### Quality Assurance. From farm to shop.













# **QS-REPORT** Meat and Meat Products 01/2016

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### Dear Readers,

Editorial Dear Readers,
The phasing out of the castration of piglets without anaesthesia by the end of 2018 has very much been on the minds of pig farmers and companies within the meat industry just as much as it has of those in the field of science and applied research. With its Coordination Platform Piglet Castration, QS is offering a sector forum in which to discuss problems and possible roads to solution. In this issue, you read which position the various participants have with regard to current developments. You can also enjoy the following topics: data protection at QS, taking stock on three years of monitoring antibiotics and more. This spring issue also includes an insert with facts, figures and data from 2015 within the QS scheme.

The editorial team would be pleased to receive questions and suggestions on the QS-Report to presse@q-s.de.



# **Phasing out Piglet Castration** without Anaesthesia

### Coordination platform discusses basic points

According to new legal regulations, from 1 January 2019 piglets may no longer be castrated in Germany without anaesthesia. An earlier date is being striven for by some individual market participants. It must now be quickly demonstrated that alternative methods are ready to be put into practice. In a position paper, the participants in the QS Coordination Platform "renouncing piglet castration without anaesthesia" speak in favour of a joint and active approach in order to achieve a timely and orderly way of abandoning surgical castration of piglets without anaesthesia that is both justifiable from an animal welfare point of view and economically viable for all concerned.

The coordination platform is comprised of responsible individuals from pig production, the meat industry and retail. Numerous scientists, representatives of the German animal welfare association "Deutscher Tierschutzbund" and ministerial representatives also actively participate. Already in 2008 in the Düsseldorf Declaration their joint objective was formulated, to abandon the castration of piglets without anaesthetic, at the same tie ruling out any kind of risk to the consumer and animals alike. Following this declaration, a quick and coordinated start was made on scientific research and concrete conversion processes in the industry sector.

### Three alternative procedures

There is agreement amongst experts that in the future the alternatives available will be castration with analgesia/anaesthesia, entire male production and vaccination against boar taint (immuno-castration). In its latest meeting of April 2016, the coordination platform explored the various possibilities and debated possible further need for action. This has all been summarised in the key issues paper which can be accessed here: www.q-s.de/presse. According to the above, each procedure has its pros and cons but each has its risks as well. Commenting on this, Johannes Röring, President of the Westphalia-Lippe Agricultural Association said, "So that both the livestock farmers and the remaining partners in the chain can find the suitable procedure, an impact assessment needs to be conducted as a matter of urgency. Farmers are of course pushing for greater animal welfare. However, we see that there is still great need for clarification." He also warns of stigmatising a specific procedure. "Making a decision in favour of a specific procedure must not be allowed to be abused for competitive advantage."

### Further research needed

In addition to the knowledge already gained, there is further need for research and clarification regarding fundamental legal, technical and market-related issues in

Continue reading here >>

# **Phasing out Piglet Castration without Anaesthesia**

### Coordination platform discusses basic points - continued from page 1

order to ensure that piglet castration without anaesthetic is phased out smoothly by 2019. "Business and science are working at high pressure to develop solutions. It's a matter of clarifying outstanding issues in the areas of odour and taint detection, animal husbandry, breeding, processing and marketing. Furthermore we need to examine the effects on business and market structures, production and breeding businesses, as well as the trading of pigs and pork within Europe. Special regional features also have to be taken into account", according to QS Managing Director, **Dr. Hermann-Josef Nienhoff**.

#### QS as a coordinator

There are still many unresolved points in all areas, but time is running out. Those participants from within the sector are working extremely hard on workable solutions. The platform hosted by QS is coordinating these efforts and offers those involved the chance to exchange ideas directly and adopt a coordinated approach.

i On 9 June 2016 together with the Federal Ministry of Food and Agriculture (BMEL), QS will be holding a symposium in Berlin entitled "Renouncing Piglet Castration without Anaesthesia". A comprehensive overview of current knowledge and expertise in this area will be offered in the form of lectures and panel discussions. Further information will follow shortly on the QS website.

