



QS. Ihr Prüfsystem für Lebensmittel.

QS-REPORT Fruit, Vegetables, Potatoes

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Editorial Dear Readers,

The move towards pre-cut fruit or vegetables and fresh-cut salads represents one of the most significant market trends in the food industry. QS has also been placing a focus on fresh, prepared fruit and vegetable products for the last number of years. In this edition of the QS-Report, we will take a close look at the topics of hygiene and microbiology in fresh-cut products. Additional topics include: shared understanding of sustainability within the industry, recognition of QS-audits from “Regionalfenster e.V.”, as well as news on residue analysis.

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



Fresh-cut products Focus on hygiene and microbiology

The demand for ready-to-eat fruit, vegetable and salad mixes is increasing steadily. This product group is growing faster than practically any other in the food industry. For producers, wholesalers and food retailers in the QS scheme, the rule is that anyone who chops, peels and packages, grates, slices or purees fruit, vegetables or potatoes after harvest can be audited in line with the Guideline Processing. The processing of sprouts also falls within the scope of the Guideline Processing. With the standards of this guideline, QS supports companies in documenting their efforts regarding safe production processes and products and making consumers aware of these efforts.

Because fresh-cut products are particularly vulnerable to contamination with bacteria, process hygiene and adherence to microbiological guidelines are basic requirements in order to guarantee safe food. To achieve QS certification, scheme participants need to follow a comprehensive hygiene concept and meet additional requirements on temperature control and shelf life. The implementation of microbiological monitoring is intended to guarantee the microbiological safety of the products. For many suppliers of fresh-cut products, the strict requirements regarding hygiene and temperature control constitute one very practical advantage of QS certification. “Hygiene deficiencies can be prevented effectively through the quality criteria of the QS checklist. Especially in the sensitive area of convenience products,

the QS certification mark represents visible proof of quality,” argues **Nadine Ernst**, Head of Quality Management at Bonduelle Deutschland.

Interest in QS auditing is rising

50 companies are already using the QS certification mark to prove the neutral quality assurance process undergone by their fresh-cut products. Today, in addition to fresh-cut producers, more and more companies involved in other processes (e.g. freezing and cooking processes) are interested in certification according to the QS Guideline Processing. A pilot project is currently being executed with the aim of expanding the scope of validity of the guideline with processes such as cooking, freezing and vacuuming. Based on the knowledge gained from the project, various control plans for microbiological monitoring are to be drawn up for the Guideline Processing.

i The supporting document **“Microbiology and Sampling”** offers useful tips on the aspects to be considered during the implementation of microbiological monitoring. In addition, it provides an overview of the microorganisms relevant to the fruit and vegetable sector and gives information on their occurrence and environmental behaviour. The supporting document can be downloaded from the **Document Centre** at www.q-s.de.

[Continue reading here >>](#)

Fresh-cut products

Focus on hygiene and microbiology – continued from page 1

Interview: Nadine Ernst (Head of Quality Management at Bonduelle Deutschland)



At Bonduelle, where do the focuses lie in the quality assurance of fresh-cut salads?

Ernst: Fresh-cut salads are highly perishable products. For this reason, the entire production and processing sequence at Bonduelle is subject to extremely strict quality and food safety checks. We have defined quality criteria that go far beyond legal requirements. Only raw goods that meet all defined requirements enter the production process. All German and almost all non-German salad producers are certified according to



the current QS standard, among others. In order to offer the greatest possible safety, all prepared Bonduelle salads are checked manually and washed in ice water. During processing, all significant process steps are precisely monitored, for example the optical sorter, cleaning checks, dosing of washing water and adherence to temperature requirements. Throughout the entire process from the field to the customer, our products go through more than 40 control steps. Every year, 5,000 microbiological and chemical analyses and over 15,000 sensory controls are performed by internal and

external laboratories in our sites in Germany. Certification according to IFS and QS is also a significant component of this.

How important is hygiene in your company?

