4.3 应保持舍内空气质量良好，有害成份符合 NY/T 388 规定。

6.5 饲养密度

6.5.1 应提供充足的饲养空间，保证鸡群起卧等活动的需要。

6.5.2 白羽肉鸡和黄羽肉鸡的最大饲养密度见表 1 和表 2。

表1 白羽肉鸡最大饲养密度

单位为只每平方米

| 饲养方式 | 最大饲养密度 | |
|------|--------|-------|
| | 0周~3周 | 4周~6周 |
| 垫料平养 | 28 | 13 |
| 网上平养 | 30 | 14 |
| 大笼饲养 | 32 | 16 |

表2 黄羽肉鸡最大饲养密度

单位为只每平方米

| 饲养方式 | | 最大饲养密度 | | | | |
|------|-----|--------|-------|-------|--------|------|
| | | 0周~2周 | 3周~4周 | 5周~7周 | 8周~11周 | >11周 |
| 散养 | 快速型 | 25 | 15 | 13 | 9 | - |
| | 中速型 | | 19 | 15 | 11 | 9 |
| | 慢速型 | | | 19 | 15 | 13 |
| 垫料平养 | 快速型 | 30 | 19 | 13 | 11 | 11 |
| | 中速型 | | 23 | 17 | 14 | 11 |
| | 慢速型 | | | 21 | 15 | 13 |
| 网上平养 | 快速型 | 42 | 25 | 14 | 12 | 12 |
| | 中速型 | | 34 | 19 | 13 | 12 |
| | 慢速型 | | | 21 | 13 | 12 |

6.6 舍外场地

6.6.1 散养应设置足够空间的舍外场地，舍外面积不宜少于 $2\text{m}^2/\text{只}$ 。

6.6.2 舍外场地应注重安全卫生，保持干燥，并有良好的排水措施。

6.6.3 在鸡舍周围 20m 范围内，应为鸡只提供不少于 $8\text{m}^2/1000$ 只的遮荫棚或人工庇护区域，且应布局合理。

6.6.4 每 600 只的鸡群，应至少设置 2 个出入口，出入口规格为高不应小于 45cm、宽度不应小于 50cm。

6.6.5 出入口基部有台阶时，应设坡道，便于鸡只轻松出入。

6.6.6 夜间应关闭出入口，以防兽害的侵袭。

6.7 环境富集

6.7.1 应尽早（一般不迟于 7 日龄）提供环境富集物，如栖木（栖架）、沙浴池、啄食物（木块、悬挂并打结的粗吊绳）、玩具、以及芸薹类蔬菜或无毒植物。重复使用的富集物应彻底清洁消毒。

6.7.2 慢速型黄羽肉鸡宜提供栖木（栖架）。栖木总长度至少应保证 20% 的鸡群自由栖息，多排栖木之间相隔至少 30cm，与墙壁平行的栖木距离墙壁至少 20cm，栖架垂直空间为 30cm~

