

# SHIANT

## **Food Safety cloud in Guizhou**

SHIANT

Bing Yang

# CONTENT



## Food safety cloud

单击添加内容单击  
添加内容单击添加  
内容



## Lims

单击添加内容单击  
添加内容单击添加  
内容



## Community

单击添加内容单击  
添加内容单击添加  
内容



## Portal

单击添加内容单击  
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## Application

单击添加内容单击  
添加内容单击添加  
内容





# SHIANT

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FOOD SAFETY CLOUD

01

## Food safety cloud

Big data  
Introduction  
Aim

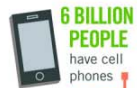
# 01 Big Data

Big health  
Big Data  
Detection IT Credibility  
Food safety  
Quality  
People-oriented  
Intelligence  
Safety cloud  
Green  
Visualizaiton

# 01 Big Data

## 40 ZETTABYTES

[ 43 TRILLION GIGABYTES ]  
of data will be created by 2020, an increase of 300 times from 2005



**6 BILLION PEOPLE**  
have cell phones



WORLD POPULATION: 7 BILLION

## Volume SCALE OF DATA

It's estimated that  
**2.5 QUINTILLION BYTES**  
[ 2.3 TRILLION GIGABYTES ]  
of data are created each day

Most companies in the U.S. have at least  
**100 TERABYTES**  
[ 100,000 GIGABYTES ]  
of data stored

The New York Stock Exchange captures

**1 TB OF TRADE INFORMATION**  
during each trading session



By 2016, it is projected there will be

**18.9 BILLION NETWORK CONNECTIONS**

— almost 2.5 connections per person on earth



## Velocity ANALYSIS OF STREAMING DATA

Modern cars have close to  
**100 SENSORS**  
that monitor items such as fuel level and tire pressure



## The FOUR V's of Big Data

From traffic patterns and music downloads to web history and medical records, data is recorded, stored, and analyzed to enable the technology and services that the world relies on every day. But what exactly is big data, and how can these massive amounts of data be used?

As a leader in the sector, IBM data scientists break big data into four dimensions: **Volume, Velocity, Variety and Veracity**

Depending on the industry and organization, big data encompasses information from multiple internal and external sources such as transactions, social media, enterprise content, sensors and mobile devices. Companies can leverage data to adapt their products and services to better meet customer needs, optimize operations and infrastructure, and find new sources of revenue.

By 2015  
**4.4 MILLION IT JOBS**  
will be created globally to support big data, with 1.9 million in the United States



As of 2011, the global size of data in healthcare was estimated to be

**150 EXABYTES**  
[ 161 BILLION GIGABYTES ]



**30 BILLION PIECES OF CONTENT**  
are shared on Facebook every month



## Variety DIFFERENT FORMS OF DATA

By 2014, it's anticipated there will be

**420 MILLION WEARABLE, WIRELESS HEALTH MONITORS**

**4 BILLION+ HOURS OF VIDEO**  
are watched on YouTube each month



**400 MILLION TWEETS**  
are sent per day by about 200 million monthly active users



**1 IN 3 BUSINESS LEADERS**

don't trust the information they use to make decisions



Poor data quality costs the US economy around

**\$3.1 TRILLION A YEAR**



**27% OF RESPONDENTS**

in one survey were unsure of how much of their data was inaccurate

## Veracity UNCERTAINTY OF DATA

Sources: McKinsey Global Institute, Twitter, Cisco, Gartner, EMC, SAS, IBM, MEPTec, QAS

IBM

FOOD BAFFTY CI OLD

# 01 Introduction



# 01 Aim

- Requirement of industry
  - Small enterprise
  - Shortage of inspection and data mining
  - A brake to development
- Development trend
  - Digitalization to all industries
  - Meet the trend of data help management and quality
- Government support
  - Guian District



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FOOD SAFETY CLOUD

## 02

### LIMS

点击添加内容点击添加内  
容内容点击添加内容



## 02 What is LIMS

- Laboratory information management system
- Manage data, resources and workflows
- Reduce implementation, training, validation and maintenance costs