Ernst: At Bonduelle, very strict standards regarding compliance with hygiene requirements apply throughout the entire production process. We guarantee that a constant cool temperature of no more than 4 °C is maintained from inbound to outbound delivery of the raw goods in order to prevent bacteria from multiplying. Personal hygiene is also a very important consideration. Protective clothing, washing facilities and strict hygiene plans, as well as regular training and success monitoring coordinated to the field of work, eliminate the risk of human transmission for all employees involved in processing. We perform daily pro-

duct audits and, during regular hygiene tours, our trained quality management teams check adherence to temperature, quality of cleaning, work space hygiene and pest control.



Microbiological analyses

Expert discussion highlights need for further research

On 30 June 2015, more than 20 experts from the field, sales, consulting, official control authorities, laboratories and science came together in order to exchange experiences on microbiological risks in unprocessed fruit and vegetables. The discussions made it clear that additional research is required in order to carry out microbiological analyses on fresh fruit and vegetables in a targeted manner and to be able to correctly assess possible contamination.

When it comes to guaranteeing food safety, microbial contamination of fresh fruit and vegetables is an important issue. To avoid potential risks to consumers, the microbiological status of the products is analysed frequently.

Due to a lack of knowledge, however, these analyses are often not sufficiently target-orientated. For this reason, the participants proposed developing knowledge-based recommendations for action. As a basis for this, the experts discussed possible approaches



for research projects to bridge knowledge gaps. For example, the development of challenge tests that could provide information on the growth of microorganisms in products was suggested. In addition, the participants agreed that the development of support for risk orientation during sampling would be useful. The expert discussion was organised by the Horticulture

“For me, the composition of experts from different sectors such as practice and science, was particularly useful in the expert discussion”, said **Dr. Gabriele Guder** from LAVES in Braunschweig.

Competence Centre (Kompetenzzentrum Gartenbau) and financed by the QS Science Fund Fruit, Vegetables, Potatoes. The board of the QS Science Fund Fruit, Vegetables, Potatoes is in favour of promoting additional research assignments on this topic.

10 years of QS residue monitoring

Producers in the QS scheme are doing great work, database provides a quick overview

Ever since the introduction of QS residue monitoring 10 years ago, residue levels in fresh fruit and vegetables have been steadily decreasing. This development provides clear evidence of the scrupulous working methods of producers in the QS scheme. The latest QS residue monitoring results confirm this positive trend.

In the first six months of 2015, only 0.41 percent of the analysed samples contained levels above the statutory maximum limits. Active substances that were not approved were found in 1 percent of the samples. The main reasons for this were drift, cross-contamination and carryover from spraying. The proportion of rejected samples with multiple reasons for rejection was 1.1 percent. Based on the official assessment benchmarks, the rejection rate of just 0.18 percent is minimal. The assessment benchmarks in the QS residue monitoring programme are considerably more stringent. In the assessment of plant protection product residues, QS does not accept any tolerance for analytical measurement uncertainty and additionally checks all analysis results for active

substances that are not approved for the cultivation crop in question.

Quick overview of company data

QS scheme participants can obtain an overview of their company data from the residue monitoring programme at any time. With just a few mouse clicks, the evaluation data in the QS database can be filtered and refined precisely according to the time period, product, active substance, trade specification or exceedance of contamination. Today, more and more scheme participants are making use of this service and providing voluntary samples in addition to the mandatory samples for comprehensive evaluation in the QS database.