40cm。栖木不应置于水槽、食槽上方。

7 饲养管理

7.1 人员要求

鸡场管理和饲养人员应接受过动物福利相关知识培训，掌握动物健康和福利基本知识，能够胜任其所承担的工作。

7.2 抓鸡

抓鸡应在低光照或夜间实施，应握住鸡只的双翅或双脚，不应抓提鸡只的头部，轻抓轻放，动作温和，以减少鸡只的惊吓和应激反应。

7.3 日常管理

7.3.1 鸡群的日常管理应采用温和方式，所有活动应缓慢、谨慎，以减轻鸡群的恐惧、损伤及不必要的惊吓。

7.3.2 应每天对鸡舍进行卫生清洁工作，包括饮水、饲喂设施及地面等。

7.3.3 应随时清除鸡舍及周围环境中可能被鸡群误食的铁丝、塑料布、电线等杂物。

7.3.4 应每天对舍内设备如水线、料线、温控装置、通风设备、清粪系统等进行检查，发现故障，立即排除。

7.3.5 应尽量缩短对鸡群实施断喙、修喙、免疫接种、治疗（如注射）、称重、装车运输等过程的时间。

7.3.6 应每天对鸡群进行检查，发现健康不佳或受伤等福利问题，应及时查明原因，采取隔离、淘汰等措施妥当处置。

7.3.7 应识别可能对动物福利造成不利影响的自然灾害、极端天气等各种紧急情况，并制定应对方案。

7.3.8 应记录并保存日常检查的内容。

8 健康计划

8.1 鸡场应制定符合法律法规要求的兽医健康和福利计划，内容应至少包括：

——生物安全措施；

——疫病防控措施；

——药物使用及残留控制措施；

——病死鸡及废弃物的无害化处理措施；

——其他涉及动物福利与健康的措施等。

8.2 鸡场应定期对健康计划的实施情况进行检查，并适时对计划进行更新或修订。

9 运输

9.1 管理

9.1.1 运输方应满足国家相关法律法规和标准的要求，并应制定运输应急预案措施。

9.1.2 捕捉、装卸和运输肉鸡人员（司机和押运人员）应经必要的指导和培训，了解兽医和动物福利基本知识、能够胜任所承担工作。

9.2 捕捉

9.2.1 禁食时间应控制在 6h~8h，运输前 1h 应停水。

9.2.2 肉鸡养成上市时的捕捉，应在暗光或蓝光下进行，采取适当的隔挡，防止鸡群拥挤或踩踏。对于多层饲养的鸡群，捕捉时应防止鸡群从高空坠落。靠近鸡群时，应尽量降低噪音、灰尘和混乱，避免鸡群紧张和恐惧。

9.2.3 捕捉可采用单手法（抓握双脚）和双手法（抱胸扣翅法）。不应抓提鸡只的头部，操作时应轻柔小心，避免鸡只大小腿及鸡翅充血、出血或骨折。

9.3 运输

9.3.1 运输车辆、运输笼及所有与鸡群接触的表面，不应存在锋利边缘或突起物，使用前后应彻底清洗消毒，鸡笼清洗时笼内不应有活鸡。

9.3.2 运输时应采用肉鸡标准运输笼，笼高不应低于 28cm。装载密度（按笼底面积计算），白羽肉鸡不应小于 500cm²/只，黄羽肉鸡不应小于 400 cm²/只。

9.3.3 避免在极端天气运输鸡只，如遇有恶劣天气有防护措施（挡风板、帆布）。当气温高于 25℃（湿度大于 75%）或低于 5℃时，应采取适当措施，减少因温度过高或过低引起鸡群的应激反应。

9.3.4 司机应做到平稳驾驶，减少运输过程中的噪音，运输时间应控制在 2h 以内。押运人员在运输过程中应注意观察鸡只状况，避免死亡。

10 屠宰

10.1 管理

10.1.1 屠宰企业应满足国家相关法律法规和标准的要求。

10.1.2 屠宰企业的相关人员应掌握致晕屠宰的技能。

10.1.3 致晕和宰杀设备应安全、高效和可靠，使用前后应彻底清洁、消毒。

10.1.4 屠宰设备使用前应有专人进行检查，使其处于良好状态。

10.2 待宰栏

10.2.1 待宰栏的温度、湿度的要求适宜鸡只正常要求，应通风良好，采用弱光或蓝色灯光照明，有防止阳光直射和恶劣天气的措施，将肉鸡应激风险降到最低。

10.2.2 肉鸡运抵屠宰场后，应尽快安排宰杀，待宰时间不宜超过 2h。

10.3 挂鸡

10.3.1 挂鸡员应经培训，能够胜任工作，熟悉肉鸡镇静处理技术，以减少肉鸡不必要的痛苦或紧张。

10.3.2 待宰鸡只悬挂至屠宰时间间隔不应超过 30s。

10.4 致晕与放血

10.4.1 致晕方式应能使鸡只瞬间失去知觉和疼痛感，直至宰杀工序完成。

10.4.2 致晕过程不宜采用直流致晕的方式。

10.4.3 致晕—放血间隔不宜超过 10s。可采用设备放血或人工放血。在放血后 5s 内的位置应配备检查人员，对放血不充分的鸡只，进行补刀操作。

10.4.4 放血到热烫的过程不少于 3min。

10.4.5 如因宗教或文化原因不允许在屠宰前使鸡只失去知觉，而直接屠宰的，应在平和的环境下尽快完成宰杀过程。

11 记录与可追溯

11.1 除通常的养殖记录外，肉鸡养殖、运输、屠宰全过程的福利相关内容应予以记录，并可追溯。

11.2 记录可采用电子、纸质或其他可行方式。

11.3 肉鸡养殖、运输、屠宰全过程的相关记录应至少保存三年。

参 考 文 献

- [1]GB 12694 肉类加工厂卫生规范
 - [2]GB 13078 饲料卫生标准
 - [3]GB 16548 病害动物和病害动物产品生物安全处理规程
 - [4]GB 16549 畜禽产地检疫规范
 - [5]GB 16567 种畜禽调运检疫技术规范
 - [6]GB 18596 畜禽养殖业污染物排放标准
 - [7]GB/T 19525.2 畜禽场环境质量评价准则
 - [8]GB/T 20014.6 良好农业规范 第6部分：畜禽基础控制点与符合性规范
 - [9]NY/T 1167 畜禽场环境质量及卫生控制规范
 - [10]NY/T 1871 黄羽肉鸡饲养管理技术规程
 - [11]RSPCA welfare standards for CHICKENS
 - [12]BCSPCA Standards for the Raising and Handling of Laying Hens
 - [13]中华人民共和国动物防疫法
 - [14]中华人民共和国畜牧法
 - [15]兽药管理案例
 - [16]畜禽规模养殖污染防治条例
 - [17]农业部公告第168号饲料药物添加剂使用规范
 - [18]农业部农医发(2013)34号病死动物无害化处理技术规范
 - [19]农业部令 2010年 第7号动物防疫条件审核办法
 - [20]农业部令 2013年第2号兽用处方药和非处方药管理办法
-