## 02 Why we design

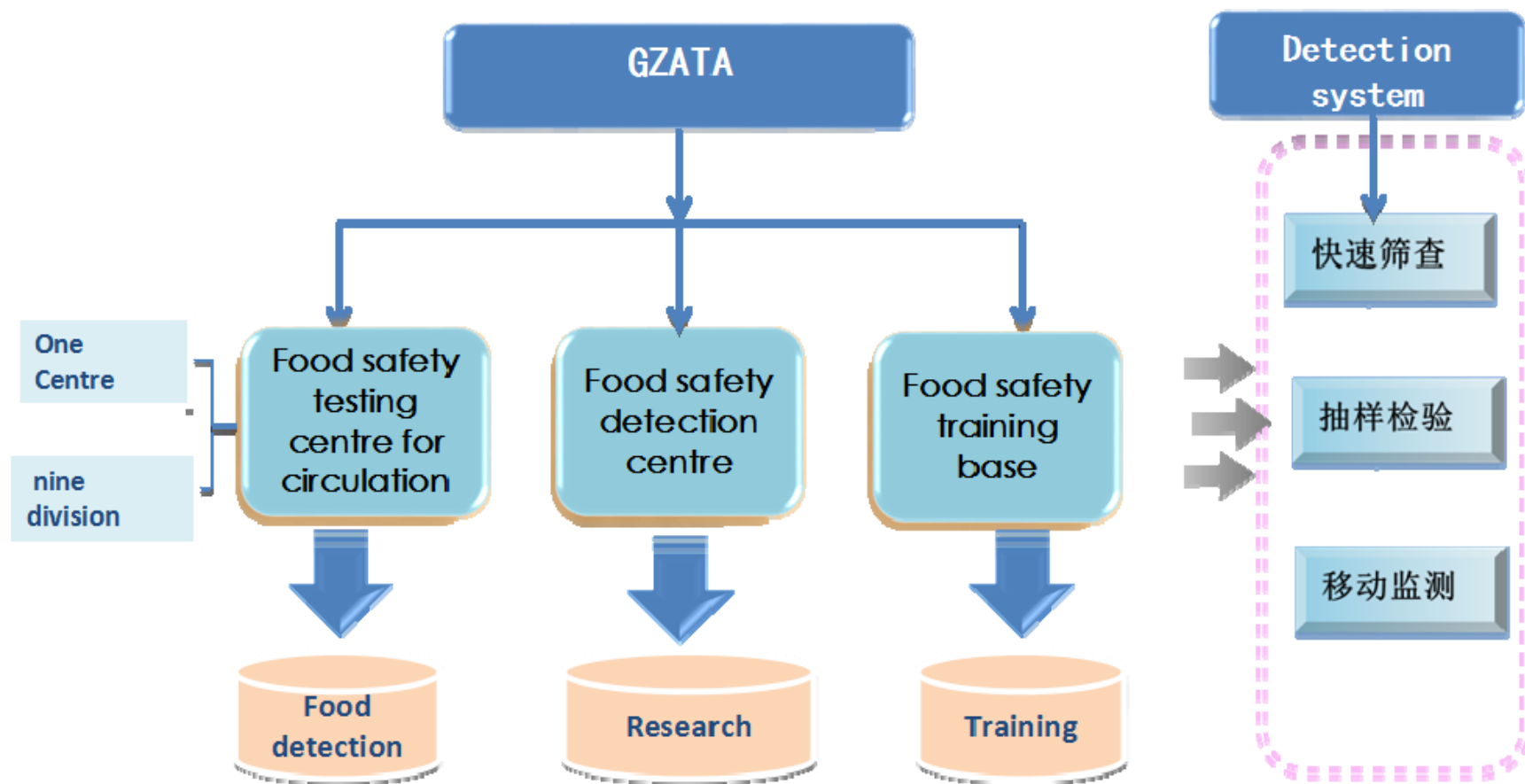


Guizhou Academy of Testing and Analysis was build in 1935. It is a social service organisation belongs to Guizhou Academy of Science

