

*DIETARY INTAKE OF DIOXIN AND DIOXIN-  
LIKE COMPOUNDS IN CHINA:  
OCCURRENCE AND TEMPORAL TREND*

**Jingguang Li**

NHC Key Laboratory of Food Safety Risk Assessment

China National Center for Food Safety Risk Assessment

Food Safety Research Unit of Chinese Academy of Medical Science

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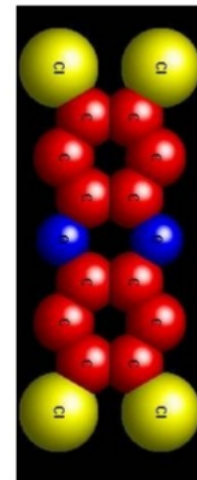
# Dioxin contamination incidents

In 1999, high levels of dioxins were found in poultry and eggs from Belgium.

In late 2008, Ireland recalled many tons of pork meat and pork products when up to 200 times the safe limit of dioxins were detected in samples of pork



## Belgian dioxin & PCB crisis



# Dioxin contamination incidents

[香港检出两批大闸蟹二噁英超标,江苏检验检疫局回应](#) 网易新闻

7小时前 - (原标题:香港检出两批大闸蟹二噁英超标,江苏检验检疫局回应) 江苏检验检疫局今天就香港食环署有关太湖出口大闸蟹检出二噁英和二噁英样多氯联苯事件通...

[news.163.com/16/1102/1...](#) - 百度快照 - 808条评价

[香港验出两只大闸蟹样本含致癌物二恶英超标](#) 新闻 腾讯网

15小时前 - 人民网香港11月1日电 香港特区食品安全中心9月下旬在市面上抽查5只共12斤的大闸蟹样本,发现其中两个样本的二恶英含量超标,超标样本来自江苏省两个水产...

[news.qq.com/a/20161102...](#) - 百度快照 - 913条评价

[香港查出江苏产大闸蟹致癌物超标二恶英大闸蟹](#) 凤凰财经

14小时前 - 香港特区食品安全中心9月下旬在市面上抽查5只共12斤的大闸蟹样本,发现其中两个样本的二恶英含量超标,超标样本来自江苏省两个水产养殖场。目前,香港食...

[finance.ifeng.com/a/20...](#) - 百度快照 - 1369条评价

[太湖大闸蟹被检出二噁英超标 阳澄湖大闸蟹称被新信对港供货](#)

3小时  
含量

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大闸蟹二噁英

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政经频道

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政经 要闻 正文

## 民间报告称数地鸡蛋测得二噁英水平超欧盟标准

2016年06月21日 16:53 来源于 财新网

发布方表示,其最终目的不是要告诉大家以后不能再吃散养鸡了,而是呼吁要集中力量防控包括二噁英在内的持久性有机污染物的排放和污染

【财新网】(实习记者 刘月明 记者 周辰)2016年6月21日,中外三家民间环保组织共同发布《中国热点地区鸡蛋中的持久性有机污染物》报告,报告指出,在国内六个典型工业污染源附近的散养鸡蛋中,检出了超过欧盟标准限值的二噁英等持久性有机污染物。

相关报道  
有机污染物或致女性不育 国家立项研究  
中国构建持久性有机污染物污染防治长效机制



# Exposure Assessment

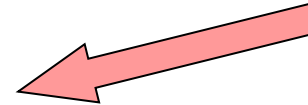
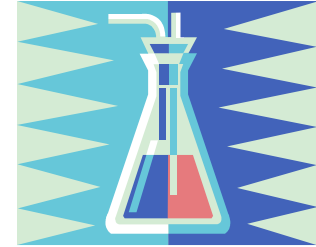
**Sampling**



