

# La digitalización del control oficial de los alimentos: situación en la Unión Europea y casos de uso

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# Justificación



**MODERNIZAR Y  
MEJORAR**  
el control oficial



**FALTA**  
evidencia científica



Necesidad de  
**ARGUMENTOS  
CONVINCENTES** y  
**BASADOS EN  
EVIDENCIAS**



**DIGITALIZACIÓN**  
global e inevitable

# Posibilidades de las herramientas digitales

**Recopilar,  
registrar y enviar  
datos electrónicos  
y estandarizados**

The screenshot shows a web-based form titled '18. Equipaments de refrigeració \*'. It includes a 'Llimpiar' button and a 'Sense deficiències' button. Below, there are sections for '19. Equipaments de congelació \*' and '20. Equipaments d'emmagatzematge a temperatura ambient \*', each with a 'Llimpiar' button and a 'Sense deficiències' button. The form also features a 'Deficiències' section with radio buttons for selecting specific deficiencies: '19.a Capacitat', '19.b Manteniment', '19.c Temperatura dels equips', '19.d Termòmetre', '19.e Freqüència aigua', and '19.f Acumulació d'aigua i gel'.

Das & Mao, 2020; Donaghy et al., 2021;  
Labrique et al., 2013; Oppong et al., 2021

**Procesar y  
analizar datos**



Eckert & Waidner, 2019; FAO,  
2022; Park et al., 2021

**Tomar  
decisiones**



Labrique et al., 2013; Odone et  
al., 2019; Park et al., 2021

**Rendir cuentas  
y ser más  
transparentes**



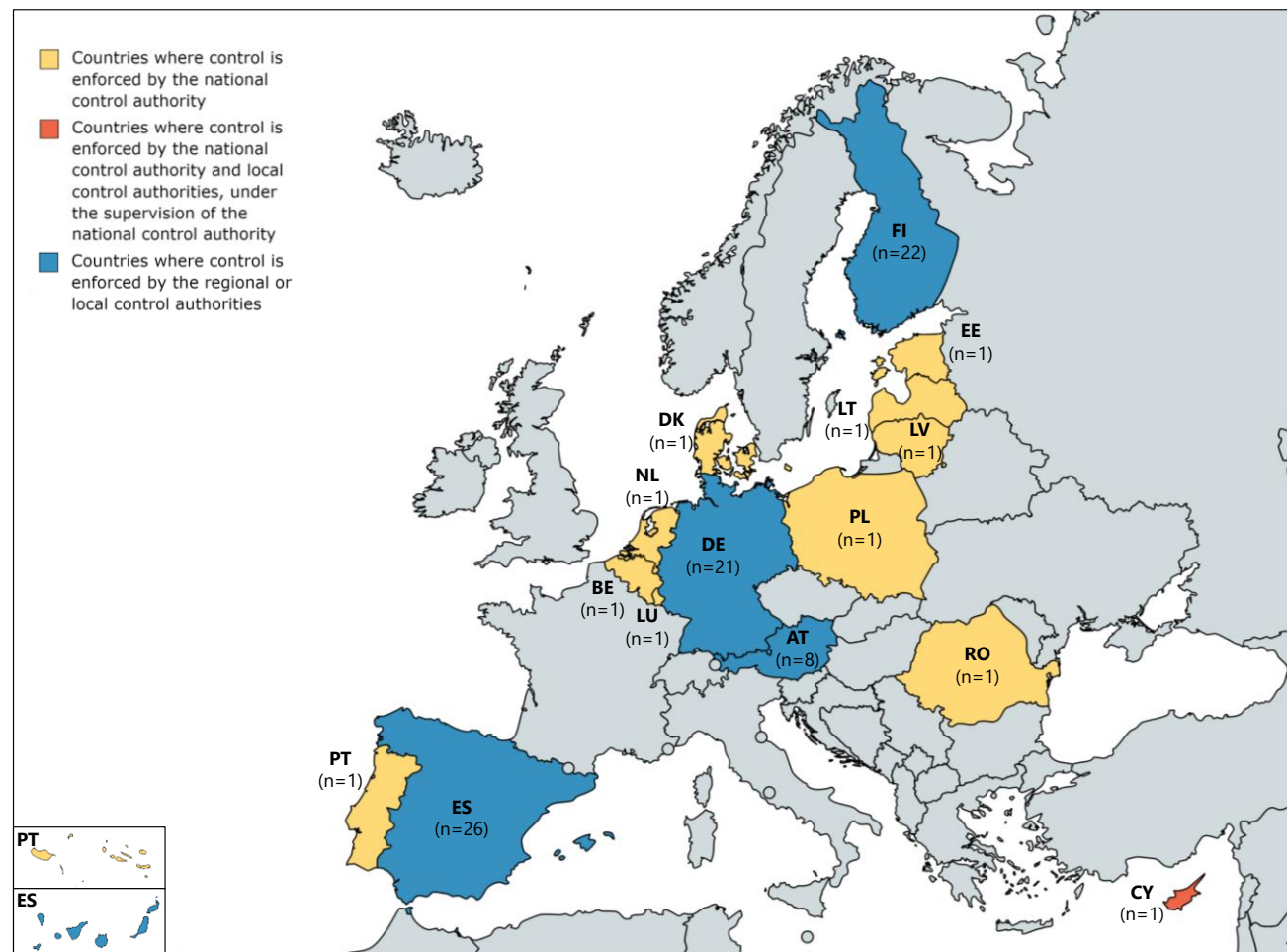
Janssen, 2011

# Situación en la Unión Europea

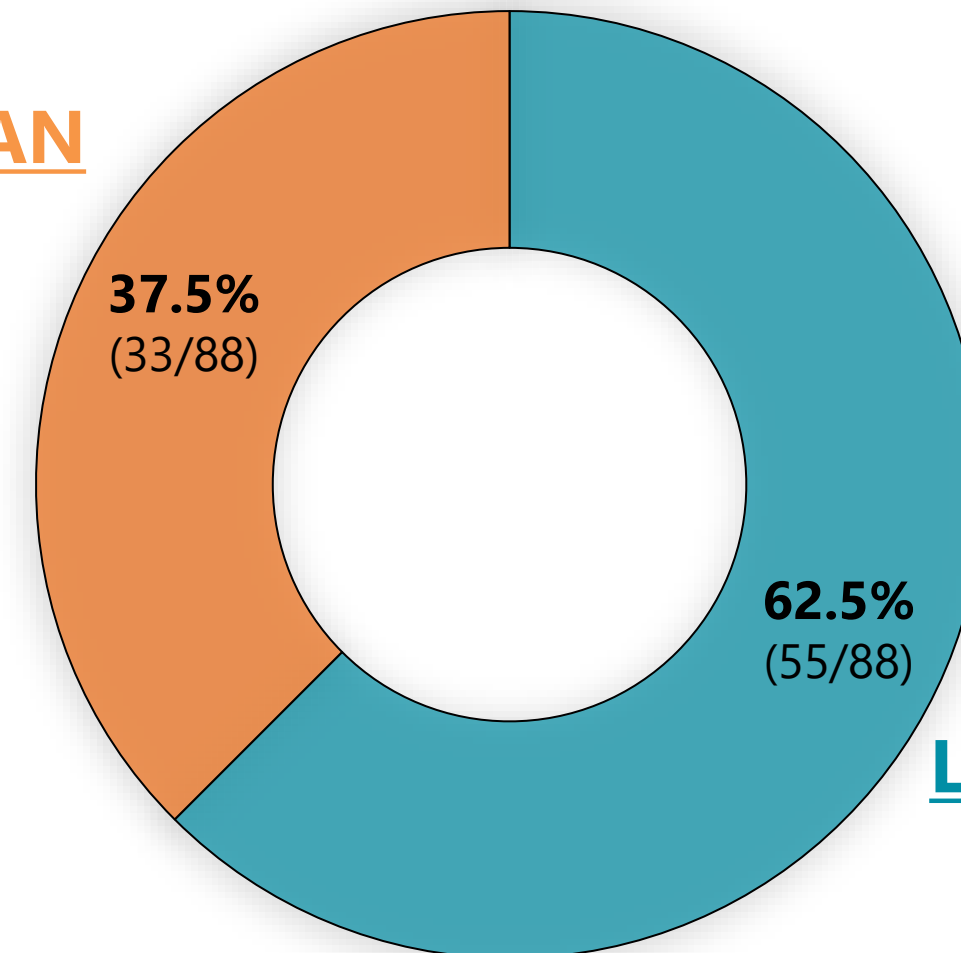
# Uso de un entorno digital

**88 autoridades** de control oficial de 15 estados miembros de la UE:

- 11 autoridades nacionales
- 77 autoridades regionales y locales



**NO LO USAN**



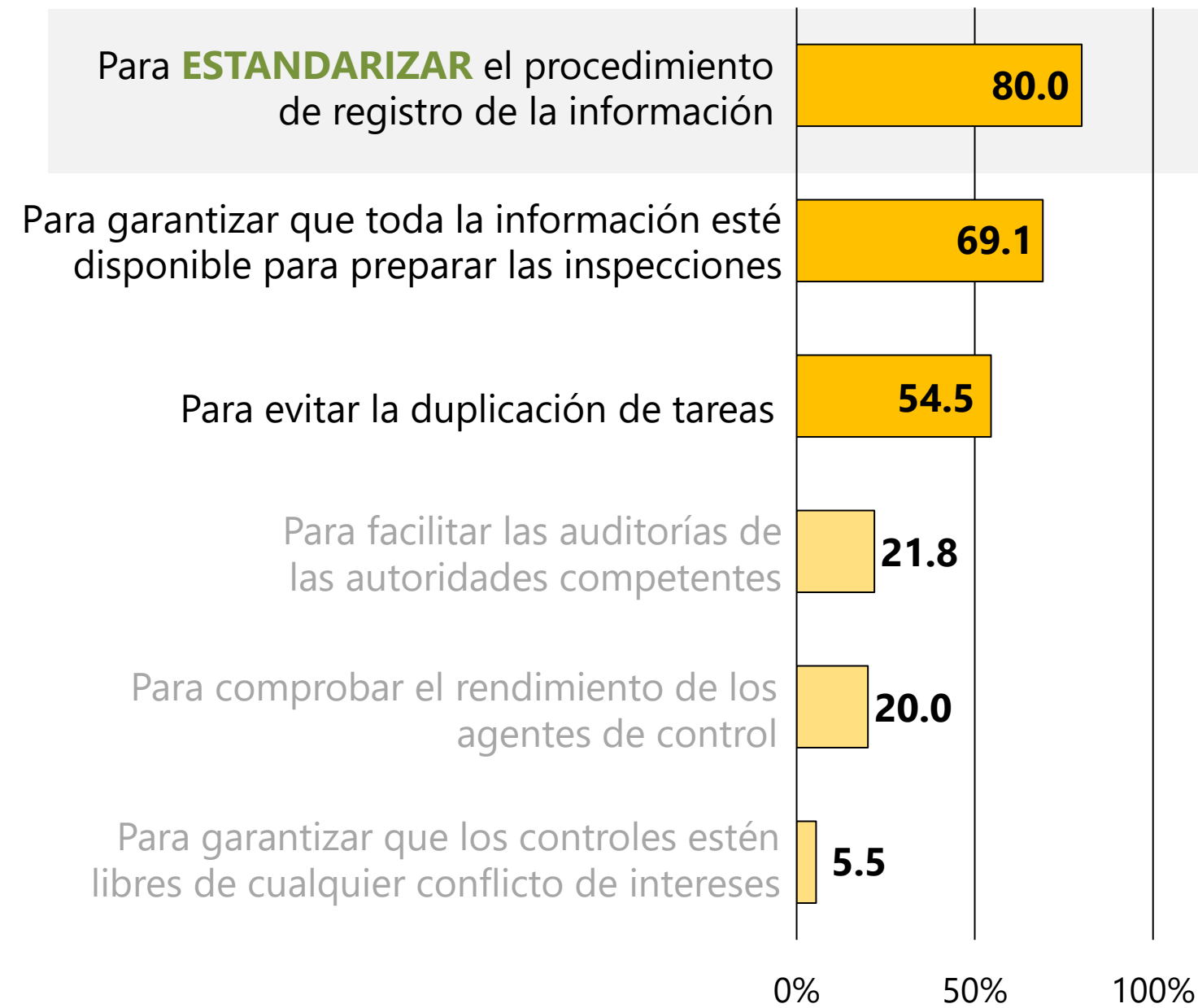
**LO USAN**

- tabletas (60.0%)
- portátiles (58.2%)
- Smartphones (50.9%)