本标准起草工作组构成：

起草单位：中国农业国际合作促进会动物福利国际合作委员会

英国皇家防止虐待动物协会

世界农场动物福利协会

山东民和牧业股份有限公司

湖北正大有限公司

福喜（威海）农牧发展有限公司

江苏立华牧业有限公司

北大荒宝泉岭农牧发展有限公司黑龙江北三峡养殖有限公司

山东凤祥股份有限公司

新希望六和股份有限公司

通标标准技术服务有限公司

起草人：杜炳旺、肖肖、王培知、席春玲、郑麦青、王林川、徐廷生、
顾宪红、滕小华、阿永玺、周宝贵、孟祥兵、赵景鹏、王天羿、
冯晓红、张沛。

T/CAS 267-2017

ICS 65.020.30; 67.120

B45

关键词：动物福利、农场动物、肉鸡

STANDARDS OF CHINA ASSOCIATION T/CAS
FOR STANDARDIZATION 267-2017

Farm animal welfare requirements:

Meat-type chicken

2017-07-14 issued



Index number
T/CAS 267-2017 (E)

This standard is developed by China Association for Standardization Copyright belongs to China Association for Standardization. All rights reserved. It must not be copied in any form except when it is used in the national laws or used with the permission in word from China Association for Standardization.
Address of China Association for Standardization: No.33 Zengguang Road,
CAS Building, Haidian District, Beijing
Postal Code: 100048 Tel: 010-68487160 Fax: 010-68486206
Website: www.china-cas.org E-mail: cas@china-cas.org

Contents

| | |
|---------------------------------------|-----|
| Foreword..... | III |
| Introduction | IV |
| 1 Scope..... | 1 |
| 2 Normative reference documents | 1 |
| 3 Terms and definitions..... | 1 |
| 4 Chicks | 2 |
| 5 Feeding and drinking water..... | 3 |
| 6 Farming environment..... | 5 |
| 7 Feeding management | 8 |
| 8 Health plan | 9 |
| 9 Transport | 9 |
| 10 Slaughter | 11 |
| 11 Record and traceability | 12 |
| Bibliography..... | 13 |

Foreword

China Association for Standardization (CAS) is a nationwide public organization that organizes and carries out activities about domestic and international standardization. Developing CAS Standard to meet the needs of enterprises and promote the work of enterprise standardization is one of CAS' work contents. Both groups and individuals at home can offer the suggestion on developing or revising CAS standard, and participate in the relevant work.

CAS standard is managed according to "Management Rules for the Standards of CAS", and developed on the basis of CAS 1.1 "*Rules for the structure and drafting of standards of CAS*".

The draft of CAS Standard is open to the society for suggestion. Only with the vote of more than 75 percent experts and members who attend the Meeting can the draft be issued as the CAS Standard.

Given that some clauses of this standard may involve patent right, China Association for Standardization shall not be responsible for the identification of any of such patent rights.

It is the first time to issue the standard.

In the process of implementing the standard, please mail the opinion and relevant materials to CAS if you find something to be revised or complemented.

Introduction

0.1 General rules

In order to ensure the quality and safety of animal-derived food, healthy and good sustainable development of livestock husbandry industry, and fill the gaps in our farm animal - meat-type chicken welfare standard, specially develop this standard.

Based on the international advanced farm animal welfare concept and by combining with China's existing scientific and technological and socio-economic conditions, this standard specifies the farm animal - meat-type chicken welfare production requirements.

This standard is the requirements of the whole process of farming, transport and slaughter of meat-type chickens in farm animal welfare requirements.

0.2 Basic principles

Five basic principles of animal welfare are the basis of the farm animal welfare standards, the five basic principles include:

- a) Provide animals with clean drinking water and feed needed for keeping their health so as to protect them from hunger and thirst;
- b) Provide adequate shelter and comfortable habitat for animals to protect them from discomfort;
- c) Carry out disease prevention for animals and implement timely diagnosis and treatment for sick animals so as to protect them from pain and injury;
- d) Ensure that animals have the conditions and disposal modes to avoid psychological pain so that they are protected from fear and mental pain;
- e) Provide adequate space, appropriate facilities and companions for animals so that they can freely express their normal behavior.