**Preparation**



**Analysis**



**Exposure**

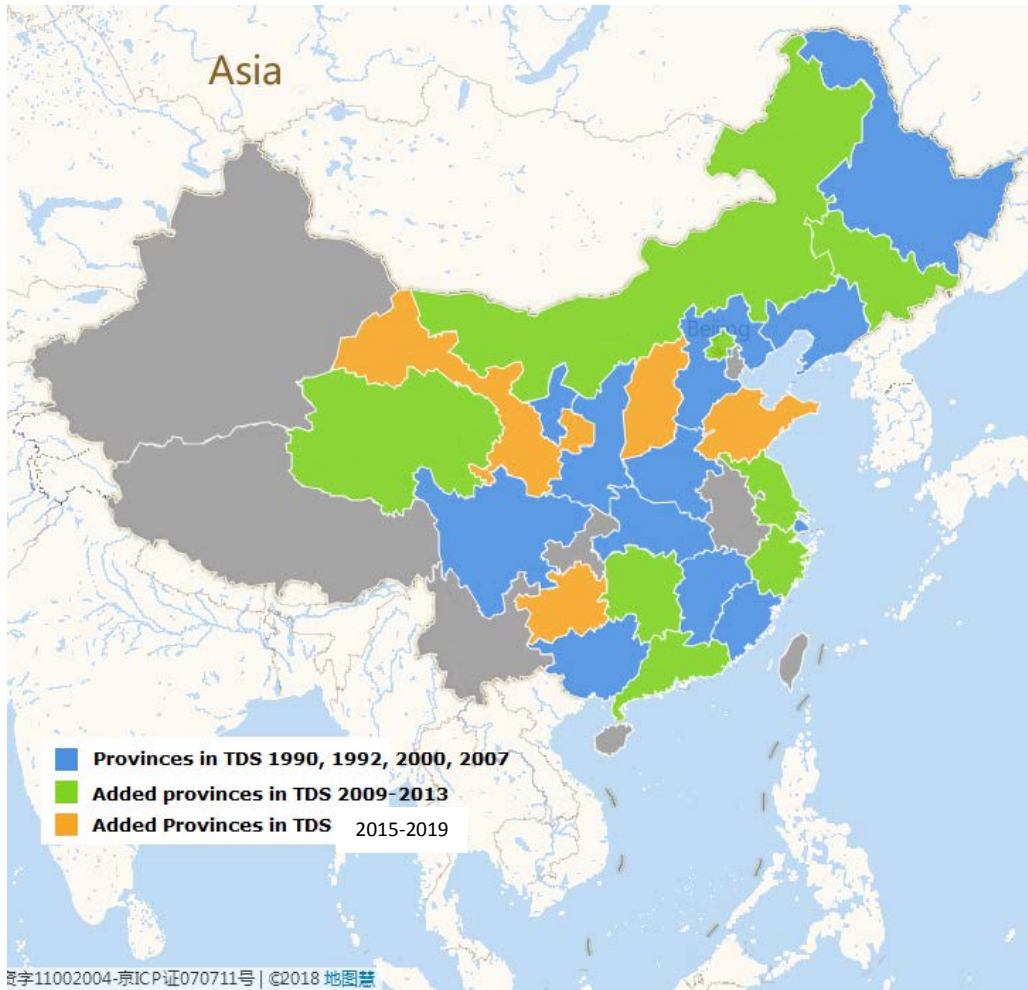


**Compare with safety  
reference value**





# TDS in China



## Leaders of China TDS



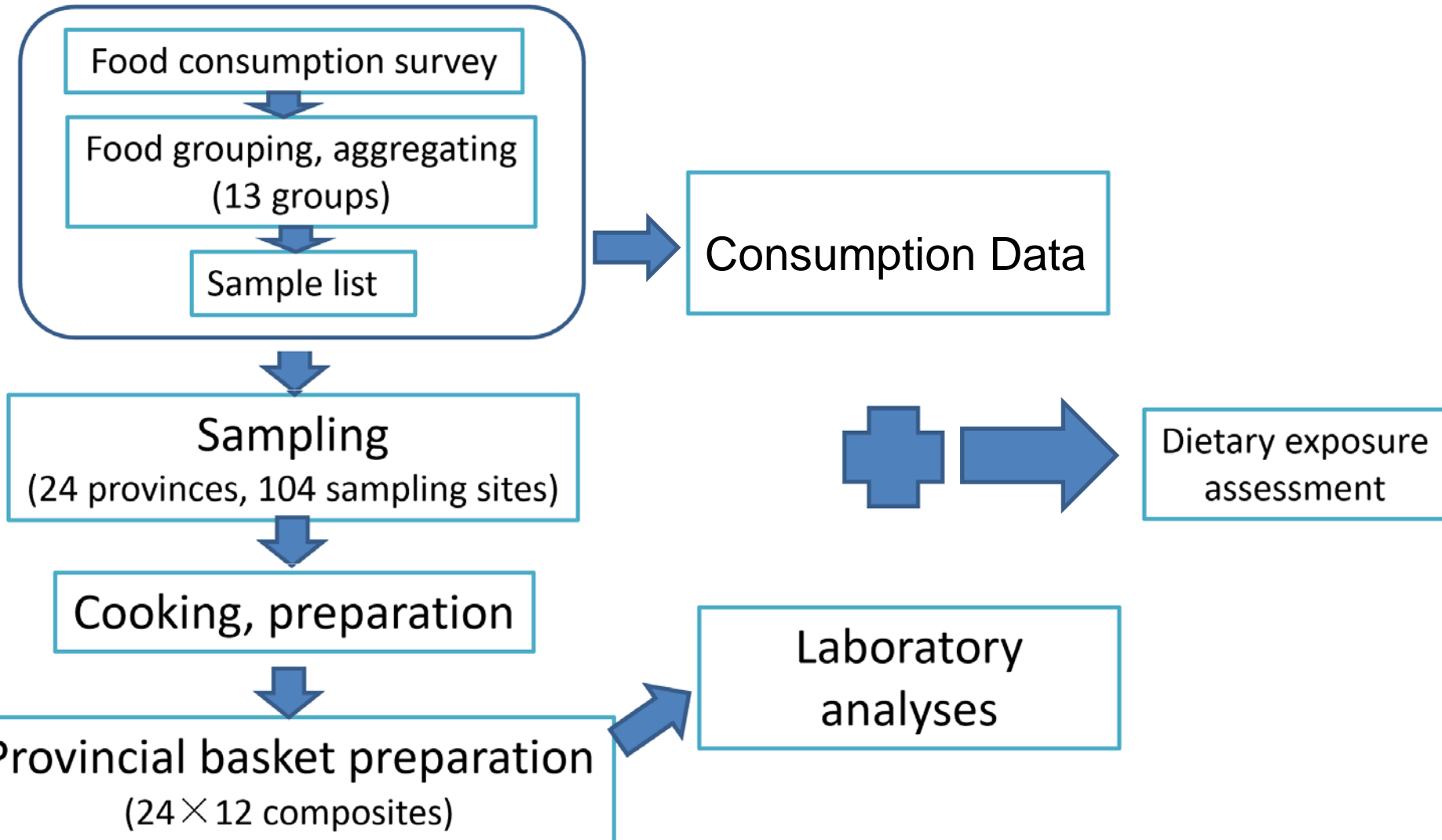
Prof. Dr. CHEN Jun-Shi, CAE academician



Prof. Dr. WU Yong-Ning

- 1<sup>st</sup> round TDS in 1990, 12 provinces involved, and 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> round was conducted in 1992, 2000, and 2007 separately.
- 5<sup>th</sup> round covered 20 provinces
- 6<sup>th</sup> round involved 24 provinces, covered 86.5% population (1.1 Billion)
- All provinces will be covered in near future