# Razones y resultados

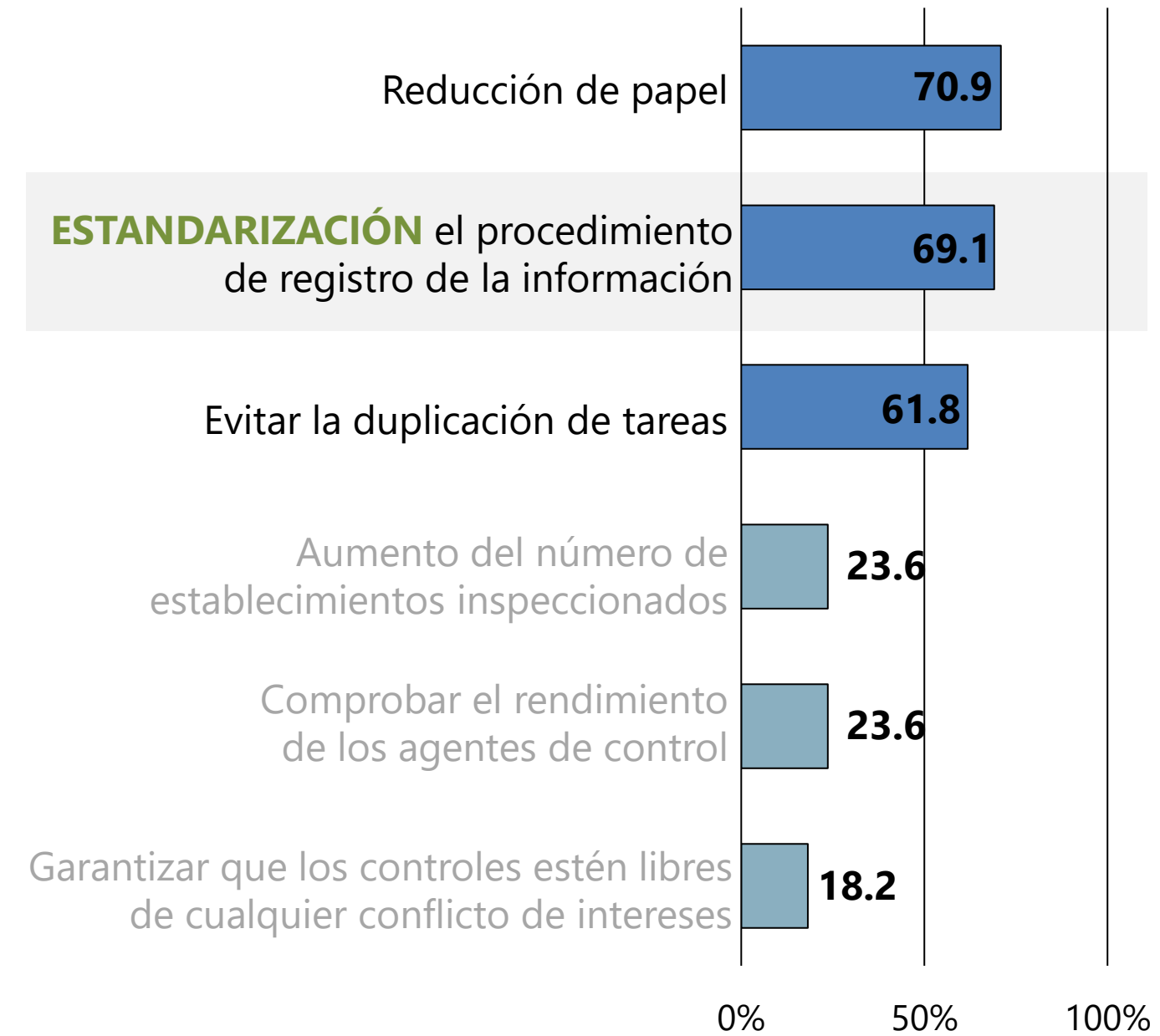
## RAZONES

n = 55/88

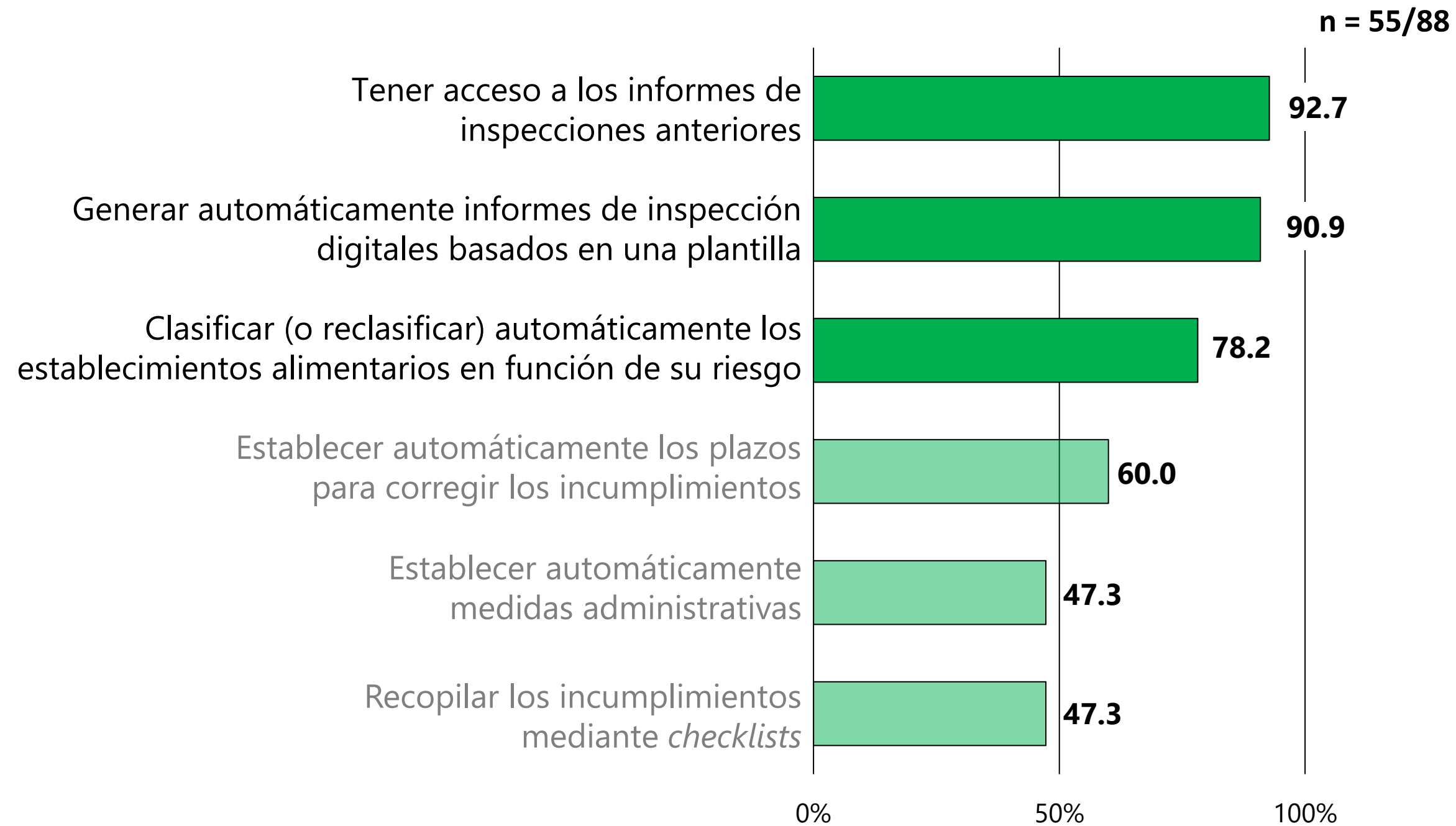


## RESULTADOS

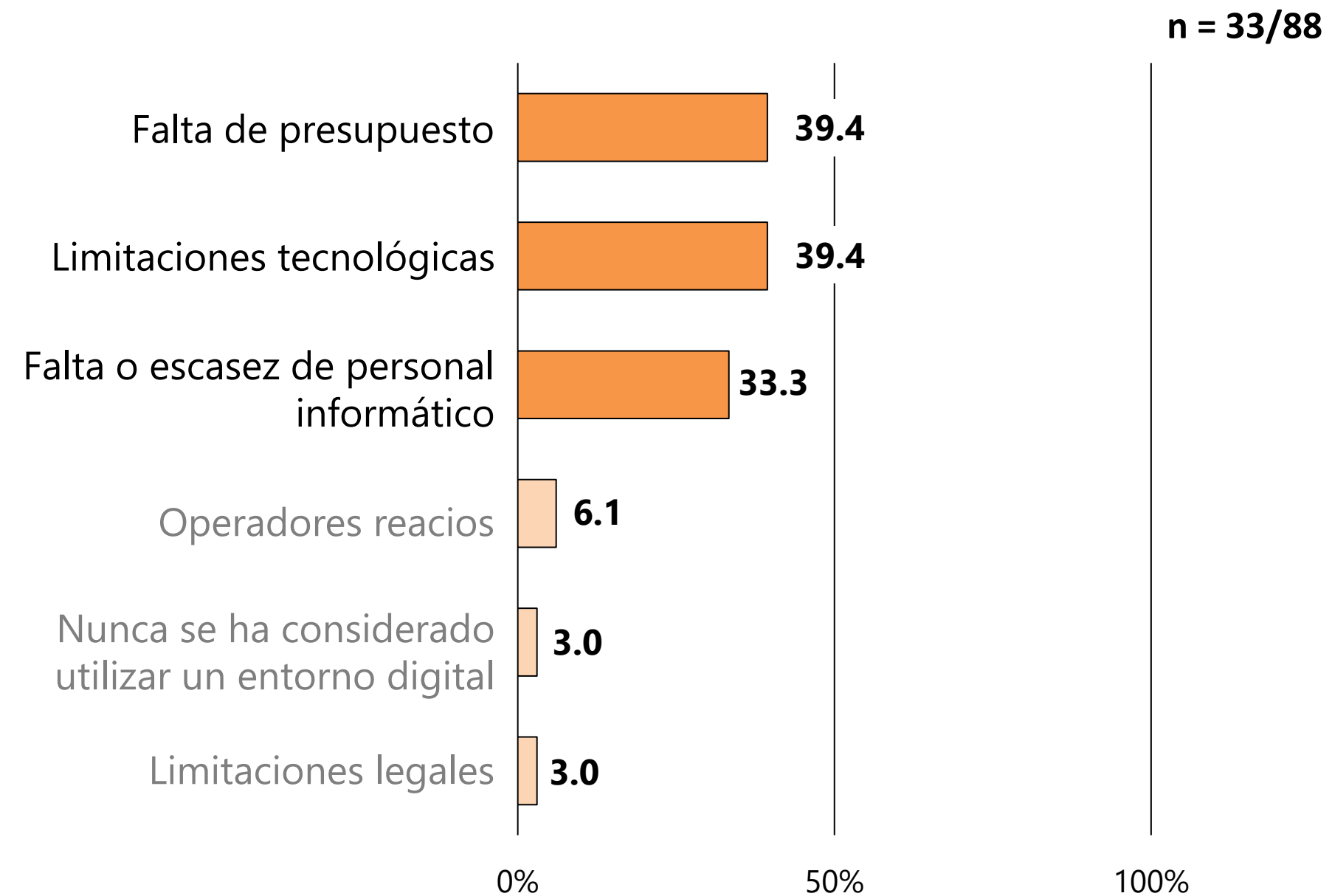
n = 55/88



# Procesos realizados



# Razones por no utilizar





Contents lists available at [ScienceDirect](#)

## Food Control

journal homepage: [www.elsevier.com/locate/foodcont](http://www.elsevier.com/locate/foodcont)



### Digitalization and official food safety inspections at retail establishments

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<sup>l</sup> Federal Agency for the Safety of the Food Chain (FAVV-AFSCA), Brussels, Belgium

<sup>m</sup> Agriculture and Food Board, Tallinn, Estonia

<sup>n</sup> Department of Biomedical Sciences and Veterinary Public Health, Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden

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<sup>r</sup> Ministry for Environment, Agriculture, Conservation and Consumer Protection of the State of North Rhine-Westphalia (MULNV), Düsseldorf, Germany

<sup>s</sup> Netherlands Food and Consumer Product Safety Authority (NVWA), Utrecht, Netherlands

<sup>t</sup> Environmental and Public Health Services, Ministry of Health, Nicosia, Cyprus

<sup>u</sup> Food and Veterinary Service, Ministry of Agriculture, Riga, Latvia



### Discover Food

<https://doi.org/10.1007/s44187-026-00902-3>

### Article in Press

## Advancing towards the digitalisation of official food safety control in Spain in the retail sector

Received: 3 September 2025

Accepted: 20 February 2026

Samuel Portaña, Maica Rodríguez-Sanz, Remo Suppi, Assun Bolao, Artur Xavier Roig-Sagués & Eduard Grau-Noguer