Farm animal welfare requirements:

Meat-type chicken

1 Scope

This standard specifies the terms and definitions of meat-type chicken welfare, chicks, feeding and drinking water, farming environment, feeding management, health plan, transport, slaughtering and record and traceability.

This standard applies to the animal welfare management of the whole process of farming, transportation and slaughtering of meat-type chicken.

2 Normative reference documents

The following documents are essential for the application of this standard. For any dated reference, only the version dated will be applicable for this standard. For undated references, the latest version (including all amendments) applies to this standard.

GB 5749 Standards for Drinking Water Quality

NY / T 388 Environmental Quality Standard for the Livestock and Poultry Farm

3 Terms and definitions

The following terms apply to this document.

3.1 Animal welfare

Provide animals with appropriate nutrition and environmental conditions; scientifically treat animals; properly dispose animals; reduce pain and stress response of animals and improve their life quality and health level.

3.2 Farm animals

Animals for the production of food (meat, eggs and milk), processing of hair, fur and skin or other purposes, and those bred and fed in the farm environment or similar environment.

3.3 Farm animal welfare

Farm animals are well taken care of in the farming, transportation and slaughter to avoid unnecessary scare, pain, suffering, illness or injury.

3.4 Environmental enrichment

Through the providing of natural and man-made objects or environment for social

contact, entertainment, seeking and exploration of animals so as to enhance the animal body and psychological stimulation and achieve the management mode of meeting normal expression of animal behavioral habits, psychological and physical health needs.

3.5 Abnormal behavior

A kind of repeated behavior without obvious purpose or that causing harm to themselves and companions when the psychological or physiological needs of the meat-type chicken are not met.

3.6 White feather meat-type chicken

Fast-growing white feather meat-type chicken usually refer to those slaughtered at 35-42 days of age and weighing more than 1.8kg, also known as big fast-growing meat-type chicken.

3.7 Yellow feather meat-type chicken

Usually according to the growth rate and days of age of them coming into the market, meat-type chicken with yellow feathers or colored feathers are divided into fast type (8 to 10 weeks), medium speed type (10to 13 weeks) and slow type (more than 13 weeks).

3.8 Free-range farming

The farming mode that the meat-type chickens are free to enter and leave the poultry house, free to run, free to eat and drink water, and are sheltered.

3.9 Feeding on litter floor

The farming mode that meat-type chickens are fed on litter floors in the poultry house.

3.10 Feeding on the net rack

The farming mode of meat-type chickens bred on the net rack (single layer or multiple layers) that are manually installed in the poultry house.

3.11 Feeding in the large cage

The farming mode of meat-type chickens bred in a single layer or multi-layer cage in the poultry house.

3.12 Stunning slaughter

The slaughtering method that the animal is in a completely unconscious state prior to bloodletting by using the stunning device.

4 Chicks

4.1 Source

Chicks shall be from the meat-type chicken hatchery with the breeding livestock and poultry production and operation license; the chicks are the healthy chick flocks after

disease purification.

4.2 Disposal

4.2.1 Male and female identification should be carried out for chicks on the same day; the identification method of sex-linked inheritance identification method is appropriate. If the anal opening identification method is used, identification workers shall carry out sanitation and disinfection work.

4.2.2 Immunization of the relevant vaccines shall be implemented on the day of the brooding.

4.2.3 It should implement the beak trimming on the day of brooding. The infrared beak cutting technology is appropriate. The beak cutting operators should be trained specially to master relevant animal welfare knowledge.

4.2.4 Chicks shall use the standard chick boxes for storage and transport; the occupied area of 100 chicks is not less than 0.25m².

4.2.5 The room temperature for storage of chicks is between 22°C~26°C, humidity: 60%~70%, storage time should not exceed 4 hours. It should use special transport vehicles to transport chicks, the compartment temperature is controlled at 22°C~26°C and the ventilation is good.

5 Feeding and drinking water

5.1 Feed

5.1.1 The use of feed and feed raw materials shall comply with the requirements of relevant national laws, regulations and standards.

5.1.2 The feed supply shall comply with the characteristics of meat-type chicken breeds and their nutritional needs in physiological phase, and meet the requirements for maintaining good physical condition, normal growth and development of meat-type chickens.

5.1.3 The formula feed purchased by the meat-type chicken farm shall have the document record of raw material composition and nutrient content of the feed of the supplier; when you formulate the feed by yourselves, you shall keep the feed formula and ingredient list; the source of feed raw material should be traceable.

5.1.4 The feed of mammal or avian animal protein source (excluding dairy products) shall not be used. Except for the purpose of treatment, it is not allowed to use antibiotics or raw materials containing similar antibiotics in feed.