# ■ Methodology



# ■ Food Aggregation

All food samples are grouped into 14 food categories



- 1 Cereals and products
- 2 Legumes, nuts, and products
- 3 Potatoes and products
- 4 Meats and products
- 5 Eggs and products
- 6 Aquatic foods and products
- 7 Milk and products
- 8 Vegetables and products
- 9 Fruits and products
- 10 Sugar
- 11 Beverages (non-alcohol)
- 12 Alcoholic beverages
- 13 Condiments
- 14 Cooking oils



# ■ Sampling and Cooking

In each survey sites, food samples were purchased at local food markets.

Local cook prepared food according to the local cooking habits .





# ■ Dietary exposure to dioxins of the Chinese

- Chemical compounds:

7 PCDDs, 10 PCDFs, 12 dl-PCBs

- Four food groups

meats and products, eggs and

products, fish and products, milk and

products

- Laboratory analysis

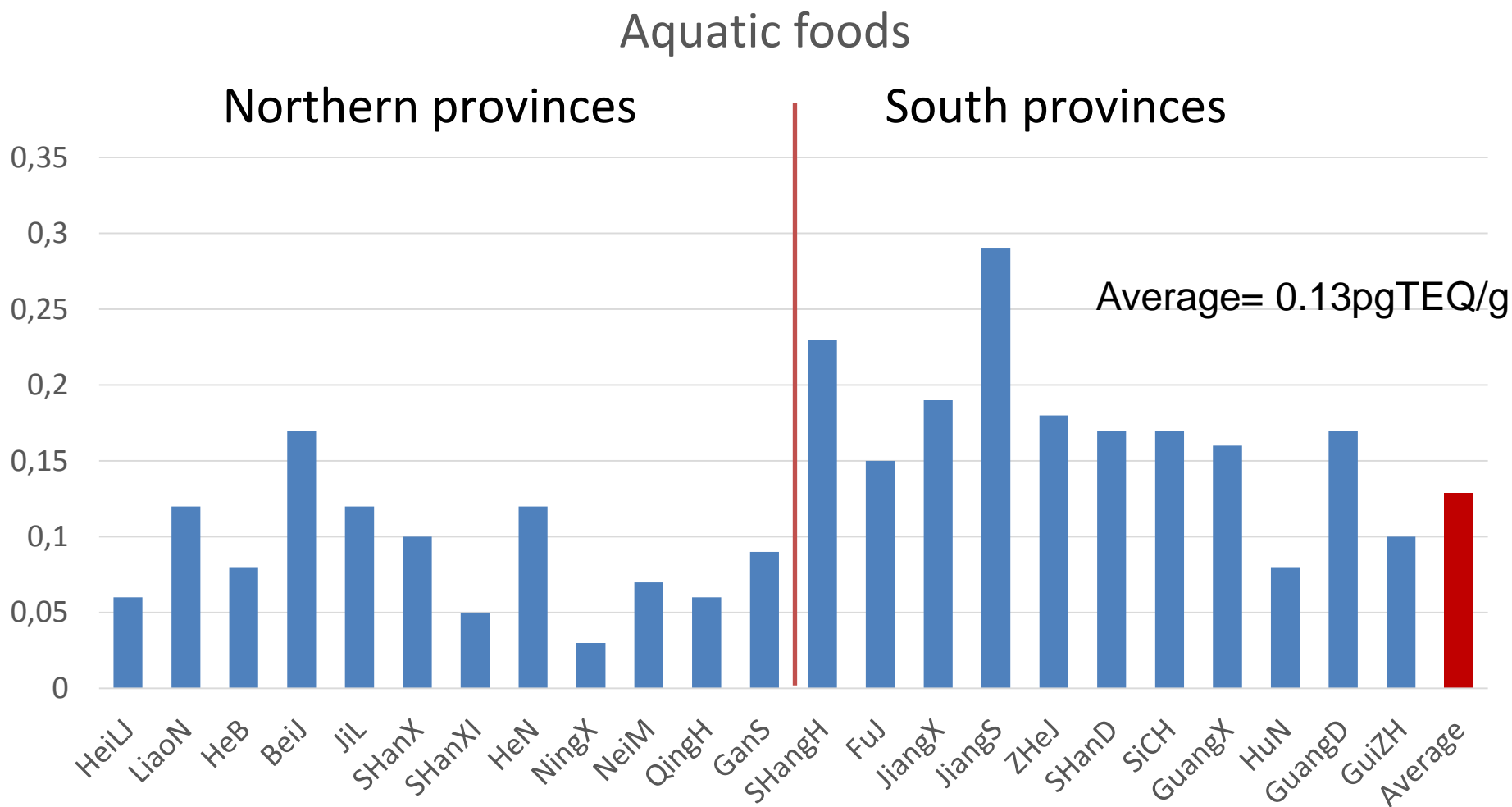
Samples were analyzed according to

GB5009 205-2013 that is Based on

USEPA Method 1613 and 1668a



# ■ Levels of dioxins in foods in 6<sup>th</sup> TDS

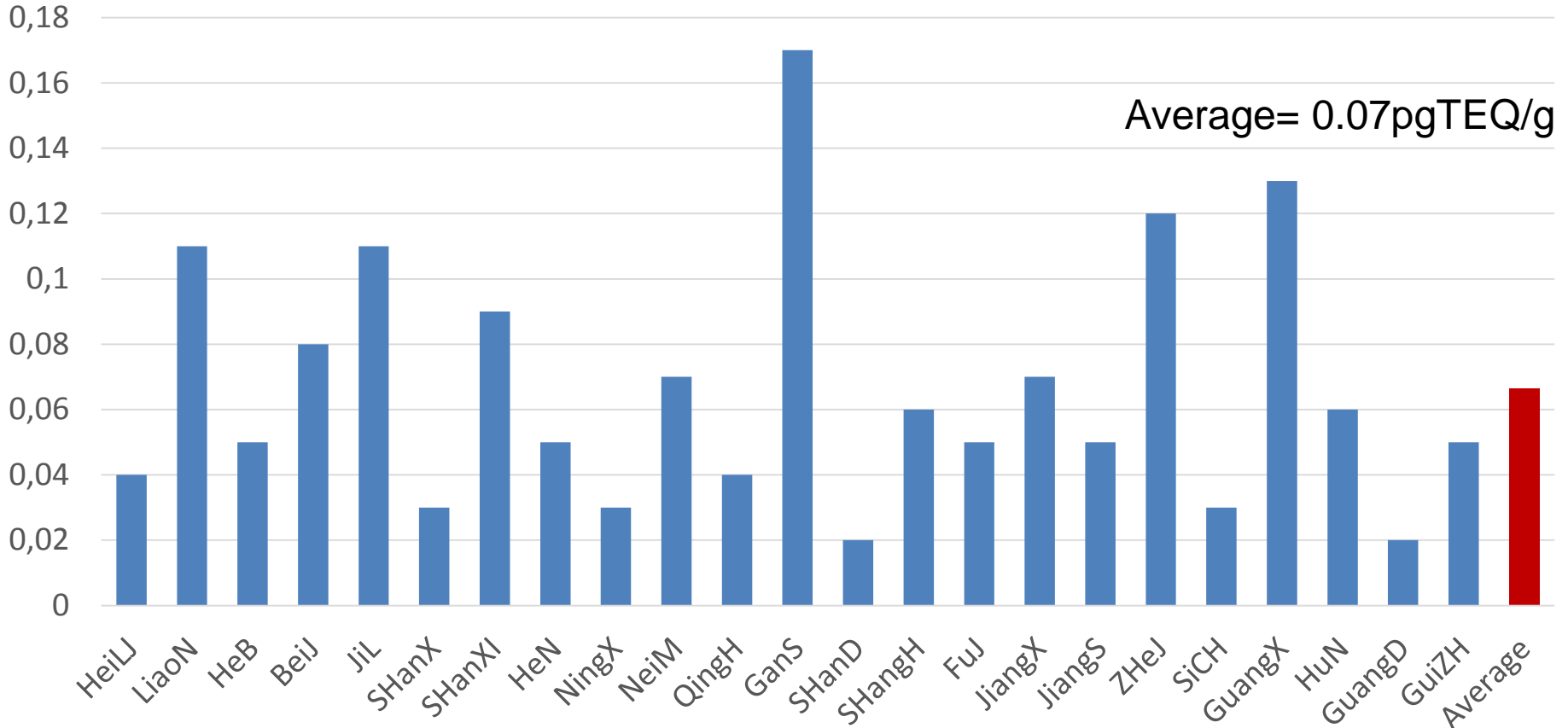


\*WHO-TEF-2005 scheme