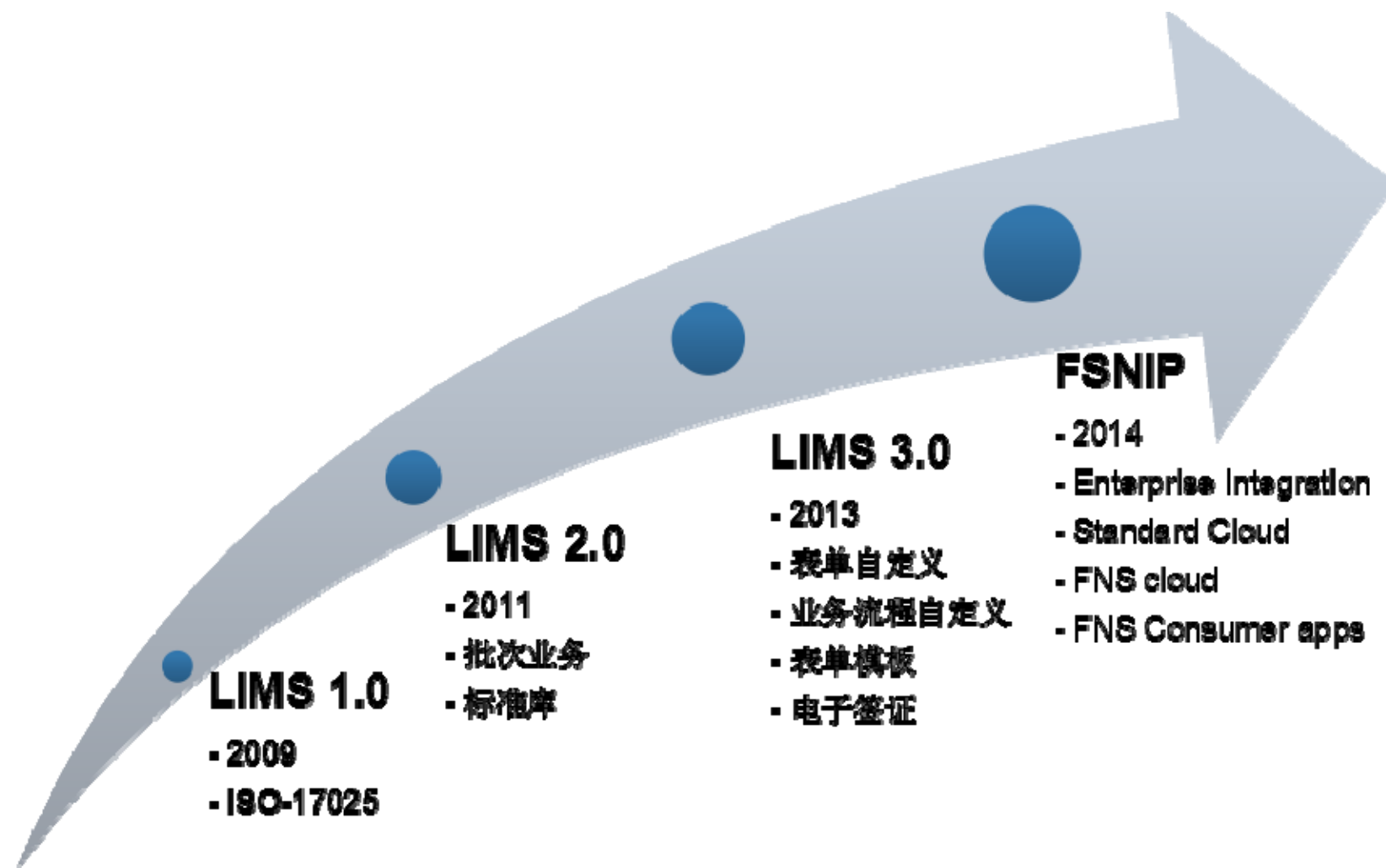
CMA, CMA-F, CNAS, GLP

Employees: 150


## 02 Why we design



## 02 Development of LIMS



## 02 Foundation of hardware

- “Guizhou cloud” by Alibaba
- Self foundation  Purchase service
- Self management on the basis of Internet
- Safety