# Three Years of QS Antibiotics Monitoring

### Time to take stock, critical antibiotics remain in the spotlight

The therapy index is available for 95 percent of all pork producing and 90 percent of all poultry producing farms in Germany. The QS antibiotic monitoring has created transparency and the possibilities to make comparisons for livestock farmers and vets. This has already led to a considerable reduction in the amounts of antibiotics used in the last few years. This is the result of the stock take of the first three years of the QS antibiotic monitoring programme, introduced as a joint project by the industry and veterinarians at the beginning of 2012. Since then, 1.8 million veterinary drug records have been recorded in the QS database by veterinarians on behalf of the livestock farmers

This is an enormous amount of data, which is not only testimony to the great dedication on the part of livestock farmers and veterinarians but also allows reliable conclusions to be drawn in assessing the use of antibiotics in livestock farming. Progress has been made here: In the past three years the average therapy index values for all kinds of animals and all areas of use have fallen - some by more than 30 percent. The quantities of antibiotics prescribed by farm vets, which has been diminishing for years has also contributed to the actual reduction (see figure).

Just discussing quantities, however, is not expedient. The aim of monitoring antibiotics is to minimise the spread of resistance. Here it is the classes of drugs that are the focus of our attention and these are also of great importance in the field of human

medicine. This is why QS introduced an additional therapy index for critical antibiotics at the end of 2015. In this regard, livestock farmers who most frequently use antibiotics in the two drug classes of fluoroquinolones and cephalosporins (third and fourth generation drugs) receive special information in their antibiotic information updates every three months. A step welcomed by veterinary specialist for pigs **Dr. Andreas Palzer:** "The new therapy index is helping to create a conscience among animal owners regarding the amount of critical antibiotics administered,

In the current issue of our **veterinary magazine "Zum Hofe"** (only available in German) you will be able to find further facts and figures and data on three years of monitoring antibiotics by QS (to be found under www.q-s.de/magazin-zum-hofe or in the App-Store).

to look for suitable alternatives with their veterinarians and in doing so laying the foundation for a further reduction in antibiotic use."



### Use of antibiotics in QS-companies (poultry, pig)

	2014	2015	comparison with the previous year
Aminoglycosides	17.82	11.38	-36.1%
Cephalosporines, 1 <sup>st</sup> gen.	0	0	-
Cephalpsporines, 3 <sup>rd</sup> & 4 <sup>th</sup> gen.	0.36 = 7.65	0.49 = <b>6.59</b>	36.1% = <b>13.9</b> %
Fluorchinolones	7.29	6.10	16.3%_
Folic acid antagonists	8.39	4.29	-48.9%
Lincosamides	10.76	8.15	-24.3%
Macrolides	64.19	49.14	-23.5%
Penicillines	282.08	231.93	-17.8%
Phenicoles	1.14	1.51	32.5%
Pleuromutilines	9.6	10.12	5.4%
Polypeptide antibiotics	56.59	45-39	-19.8%
Sulfonamides	44.9	23.46	-47.8%
Tetracyclines	194.08	154.92	-20.2%
Total	697.2	546.87	-21.6%

Per tonne of antibiotics

# **QS-live**

### What's new?

### The search for retail team of the year

This year our theme is "QS-live does School!" One of the highlights of this is our participation at the summer camp in Neuwied from 11-12 June. In conjunction with the Neuwied "food akademie" and



the specialist magazine "LEBENSMITTEL PRAXIS" we will be on the look-out over the two days for the up-and-coming Retail Team of the Year. QS-live will be on site as a cooperation partner and will be putting its



knowledge of cross-stage quality assurance in the fresh food sector to the test in front of around 350 junior sector employees.

### Enhanced cooperation with LandFrauen

Cooperation between QS-live and the LandFrauen associations is being intensified. The talks with the regional associations regarding possible connecting factors are leading to joint appearances. QS-live will be represented at the Hessian LandFrauen Assembly on May 24 and the German LandFrauen Assembly on July 6, 2016. "LandFrauen are true ambassadors, who convey fundamental everyday skills with regard to the expert and conscious handling of foodstuffs", so says QS Managing Director **Dr. Hermann-Josef** 



Nienhoff. "With this joint commitment we want to specifically address consumers and strengthen confidence and trust in our great food". The topics here concern knowledge regarding the provenance, processing and preparation of food, as well as quality assurance along the entire chain of production right the way through to the consumer.

Visit www.qs-live.de, where LandFrau Lore Mauler shares everything she knows about buying, storing and preparing fresh food.



