



Request for Proposals in Nutrition Research – 2019

The American Pecan Council (APC)

The American Pecan Council <https://americanpecan.com/> is a Federal marketing order established in November 2016 with oversight by the U.S. Department of Agriculture (USDA). The purpose of the order assists the American pecan industry in the promotion, research, standardization and consumer information of U.S. pecans. The order provides the pecan industry a means to develop a coordinated program designed to strengthen the American pecan industry's position in the market place. It also maintains existing markets, while pursuing potential new markets and uses for American pecans.

Nutritional properties of pecans

The pecan is a delicious, nutrient dense food that is a good source of fiber, thiamin, zinc and an excellent source of copper and manganese. Pecans are rich sources of unsaturated fats (especially oleic acid) and are among the lowest nut in total carbohydrate. Furthermore, pecans have the highest flavonoid content of all tree nuts¹ and are rich sources of other phytonutrients including plant sterols.

Research priorities

Cardiovascular health

APC is soliciting proposals that examine the effect of pecans on cardiovascular disease (CVD) risk factors. Priority will be given to proposals that include measures of peripheral vascular health (including endothelial function) and less commonly measured CVD risk factors such as circulating epoxide concentration, platelet function and reactivity as well as LDL susceptibility to oxidation. Such factors are of particular interest due to the high flavonoid content of pecans. Both acute and non-acute studies will be considered although proposals that begin with an acute pilot study phase may be particularly attractive. The inclusion of secondary endpoints related to cognitive performance, changes in the microbiome, inflammatory markers and/or more conventional CVD risk factors (e.g., lipids, blood pressure, fasting blood glucose/insulin) are desirable if they are compatible with the protocol.

Weight management

Acute and/or short term studies that examine the ability of pecans to contribute to weight management are also a priority for APC. At a minimum, such studies should measure hunger/satiety and spontaneous energy intake after a pecan-based meal. Studies that examine the role of pecans as healthy snacks are of particular interest. Both acute and non-acute proposals

will be considered, although proposals that begin with an acute pilot study followed by short-term, non-acute experiments (e.g., two-weeks) may be particularly attractive. The inclusion of secondary endpoints (especially cognitive measures) as well as CVD risk factors or changes in the microbiome are desirable if they are compatible with the protocol. Proposals for long-term studies that examine the effect of pecan-containing diets on body weight loss and/or maintenance are *not* desired at this time.

Grant specifics

Grants of up to \$150,000 per year are available. Proposals for up to three years will be considered, but grants are funded on an annual basis and must be renewed each year after evaluation by APC staff and external reviewers as appropriate. APC does not pay indirect cost to academic institutions for research.

Proposals must be received by *June 28, 2019* and funding decisions will be made by August 1, 2019. Projects that receive funding must be registered at *ClinicalTrials.gov*.

Proposal format

Proposals must not exceed six, single-spaced pages (excluding references) using an 11-point or larger font. The following elements must be included:

Project title and investigator information

- Project title
- Principal investigator (PI)
- Co-Principal Investigator(s)
- Organizations(s)
- PI contact information (e-mail, phone, mailing address)

Abstract

Provide a summary (500 words or less) of the project including hypothesis, methodology, anticipated results and expected benefits for the pecan industry.

Background and justification

Explain the rationale/justification of the research based on any existing literature and the unique composition of pecans.

Goals and methodology

List the goals of the research (including primary and secondary endpoints) and describe the methodology that will be used to achieve them. Subject characteristics, inclusion/exclusion criteria, detailed description of the intervention(s) and power calculations should be included as appropriate.

Anticipated results/benefit to the pecan industry

Describe the expected results and how they will benefit the pecan industry based on APC's research priorities.

Timeline

Provide a timeline for anticipated results including manuscript submission.

Budget

Provide a detailed budget itemized by category such as salary, supplies/equipment, travel and publication. As noted above, APC does not pay indirect cost for research at academic institutions. Multi-year projects should provide an itemization for each year (not to exceed \$150,000 to be provided by APC). Please include any additional funding sources that will be used for the project.

Additional information

Include a *Curriculum vita* (not to exceed ten pages) for the principal investigator. If not included in the CV, please provide a list of any previous research projects conducted with tree nuts or peanuts.

Submission

Submit proposals no later than June 28, 2019 to nutritionresearch@americanpecan.com.

Questions pertaining to the RFP should also be directed to this address.

Reference

1. Bolling BW, Chen CY, McKay DL, Blumberg JB. Tree nut phytochemicals: composition, antioxidant capacity, bioactivity, impact factors. A systematic review of almonds, Brazils, cashews, hazelnuts, macadamias, pecans, pine nuts, pistachios and walnuts. *Nutr Res Rev* 2011;24:244-75.