# 02 System



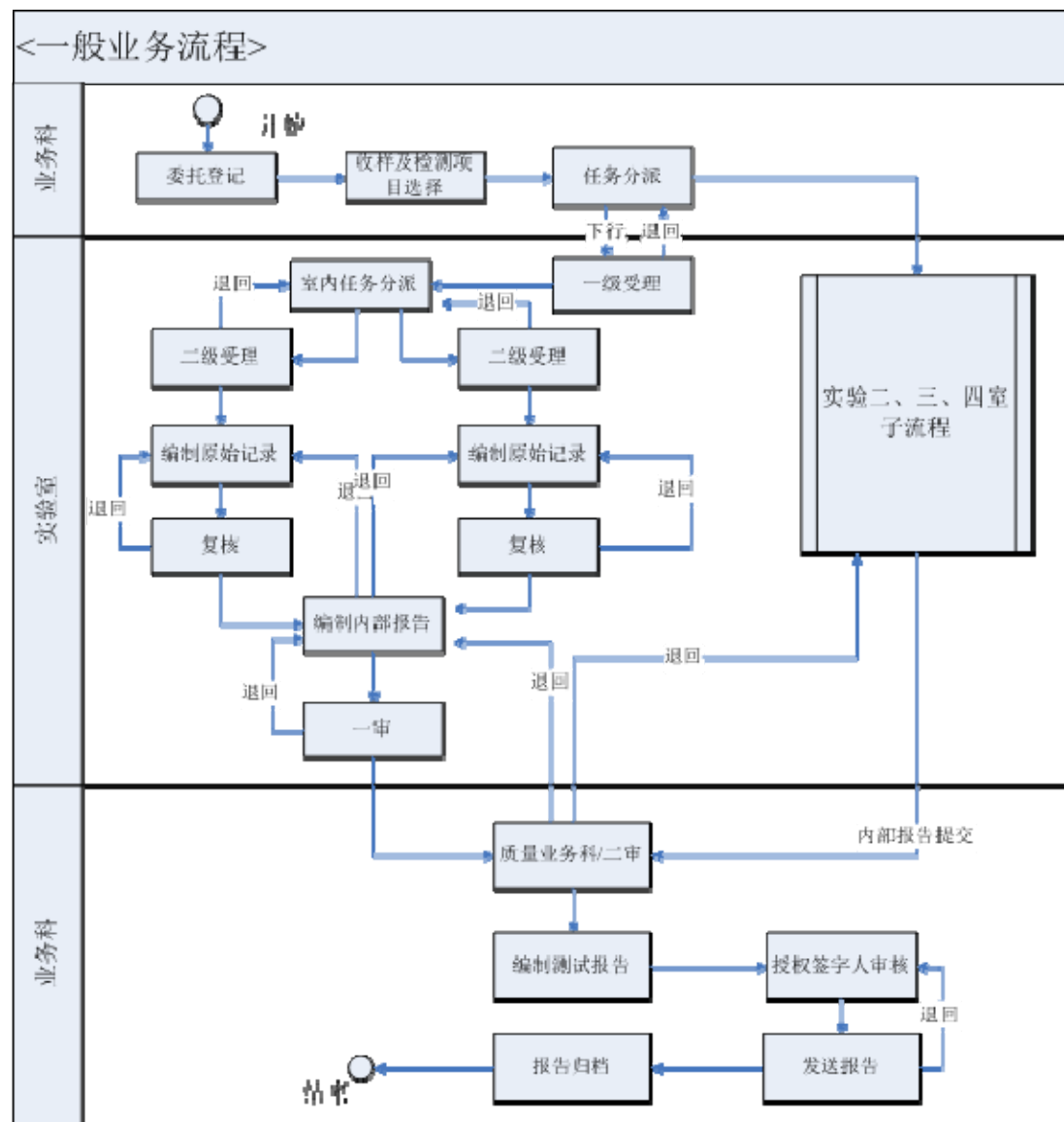
## 02 Advantage

LIMS



- User-designed
  - Test item form
  - Test work flow
  - Resources
- Paperless
- Good theoretical knowledge
- Public trust