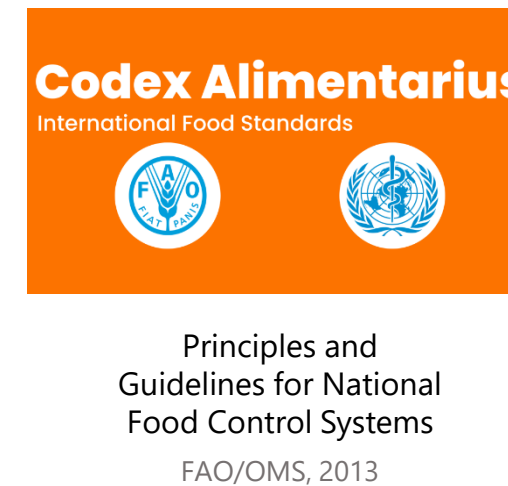
# Caso de uso

# Efectividad del control oficial

## EFFECTIVIDAD



‘Los Estados Miembros garantizarán [...] la coherencia y la **efectividad** de los controles oficiales u otras actividades oficiales en todo su territorio’



‘La autoridad competente tiene la responsabilidad de garantizar el funcionamiento **efectivo** del sistema nacional de control alimentario’

# Efectividad del control oficial

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## EFFECTIVIDAD

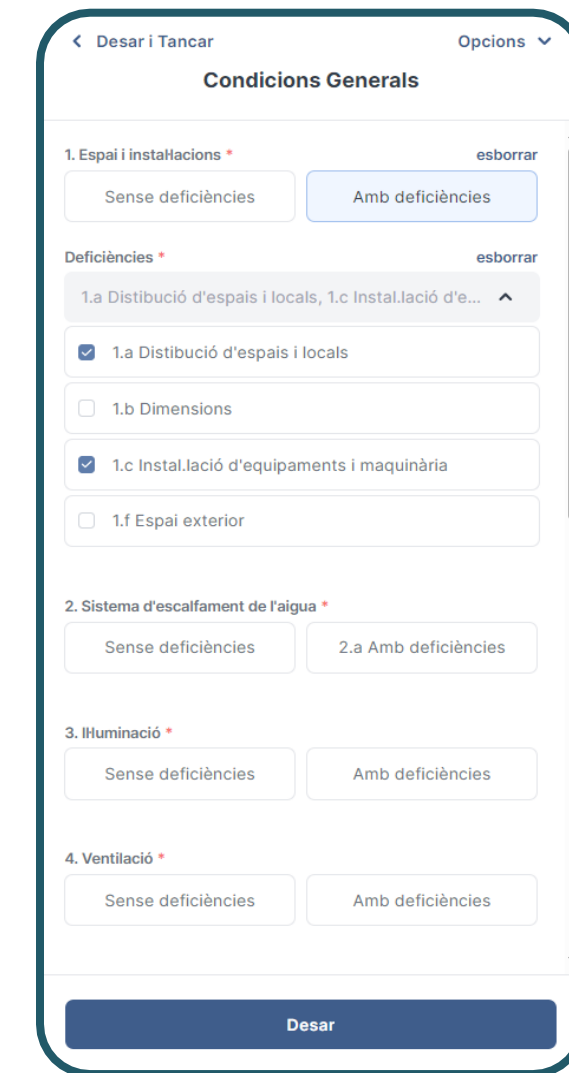
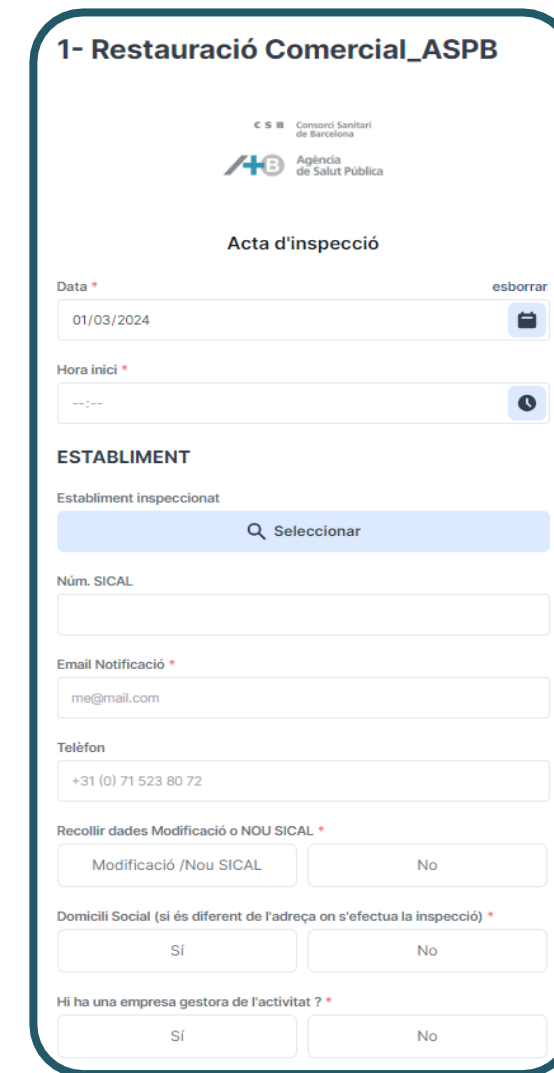
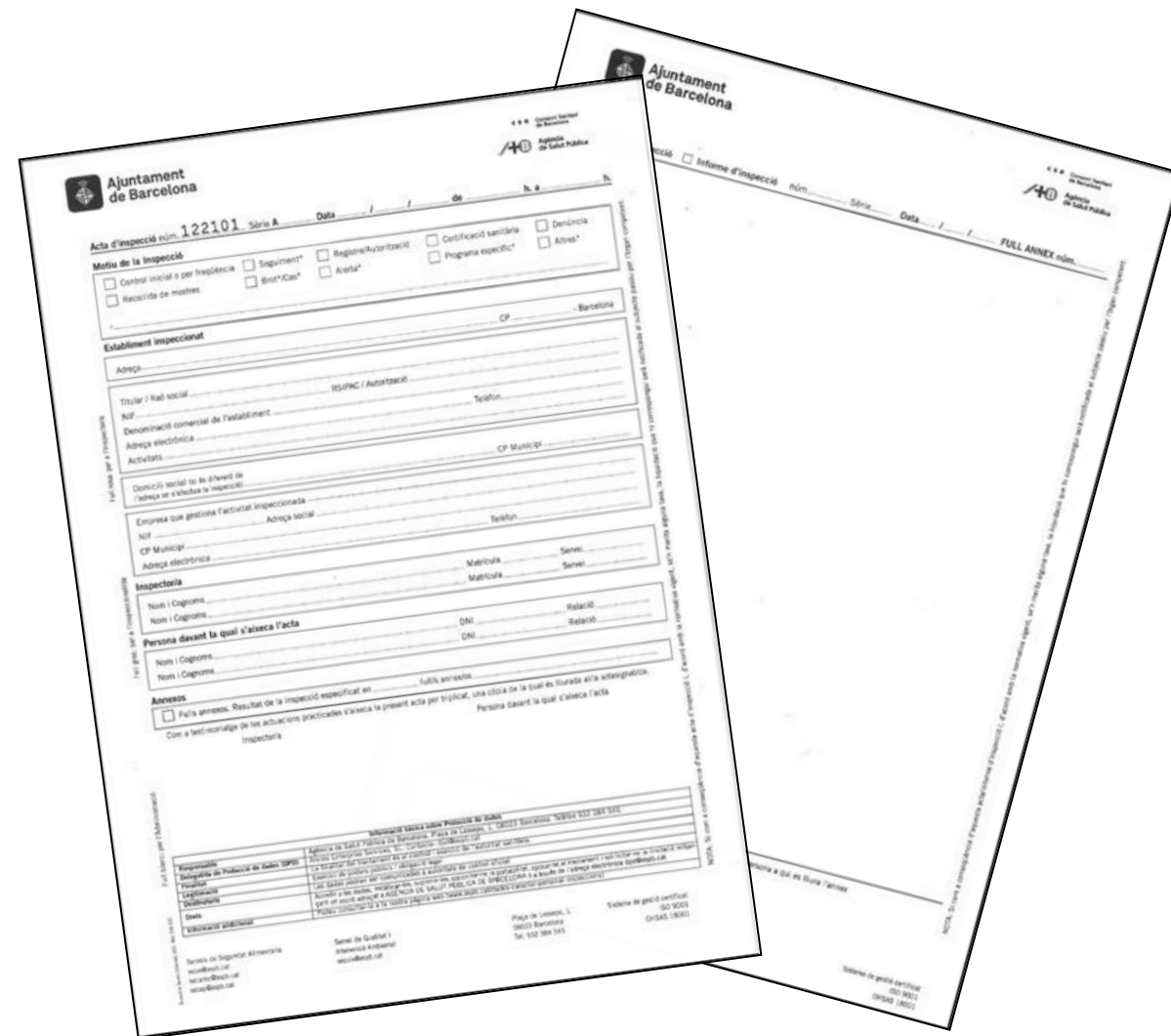
La capacidad de  
detectar  
incumplimientos  
durante las  
inspecciones

