**NUTRIENT SAMPLING & ANALYSIS**

**PROCUREMENT SPECIFICATION & REQUEST FOR PROPOSALS**

**Overview of Requirements**

The Agriculture and Horticulture Development Board (AHDB) requires nutrient analysis for a range of food products, with a focus on red meat.

The core project is for nutritional analysis of key cuts of pork, which is being funded in collaboration with Public Health England (PHE). This project must be fully completed by the end of March 2019. The ability to meet this deadline is an essential criteria for this contract.

Further nutrient analysis work may subsequently be required by AHDB on other food products and / or red meat cuts. As such, the successful applicant will be contracted by AHDB for 2 years (December 2018 until December 2020) to undertake this work, with an option to extend for a maximum of 12 months. Please note, however, that any additional nutrient sampling and analysis work is not guaranteed, either in part or in its entirety.

The successful applicant will be contracted with AHDB only.

**Background & Core Project**

AHDB

AHDB is a statutory levy board funded by farmers, growers and others in the supply chain. Our purpose is to make our agriculture and horticulture industries more competitive and sustainable through factual, evidence-based advice, information and activity. This includes consumer marketing activity to promote the benefits of our farmers and growers’ produce.

Established in 2008 and classified as a Non-Departmental Public Body, AHDB supports the following industries: meat and livestock (cattle, sheep and pigs) in England; horticulture, milk and potatoes in Great Britain; and cereals and oilseeds in the UK. Our remit covers 72 per cent of total UK agricultural output.

PHE

Public Health England exists to protect and improve the nation’s health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge   
and intelligence, advocacy, partnerships and the delivery of specialist public health services.  We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Helping people live longer and more healthy lives by reducing preventable deaths and the burden of ill health associated with smoking, high blood pressure, obesity, poor diet, poor mental health, insufficient exercise and alcohol is one of PHE’s key priorities. Diet related chronic disease and the co-morbidities associated with obesity are major causes of premature mortality and morbidity in England. Improving the population’s diet would therefore help to save lives.

Background

AHDB is working in collaboration with PHE on the core project detailed below. The aim of the core project is to deliver a nutrient composition survey of key cuts of pork. This is with an overall objective of updating PHE’s nutrient databank that supports the UK National Diet and Nutrition Survey and updating the authoritative UK food composition tables, *McCance and Widdowson’s The Composition of Foods*. The data resulting from this survey will be used to update the Composition of Foods Integrated Dataset (CoFID), the electronic version of the tables.

The nutrient analysis data generated by this survey will update the evidence on which government interventions and policies in diet and nutrition are based. The UK National Diet and Nutrition Survey (NDNS) provides the evidence base at population level and data from this project will be used to update the nutrient composition databank that supports NDNS, thus improving the quality of nutrient intake estimates. The Scientific Advisory Committee on Nutrition (SACN), the independent body advising government on nutrition matters, uses NDNS data to inform its dietary risk assessments.

*McCance and Widdowson’s CoFID* is similarly used by AHDB and the wider food industry for promotional activity and labelling purposes. It is also underpins diet and nutrition research and is used widely by researchers, dietitians, industry, local government officers and others as the key reference work on the nutrient content of the UK food supply.

The core project will provide up-to-date nutrient values for key cuts of pork. The last comprehensive nutrient analysis surveys of red meat (beef, pork and lamb) in the UK were completed between 1992 and 1994. The data generated from these surveys has formed the basis of the *McCance & Widdowson’s CoFID* ever since.

Since the early 90’s, in response to the public health need to reduce fat intake, the livestock industry has made comprehensive changes to production and processing methods. These changes have resulted in significant reductions in the fat content of red meat. Changes in breeding and feeding practices along with modern butchery methods mean that a wide range of lean cuts are now routinely available to consumers.

It is now timely to undertake this work to ensure the nutrient composition data used by government, industry and others most accurately reflects today’s UK food supply. It will also bring the UK in line with other livestock producing developed countries – the majority of whom have updated their nutrient analysis work in the last 5 years.

Core Project

This is a small project to be undertaken in a short timescale, reflecting constraints on resources. It is not intended to reflect the full range of pork cuts available on the market. The six samples chosen reflect some commonly consumed cuts and leaner cuts that are becoming more popular.

The core project focuses on analysing the following cuts of pork, with separate analysis of lean and fat for the pork loin steak and leg roasting joint:

1. Pork fillet medallions (uncooked)
2. Pork loin medallions (uncooked)
3. Pork loin steak (uncooked)
4. Pork loin steak (cooked, grilled)
5. Pork leg roasting joint (uncooked)
6. Pork leg roasting joint (cooked, roasted)

Dependent of tender pricing, we reserve the right to award all or part of the above requirements.