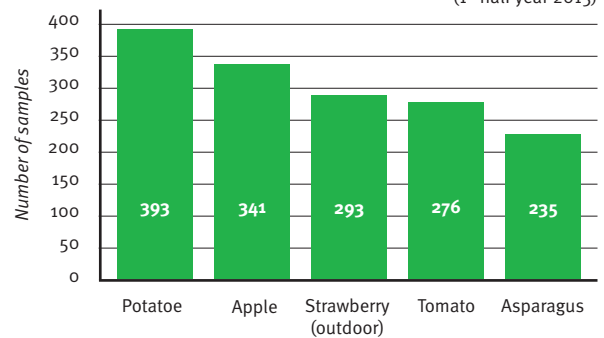
QS database – advantages at a glance

- ✓ Quick overview of results:
 - Red data sets: maximum levels exceeded or non-approved substances found
 - Yellow data sets: at least one active substance found
- ✓ Simple filtering options (e.g. according to trade specifications, products, active substances, countries of origin)
- ✓ Practical output of filtered results in Excel format

- In 2005, 3,800 scheme participants in the stages production, wholesale and food retail took part in QS residue monitoring; today, the number stands at approximately 14,300.
- 69,354 samples have been analysed in the last 10 years.
- The rejection rate has decreased from 1.3 percent (2005) to 0.59 percent (2014).
- The number of laboratories performing analyses has increased from 15 (including 3 outside Germany) to 76 (including 44 outside Germany).
- The laboratories' work has been subjected to 18 laboratory performance assessments since 2005 (two per year).

Top 5 of the most often analysed products

(1st half year 2015)



Regionalfenster

New service well received by QS scheme participants

Since April, it has been possible for “Regionalfenster e.V.” requirements to be checked in addition during QS audits on QS-certified production companies. Within this time, more than 530 companies have registered for Regionalfenster at QS. Wholesalers and packaging companies who are licensees of “Regionalfenster e.V.” and also QS scheme participants can have the production stage audited via the QS scheme within the scope of their Regionalfenster group certification.

« « « Three opinions from the field » » »

Carsten Knodt (vegetable producer from Tönisvorst): “For five years now, my products have practically only been marketed within a 150-kilometre radius. This makes more sense and is more sustainable. The recognition of QS audits with combined Regionalfenster inspec-

tion makes participating in Regionalfenster easier for me, because I don't need to do an extra audit. What's more, the inspection of Regionalfenster requirements in the QS audit allows me to provide credible evidence of the regional added value of my products.”

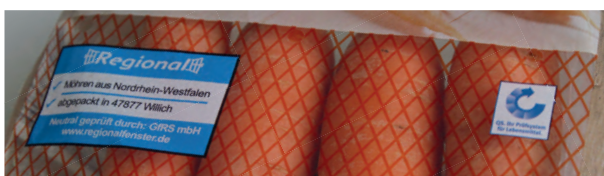
Dr. Svea Pacyna-Schürheck (Head of Quality Management at Landgard): “Many of our customers in the food retail sector are demanding fresh fruit and vegetables with a regional identity. We can prove this with a Regionalfenster label. QS gives us the possibility of quickly registering all interested member companies in the Regionalfenster programme. The additional requirements can be checked within the QS scheme without the need to set up an additional, cost-intensive system.”

Stephan Weist (Area Manager at CM Ultrafrische, REWE Group Buying): “In the last few years, the topic of regional origin has

Three steps to participating in Regionalfenster:

1. The production company concludes a declaration of participation for Regionalfenster with its QS coordinator and forwards a copy to its buyer, which is a QS scheme participant and also a licensee of “Regionalfenster e.V.”
2. The coordinator registers the company for the Regionalfenster programme in the QS database.
3. The additional requirements of the Regionalfenster programme are included in the next regular QS audit for registered companies.

gained in significance. For many consumers, short transports and support of regional agriculture play an important role in their purchase decisions. The agreements between QS and Regionalfenster make joining the Regionalfenster programme considerably easier. This allows us to meet the high demand for regional products faster.”