Berking et al., 2019

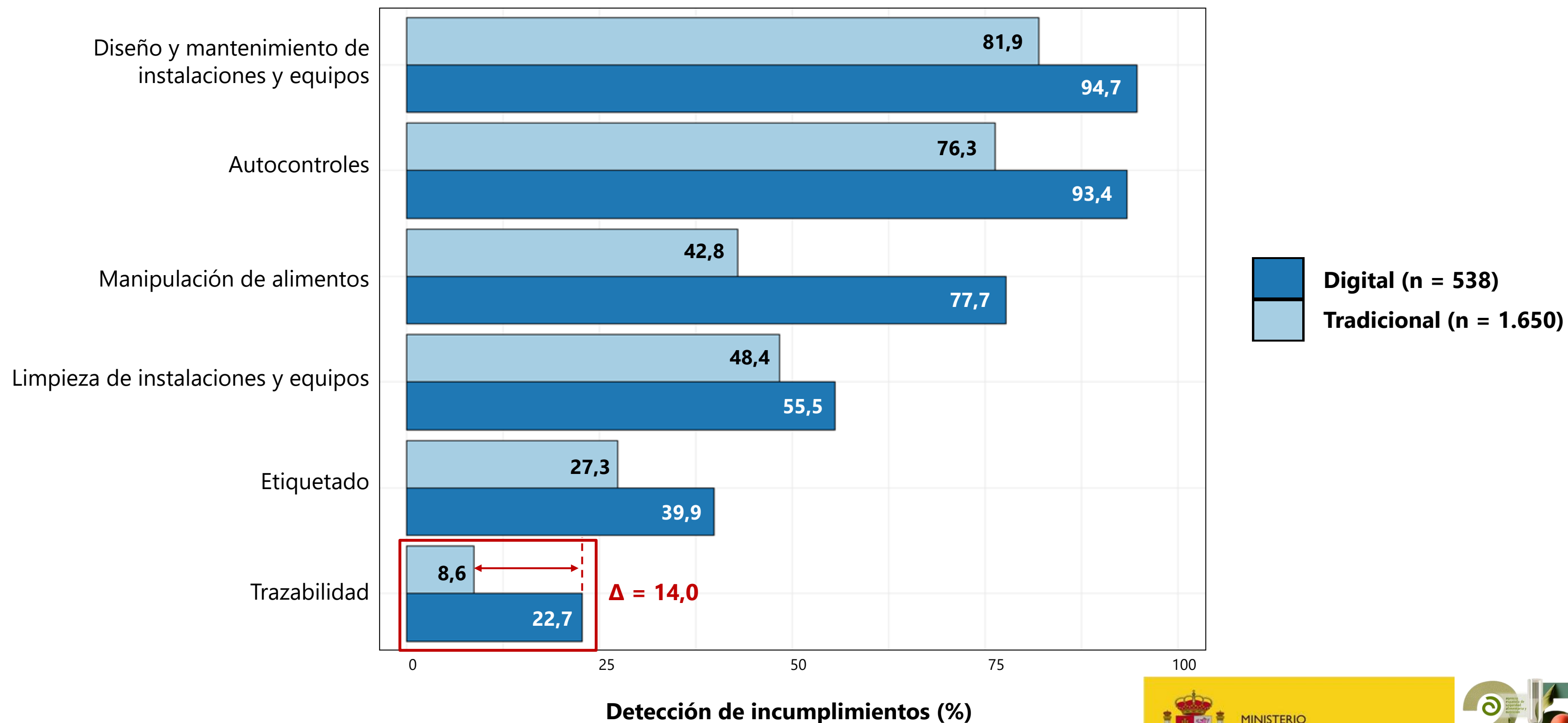
La capacidad de  
garantizar que  
los operadores  
corrijan los  
incumplimientos

Läikkö-Roto et al., 2015

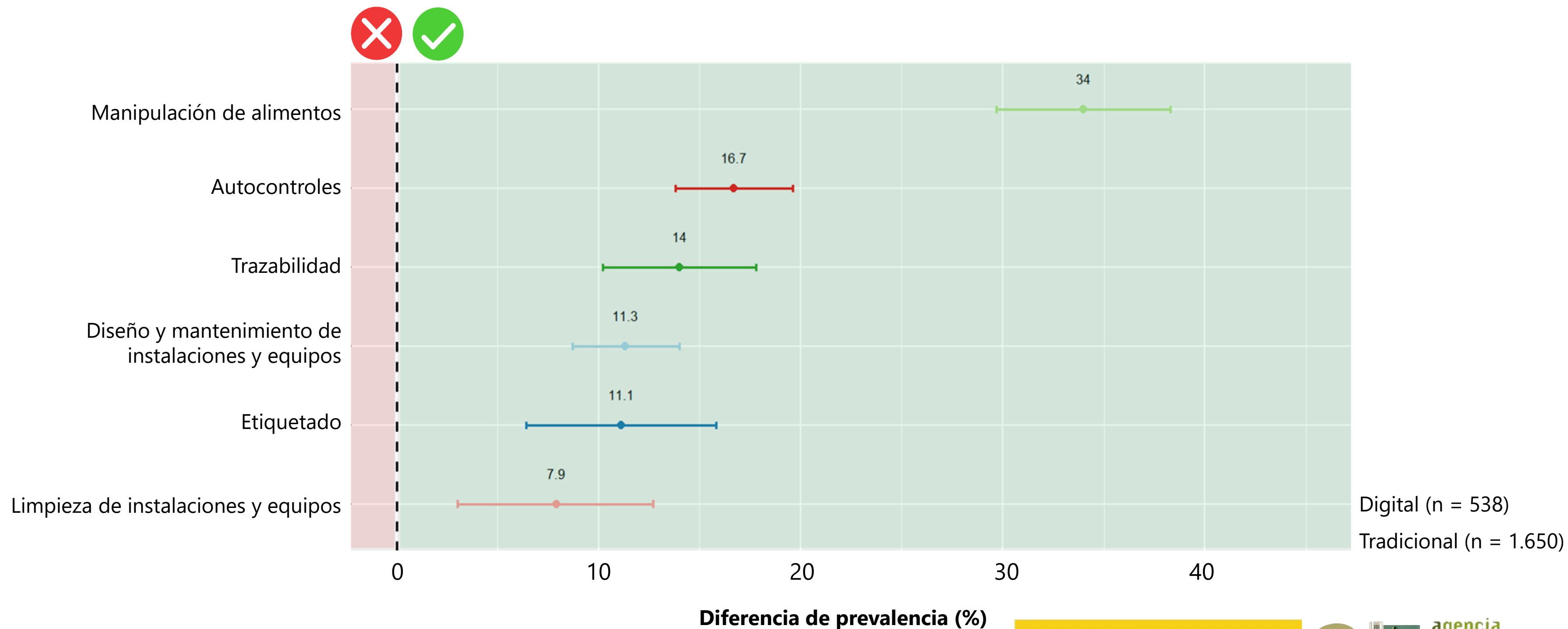
# El caso de Barcelona



# Detección de incumplimientos (0/1)



# Detección de incumplimientos (0/1)



# Efectividad del control oficial



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**JUICIO  
CUALITATIVO**



**‘RUIDO’**

Kahneman, 2021

- Impredecible
- No deseado

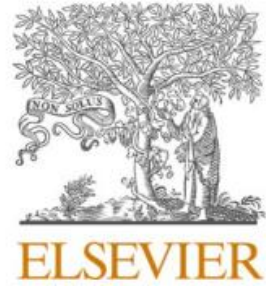
- Estructurar
- Dividir



**CONSISTENCIA**



**SENSIBILIDAD**



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Food Control

journal homepage: [www.elsevier.com/locate/foodcont](https://www.elsevier.com/locate/foodcont)



## Effectiveness of official food safety control in Barcelona city: Digital and traditional inspections

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Janne Lundén<sup>g</sup>, Assun Bolao<sup>b,d</sup>, Desireé Cedano<sup>b</sup>, Samuel Portaña<sup>a,b,d</sup>

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<sup>d</sup> Institut d'Investigació Biomèdica (IIB Sant Pau), Barcelona, Spain

<sup>e</sup> Departament d'Arquitectura de Computadors i Sistemes Operatius, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Barcelona, Spain

<sup>f</sup> German Federal Institute for Risk Assessment (BfR), Berlin, Germany

<sup>g</sup> Department of Food Hygiene and Environmental Health, Faculty of Veterinary Medicine, University of Helsinki, Helsinki, Finland



## Digital environment to support official food safety control during inspections

Download PDF



### Year of publication

2024

### URI

<https://openknowledge.fao.org/handle/20.500.14283/cc7487en>

### Place of publication

Budapest, Hungary ;

### Synopsis (short abstract)

The paper discusses the transition of the Public Health Agency of Barcelona from paper-based inspection procedures to a digital-based system for food safety control procedures. The digital inspection tool allows for the systematic collection of non-compliances, information about official samples taken for laboratory analysis, and the attachment of pictures to inspection reports. The data and information retrieved from inspections are easily accessible for analysis and application in monitoring and planning control activities based on evidence. The paper emphasizes the importance of addressing officers' needs and feedback along the process of development.

