

Request for Proposal – Nutrition Research FY 2026

Objective

The National Watermelon Promotion Board (NWPB) is inviting investigators to <u>submit proposals by December 1, 2025</u>, for research related to investigating the potential human health benefits of watermelon consumption. The NWPB's specific areas of nutrition research interests are outlined below.

PRIMARY NWPB Nutrition Research Areas of Interest

The NWPB is interested in investigating the potential human health benefits of consuming watermelon, including the flesh, rind or juice (edible portions). *Animal or in vitro studies will not be considered*. For the 2026 research funding cycle, NWPB is seeking multi-faceted trials that help further our understanding of the impact of watermelon consumption on cardiovascular health.

There is a strong foundation of published pilot and exploratory studies on watermelon and vascular health. NWPB is seeking proposals that take these investigations to the next level, including studies that follow larger size populations of individuals who are at risk for chronic diseases (eg., overweight/obese, prehypertension, prediabetes, etc.) for a longer time frame, with multiple endpoints that are directly or indirectly related to vascular health.

For additional insight, we are sharing the following examples of research topics that may further our understanding of the vascular effects of eating watermelon. Please note: This is not an exhaustive nor inclusive list, and NWPB welcomes and encourages novel ideas. Additionally, priority will be given to proposals that <u>effectively address multiple</u> topic areas described in this RFP.

Vascular Health and Blood Flow: Investigating the impact of watermelon consumption on various indices related to vascular health and "downstream impacts" on other health markers. NWPB is specifically interested in studies that investigate watermelon consumption and:

- Outcomes on endothelial function/activation (e.g., FMD, VCAM-1) and/or arterial stiffness (e.g., PWV).
- Blood flow/blood pressure changes and effects on inflammatory biomarkers (e.g., CRP, IL-6, TNF, MCP-1).
- Blood flow/blood pressure changes and effects on gut health and/or gut microbiota effectiveness (e.g., TMAO, SCFA, Endotoxemia Markers, Metabolomics).
- Bioavailability of nitric oxide and its relationship to vascular health, including blood/urine nitrate/nitrite levels, arginine/ADMA ratios, etc.



- Endothelial function and the impact on, or relationship to lipids and atherogenic risk factors (e.g., ApoB, LipoA, LDL and HDL particle size/density/number, HDL functionality).
- Associations or connections with antioxidants, polyphenols and other bioactive compounds found in watermelon and impacts on oxidative stress markers. (e.g., oxidized LDL, Glutathione, SOD, catalase).
- Dose-response activity of watermelon (as typically eaten) on vascular health.

Funding Details

 The NWPB will award up to \$125,000 per project for studies focused on our primary topics of interest.

EMERGING NWPB Research Topics of Interest

In addition to the request for proposals as described above, NWPB is interested in projects exploring emerging research topics related to watermelon consumption. Areas of interest include, but are not limited to investigating watermelon consumption and:

- Cognitive Health and Function
- Mood
- Gut Health and Immunity
- Skin Health, Wrinkles and Hydration

Funding Details

 The NWPB will award up to \$50,000 per project for studies focused on our emerging topics of interest.

Methodological Standards

Study design must adhere to current methodological standards, including but not limited to:

- Observational studies using an established prospective cohort or cross-sectional database (e.g., NHANES)
- Randomized Controlled Intervention Trials (RCTs) using parallel or cross-over designs
- Uncontrolled intervention studies, animal studies or in vitro studies will not be accepted

Proposal Requirements

- Proposal must be received no later than 5:00 p.m. ET on Monday, December 1, 2025 to be considered.
- Proposals should be no longer than 5 pages, not including budget detail and any necessary attachments (CVs, references, etc.).
- All applicants will be informed of their funding status by March 16, 2026.
- Proposals must include the following information and be submitted electronically in a Word document:



- Project Title
- Project Duration (include begin and end date)
- Investigators: Identify principal investigator (person responsible for research and expenditure of funds) as well as additional collaborators. Include affiliations and complete contact information for principal investigator and collaborators
- Abstract (maximum 500 words)
- Study Objectives (maximum 500 words), clearly state the goal(s) and objectives of the project
- Justification: Include summary of prior work and expertise related to the topic and references cited
- Approach (Materials and methods): Include detailed description of the intervention for RCTs, dietary assessment methodology (for observational studies), primary and secondary endpoints, inclusion/exclusion criteria, power calculation, statistical methodology
- o Anticipated Limitations
- Study Timeline (key events and estimated timeline)
- Proposed Dissemination: Include suggested conferences and/or publications and approximate timing
- Budget: Include a budget sheet detailing direct costs
 - Please include a line item for purchasing watermelon (must be part of your total budget)
 - Per our Bylaws: Any research grants provided to universities or government agencies must be used in total toward the written objective of the grant and not be used in any percentage or form to cover administrative costs of such university or agency. Dollar for dollar, 100% of the grant must be used for the research that the Board is paying for, to include labor, lab time, equipment, etc. that is agreed upon prior to grant approval.
- Curriculum Vitae for all investigators

Proposals and any questions should be directed to (both):

- Mark Arney, Executive Director: marney@watermelon.org
- Rebekah Dossett, Director of Operations & Industry Affairs: rdossett@watermelon.org

About National Watermelon Promotion Board

The National Watermelon Promotion Board (NWPB), based in Winter Springs, Florida, was established in 1989 as an agricultural promotion group to promote watermelon in the United States and in various markets abroad. Funded through a self-mandated industry assessment paid by nearly 700 watermelon producers, handlers and importers, NWPB mission is to increase consumer demand for watermelon through promotion, research and education programs.

A serving of nutrient-dense watermelon provides an excellent source of Vitamin C (25% DV), a source of Vitamin B6 (8% DV), and a delicious way to stay hydrated (92% water), with only 80 calories per 2-cup serving. Watermelon consumption per capita in the United States was roughly 15.6 pounds in 2024. Watermelon consumption in the United



States was nearly 5.3 billion pounds in 2024. Additionally, the United States exported 400 million pounds of watermelon. For additional information, visit www.watermelon.org.

NWPB Nutrition Research Program

The NWPB believes in the power of nutrition research to educate consumers. The research committee, comprised of members of the watermelon industry, directs and prioritizes the research projects to be conducted on behalf of the NWPB. The NWPB has conducted nutrition research for over 20 years and has contributed millions of dollars towards funding studies.