# Data Security in the QS Scheme

### Properly protecting confidential data - information security concept further developed

Data and information represent considerable financial value - and this is true within the QS scheme, which deploys the most modern IT technology to collect data on behalf of and in the service of its scheme participants. The security and reliability of this technology is important, but the trustworthy handling of data and information is equally important. QS has brought together the most important measures to guarantee data security in an information security concept that has been designed in accordance with the standards of the Federal Office for Information Technology Security.

QS gathers, stores and processes data and information in the service of its scheme participants. The scope, type and purpose as well as the processing of this information and data are determined by agreements with the scheme participants along with the scheme manual and its guidelines. These measures are defined and limited by the QS information security concept. In addition to actual technical and organisational measures as part of a "rights and roles concept" it also regulates who collects data in the QS scheme, for what purpose and to what extent, as well as who may access this data.

### Who has access and to which data?

The scheme participants within the QS scheme have access to their data via the QS software platform. This is the case for basic data such as names, addresses and telephone numbers as well as for audit and monitoring data. This is different in the agricultural sector: The participating farms have authorised a

coordinator with the care and control of their data. They are given regular information updates by their coordinator. This is the case particularly with regard to data from the antibiotic and salmonella monitoring programmes as well as newly for findings from animal and meat testing. Farmers may also obtain their access data to the monitoring databases in the QS scheme on request from the coordinator. It is currently being looked into whether in the future it may be possible to give them direct access to the QS software platform.

### The information security concept

QS scheme participants can fully trust the data security within the QS scheme. This is also guaranteed via the information security concept: without prior permission by the respective scheme participant, QS will not disclose any company-specific data to third parties outside of QS. The only exception to this is information regarding undertakings participating in the QS scheme or those that have been temporarily and/or permanently suspenwided. Up to date information regarding participation or eligibility to deliver may be

obtained via the public scheme participant search in the QS software platform. This information is essential for the QS scheme "from farm to shop" to work properly.

## Recorded data in 2015 (supply chain meat and meat products):

- Master data of 108,785 scheme participants, 79 agricultural coordinators, 98 laboratories, 34 certification bodies, 390 auditors and 2,315 veterinarians
- 1.71 mio. analysis results of more than
   23,000 pig production companies of the salmonella monitoring
- 838,328 treatment slips for more than 36,000 livestock farmers of the antibiotics monitoring
- 19 mio. diagnostic data of ante-mortem and post-mortem inspections for more than 20,500 pig production companies
- 402,346 analysis results of the feed monitoring
- 31,135 audit records

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# Ad-hoc Monitoring - Aflatoxin B1 in Maize

### Risk-based approach proves its worth

The 2015 harvest revealed that there is still a clear and present danger from contaminated lots of maize. An effective instrument for the checking and monitoring of Aflatoxin levels has been developed in the "ad-hoc monitoring plan for Aflatoxin B1 in maize".

In July 2013 a separate ad-hoc control plan was introduced within QS as a reaction to the 2012 exceedances of maximum levels of Aflatoxin B1 in batches of maize from Serbia. This was done in consultation with the international standards authorities GMP+ Int., Ovocom and AIC. Since its introduction, producers of compound feed, feed material and wholesalers must test each batch of maize or processed

maize products from countries of origin classified in higher risk categories. "The regional Aflatoxin contamination of the 2015 harvest is an indication that this topic is still current. Even though the maximum permitted limits were exceeded in only a few samples, we must continue to vigilantly pursue possible contamination", explains **Claudia Brill**, coordinator of the animal feed section within the QS scheme.

The risk-oriented ad-hoc monitoring plan is re-tuned to the current crop and adjusted virtually every month. Existing analysis results collected by QS and other standards authorities and postings in the EU rapid alert system, as well as weather conditions in each respective country form the assessment basis for risk classification. "Because Aflatoxins occur time and again depending on weather and storage conditions and the risk cannot be ruled out per se, we will retain the monitoring plan in the future and at the same time need to discuss a more general approach", so Brill continues.



Detailed analysis results from selected countries for Aflatoxin B1 in maize and processed maize products, can be found on page 1 of the enclosed insert.