### Pages

6p.

### Author

FAO

### Language

English

### Also available in:

Russian

FAO 2024. Digital environment to support official food safety control during inspections.  
<https://www.fao.org/3/cc7487en/cc7487en.pdf>



# Oportunidades de sistemas estandarizados de control oficial

# Resultados del control y enfermedad en humanos

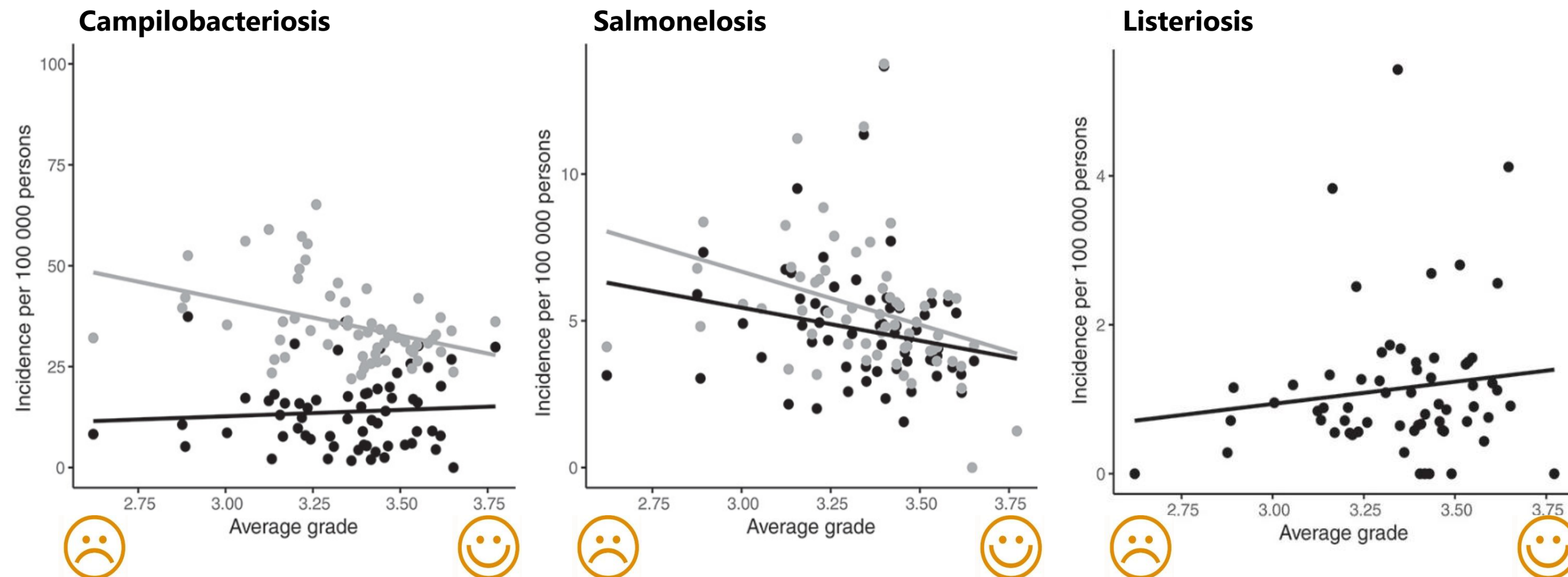
INTERNATIONAL JOURNAL OF ENVIRONMENTAL HEALTH RESEARCH  
2024, VOL. 34, NO. 2, 885–897  
<https://doi.org/10.1080/09603123.2023.2183942>



OPEN ACCESS [Check for updates](#)

## Association between food control inspection grades and regional incidence of infectious foodborne diseases in Finland

Mikko Kosola<sup>a</sup>, Ruska Rimhanen-Finne<sup>b</sup>, Annukka Markkula<sup>c</sup> and Janne Lundén<sup>a</sup>



# Transparencia del control y enfermedad en humanos

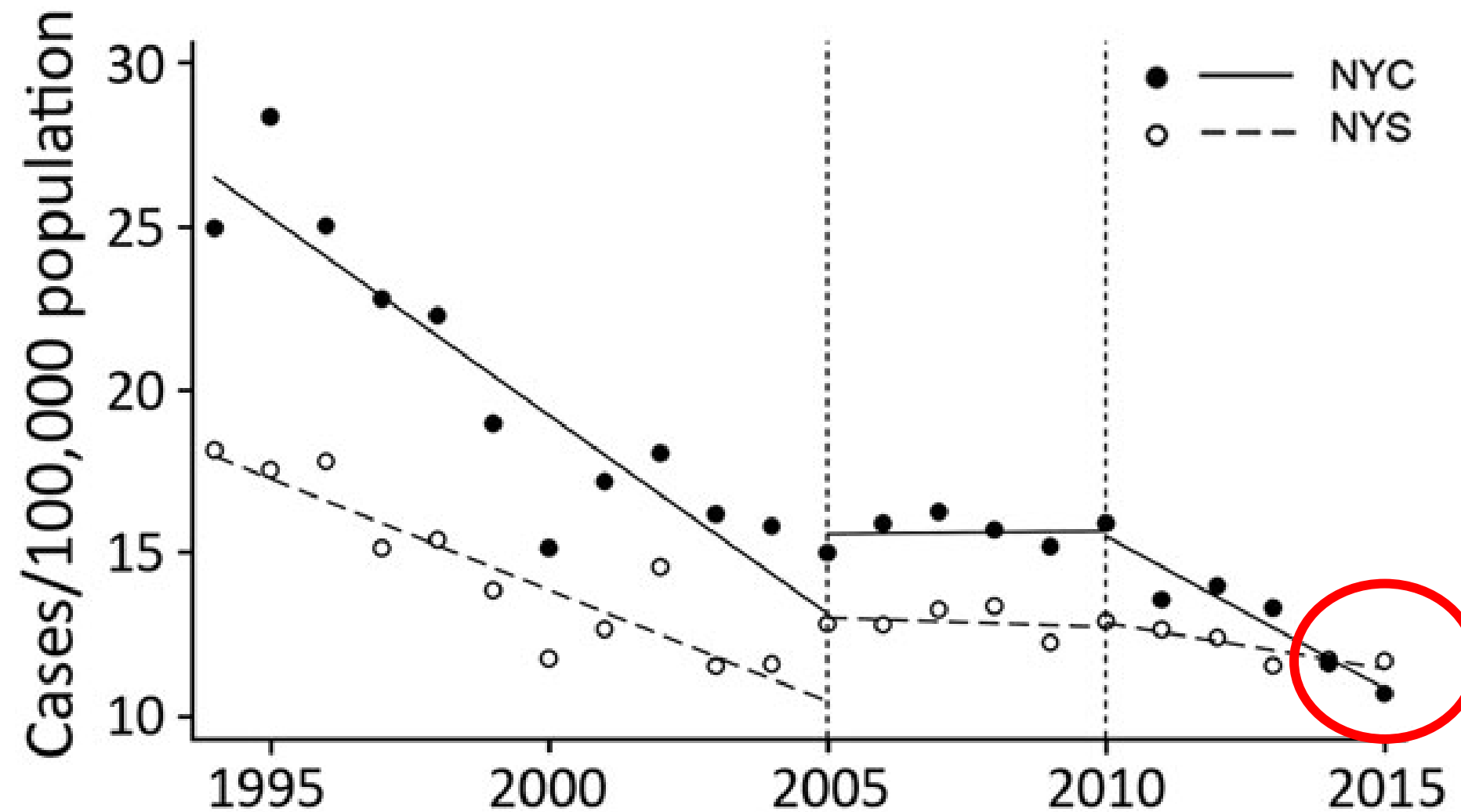
## Restaurant Inspection Letter Grades and *Salmonella* Infections, New York, New York, USA