**Approach / Requirements**

The core project is focused on composite samples of six cuts of pork . Analysis is required for a range of nutrients in each composite sample detailed below:

* Moisture
* Protein (calculated from total nitrogen and nitrogen factor used)
* Total fat and fatty acids
* Cholesterol
* Minerals; sodium, potassium, magnesium, phosphorus, calcium, iron, zinc and manganese
* Vitamins; D3, E B1, B2, B3, (tryptophan), B6, B12, folate, pantothenic acid and biotin
* Selenium and iodine

The nutrients to be analysed in each composite sample is shown in the table below. Comments from applicants are welcome.

|  |  |  |
| --- | --- | --- |
|  | **Composite sample** | **Nutrients to be analysed** |
| 1 | Pork fillet medallions, uncooked | All listed above |
| 2 | Pork loin medallions, uncooked | All listed above |
| 3a | Pork loin steak uncooked, lean portion | All listed above |
| 3b | Pork loin steak uncooked, fat portion | All listed above |
| 4a | Pork loin steak grilled, lean portion | All listed above |
| 4b | Pork loin steak grilled, fat portion | Fat, protein, water only |
| 5a | Pork leg roasting joint, uncooked, lean portion | All listed above |
| 5b | Pork leg roasting joint, uncooked fat portion | All listed above |
| 6a | Pork leg roasting joint, roast, lean portion | All listed above |
| 6b | Pork leg roasting joint, roast, fat portion | Fat, protein, water only |

Applicants are requested to provide costings to analyse composite samples of each of the pork cuts listed in the table above under ‘Core Project’. Each composite sample is to consist of 10 sub-samples. Sub-sample are to be purchased from a range of different retail outlets reflecting usual consumer buying habits for red meat – see Annex 1.

Applicants are requested to provide a breakdown of their costings to include a cost for each nutrient listed above. We reserve the right to award all or part of this work depending on tender pricing.

***Optional requirement:***

Applicants are asked to confirm if they are able to purchase sub-samples to make up each composite sample from a list of retailers agreed with AHDB (see Annex 1). If able to provide the service, applicants are asked to provide a separate cost for this as part of their tender document. AHDB will work with the contractor to produce a protocol for purchasing.

The successful contractor(s) will be responsible for the following for all commissioned projects:

* Finalising the list of composite samples to be analysed, in consultation with specialists in AHDB;
* Finalising the list of nutrients to be analysed in each composite sample, in consultation with specialists in AHDB;
* Producing and agreeing with AHDB a sampling protocol including a **list of sub-samples**;
* Separating the sub-samples into lean and fat where required and recording the weights;
* Cooking the sub-samples where required and recording the weight loss on cooking;
* Combining sub-samples into composites as specified in the sampling protocol and preparing the samples as appropriate;
* Carrying out **nutritional analysis** of the composite samples;
* Carrying out quality control evaluation of the results in consultation with AHDB and undertaking repeat analysis where the evaluation suggests that results may be erroneous;
* Collating all the sampling information from each individual sub-sample and presenting this in a **sampling report**;
* Writing up a **final report** to include the analytical results.

This work may be carried out by a single contractor or by joint contractors, in collaboration; full details of the parties who will be providing the services must be provided in the tender response. Where successful, AHDB will sign a contract with the lead (primary) contractor who will be responsible for ensuring that all components are completed satisfactorily. AHDB will not consider tenders for part of the work (i.e. just sampling or just analysis).

**Devising the sampling protocol**

For the core project, the list of nutrients and composite samples to be analysed is as set out above. Comments or observations on this list of nutrients is welcomed from the applicant.

As noted above, the overall objective of the core project is for analysis to be included in PHE’s nutrient databanks to support national dietary surveys and *McCance and Widdowson’s CoFID.* For this to be achieved, the analysis results must be sufficiently robust to ensure validity, so applicants are required to outline how they intend to deal with factors / challenges in their sampling protocol. This should include their approach to the separation of lean, visible fat and inedible portions. Applicants should also outline their standard analytical quality control measures. AHDB have considered the impact of regional variation and it is negligible so applicants are not required to consider the need for regional sampling.

The final sampling protocol and list of composite samples for the core project must be agreed with AHDB before work commences.

**Procedure for sampling; inc. purchasing, transporting and preparation of samples**

The list of sub-samples to be purchased (see Annex 1) needs to be finalised with AHDB once the sampling protocol has been agreed.

Where applicable, the successful contractor should purchase sub-samples from the list agreed with AHDB. Where this does not form part of the contract, it will be AHDB’s responsibility to purchase sub-samples.

