

Call for proposals 2024

Modulation of brain ageing through nutrition and healthy lifestyle (NutriBrain)

Preliminary Announcement

The Partnership “Fostering a European Research Area for Health” (ERA4Health) aims at establishing a flexible and effective coordination between funding organisations in the European Research Area (ERA) for Health and Well-being. This Partnership brings the opportunity to increase European transnational collaborative research funding by creating a funding body for joint programming in priority areas addressing European Public Health Needs. Under this umbrella, the call for proposals “Modulation of brain ageing through nutrition and healthy lifestyle” (NutriBrain) will be launched.

1. Aim of the call

The aim of the call is to support transnational research projects that focus on the improvement of cognitive brain ageing through nutrition and other lifestyle factors. Thereby it enables scientists from different countries to build a valuable collaboration on interdisciplinary research projects based on complementarities and sharing of expertise in the field of brain ageing, its related disorders, nutrition and lifestyle factors.

Research projects should gain further insights into the modulation of brain aging by lifestyle factors and/or pilot test interventions based on the existing evidence in the literature or upscale existing pilot interventions that will help to lower the risk of cognitive impairment manifestations related to a pathological brain ageing.

At least one of the following lifestyle factors should be investigated: nutrition (particularly improvements in dietary pattern), physical activity, sleep pattern (quantity, quality and timing), social interaction and stress.

Researchers should apply a perspective of prevention and public health, taking into consideration large population groups such as age cohorts or relevant subgroups.

Proposals may include one of the following approaches, such as:

- Pilot test interventions that will help to lower the risk of cognitive impairment manifestations related to a pathological brain ageing
- Upscale existing pilot interventions that will help to lower the risk of cognitive impairment manifestations related to a pathological brain ageing

Proposals may be supplemented by one of the following approaches, such as:

- Mechanistic / experimental research focusing on how specific lifestyle factors influence brain ageing;
- Translational research that will establish proof of concept, in order to support the development of effective health-improvement strategies and/or solutions to promote a healthy brain.

In addition, the following points should be considered:

- Research proposals may focus on specific population groups, e.g., those living with obesity and/or sarcopenia or with specific phenotypes, who may benefit from particular dietary and/or physical activity and life-style interventions, but can also focus on broader populations groups.
- For projects focussing on the prevention of cognitive impairment before the onset of clinical symptoms, the target group is not necessarily elderly, but may include also adults of other age groups.
- Applicants should make use of existing biobanks and cohorts, if applicable. Otherwise, it should be explained why existing cohorts are not used.
- Applicants need to define the standardized approach for sample collection, isolation and analysis methods and explain the tools they plan to use to measure nutritional status, dietary consumption, eating behavior, other lifestyle factors and cognitive decline as well as cognitive impairment through ageing in their proposals.
- Where relevant, investigations should employ existing biomarkers/surrogate outcomes that relate strongly to the risk of cognitive impairment. These include biomarkers related with the gut-brain axis, neuroendocrine signalling, and microbiota, especially those easily, affordable and feasible to obtain. Furthermore, other more sophisticated biomarkers derived from cerebrospinal fluid and image should be considered. The development of new biomarkers is not within the scope of the call.
- There may be opportunities to also use omics approaches, brain imaging, microbiota study linked, digital health data to get robust measures of diet, nutritional status, physical activity, sleep, social interaction, stress in well-characterised prospective cohort studies in adults and older people.
- The project should be consumer-centred: the involvement of the target population in the research is strongly encouraged at all stages of research design, implementation, analysis and dissemination. Research proposals are encouraged to also apply participatory methods, participatory agenda settings, informal settings, crowdsourcing data collection.
- Proposals should consider potential moderators of effects such as age, sex, gender and ethnic or other demographic features/differences in the respective research approaches.
- Where relevant, emerging model systems should be preferred to animal models. Research may make use animal models only for investigations that are impractical or unethical in humans and they must be justified. In this case, it is important to have mechanistic studies combined with observational research emphasising humans and it's needed a clarification on how the observations of animal models translate to humans (back and forth translation).
- The impact indicators should be identified at the project proposal stage.
- Applicants are encouraged to consider the gender balance in the composition of the consortia and to balance the responsibilities between them.
- The proposed research should not overlap with previous studies funded under the HDHL and JPND calls or collaborations should be established.
- Early Career Scientists (Master students, PhD students and post-docs) are encouraged to participate in the consortium.

- Proposals that relate purely to the study of pathomechanisms are not eligible for funding in this call.

Please note that **additional conditions might apply at national level.**

2. General conditions for application

The duration of the projects will be 36 months.