5.1.5 Feed must be safely and hygienically transported, stored and conveyed to prevent pests, moisture, deterioration and pollution.

5.2 Feeding

5.2.1 Adequate eating space shall be provided, linear trough: 5 cm for each chicken (single side) or 2.5 cm for each chicken (double sides); round trough (according to its circumference) shall not be less than 1.8 cm for each chicken.

5.2.2 The feeders shall be evenly distributed in the poultry house. The distance from the meat-type chicken to the nearest feeder shall not exceed 4 m. The optimum height of the feeder shall be set according to the days of age and size of the chicken; it is appropriate for the height to be equal to the back height of the chicken.

5.2.3 The feeding equipments shall be kept clean, clean up the residual feed in time to prevent deterioration of residual feed.

5.2.4 In accordance with different breeds or growth requirements of meat-type chickens, provide appropriate amount of gravel to help digestion on time.

5.2.5 The drugs for prevention and treatment of meat-type chickens and the withdrawal period before they come into the market shall strictly implement relevant provisions of the relevant state departments.

5.3 Drinking water

5.3.1 Provide adequate, clean and fresh drinking water; the water quality shall meet the requirements of GB 5749.

5.3.2 The drinkers shall be evenly distributed; the maximum distance from the chicken to the drinker does not exceed 2m.

5.3.3 It shall be ensured that each chicken has enough drinking space; the minimum number of drinkers: a bell-type drinker for 50~ 60 chickens; a nipple drinker for 10 chickens.

5.3.4 The height of the drinker shall be set according to different production modes, the days of age and size of chickens; it is appropriate for the height of the nipple drinker to be equal to the sight line of the chicken; it is appropriate for the height of the bell-type drinker to be equal to the back height of the chicken.

5.3.5 The water supply system shall be regularly detected, cleaned, disinfected and maintained, and has perfect health management measures. The water storage facilities used in the drinking water system must be closed and regularly cleaned and disinfected.

5.3.6 If the free range farming is adopted, it shall be ensured that water supply facilities or water sources provide adequate, clean and fresh drinking water. If natural water source is used, the risk of potential disease shall be assessed.

5.3.7 According to the advice of the veterinarian, when drugs or anti-stress agents

need to be added in the drinking water, special equipments shall be used, and adding records shall be made.

6 Farming environment

6.1 Facilities

6.1.1 The planning, design and construction of the meat-type chicken farm shall meet the requirements related to animal welfare.

6.1.2 The construction of the meat-type chicken farm shall meet the requirements of biosafety; the boundary among the living area of the farm workers, feeding area and the sports ground shall be obvious; the fence or separation net shall be installed. The quarantine zone shall be set outside the meat-type chicken farm; there are special clean passage and polluted passage connected to the outside; the clean passage and polluted passage shall not cross.

6.1.3 The dead chicken autopsy room and harmless treatment facilities for waste shall be set at the farm.

6.1.4 Non-toxic and harmless materials shall be used for the poultry house and facilities in it; the electrical equipments, wires and cables in the poultry house shall be consistent with relevant specifications, and there are protective measures to prevent chickens from getting close to and being bitten by rodents.

6.1.5 The poultry house shall meet the temperature requirements, and has thermal insulation function; the floors and walls shall be easy to clean and disinfect.

6.1.6 Noise of equipments inside and outside the poultry house shall be strictly controlled; the total noise of the equipments shall not exceed 70dB at runtime.

6.1.7 All the feeding facilities contacting with the flocks, such as the fence, separation net, troughs and drinkers at the meat-type chicken farm, shall not cause injury to the flock.

6.1.8 The facilities preventing rats, cats, dogs and other animals from entering the poultry house shall be installed to avoid panic or injury and other emergencies of meat-type chicken flock.

6.2 Floor and litter

6.2.1 The floor of the poultry house shall be smooth and dry, and is easy to clean and disinfect effectively.

6.2.2 For the feeding on litter floor, it shall be covered with the litter to facilitate the chickens to find, explore, dig food and other activities. The average thickness of the litter: 2cm ~ 5cm in summer, and 5cm ~ 10cm in winter. Shall Add fresh litter in time to

keep the surface dry.

6. 2. 3 The litter shall be clean, dry, fragile and loose without hardening.

6. 2. 4 For feeding on the net rack, it is appropriate to use the bottom net of wooden, bamboo or plastic products; it is appropriate for the mesh diameter to be 1.5cm ~ 1.8cm. The net surface should be divided into several small zones; the area of each small zone is not less than 4m².

6. 2. 5 For the feeding in large cage, it is better for the number of layers not to be more than 4 and the spacing between layers not to be less than 75cm; and effective separation should be carried out to prevent the mutual pollution between the layers.