Levels in all composites were much lower than the EU Maximum Levels

# ■ Levels of dioxins in foods in 6<sup>th</sup> TDS

meat

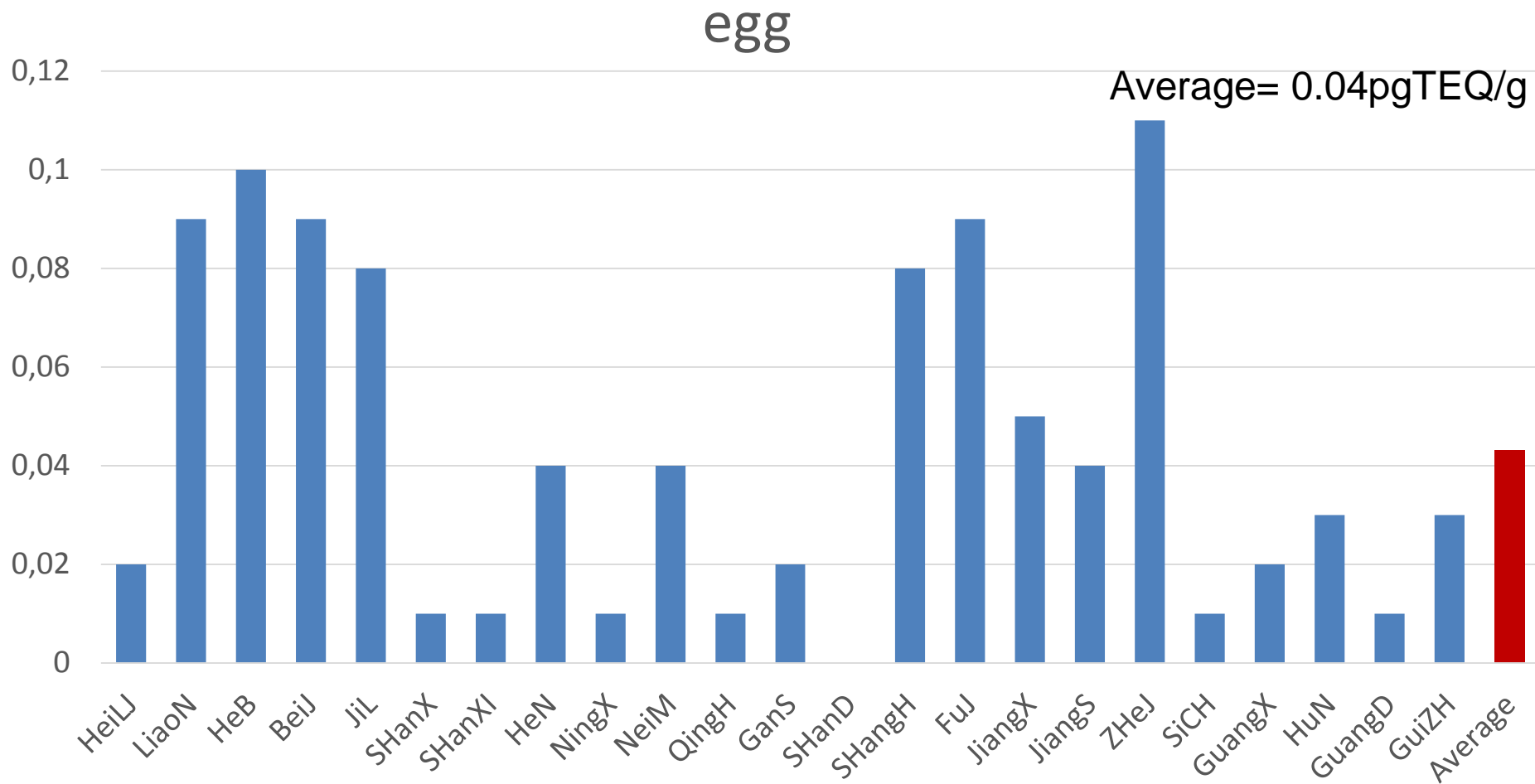


\*WHO-TEF-2005 scheme

Levels in all composites were much lower than the EU Maximum Levels



# ■ Levels of dioxins in foods in 6<sup>th</sup> TDS

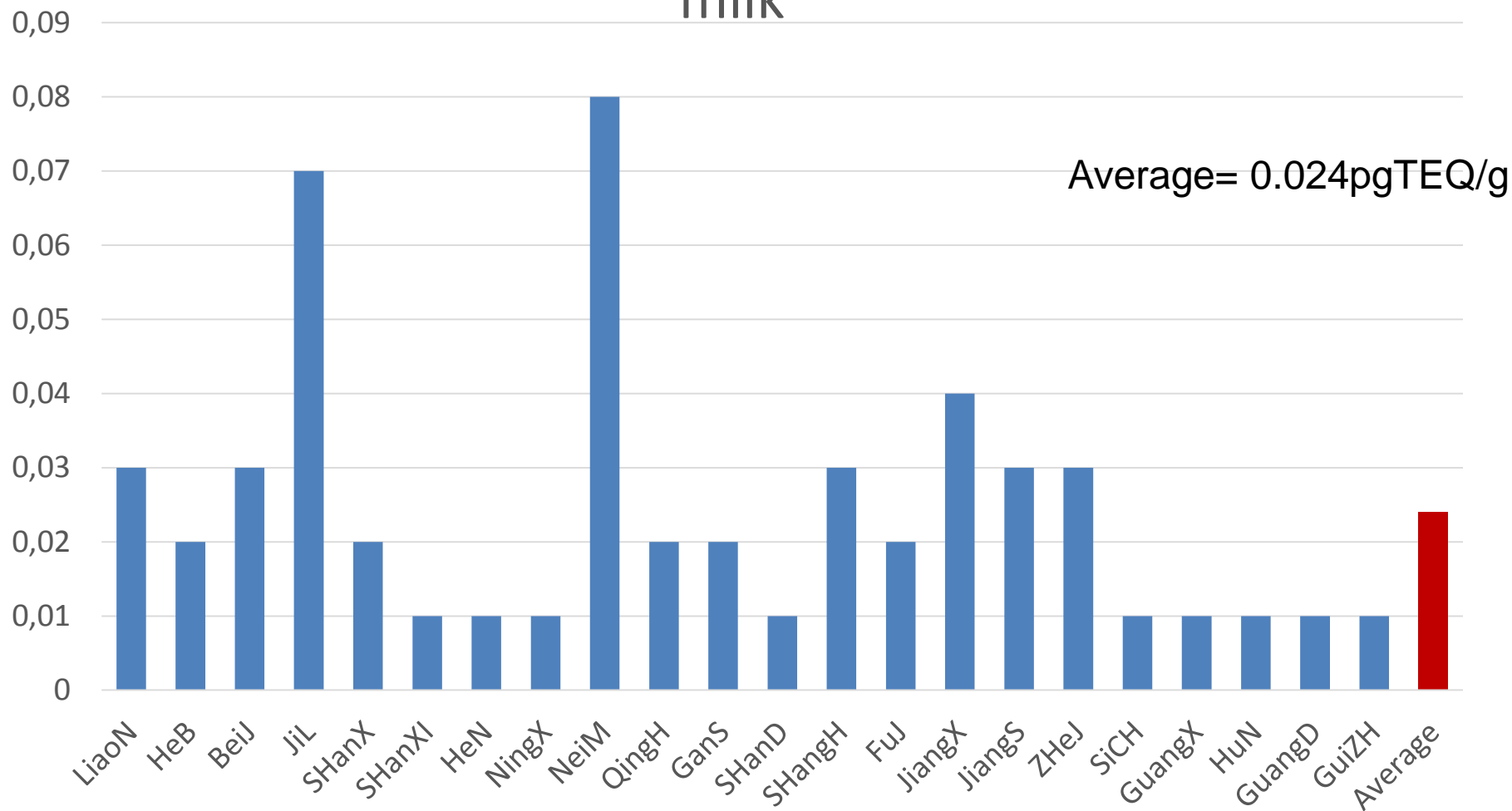


\*WHO-TEF-2005 scheme