### **News** in brief

Animal welfare: farms move from the waiting list

As of mid-April, 279 poultry livestock farms and 259 pig farms have



been moved from the waiting list and admitted to the audit for the animal welfare initiative. The domestic waiting lists for chicken and turkey operations have thus been cleared. There are still 2,437 pig farms on the waiting list. Commenting on this, Managing Director Dr. Alexander Hinrichs says: "As soon as further financial means are available, more farms will be able to move up to participate. We continue to work intensively to find new partners for the initiative." The preliminary audits for newly accepted farms started at the end of April. Because of the new farms coming into the scheme, we estimate that the animal welfare measures implemented are now benefiting an additional 1.6 million pigs, 74.3 million broilers and 1.97 million turkeys.

### Centralised acquisition of diagnostic data – more than 50 % of slaughter pigs already recorded

The project to centrally record of diagnostic data which has been implemented since 2014 by QS and the Verband der Fleischwirtschaft e.V. (VDF - German Association of the Meat Industry) together with 14 abattoirs is transitioning seamlessly into general practice. Since the end of 2015 all abattoirs participating in the QS scheme can report the findings of official ante-mortem and post-mortem inspections in the QS diagnostic database. This applies to changes in the lung, pleura, pericardium, liver, as well as findings concerning ear and tail necrosis, abscesses, inflammation of the joints and skin lesions. The aim of centralised recording is to achieve benchmarking or comparison standards for data. Only then can beneficial conclusions be offered with regard to animal health, animal protection and animal welfare. In future, the results of organ findings can be used by Initiative Tierwohl - the Animal Welfare Initiative - as indicators of the level of animal welfare in pig farming. From 1 July 2016, abattoirs participating in the initiative will be obligated to record the ante- and post-mortem diagnostic data on pigs in the QS diagnostic database.

### A service for scheme participants: VLOG add-on module in OS audits





From 1 July 2016 scheme participants from the agricultural and feed sectors, as well as slaugh-

tering, deboning and processing will be able to opt for the VLOG add-on module as part of QS audits. The module was developed in collaboration with the Verband Lebensmittel ohne Gentechnik e.V. (VLOG - Association Food without Genetic Engineering) and only covers the requirements relevant to the "No GMOs" seal, that are over and above standard QS requirements. The supplementary checks as part of the VLOG add-on thus contribute to greater efficiency. Additional costs via duplicate auditing can be avoided. This add-on module also fulfils the requirements for using the QS quality seal in conjunction with "No GMOs" labelling. In order to achieve recognised status at VLOG, a successful audit to meet QS requirements along with the VLOG add-on module is needed. Conversely the result of the VLOG addon module has no bearing on the outcome of the QS audit.

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# Facts, Figures and Data on the QS Scheme

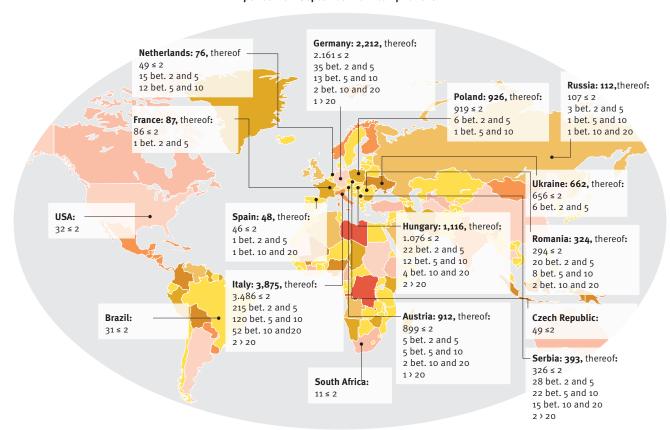
Meat and Meat Products



# **QS Feed Monitoring**

Aflatoxin B1: hazard of contaminated lots of maize still present

Amount of Aflatoxin B1 analyses and results (µg/kg) in maize and maize products of selected countries during the period from September 2012 to April 2016



From September 2012 to April 2016, **11,211 analyses** on Aflatoxin B1 in maize an maize products were carried out. In **94** % the content of Aflatoxin B1 was less than 2  $\mu$ g/kg. The results show that although exceedances of limit value hardly occur, contaminations still exist.

**8 analyses** were above the limit of 20  $\mu$ g/kg. Considering RASFF-reports and the results of other standards, Serbia and Italy are, among others, critical countries of origin.