6. 3 Lighting

6. 3. 1 It is better for the poultry house to introduce the natural light and be equipped with adequate lighting facilities to ensure adequate and uniform light. Light intensity in brooding period: 20lx ~ 30lx, growth period: 10lx ~ 20lx.

6. 3. 2 For white feather meat-type chickens, it should be use continuous lighting system or intermittent lighting system; continuous lighting time is longer than or equal to 8 hours, dark time is longer than or equal to 2 hours. For yellow feather meat-type chickens, it should be use natural light or intermittent lighting system, that is, ratio of light to darkness: 8: 4, or 12:12.

6. 3. 3 The opening and closing of the artificial light source shall be carried out in a gradual manner to ensure that the flock adaptation time is longer than or equal to 15 minutes.

6. 4 Temperature, humidity and ventilation

6. 4. 1 Shall according to different growth stages of meat-type chickens, implement the best temperature required to avoid sudden change in temperature.

6. 4. 2 The poultry house shall be effectively ventilated; relative humidity shall be controlled between 50% and 70%.

6. 4. 3 Shall keep the good quality of air in the poultry house, the harmful ingredients comply with regulations in NY / T 388.

6. 5 Feeding density

6. 5. 1 Shall provide adequate feeding space to ensure the requirements of life, sleeping and other activities of the meat-type chicken flock.

6. 5. 2 The maximum farming density of white feather meat-type chickens and yellow feather meat-type chickens is shown in Table 1 and Table 2.

Table 1 Maximum feeding density of white feather meat-type chickens

Unit: number of meat-type chickens per square meter

| Feeding mode | Maximum feeding density | |
|-----------------------------|-------------------------|----------|
| | 0~3weeks | 4~6weeks |
| Feeding on the litter floor | 28 | 13 |
| Feeding on the net rack | 30 | 14 |
| Feeding in the large cage | 32 | 16 |

Table 2 Maximum feeding density of yellow feather meat-type chickens

Unit: number of meat-type chickens per square meter

| Feeding mode | | Maximum feeding density | | | | |
|-----------------------------|-------------------|-------------------------|-----------|-----------|------------|-----------|
| | | 0~2 weeks | 3~4 weeks | 5~7 weeks | 8~11 weeks | >11 weeks |
| Free-range farming | Fast type | 25 | 15 | 13 | 9 | - |
| | Medium speed type | | 19 | 15 | 11 | 9 |
| | Slow type | | | 19 | 15 | 13 |
| Feeding on the litter floor | Fast type | 30 | 19 | 13 | 11 | 11 |
| | Medium speed type | | 23 | 17 | 14 | 11 |
| | Slow type | | | 21 | 15 | 13 |
| Feeding on the net rack | Fast type | 42 | 25 | 14 | 12 | 12 |
| | Medium speed type | | 34 | 19 | 13 | 12 |
| | Slow type | | | 21 | 13 | 12 |

6.6 Yard outside the poultry house

6.6.1 The free-range farming shall have the yard with enough space outside the poultry house; its minimum area should be bigger than or equal 2 square meters for each chicken.

6.6.2 Attention shall be paid to the safety and sanitation of the yard outside the poultry house; keep dry, and good drainage measures should be taken.

6.6.3 Within the range of 20m around the poultry house, the shed or artificial

shelter area not less than 8m² for every 1000 chickens shall be provided for chickens, and the layout shall be reasonable.

6.6.4 For a flock of 600 chickens, at least 2 entrances and exits shall be set; the height is bigger than or equal to 45 cm and the width is bigger than or equal to 50 cm.

6.6.5 If there are steps at the base of the entrance and exit, the ramp shall be set so that the chickens can get in or out easily.

6.6.6 The entrance and exit shall be closed at night to prevent the invasion of animals.

6.7 Environment enrichment

6.7.1 Environmental enriched materials, such as perches (roost), sand bath, pecking food (wooden blocks, suspended and knotted ropes), toys, brassicas-like vegetables or non-toxic plants, shall be provided as early as possible (generally no later than 7 days of age). The reused enriched materials shall be thoroughly cleaned and disinfected.

6.7.2 Slow type yellow feather meat-type chickens should be provided a perch (henroost). Perches (roost) shall be provided for slow-type yellow feather meat-type chickens; the total length of the perch shall ensure at least 20% of the meat-type chicken flock inhabit freely; the spacing among several rows of perches is at least 30cm; the distance between the perch parallel to the wall and the wall is at least 20cm; the vertical space of the roost is 30cm~40cm. The perches should not be placed above the water trough and feed trough.

7 Feeding management

7.1 Personnel requirements

The meat-type chicken farm management and farming personnel shall be trained about animal welfare knowledge, master basic knowledge of animal health and welfare, and be able to do what they are responsible for.