Joint research proposals may be submitted by applicants belonging to one of the following categories (according to national/regional regulations; certain categories may not be eligible for funding by a specific funding organisation):

- **A. Academia** – research teams working in universities, other higher education institutions or research institutes.
- **B. Clinical/public health sector** – research teams working in hospitals/public health and/or other health care settings and health organisations, including primary health care.
- **C. Enterprises** – private companies of all sizes.
- and **D. Operational stakeholders** – e.g. patient advocacy organisations, municipalities and local governments, local/national NGO's. In line with the concept of RRI, operational stakeholders should be in a position to provide useful knowledge to the consortium, ensure the consortium's research is useful and translatable to their (or other) organizational contexts, and/or influence decision making or create change within their organisations. Operational stakeholders should be engaged in the research process from conception of the study to dissemination.

Consortia submitting applications to this call are strongly encouraged to include partners from different categories (A, B, C and D) in line with the crosscutting/multidisciplinary nature of the call, where the aim is to include partners at different levels in the value chain.

The number of participants and their research contribution should be appropriate for the aims of the transnational research project and be reasonably balanced in terms of international participation. Each transnational collaborative project should represent the critical mass to achieve ambitious scientific goals and should clearly demonstrate an added value from working together.

Only transnational projects will be funded. The following conditions apply to the composition of consortia:

- Minimum of three eligible and a maximum of five eligible partners from at least three different countries participating in the call (see list below).
- The maximum number of eligible partners can be increased up to six or seven if they include one or two partners, respectively, from the following participating countries: Latvia, Lithuania, Türkiye.
- No more than two eligible partners from the same country participating in the call will be accepted within one consortium.
- Maximum of two collaborators per consortium. Collaborators are self-funded partners: i.e. partners that do not request funds in this Joint Transnational Call provided by one of the participating funding organisations (i.e. partners from non-funding countries or partners which are not fundable according to national/regional regulations of the participating funding organisations).

Project partners will be funded by their relevant national/regional funding organisation. Eligible costs and funding rules vary between the respective funding organisations.

3. Time schedule

There will be a two-step submission and evaluation procedure for joint applications, i.e. pre-proposals and full proposals, and the full proposal review process will be complemented by a rebuttal stage. For both submission steps, one joint proposal document (in English) shall be prepared by the partners of a joint transnational proposal and must be submitted on the electronic submission system by the project coordinator. The two-step application process will have the following timetable:

3 November, 2023	Publication of NutriBrain call
15 January, 2024, 16h00 CET	Deadline for pre-proposal submission
27 March, 2024	Communication of the results of the pre-proposal assessment (invitation for full proposal)
27 May, 2024, 16h00 CEST	Deadline for full proposal submission
12 – 23 August, 2024	Rebuttal stage
Mid-October 2024	Communication of the funding decisions to the applicants
December 2024 – May 2025	Expected project start (subject to national procedures)

4. Participating countries/regions and respective funding organisations

Countries	Funding organisations	Acronym
Austria	Austrian Science Fund	FWF
Belgium	Fund for Scientific Research-FNRS	F.R.S.-FNRS
Belgium	The Research Foundation - Flanders	FWO
Denmark	Innovation Fund Denmark	IFD
France	French Research Funding Agency	ANR
Germany	Federal Ministry for Education and Research (BMBF)/ represented by DLR Project Management Agency (DLR-PT)	BMBF/DLR
Hungary	National Research, Development and Innovation Office	NKFIH
Ireland	Health Research Board	HRB
Israel	Ministry of Health	CSO-MOH
Italy	Ministry of Health	IT MOH
Italy	Italian Ministry of Universities and Research	MUR

Latvia	Latvian Council of Science	LCS
Lithuania	Research Council of Lithuania	LMT
Norway	Research Council of Norway	RCN
Poland	National Centre for Research and Development	NCBR
Spain	Regional Ministry of Health and Consumer Affairs of Andalusia	CSCJA
Spain	Institute of Health Carlos III	ISCIII
Spain	Fundacion Para El Fomento En Asturias De La Investigacion Cientifica Aplicada Y Tecnologia	FICYT
Taiwan	National Science and Technology Council	NSTC
The Netherlands	Dutch Research Council	NWO
Türkiye	The scientific and technological research council of Türkiye	TUBITAK
Switzerland	The Swiss National Science Foundation	SNSF
Canada	The Canadian Institutes of Health Research	CIHR
Estonia	The Estonian Research Council	ETAG

More information will soon be available online:

<https://era4health.eu/>

Please note: The content of the call described in this pre-announcement is indicative and may be subject to changes and is not legally binding.

Interested applicants are encouraged to initiate scientific contacts with potential project consortium partners for applications.