Sustainability in the supply chain

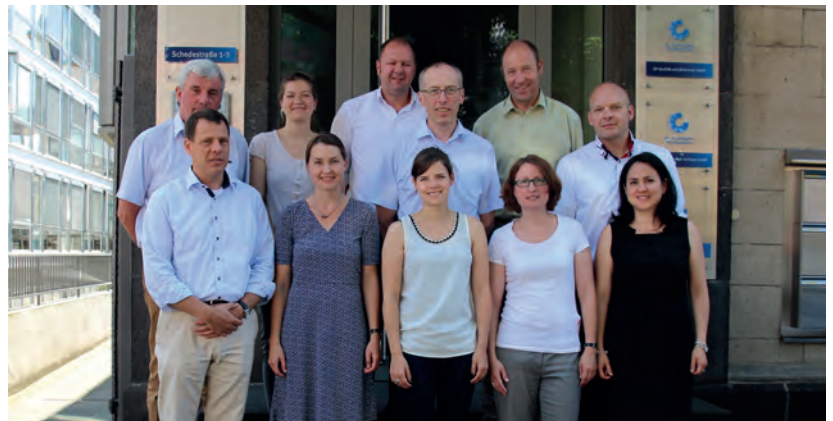
Platform for shared understanding

The concepts of sustainable development in horticulture and agriculture are quickly evolving in different directions. The Advisory Board Fruit, Vegetables, Potatoes has therefore decided to use QS as a platform for the topic of sustainability and to develop a shared understanding within the industry.

To achieve this goal, a "Sustainability" workgroup (picture) was set up comprising representatives of the entire supply chain. One of the focuses of the meetings to date was evaluating the advantages and disadvantages of the methods of sustainability standards. The participants also discussed the practicability of their implementation and controls. The group plans to invite relevant experts in order to obtain additional information on specific topics, such as economic aspects. The workgroup has the special assignment of supporting a study commissioned by QS aimed at the technical preparation of the topic. In this process, the relevant topical areas or hotspots of sustainability should be identified for the entire supply chain in the fruit, vegetables, potatoes sector and their significance for the industry assessed. The study is being carried out by Prof. Mempel and Prof. Hannus of the Weihenstephan-Triesdorf

University of Applied Sciences. In order to obtain as complete a picture as possible of the industry, the university conducted comprehensive online surveys of producers, wholesalers and food retailers in the scope of the study. Discussions at the expert level

round off the survey. Based on the results of the study and the workgroup meetings, the workgroup will develop a recommendation on future handling of the sustainability issue and present it to the advisory board in the spring of 2016.



News in brief



FRUIT LOGISTICA 2016

The fruit and vegetable industry will come together at the FRUIT LOGISTICA in Berlin from 3 to 5 February 2016. At the joint stand of the German Association of Producers' Organisations (Bundesvereinigung der Erzeugerorganisationen) at Hall 20, Stand A-02, QS staff will provide advice on the topic of quality assurance in fresh fruit and vegetables and inform you about news from the QS scheme. The new edition of the Monitoringreport Fruit, Vegetables, Potatoes, in which the German Fruit Trade Association (Deutscher Fruchthandel Verband) and QS present the current analysis results from the residue monitoring programme, will also be available at the stand.



New edition of Grips&Co sales guide published

In cooperation with RUNDSCHAU für den Lebensmittelhandel, QS has published the new edition of the Quality Assurance sales guide for the food retail sector. The brochure from the Grips&Co brand guide series provides apprentices in food retail and vocational students with valuable tips on the successful sale of fruit, vegetables and potatoes. The brochure also explains how the cross-stage quality assurance from farm to shop in the QS scheme works and what aspects need to be considered in the preparation of fruit and vegetables. Effective immediately, the new edition can be ordered free of charge from RUNDSCHAU and can be viewed at www.q-s.de (in German only).

Focus on barbecuing at QS-live


This summer at QS-live was all about barbecues. A particular highlight was the "Grill sucht Party" competition. The three winners of this promotion got the opportunity to enjoy a professionally prepared menu

including QS-certified meat, fruit and vegetables for their barbecue party. You can find useful tips relating to quality assurance when barbecuing in the "Grill Kompass" on the QS-live website. This compact guidebook offers information on which safety rules need to be followed when barbecuing and provides delicious recipes as well as useful tips on product know-how and the purchasing and storage of fresh barbecue foods.



You can download the "Grill Kompass" (in German only) for free from www.qs-live.de.

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