



# FOODINTEGRITY

## Ensuring the Integrity of the European food chain

613688: Collaborative Project

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RE	Restricted to a group specified by the consortium	
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# 1 Preface

WP 3 Gap identification leading to procurement is a major part of the EU Seventh Framework program Food Integrity - Ensuring the Integrity of the European food chain. The Food Integrity project has a budget to fund €3 million of research in the area of food authenticity and traceability. One of the objectives of WP 3 was to identify the gaps in food authenticity / traceability research to prioritise subject areas for funding. In this work, we report on the procedure and outcome of extensive analytical, traceability and consumer gap analysis leading to procurement for call of new project proposals.

## Summary

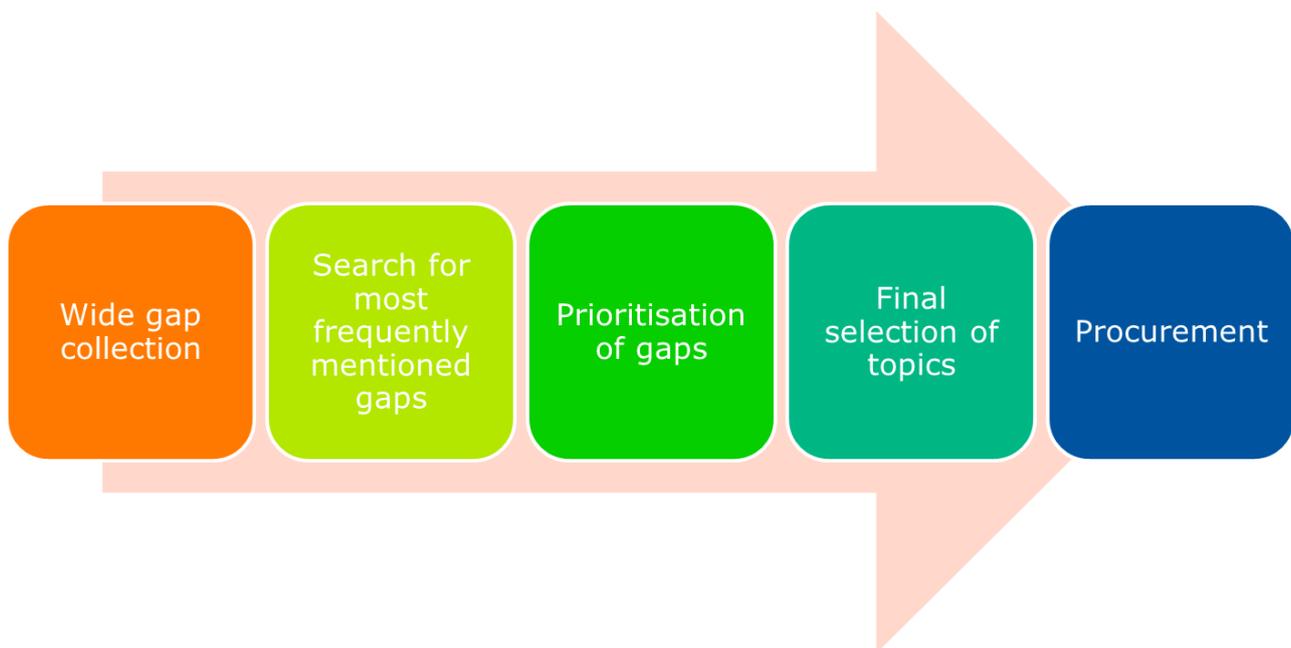
The development and implementation of the existing knowledge on analytical methodology and traceability systems to assure the integrity and authenticity has mainly remained in the scientific domain. In order to tackle this problem, the Food Integrity WP 3 investigated the analytical, traceability and consumer gaps relating to food authenticity and integrity. To achieve this goal, data was gathered by collecting data on previous studies on this topic, performing internal and external evaluations amongst experts, performance of an on-line study amongst professionals in the food authenticity field and performance of a consumer desk and Delphi study. By combining the results of these activities, a list of ten gaps was identified which were subsequently presented by an independent moderator to a panel of stakeholders. As a result, four main gaps were identified: (I) standardization and harmonization of untargeted food integrity methods, (II) Approaches to assure the integrity of complex foods, (III) Common platform and tools for sharing information across stakeholders to increase transparency along the food supply chain and (IV) Rapid, cost efficient methods for fraud detection. These four topics were considered as candidates for calls, to be prepared by Food Integrity WP 9.

## 2 The scientific gap analysis process

Considerable efforts have been made to underpin food integrity, in general, through scientific efforts. However gaps still exist. This hampers the optimal use of scientific knowledge for the benefit of the food industry, official food control, and consumers world-wide. Therefore, the work package 'Prioritisation' of the EU project Food Integrity ([www.foodintegrity.eu](http://www.foodintegrity.eu)) was to determine and prioritise, present and future food integrity gaps, with regards to the application of analytical methodologies as well as traceability uptake and implementation, consumer and other issues. The identified gaps will be transferred into research topics for procurement of new research projects for which competitive calls will be launched by the Food Integrity project in 2015. This report is Deliverable 3.1 of the project.

Between March 2014 and December 2014, research gaps were identified and prioritised to guide the procurement of new research sub-projects as part of the Food Integrity project. The process is schematically presented in Figure 1.