Levels in all composites were much lower than the EU Maximum Levels

# ■ Levels of dioxins in foods in 6<sup>th</sup> TDS

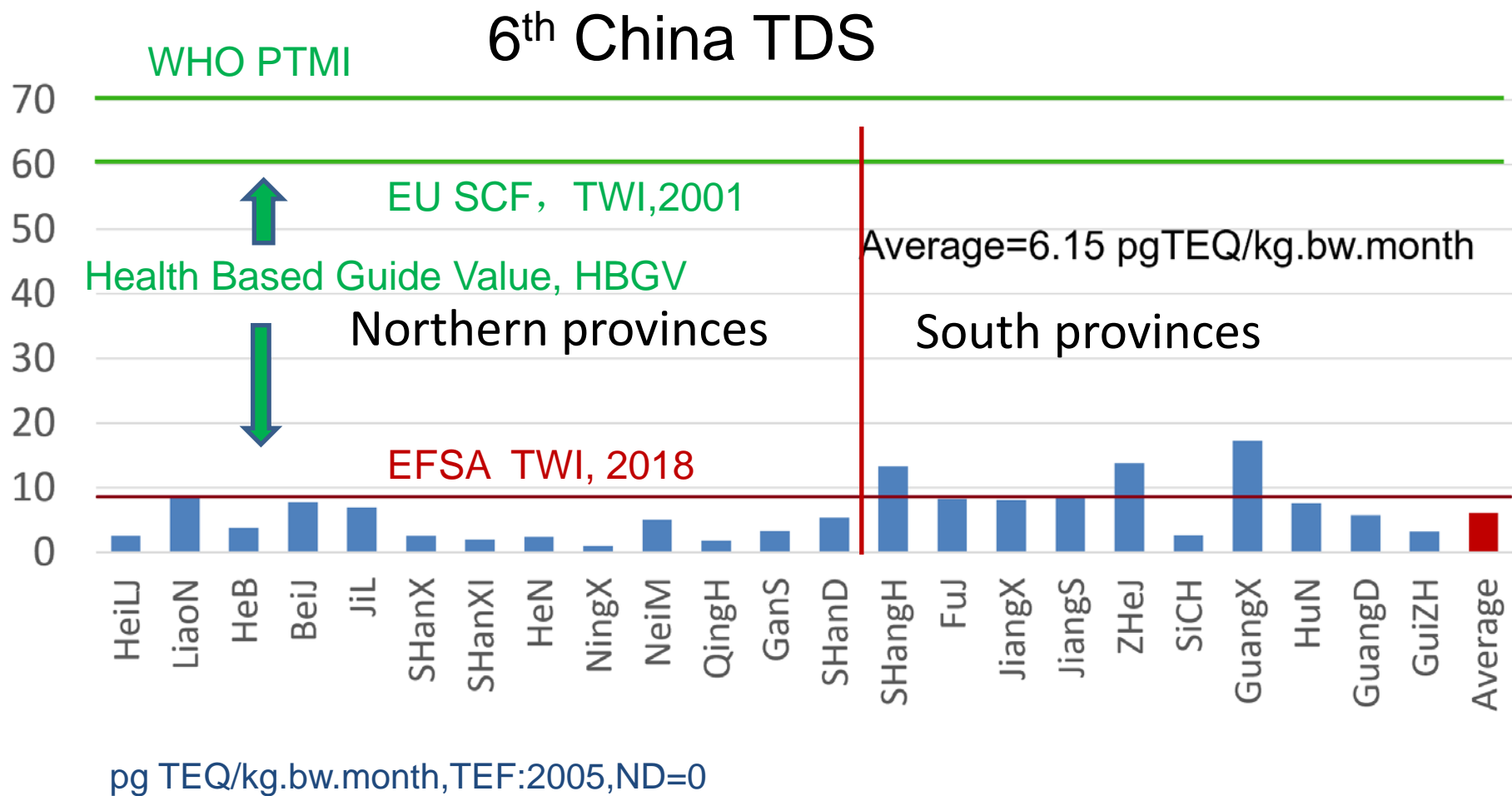
milk



\*WHO-TEF-2005 scheme

Levels in all composites were much lower than the EU Maximum Levels

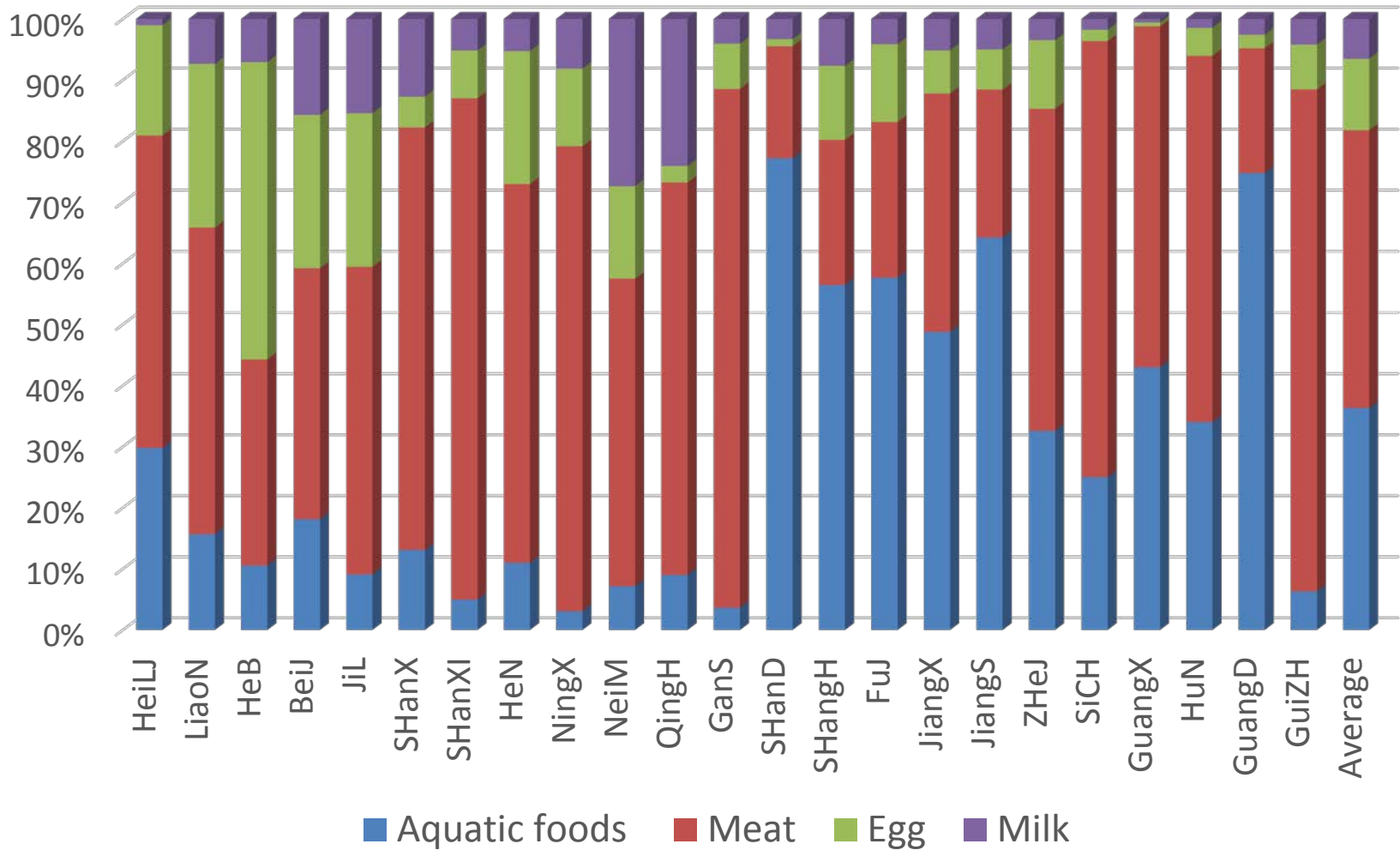
# ■ Dietary Exposure Assessment



(unpublished data)