# 02 User-design workflow





# 02 Electronic signature

**贵州省流通环节食品安全检验中心**  
**检 验 报 告**

测检字(2013)第 GMMZZA201405001 号      共 2 页    第 1 页

样品名称	猪肉粽	检验类别	市场流通环节抽检
样品编号	GMMZZA201405001	抽样日期	2014年5月16日
商标	思念	批号/日期	20140426
生产企业	四川省思念食品有限公司		
抽样单位	贵州省食品药品监督管理局		
规格型号	500克/袋	样品状态	包装、封条完好
抽样量	2袋		
受托单位 (被检测人)	贵阳乌当兴隆购物有限公司	主要仪器	高效液相色谱仪
抽样地点	乌当区高新办事处心怡小区		
判定依据	《粽子》(SB/T 10377-2004) 《食品安全国家标准 食品添加剂使用标准》(GB 2760-2011)		
检验结论	所检指标符合《粽子》(SB/T 10377-2004)、《食品安全国家标准 食品添加剂使用标准》(GB 2760-2011)标准要求。		
备注	抽样编号: GMMZZA201405001	单位盖章	2014年5月29日

批准: 张峰    审核: 孙峰    主检: 钱晓溪



## 02 Auto data collection

- Equipment data collection SDK toolkit
- Uniform internal note
- Uniform external API
- API for different type instrument