Melanie J. Firestone, Craig W. Hedberg

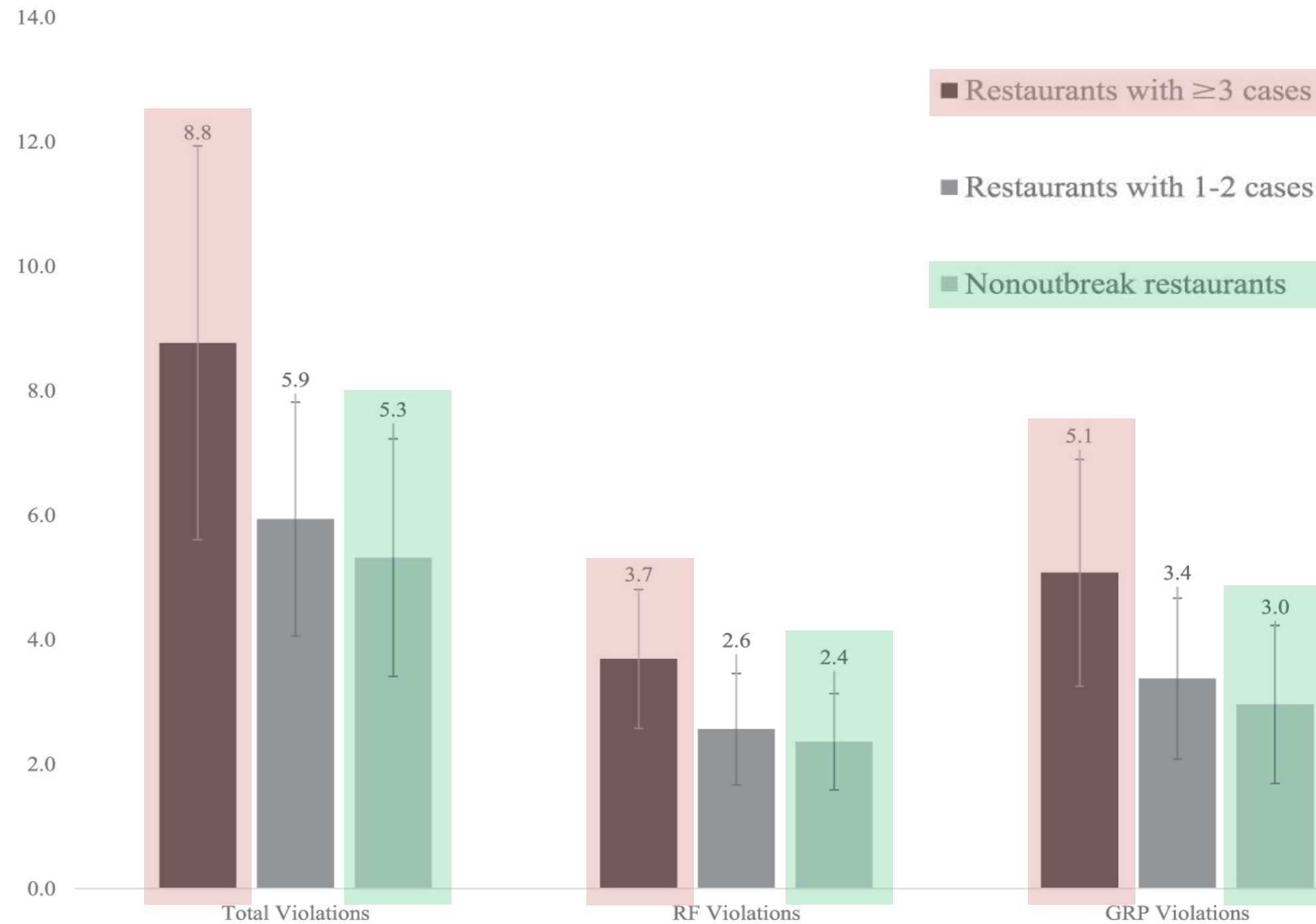


EMERGING INFECTIOUS DISEASES®

Figure



# Incumplimientos e investigación de brotes



*Journal of Food Protection*, Vol. 83, No. 5, 2020, Pages 788–793  
<https://doi.org/10.4315/JFP-19-576>  
 Published 2020 by the International Association for Food Protection  
 This is an open access article under the CC BY-NC-ND license (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