7.2 Catching chickens

Chickens shall be caught in low light or at night; catch the wings or feet of the meat-type chicken; shall not grasp the head; gently grasp and put down; the action is mild so as to reduce the meat-type chicken's fear and stress response.

7.3 Daily management

7.3.1 Daily management of flocks shall adopt the mild manner; and all activities must be slow and careful so as to reduce the fear, damage and unnecessary scare of the flock.

7.3.2 The poultry house shall be cleaned every day, including drinking water, feeding facilities and the floors.

7.3.3 Iron wire, plastic cloth, wire and other debris that may be eaten by the flocks mistakenly in the poultry house and the surrounding environment shall be removed at any time.

7.3.4 The equipments in the poultry house shall be check every day, such as waterline, feed line, temperature control device, ventilation equipment, dung cleaning system, etc. If the faults are found, solve the problems immediately.

7.3.5 Minimize the implementation time of beak cutting, beak repairing, immunization, treatment (such as injection), weighing, loading and transportation.

7.3.6 The flocks shall be check every day, if the poor health or injury and other welfare problems are found, promptly identify the reasons and take measures of isolation, elimination and others to properly dispose.

7.3.7 The meat-type chicken farm shall identify emergencies such as natural disasters, extreme weather and others that may adversely affect animal welfare, and develop response programs.

7.3.8 The contents of the routine inspection shall be record and save.

8 Health plan

8.1 The meat-type chicken farm shall develop the veterinary health and welfare plan that complies with the requirements of laws and regulations; the content shall include at least:

- Biosecurity measures;
- Disease prevention and control measures;
- Drug use and residue control measures;
- Harmless treatment measures for dead or sick chickens and waste;
- Other measures involving animal welfare and health.

8.2 The meat-type chicken farm shall regularly check the implementation of the health plan and update or revise it in time.

9 Transport

9.1 Management

9.1.1 The transport party shall meet the requirements of relevant national laws, regulations and standards, and formulate measures for transport contingency plan.

9.1.2 The personnel (drivers and escort personnel) catching, handling and

transporting meat-type chickens shall be guided and trained to understand the basic knowledge of veterinary and animal welfare, and can do the work.

9.2 Catching

9.2.1 The fasting time shall be controlled between 6h and 8h; water supply shall be stop 1h before transport.

9.2.2 Catching of meat chickens when they grow to market weight shall be carried out in dark or blue light; adopt appropriate barriers to prevent crowding or trampling of the flocks. For multi-layer fed flocks, shall prevent flocks from falling from high altitude in catching. Quietly get close to flocks, try to reduce noise, dust and confusion, and avoid tension and fear of flocks.

9.2.3 The capture can adopt single hand method (grasp the feet) and two –hand method (cling to the chest and hold the wings). Shall not grasp the head of the chicken; the operation shall be gentle and careful to avoid congestion, bleeding or fracture of thighs, shanks and wings of chicken.

9.3 Transport

9.3.1 All surfaces of transport vehicles and cages contacting with flocks shall not have sharp edges or protrusions; they must be thoroughly cleaned and disinfected before and after use. When the cages are cleaned, live chickens are not allowed to be in them.

9.3.2 The standard transport cage shall be used, the cage height shall not be less than 28cm. Loading density (calculate according to the cage bottom area): for white feather meat-type chickens, bigger than or equal to 500 square centimeters/ each; for yellow feather meat-type chicken: bigger than or equal to 400 square centimeters/ each.

9.3.3 Laying hens shall be avoided transport in extreme weather, in case of bad weather, there are protective measures (wind board and canvas). When the temperature is higher than 25 °C (humidity is greater than 75%) or lower than 5 °C, appropriate measures shall be taken to reduce the stress response of flocks caused by too high or too low temperature.

9.3.4 The drivers shall drive smoothly and reduce the noise during transport; and the transport time shall be controlled within 2 hours. Escort personnel during transport shall pay attention to observe the situation of meat-type chickens to avoid their death.

10 Slaughter

10.1 Management

10.1.1 The slaughter enterprise shall meet the requirements of relevant national laws, regulations and standards.

10.1.2 The personnel of the slaughter enterprise shall have the skills of stunning slaughter.

10.1.3 Stunning and slaughter equipments shall be safe, efficient and reliable, and be thoroughly cleaned and disinfected before and after use.

10.1.4 The slaughter equipments shall be checked by specially-assigned personnel before use so that they are in good condition.

10.2 Waiting lairage

10.2.1 Requirements for temperature and humidity of the waiting lairage for slaughter are suitable for normal requirements of chickens; its ventilation shall be good; low light or blue lighting shall be used; there are measures for preventing direct sunlight and bad weather, which minimizes the stress risk of meat-type chickens.

10.2.2 After meat-type chickens are transported to the slaughterhouse, the slaughter should be arranged as soon as possible and it is not suitable for the waiting time for slaughter to exceed 2 hours.

