The National Research Council’s Assessment of Research Doctorate Programs Can Be Used to Strengthen Doctoral Programs in Nutrition

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Abstract

The National Research Council (NRC) is for the first time including the field of nutrition in its Assessment of Research Doctorate Programs in 2006. This assessment will rate doctoral programs, in terms of research impact and graduate student support and outcomes, through the use of questionnaires and standardized national databases (such as research funding, publications, and citations of publications) rather than through name recognition as was used in past NRC surveys of graduate programs. Nutritionists can make this survey more valuable to the field by making sure all eligible faculty involved in training of graduate students in nutrition are included in the survey, by encouraging all eligible faculty members to complete the faculty questionnaire, and by being prepared to use and discuss the data and reports when they are released in 2007. The nutrition community should use the data from this national survey to strengthen doctoral programs and research in nutrition. J. Nutr. 136: 2962–2964, 2006.

Several groups have studied the quality of research doctoral programs nationally within the liberal arts and sciences during the last 20 y (1,2). Now the Board on Higher Education and Workforce of the National Research Council (NRC) is conducting a national Assessment of Research Doctorate Programs that will for the first time include assessments of doctoral programs in nutrition, animal science, food science, kinesiology, and public health (3,4).

Why is the NRC’s assessment of research doctoral programs important?

Graduate programs, universities, and funding agencies varied in how they used data from the 1995 NRC survey of doctoral programs and in what they desired from future national survey of graduate programs (4,5). Graduate programs with good ratings in the 1995 survey and the departments associated with these programs found that the data were useful in recruiting graduate students and faculty members and in obtaining funding for graduate training. Generally, university administrators (i.e., deans, provosts, presidents, and boards of trustees) want relative assessments of varied academic programs that are standardized to reduce differences in reporting and reviewers’ standards. Accordingly, many universities used the 1995 ratings as “benchmarks” during strategic planning activities and budget investment and cutting exercises. Federal and private funding agencies also desired more information on the relative strengths of programs within fields in terms of quality factors (such as funding, publications, and citations of publications) and thought prospective students deserved access to a standardized, national database on graduate programs.

Thus, the stated goals of the NRC and its financial sponsors (e.g., the NIH, the National Science Foundation, the Alfred P. Sloan Foundation, the Andrew W. Mellon Foundation, and all participating universities) for the current survey are: “to help universities improve the quality of their doctoral programs through benchmarking; to provide potential students, the public, and agencies with accessible, readily available information on doctoral programs nationwide; and to enhance the nation’s overall research capacity” (3).

What will be included in the NRC assessment?

The current NRC assessment will survey doctoral programs in the life sciences, the physical sciences, mathematics and engineering, the social and behavioral sciences, and the arts and humanities (Table 1). The survey will include, for the first time, doctoral programs in agriculture, medical, and allied health fields (like nutrition, food science, kinesiology, and public health). The NRC will also attempt to identify interdisciplinary areas and emerging fields. Quantitative data will be collected to assess graduate programs in terms of: 1) research impact (e.g., citations, publications, honors and awards, funding, etc.); 2) student support and outcomes (i.e., “time to degree” calculations, attrition rates, fractions of students having financial support, and fractions of students having positions in a relevant field upon graduation); and 3) diversity of the academic environment (fractions of students and faculty members that are female and minorities) (3).

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Whenever possible, standardized data will be obtained from national databases, such as those of the National Science Foundation (6) and citation indices. In past NRC surveys, professionals in the fields ranked doctoral programs without the use of stated quantitative variables (2). In the current NRC survey, program ratings will be multidimensional and will be devised by using “weighted” key quantitative variables (3,5).

Who will be surveyed by NRC assessment of research doctoral programs?

The NRC stipulated that only doctoral programs that granted at least 5 doctoral degrees in the last 5 y could be assessed (3). In the current NRC survey, program ratings will be multidimensional and will be devised by using “weighted” key quantitative variables (3,5).

Who are the faculty members in a graduate program of nutrition?

Even at universities with a department of nutrition, a number of faculty members from departments of animal science, biochemistry,
food science, medicine, and public health regularly participate in oral examinations of nutrition graduate students, serve on committees within the nutrition graduate program, and/or serve as major advisors to graduate students majoring in nutrition. There is still debate among NRC committees and universities, but probably faculty members who have served on doctoral (examination and/or advisory) committees in a program during the last 5 y and all assistant professors affiliated with a program should be considered “faculty” in the graduate program. The NRC recognizes that many faculty members can be affiliated with several graduate programs and is devising a system in which faculty members’ efforts can be distributed among several programs without artificially inflating any faculty member’s efforts above 100% of his or her time.

What does that mean for nutritionists? Make sure that all faculty members involved in the training of graduate students in nutrition at your institution are included in the survey. Remind your institutional official to list all these faculty members as core or associated faculty of the nutrition program.

At many institutions, the nutrition graduate program will have to assemble the complete list of faculty members who have served on graduate student advising and examination committees because records in the graduate school are incomplete. This is worth the effort because when the rankings are calculated, the publications, citations, and grant funding of these individuals will probably be prorated to programs on the basis of their participation in graduate student committees.

**Is bigger always better in terms of graduate programs?**

After Brown and Rudenstine (1) reported in 1992 that larger graduate programs were more apt to be successful than smaller programs, many graduate programs tried to increase the list of faculty affiliated with their programs, even if the named faculty members were not active in the program. Moreover, some graduate deans think that common indexes of quality (such as amount of funding, number of publications, and number of citations) are biased toward larger programs.

Accordingly, the NRC committees suggested that data be corrected for the size of programs and tried to create a standardized definition of faculty in graduate programs that recognize only service in the program during the last 5 y.

What does this mean for nutritionists? Listing individuals as faculty members in a graduate program should be considered carefully. Faculty members (whether still employed or emeritus) should not be included in the list of participating faculty if they have not served on a graduate student’s committee, published in journals, and received funding during the last 5 y. Past surveys depended on name recognition and hence inclusion of emeritus faculty, especially those with membership in the National Academy of Sciences or other honorary groups was important.

In the 2006 survey, ranking will depend primarily on quantitative data (i.e., funding, publications, citations of publications, and so forth, prorated per individual) rather than on name recognition.

**What should nutritionists do?**

All eligible faculty members should fill out the faculty questionnaire so that the survey is an accurate reflection of the nutrition program.

It may be wise for all members of the nutrition graduate program at each institution to meet and discuss the survey and appoint a survey coordinator. In most cases, this would be the department head/chair or the director of the graduate program. This person should talk to the graduate dean at their institution to be sure that data on the nutrition program is complete and accurate.

All nutritionists should be prepared to use and discuss the national data and reports when they are released in 2007 (projected). The large datasets will be available on-line for further analyses. These data on graduate education and research productivity will be used for strategic planning at many universities. The data should also be the basis for identifying strengths and weaknesses in the field of nutrition nationally by professional groups like the American Society of Nutrition. The standardized data on other fields (including emerging fields) could help nutritionists identify potential opportunities.

The 2006 NRC Assessment of Research Doctorate Programs will provide the nutrition community a resource for assessing and strengthening doctoral programs and research in nutrition. It is up to us to be prepared to use this potentially valuable resource.

**Literature Cited**