ARLA FOOD FOR HEALTH

2019 call for applications

Content

1 Introduction

Arla Food for Health (AFH) is pleased to announce the 2019 call for applications, for research projects to be funded in 2020.

AFH is a public-private research partnership between top ranked universities and the food industry – all of them engaged within dairy, new food solutions and nutrition research: University of Copenhagen, Aarhus University, Arla Foods amba and Arla Foods Ingredients.

The common vision is to **Discover health effects of dairy and dairy ingredients**

The partnership is based on the conviction that equal collaboration through independent research activities, both nationally and internationally, are crucial for the ability to adress several global health challenges.

The ambition is to push boundaries and foster world-class dairy science that subsequently can be applied in food design and new nutritional solutions with positive impact on global nutritional status and public health - and thereby create value for individuals, the society and the collaborating partners.

The AFH partners are committed to create impact and objectively disseminate the scientific insights developed through the AFH-projects. Moreover, the collaboration between the partners include a targeted and coordinated public outreach that can serve as basis for a science based nutrition and health dialogue with external stakeholders – including authorities, NGO's, universities and other industries. Likewise, use of previous AFH-obtained scientific output in new research initiatives and education is of particular importance.

All partners in the Centre seek to better understand the role of dairy foods in healthy, sustainable eating patterns. In particular, AFH is interested in promoting advanced research methodologies related to the milk value chain i.e., identification/characterization of active milk components, isolation and scaling up of these, in vitro and in vivo documentation of health effects as well as the mechanism behind these effects. Validation of these effects in high quality human studies are of special interest.

AFH emphasizes the scientific quality of the research proposed. As the total yearly fund is DKK 10 mill., typically 2-3 projects have received funding. These funds should be seen as seed money, enabling initiation of the work and leading to further funding via e.g. public funding sources. Thus, the content of the application may be seen and described as a phase of a larger and stronger research project.

2 Topic for AFH 2019 call for applications

The overall theme for AFH 2019 call for applications is 'Dairy related food matrix' and we welcome applications with this focus.

Dairy related food matrix

Healthy eating plays a vital role in maintaining high quality of life and in the prevention and management of diseases such as obesity, diabetes, hypertension, and cardiovascular disease. Traditionally, research has focused on the relationship between individual nutrients and health outcomes, which often has resulted in conflicting findings compared to research on 'whole foods'. 'Whole foods' are to be considered as food matrices that represent complex multi-component systems composed of nutrient and non-nutrient components of foods and their molecular relationships, i.e. chemical bonds. More recently, the food matrix has been recognized to drive the nutrient up-take characteristics. Therefore, the study of whole foods including dairy as part of a meal and/or the diet appears more logical in assessing potential associations between dairy/food intake and health outcomes.

Previously, researchers investigating the role of dairy products in health have looked at dairy foods as a homogenous group across different dairy categories, e.g. milk, yoghurt, cheese, milk beverages or simply according to high- or low fat contents. Knowing that dairy products differ with regard to their food matrix as well as their nutritional content and bioactive components there is an urgent need to direct dairy related nutrient and health research. In the direction of understanding matrix effects and interaction between matrix and other components and the resulting health out-come, i.e. an increased understanding at both the meal, food and component level, during digestion, uptake and final health outcome is needed.

The AFH call for 2019 focuses on investigating the health effects of well-characterised dairy/food matrices in randomized clinical trials (RCTs), and the understanding of the underlying mechanisms. The call will target the three main health areas (prevent/remedy metabolic syndrome, prevent/remedy malnutrition and enhance immune defence/response) as specified in the overall AFH scope, but with a specific focus on metabolic syndrome, satiety and appetite regulation, and obesity, including influence and regulation of the microbiome. The application only applying with models of diseases or conditions, are required to elaborate on translation to the general human population or to describe what is needed to be able to use data for the general population.

Areas of interest mentioned below mainly serve as inspiration, thus alternative ideas for new research within the area of the 'dairy related food matrix' and health out-come also are welcomed.

Fermentation incl. probiotics

The role of consuming fermented dairy products in prevention of metabolic syndrome and underlying mechanisms are not fully understood even though available epidemiologic evidence shows beneficial effects. To distinguish the fermented matrices from other foods with similar nutrient compositions, an in-depth examination is needed on how fermented matrices and/or postbiotic compositions (both in the product and in the gut) affect:

- gastrointestinal health such as altered microbiota composition
- relevant health parameters and key risk factors (e.g. blood glucose control, adiposity, insulin resistance, blood pressure, blood lipid profiles and inflammation)

The role of dairy in a healthy diet

Metabolic health spans across a broad range of conditions such as obesity, metabolic syndrome, prediabetes, diabetes and non-alcoholic fatty liver disease. To develop new dairy/food solutions of importance in preventing/mitigating non-communicable diseases it is important to have further insight into the underlying mechanisms of:

- how dairy and dairy components affect bioavailability and metabolism of nutrients in meals/diets (including ketogenic diets)
- the influence of timing of intake of dairy and dairy components in food matrices
- synergies between dairy and food components
- the effect of matrix interactions on gastic emptying, digestibility, absorption kinetics and gut barrier function on relevant health parameters and risk factors (e.g. blood glucose, insulin resistance)

3 The application process and important dates

The 2019 Call with the new optional consultancy on a one-page research proposal is published 15th of April 2019. The optional consultancy on a one-page research proposal is to help applicants to improve the quality of the applications.