**402,346 feed monitoring analysis results** were entered in the database in 2015.



**68 laboratories** are approved by QS for the feed monitoring.

# **Number of Scheme Participants**

306

108,785 scheme participants from
21 countries participate in the supply chain meat and meat products.

Scheme participants 2015 (as of Dec 2015)

Stage		Total	Germany	Other countries
	Stage	108,785	98,983	9,802
	Feed sector • Feed material production 1,2 • Compound feed production3 • Trade, transport, storage 4	<b>3,708</b> 1,140 1,240 1,328	<b>3,022</b> 962 910 1,150	686 178 330 178
	Agricultural production  • Cattle farming 5  • Pig farming 6  • Poultry farming/hatcheries	<b>77,831</b> 34,290 38,522 5,019	<b>69,613</b> 33,648 32,913 3,052	<b>8,218</b> 642 5,609 1,967
	Livestock transport	1,945	1,603	342
	Slaughtering/deboning	465	351	114
5	Processing 7	439	410	29
	Food retail <sup>8</sup>	24,397	23,984	413

1 Further 377 businesses eligible to deliver due to GMP+ certification 2 Including 71 additive and premix producers 3 Including 502 mobile feed milling and mixing plants 4 Further 4,930 businesses eligible to deliver due to GMP+ certification 5 Further 39,267 businesses eligible to deliver slaughter cows due to QM-milk auditing 6 Further 8,715 QSG businesses (DK) and 2,356 Certus businesses (B) with eligibility of delivery due to bilateral agreements 8 Including 144 meat wholesale companies



11 % of all cattle-, pig- and poultry farming businesses, eligible to deliver goods into the QS scheme, come from European neighbouring countries.

# **Auditor Trainings**

The topics treated in the auditor trainings are classified as professionally relevant with high approval. This is the finding of a survey conducted by QS last year among participants at auditor trainings. The survey was well received, with 81 percent of the 619 participants completing an assessment form at the end of the courses. Here are the detailed results:

How satisfied are you with...

the information about the event?

the course (organisation and service)?

the professional relevance of the presented topics?

the professional relevance of the guest lectures?

the offer of practice-oriented solutions?

the professional exchange with referees?

the professional exchange with colleagues?

o % 20 % 40 % 60 % 80 %

very satisfied satisfied dissatisfied/no answer



**34 certification** bodies are currently approved for the supply chain meat and meat products.



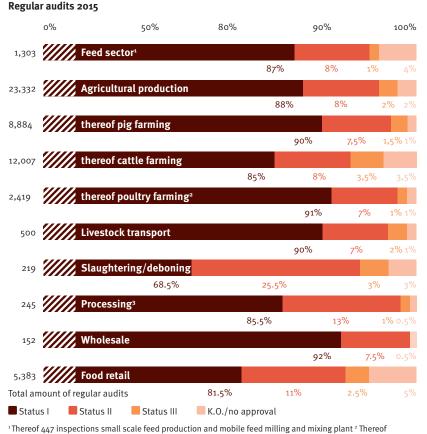
**390 auditors** have an approval for performing audits.

659 auditors participated in 36 training events in 2015.

### Auditor trainings 2015 (vs. 2014)

Туре	Amount	Participants	For foreign auditors	
			Amount	Participants
Feed sector	4 (4)	80 (60)		
Agricultural production	9 (8)	181 (179)		
Slaughtering/deboning, processing	3 (3)	45 (53)	1 (1)	14 (6)
Food retail combined (meat & fruit, vegetables, potatoes)	3 (2)	67 (64)		
Initial audits	4 (3)	68 (65)	2 (1)	13 (4)

# Regular, Random Sample and Additional Audits

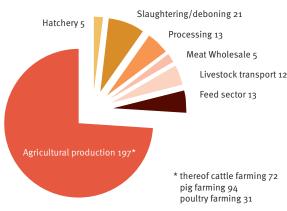


31,134 regular audits were conducted in the supply chain meat and meat products in 2015.



o.8 % of all cases led to a sanction procedure.

### Number of random sample audits



i Between the regular audits, the compliance with the QS requirements is checked by unannounced random sample audits. QS bears the costs of these audits, made per random selection.