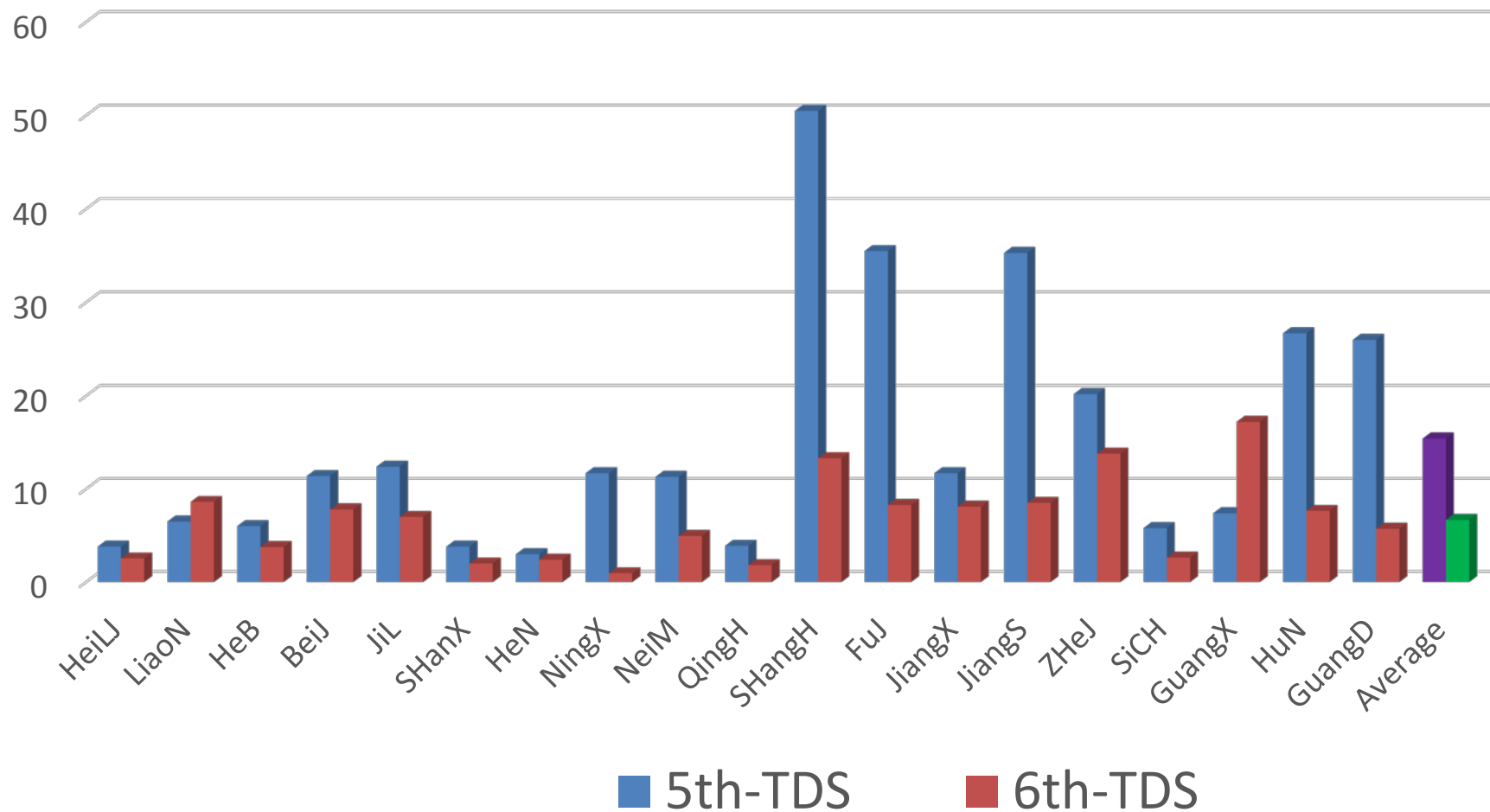


# Percentage contribution of each category



(unpublished data)

# ■ Temporal trend



(pg TEQ/kg.bw.month, TEF=2005,ND=0)

(unpublished data)

# Ongoing work

*More food groups*

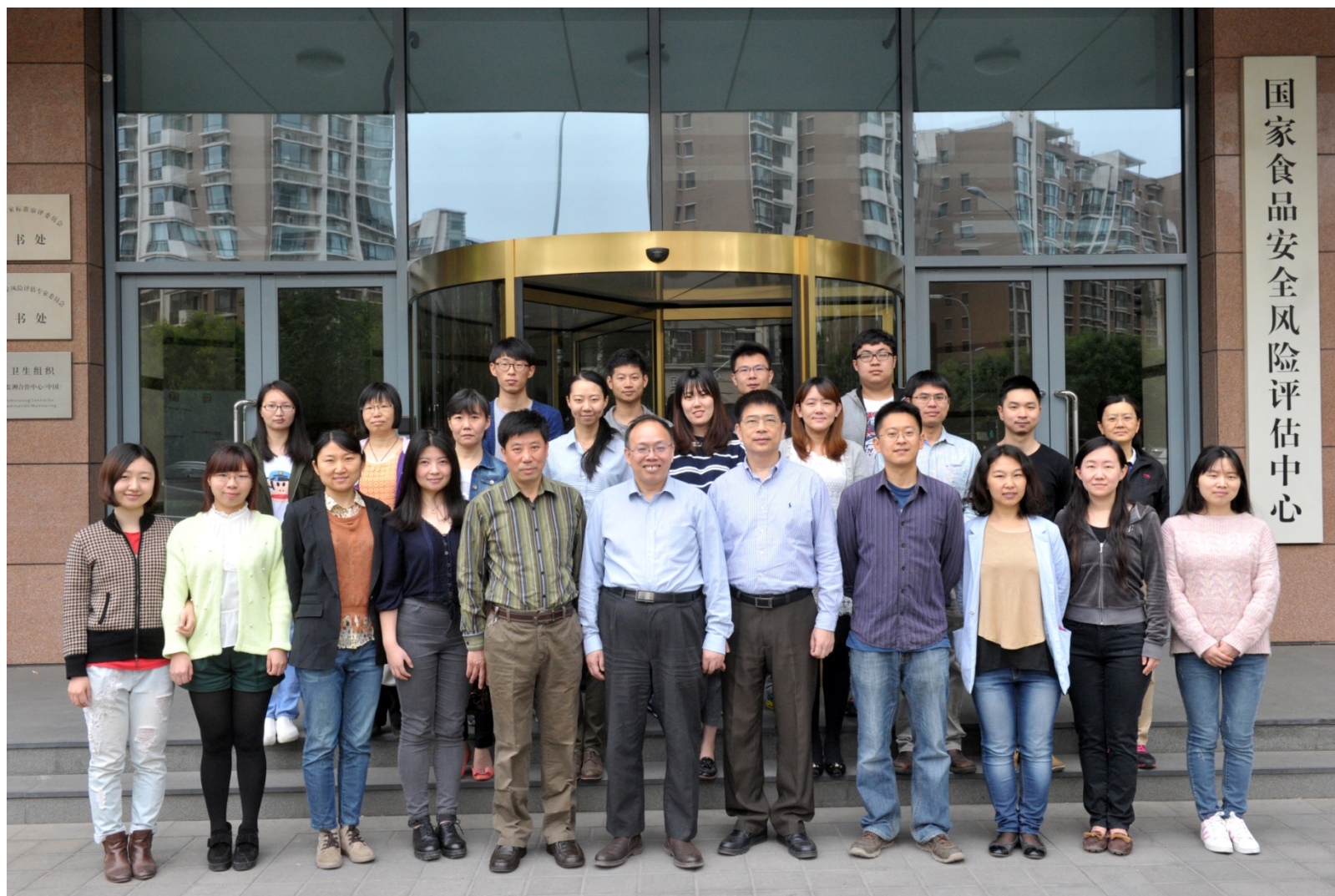
*Cereals, Vegetables.....*

*More detailed assessment*

*Gender, age*



# The Team of China TDS





China National Center For Food Safety Risk Assessment

**Thank you for your  
attention**