Applicants should set out in their tender document how sub-samples will be stored and, if applicable, transported in the correct conditions e.g. temperature.

**Record of sampling information**

The following information should be recorded for each of the sub-samples:

* Sample and sub-sample number;
* Full name of sub-sample (including any description given);
* Size/weight as purchased/provided;
* Batch/lot number (if available);
* If purchased directly, place and date of purchase (name of town and location) and type of retailer (e.g. supermarket, butchers shop);
* Place of origin;
* Use by date;
* Where available nutrient content data is provided on labelling, details of any claim made;
* Nutrient content provided on labelling and visual images of labels i.e. digital photograph or photocopies of sufficient clarity so that details can be distinguished and checked.
* Weights of lean, visible fat and inedible portions for each sub-sample
* Weight loss on cooking for cooked subsamples

This information should be reported to AHDB as a sampling report. Any additional relevant information should also be included.

**Preparation and analysis of samples**

The successful contractor should prepare the sub-samples as necessary and combine them into composite samples comprising equal portions of each of the sub-samples. Each composite sample should be analysed for a range of nutrients, as agreed with AHDB.

**Submission of the results**

The successful contractor should submit an analytical report to AHDB. The report should contain details of the methods used, sampling information, quality assurance procedures and any other relevant additional information.

**Timescale**

Work on the core project must be completed by the end of March 2019. As such, it is proposed that work commences as soon as reasonably possible on award of contract (December 2018), subject to a pre-award contract meeting/call, as required.

**Expressions of Interest & Tender Submissions**

Applicants are asked to **confirm their intention** to tender by **12 noon on Friday 7th December** emailing Roz Reynolds, Interim Head of Education, Health & Nutrition at [roz.reynolds@ahdb.org.uk](mailto:roz.reynolds@ahdb.org.uk)

All clarifications relating to this opportunity should be directed to Roz Reynolds either at the email address above or telephone 024 7647 8713. AHDB will circulate anonymised version of all questions and answers to all parties who have confirmed their intention to tender.

Submissions should be emailed to Roz Reynolds – see email address above.

***Submission deadline:* 4pm on Friday 14th December**

This tender exercise is unremunerated: no payment will be made to bidders in relation to their participation.

**Submission Requirements & Evaluation**

All tender documents should be provided in Microsoft Word.

Evaluation of tender submissions will be in accordance with the following criteria. As such, tender documents should cover all requirements accordingly:

|  |  |
| --- | --- |
| **Criteria:** | Weighting (%) |
| Core project completion date of 31 March 2019 will be met | Pass/fail |
| Laboratory accreditation for the nutrients specified (e.g. United Kingdom Accreditation Service (UKAS) Certificate or equivalent) | Pass/fail |
| Professional Indemnity insurance held (£2m) – confirm insurance is held or may be purchased if successful | Pass/fail |
| Outline team for core project, including details on any collaborations | FIO |
| **Cost** |  |
| Cost – core project (based on core service/fixed pricing) | 30% |
| Optional cost for purchasing sub-samples for core project | FIO |
| **Quality** |  |
| Details of two similar contracts (over last four years) | Pass/fail |
| Provide your response to delivering our requirements (incl. reporting) | 35% |
| Provide an outline sampling protocol | 35% |
| Risks and issues foreseen, plus any additional considerations not covered in this document for the core project | FIO |

**Please note that a pass threshold for quality will be required of 45% out of the possible 70%, based on the weighting detailed above.**

Cost provided should be for the total of the core project. This should be broken down by key activity, including a cost for each composite samples and a cost per nutrient.

Any pricing submitted will be considered to be fixed for a 12 month period and will form the basis of any pricing mechanism for any agreed additional work. Any proposed price increases after this time should be requested in writing giving 3 months’ notice.

Where applicable, please provide a separate cost if you intend to purchase the sub-samples for the core project directly.

**Terms and Conditions**

AHDB Terms and Conditions will apply to this contract, which can be found at <https://ahdb.org.uk/procurement>

**ANNEX 1**

**SUB-SAMPLE – PURCHASING LIST**

Sub-samples should be purchased from the following list of retailers, subject to availability. This list is based on Kantar insight into retailer market share for fresh meat (volume) and AHDB knowledge.

|  |  |
| --- | --- |
| **Retailer** | **Number of Sub-samples** |
| Tesco | 2 |
| Sainsbury’s | 1 |
| Asda | 1 |
| Morrisons | 1 |
| The Co-Operative | 1 |
| Waitrose | 1 |
| Aldi | 1 |
| Lidl | 1 |
| Independent butcher | 1 |
| **TOTAL** | **10** |