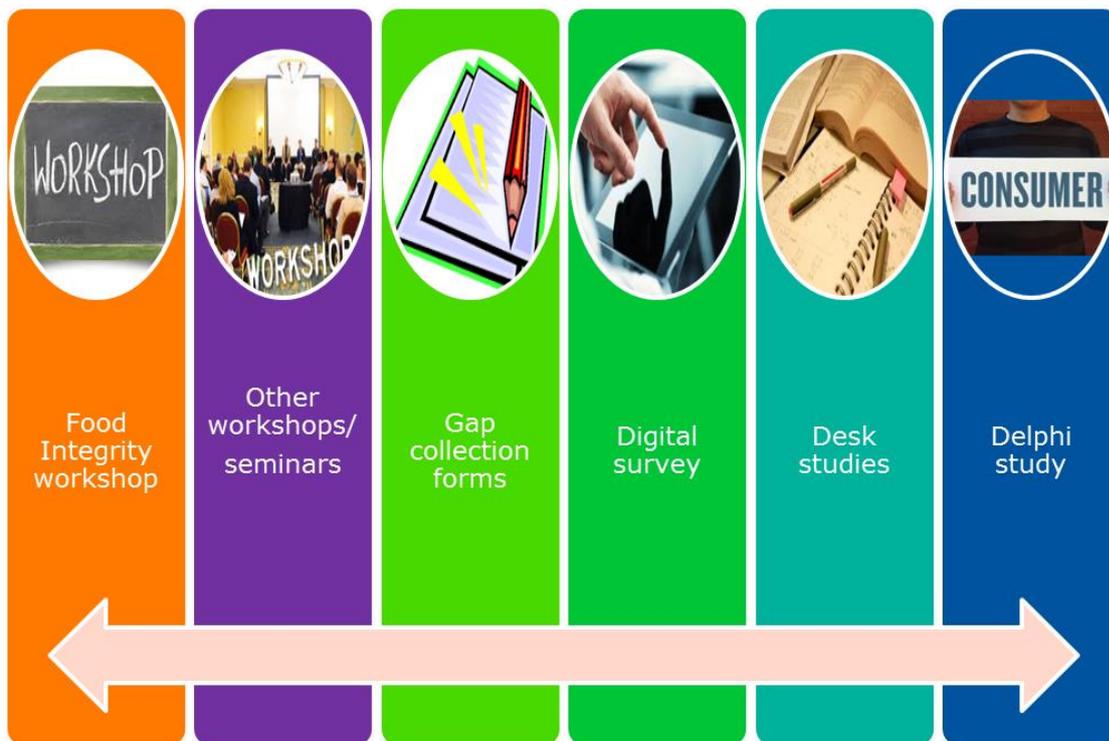
Identified research gaps were collated, with the ten most frequently mentioned gaps subsequently being prioritised by a group of expert stakeholders. The prioritisation resulted in a list of four gaps which were reformulated into broad topics and were further demarcated by the Management Committee of Food Integrity to make them suitable as research topics for procurement. The process is detailed in sections 3 and 4.



**Figure 1** Flow chart on the process prior to development of call descriptions for the procurement of new research sub-projects in the Food Integrity project

### 3 Wide gap collection and analysis

Gaps were identified through workshops and questionnaires (these were shared in workshops or were sent to stakeholders). In addition, a digital survey and desk studies on previous research projects, and a consumer oriented Delphi study (Figure 2) were conducted. Participants in the gap identification processes included stakeholders in industry, regulatory bodies, science, and consumer organisations.



**Figure 2 Various components of the gap collection process**

The identified gaps were analysed by the participants of WP3 'Prioritisation' and resulted in a list of the ten most frequently mentioned (major) gaps. Since there was overlap in gaps between analytical methodology, traceability issues/uptake and implementation, consumer and other issues no differentiation according to category was made.

The ten identified major gaps were:

1. Lack of methods for complex foods
2. Lack of generic methods for geographical origin verification
3. Insufficiently available reliable methods for fraud detection in meat (note: other food categories such as seafood, fat/oils, and alcoholic beverages were mentioned, but they are already covered in the Food Integrity project)
4. Lack of standardized and harmonized (fingerprinting) methods
5. Lack of financially affordable methods
6. Insufficient EU systems and certification
7. Lack of implementation of existing traceability systems
8. Lack of communication of relevant information to consumers
9. Uncertainty about accuracy and honesty of information available to consumers
10. Lack of transparency of accountability and responsibility in the chain

## 4 Prioritisation leading to procurement

The ten identified major gaps were prioritized in an expert stakeholder meeting on the 8<sup>th</sup> of October 2014 in Brussels. Various representatives of EU and national regulatory bodies, food industry, retail, and certification/standardisation bodies and a consumer organisation, contributed to the prioritisation of the ten gaps. The process included an initial ranking, discussion on criteria for ranking, break-out groups, a second ranking, and final ranking which resulted in a list of the top 4 gaps. The gaps, as discussed in the stakeholder meeting, were then transcribed into broad topics by WP3 partners and the descriptions were circulated and approved by the expert stakeholders panel.

These four broad topics are:

1. Standardization and harmonization of untargeted food integrity methods
2. Approaches to assure the integrity of complex foods
3. Common platforms and tools for sharing information across stakeholders
4. Rapid, cost efficient methods for fraud detection

These topics were further demarcated and reformulated into topics for procurement by the Food Integrity Management Committee in November/December 2014. Topics were transferred to WP9 Procurement. This WP will draft the call texts according to the FP7 provisions of competitive calls.