The company is categorised into a QS status based on the audit result. For classification in status I, at least 90% of the maximal achievable number of points has to be

There were **45 suspected cases** where QS commissioned additional audits of **special purpose**.

They are carried out in response to concrete events or leads.

### 1,816 requirements.

e.g. regarding hygiene controls,
temperature specifications, animal
welfare, traceability, veterinary drugs,
feeding and storage, include the
OS scheme manual.

153 audits breederfarming 3 Thereof 51 audits butchery

obtained. In status II at least 80%, in status III 70%.

### Amount of QS requirements per stage



Cattle farming Pig farming: 60 Poultry production: 67



Livestock transport



Slaughtering/deboning



Processing

Process instructions



Wholesale



Food reta

### Sanction Prodcedures and K.O. Evaluations

#### Slaughtering/deboning 8 (3.6%) Traceability Processing 1 (0.4%) • Outgoing goods inspection Agriculture 217 (0.9%)\* • General hygiene requirements • Implemention of seld-assessment • Implemention of corrective actions Food retail 9 (0.2%) • Permanent use of ankle tethers Incoming goods inspection and temperature control · General requirements on keeping • Evidence of (hygiene) trainings \* Thereof 107 cattle, 102 pig and 8 poultry farms **Number of sanction** procedures and relative Coordinators 1 (1%) frequency with regard to • Data collection and administration of master data regular audits Livestock transport 2 (0.4%) Compliance with QS supply chain/ Feed sector 24 (1.8%) • Implemention of feed monitoring

### Quality Assurance. From farm to shop.

# **QS Antibiotics and Salmonella Monitoring**



The amount of antibiotics used by livestock owners in the QS scheme was **reduced by 20%** in 2015.



**2,315 veterinarians** are registered with the QS antibiotics monitoring programme. Based on the data provided by them, the therapy index could be compiled for all farms with pigs, fattening calves, broilers and turkeys.



**1.8 mio.** veterinary drug records have been recorded in the OS antibiotics database.

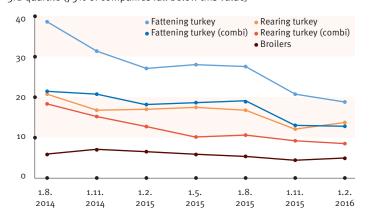
### Use of antibiotics continues to decline

Since 2012 the use of antibiotics in poultry, pig and cattle farming has been systematically recorded. The data are quaterly evaluated, the results are reported to the farmer in the form of the therapy index. The therapy index shows statistically how often antibiotics are used on an average. Both the indices calculated

by QS (see figures below) and the absolut amount of antibiotics issued by the pharmaceutical industry to veterinarians (DIMDI register), show a continuous drecrease of the use of antibiotics in livestock.

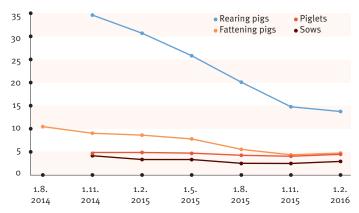
### Development of the QS therapy index poultry

3rd quartile (75% of companies fall below this value)

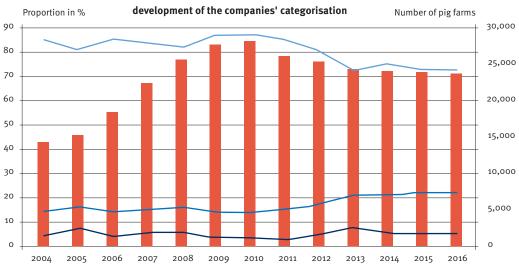


### Development of the QS therapy index pig

3rd quartile (75% of companies fall below this value)



### Salmonella monitoring:





**1,68 Mio.** samples were analysed by **30 QS-approved laboratories** within the frame of QS salmonella monitoring in 2015.

i The amount of category I-companies (low risk of salmonella) and III (high risk) decrased in the last few years. The amount of category II-companies increases significantly. Proposals for improving the salmonella monitoring are evaluated and implemented during the year 2016.

Number of pig farms

— Category I: low risk of salmonella (< 20% positive findings in sample)

Category II: middle risk of salmonella (> 20% and < 40% positive findings in sample)</li>

Category III: high risk of salmonella (> 40% positive findings in sample)

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