10.3 Hanging meat-type chickens

10.3.1 Workers hanging meat-type chickens shall be trained and then can do the work, and they are familiar with meat-type chicken sedation techniques so as to reduce unnecessary pain or tension of meat-type chickens.

10.3.2 The time interval between the hanging of meat-type chickens for waiting for slaughter and the slaughter shall not exceed 30 seconds.

10.4 Stunning and bloodletting

10.4.1 The stunning mode shall make the meat-type chickens to lose the consciousness and pain instantly until the slaughter process is completed.

10.4.2 It should not use DC stunning mode for the stunning process.

10.4.3 It is not appropriate for the time interval between stunning and bloodletting to exceed 10 seconds. Equipment bloodletting or manual bloodletting can be adopted. The checkers shall be arranged in the position within 5 seconds after bloodletting to use knives to continue the bloodletting for chickens whose bloodletting is not sufficient.

10.4.4 The time from bloodletting to hot scalding is not less than 3 minutes.

10.4.5 If, for religious or cultural reasons, the meat-type chickens are not allowed to be unconscious before slaughter, but are slaughtered directly, they shall be slaughtered as soon as possible in a peaceful environment.

11 Record and traceability

11.1 Besides the usual farming records, the welfare-related content of the whole process of farming, transportation and slaughter of meat-type chickens shall be recorded and traceable.

11.2 Records may be electronic, papery or other feasible modes.

11.3 Relevant records of the whole process of farming, transportation and slaughter of meat-type chickens shall be kept for at least three years.

Bibliography

- [1]GB 12694 Code of hygienic practice for Meat Processing
 - [2]GB 13078 Feed Hygiene Standards
 - [3]GB 16548 Biosafety Specification on Sick Animal and Animal Product Disposal
 - [4]GB 16549 Code of Quarantine for Livestock and Poultry Origin
 - [5]GB 16567 Code of Quarantine Technology for the Transport of Breeding Livestock And Poultry
 - [6]GB 18596 Discharge Standard of Pollutants for Livestock and Poultry Farming
 - [7]GB/T 19525.2 Criteria for Evaluating the Environmental Quality of the Livestock and Poultry Farm
 - [8]GB/T 20014.6 Good Agricultural Practice - Part 6: Livestock Base Control Points and Compliance Criteria
 - [9]NY/T 1167 Environment Quality and Sanitary Control Requirement for the Livestock and Poultry Farms
 - [10]NY / T 1871 Feeding Management Regulations of Yellow-Feathered chicken
 - [11] RSPCA Welfare Standards for CHICKENS
 - [12] BCSPCA Standards for the Raising and Handling of meat-type chicken Chickens
 - [13]Animal Epidemic Prevention Law of the People's Republic of China
 - [14]Animal Husbandry Law of the People's Republic of China
 - [15]Veterinary Drug Management Cases
 - [16]Regulation on the Prevention and Control of Pollution from Large-Scale Farming of Livestock and Poultry
 - [17]Code for the Use of Feed Additives, Notice No. 168 of the Ministry of Agriculture
 - [18]Technical Code for Harmless Treatment of Dead Animals, No. 34, Nongyifa [2013], Ministry Of Agriculture
 - [19]Measures for the Examination of Animal Epidemic Disease Prevention Conditions, Notice No. 7 in 2010, Ministry of Agriculture
 - [20]Veterinary Prescription Drug and Non-Prescription Drug Management Practices, Notice No. 2 in 2013, Ministry Of Agriculture
-

Drafting team of this standard:

Drafting organizations

ICCAW of CAPIAC

Royal Society for the Prevention of Cruelty to Animals(RSPCA)

Compassion in World Farming (CIWF)

Shandong Minhe Husbandry Co., Ltd

Hubei CP Co., Ltd.

OSI Group (Weihai) Poultry Development Co., Ltd.

Jiangsu Lihua Animal Husbandry Stock Co., Ltd.

Heilongjiang Beisanxia Breeding Co., Ltd. of Beidahuang Baoquanling

Shandong Fengxiang Co., Ltd.

New Hope Liuhe Co., Ltd.

SGS-CSTC Standards Technical Services Co., Ltd.

Drafting team

Bingwang Du, Xiao Xiao, Peizhi Wang, Chunling Xi, Maiqing Zheng,
Linchuan Wang, Tingsheng Xu, Xianhong Gu, Xiaohua Teng, Ayongxi,
Baogui Zhou, Xiangbing Meng, Jingpeng Zhao, Tianyi Wang, Xiaohong Feng,
Pei Zhang

T/CAS 267-2017

ICS 65.020.30; 67.120

B45

Keywords: Animal welfare, farm animal, meat-type chicken