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03

KMS

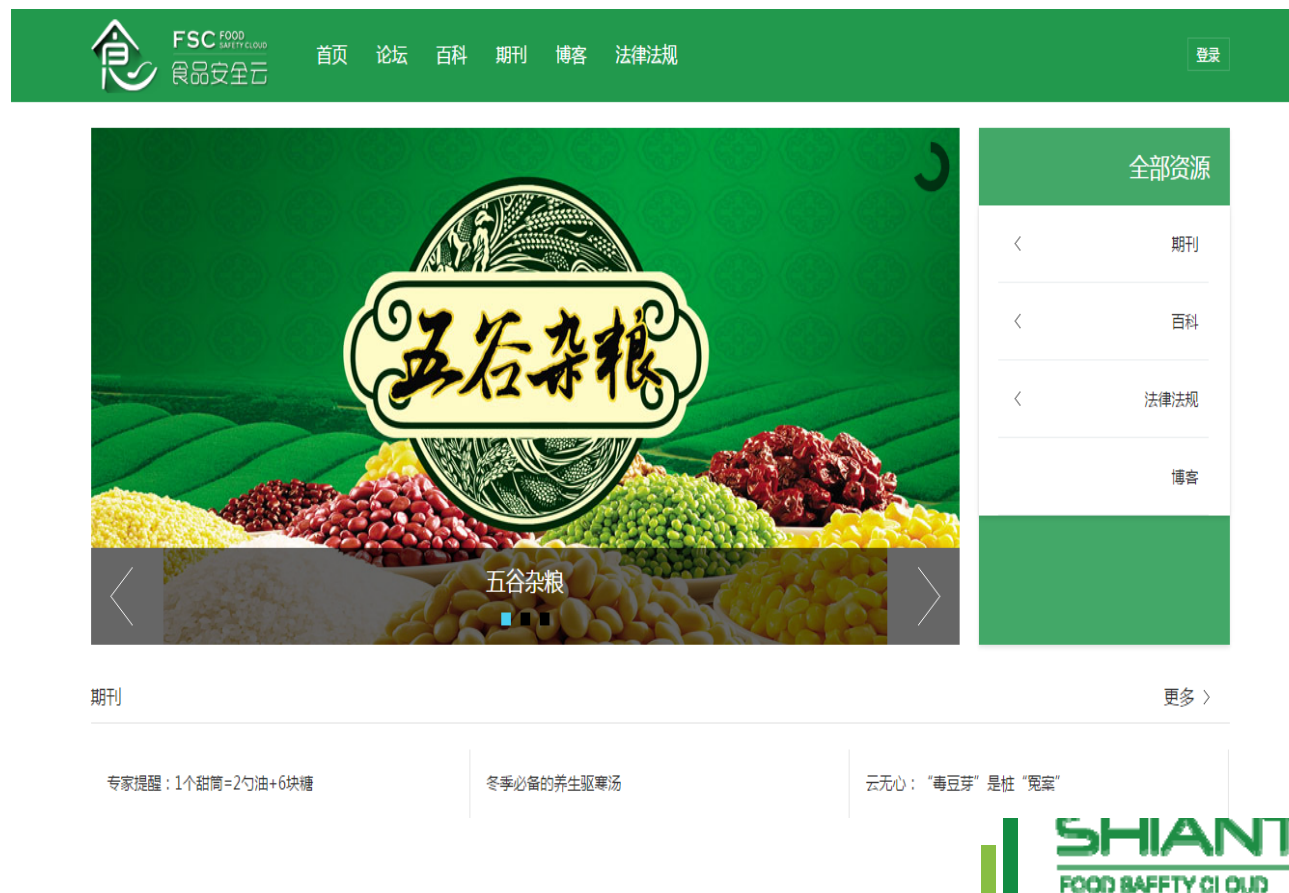
点击添加内容  
内容内容点击添加内容

# 03 Introduction



# 03 Service for profession

- Community
- Food standard and regulation
- Online technical communication



# 03 Standard

**知识信息系统**  
Knowledge Management System

[首页](#) [知识管理](#) [博客](#) [lms信息管理](#) [论坛](#) [文档管理系统](#) [组织机构分组](#) 您好:tar

判定标准管理

更新标准

标准

检测标准

认证信息

共享判定标准

私有判定标准

判定标准

名称	显示名	套餐	更新时间	状态	组织机构	
农办质〔2013〕17号 农业部办公厅关于印发茄果类蔬菜等55类无公害农产品检测目录的通知	农办质〔2013〕17号 农业部办公厅关于印发茄果类蔬菜等55类无公害农产品检测目录的通知		2014-04-12 12:48	共享标准	贵州省分析研究测试院	<a href="#">详细</a> <a href="#">下载</a>
GB 14963-2011 食品安全国家标准 蜂蜜	GB 14963-2011 食品安全国家标准 蜂蜜		2014-04-18 12:53	自有标准	贵州省分析研究测试院	<a href="#">详细</a> <a href="#">下载</a>
GB 10770-2010 食品安全国家标准 婴幼儿罐装辅助食品	GB 10770-2010 食品安全国家标准 婴幼儿罐装辅助食品		2014-04-18 17:32:59	自有标准	贵州省分析研究测试院	<a href="#">详细</a> <a href="#">下载</a>
GB 10205-2009 磷酸一铵、磷酸二铵	GB 10205-2009 磷酸一铵、磷酸二铵		2014-04-22	自有标准	贵州省分析研究测试院	<a href="#">详细</a> <a href="#">下载</a>



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FOOD SAFETY CLOUD

04

Portal

点击添加内容 点击添加内  
容内容 点击添加内容

# 04 Introduction

**Learn food  
safety  
knowledge**

**Learn food  
safety  
knowledge**

**Consumer  
communication**

**Products  
display**





## 04 Advantage

**1**

Various  
information

**2**

Save cost

**3**

Safety and  
convenient

# 04 Mobile apps



## 04 QR codes

**Interesting?  
Scan it!**



Portal website



Android



iOS

The background is a solid green color with a subtle, low-poly geometric pattern. The pattern consists of various shades of green forming a series of interconnected triangles and polygons, creating a textured, crystalline effect.

# Thanks!