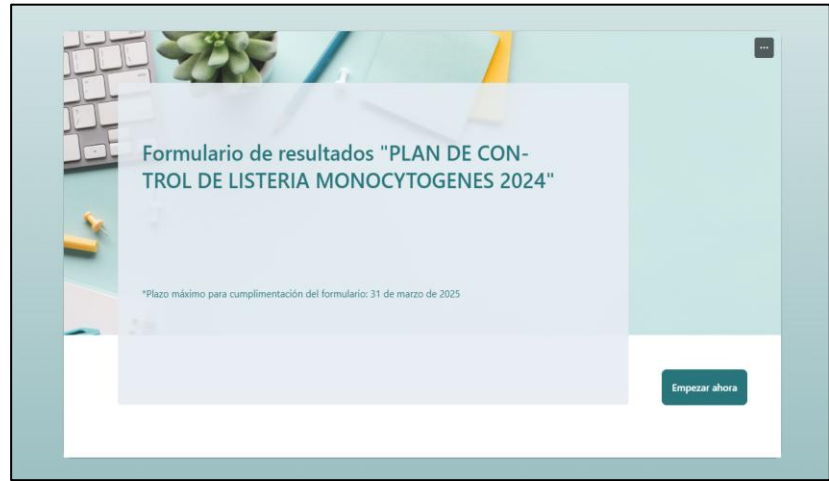
## Research Note

### Can Aggregated Restaurant Inspection Data Help Us Understand Why Individual Foodborne Illness Outbreaks Occur?

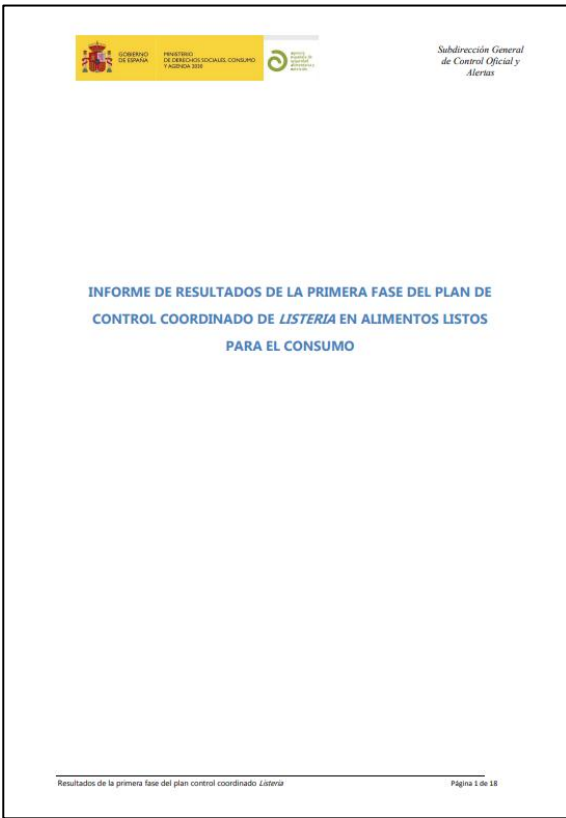
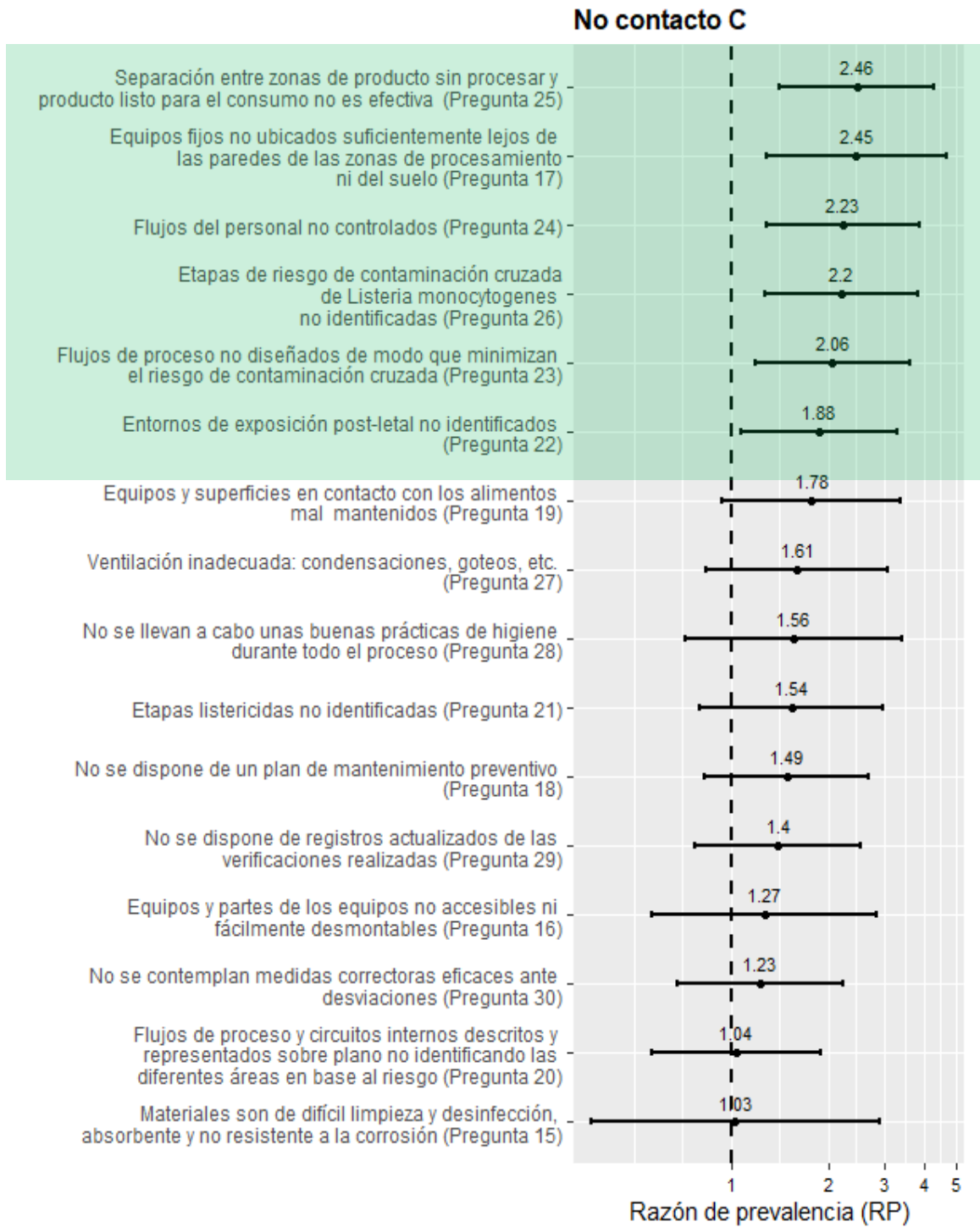
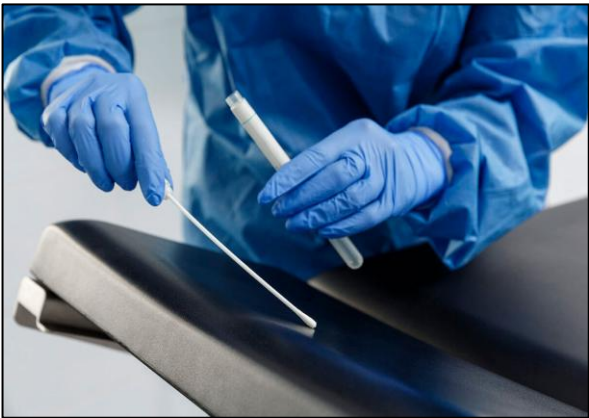
MELANIE J. FIRESTONE,<sup>1\*</sup> DANA EIKMEIER,<sup>2</sup> DEANNA SCHER,<sup>3</sup> CARLOTA MEDUS,<sup>2</sup> NICOLE HEDEEN,<sup>3</sup> KIRK SMITH,<sup>2</sup> AND CRAIG W. HEDBERG<sup>1</sup>

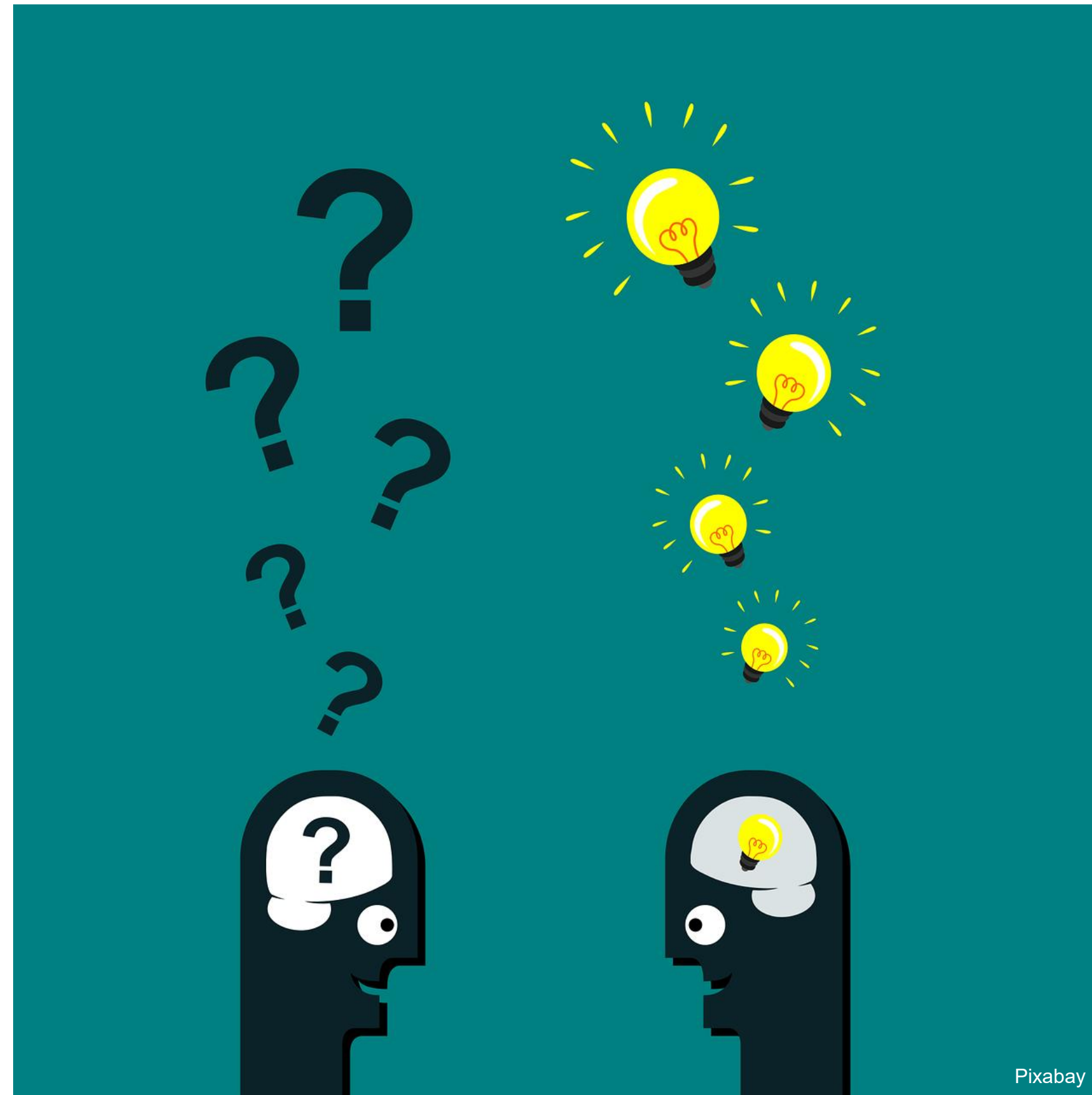
<sup>1</sup>University of Minnesota School of Public Health, Division of Environmental Health Sciences, 420 Delaware Street S.E., MMC 807, Minneapolis, Minnesota 55455 (ORCID: <https://orcid.org/0000-0003-2244-3729> [M.J.F.]); <sup>2</sup>Minnesota Department of Health, Foodborne, Waterborne, Vectorborne, and Zoonotic Disease Section, 625 Robert Street N., St. Paul, Minnesota 55164; and <sup>3</sup>Minnesota Department of Health, Environmental Health, 625 Robert Street N., St. Paul, Minnesota 55164, USA

# Incumplimientos y detección de *Listeria monocytogenes*



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**¡Muchas gracias por  
vuestra atención!**