Guideline for a one-page research proposal (***optional consultancy***):
The one-page research proposal must be submitted via email to anmor@arlafoods.com. Deadline for submission of one-pager research proposal is 1st of June. Feedback on one-page research proposal is June 15th

The one-page research proposal must contain:

1. Project title: As concise as possible.
2. Research area: In overall terms.
3. Project description and content: Hypotheses and brief description (relevant state-of-the-art and research questions to be answered). References and preliminary results attached as appendix.
4. Information on Applicant(s)/PI's: Name and University
5. A verified research collaboration (AU/KU)
6. Translational research. There must be clear description on how the research brings new knowledge within the field.

Submission of Applications
The AFH call follows a one-stage application process (with an optional pre-submission consultancy - one-page research proposal). Project activities in applications could comprise proof of concept studies or additional activities to ongoing projects, where these specifically address the topics of interest of this call. Interactions within and between AFH partnership members and international partners are encouraged and will be considered in the evaluation process of applications. Finally, it is a prerequisite that the main applicant (Principal Investigator) is affiliated to one of the AFH partner universities.

The submission deadline for the application is 15th of October 2019 at 17:00 CET
The application must be submitted via email to Anne Louise Mørkbak at anmor@arlafoods.com

If you are experiencing any technical problems or your query is not answered in the information provided in the website, please contact Anne Louise Mørkbak at anmor@arlafoods.com
Please read carefully the guidelines for the application before submitting by email.

Review process
The applications will be reviewed, in first instance, by the external, independent scientific advisory board and ranked according to scientific quality and relevance.
Hereafter the AFH Steering Committee (SC) conducts an internal review to assess: i) within call, (ii) strategic fit (Arla and University perspective) (iii) business relevance (Arla perspective. Projects with a high science quality rating but low business relevance, or low strategic fit, will not be selected.), iv) partnership; projects including three or more of the AFH partners will gain priority.
AFH Steering Committee approves final selection of projects to be funded for the call.
The Head of AFH communicates decision to principal investigators for selected projects, including any requirement for amendments to the application before end of 2019.

Key timelines for the Arla Food for Health 2019 application:

- 15/04/2019 Announcement of 2019 call for applications
- 01/06/2019 Last date to submit optional one-page research proposal
- 15/06/2019 Last date to receive feedback on optinal one-page research proposal
- 15/10/2019 Last date to submit applications
- 31/12/2019 Decision on funding
- 31/01/2020 Final project approval and proceed to contract (provisionary date)

4 Guidelines for applications

The application should not exceed 5 A4 pages, is to be written in English and should include the following elements (in this order):

1) Project title - As concise as possible. Add project acronym
2) Research area: which of the topics of interest the project relates to
3) The project's main objective (max 3 lines)
4) Project summary (max 20 lines)
5) Project duration - Expected start and end dates
6) Estimate of the project's total budget and the amount AFH is applied for: attach a completed budget template to the application (template available on website)
7) Information on Applicant(s)/PI's:
    i) Name and contact details of the Principal Investigator (mail, phone, address)
    ii) Name(s) and address of the project manager - title, name, address, phone and e-mail
    iii) If the project, as recommended, has been discussed with Arla scientists, you are welcome to state their names. However, these are not regarded as applicants.
8) Bank details and accounting contact:
    i) Banks - name and registration and account number
    ii) Accounting Contact - name, address, phone, e-mail
9) Project description (max 1 page):
    i) The hypotheses for the project and a brief description of the relevant state-of-the-art. Concise and broken down into sub-goals.
    ii) Project content - Concise description of the project content, milestones, and requirements for equipment and research facilities.
10) Foreseen Project Outcome, including:
    i) Why is it relevant for the dairy industry?
    ii) Short description of the innovative aspects, scientific and commercial perspectives. What news would the proposed research add to existing knowledge
    iii) What difference could the project make to people's health?
11) Assessment of the risk of project failure
12) Summary of Experiments and Work Packages (max 1 page, preferably less)
13) Contribution to education - short description of the project's educational contributions
14) Plans for publication
15) Dissemination plan. Shortly describe potential messages, target audiences and, where appropriate, communication and interaction with wider policy and health service audiences in ways that will facilitate research uptake in decision-making processes and practice. Please contact Kristian Levring Madsen, University of Copenhagen or Claus Bo Andreasen, Aarhus University for help and guidance*.
16) Description of the main CVs in appendix (not included in the 5 pages): attach an appendix with names and CVs, role in project and man months committed to the project during the lifetime of the project:
    i) A 2-page CV of the main applicant/PI (incl. project management experience)
    ii) A 1-page CV from leading co-applicant(s) from (other) participating institutions
    iii) A maximum of 5 CVs can be provided

17) Commitment from all participants in the project. There is no need for a letter of interest from Arla – the evaluation of the interest from Arla's side will be done as part of the evaluation process of all application.

* If AFH decides to fund the proposed project the dissemination plan will be further developed. In this process the applicant should seek further guidance and support from the communication departments of Aarhus University and University of Copenhagen. You are welcome to contact the above-mentioned communication experts.

5 Further Information

Interested applicants are welcome to consult center director Anne Louise Mørkbak regarding application topics, test products and business relevance. Already established contacts to Arla can also be used for the purpose.