MINUTES
Interagency Committee on Human Nutrition Research (ICHNR)

October 22, 2019
2:00 pm – 4:00 pm

Location: HHS Headquarters
200 Independence Avenue S.W.
Washington, D.C., 20201

Welcome & Introductions: Drs. Scott Hutchins (USDA) & ADM Brett Giroir (HHS)

Dr. Hutchins thanked the committee for their work and expressed enthusiasm for increasing the profile of nutrition-focused efforts, such as investigations of precision nutrition. Dr. Hutchins looks forward to reports from ICHNR, and from the members' related activities, for generating evidence-based results critical for making health and policy decisions.

Dr. Giroir shared his excitement for the work of ICHNR and its member agencies, noting that physical activity and nutrition are the most important disease prevention tools for the nation. Dr Giroir expressed his concerns for the growing prevalence of childhood obesity and opined that there is no better time than now in terms of changing the healthcare system to prioritize prevention and health promotion.

Copies of presentation slides were distributed to ICHNR members

1. Reports from the ICHNR Subcommittees

Dietary Guidelines for Americans (DGA) Subcommittee – Updates on the 2020 DGA Advisory Committee: Dr. Richard Olson (HHS) & Ms. Jackie Haven (USDA)

The Dietary Guidelines for Americans serves as the cornerstone of federal nutrition programs and policies, providing food-based recommendations to help prevent diet-related chronic diseases and promote overall health. Haven presented a brief overview of the DGA development process, an introduction to the DGAC membership, the review of the scientific evidence and approaches being used, the timeline of DGA activities, and mechanisms for public involvement. USDA and HHS leadership are committed to ensuring the DGA process is transparent, inclusive, and data-driven.

Although there has been slight improvement in Americans eating healthfully over the past 15 years, there remains much more room for improvement in the average American diet. In addition to improved public health, significantly increased adherence to the DGA is estimated to result in billions ($USD) in health care costs savings.

The Dietary Guideline Advisory Committee (DGAC) for the 2020-2025 DGA has been convened and is currently conducting a review of current scientific evidence on 6 specific topic areas. This is the largest DGAC yet convened (20 members), and some greater than 200,000 scientific articles were reported to be under review by the DGAC. More information, including on how the public can participate, can be found at www.DietaryGuidelines.gov. This website also has a new feature addressing popular questions on the DGA.

Olson presented an overview of the Physical Activity Guidelines for Americans, the 2nd Edition of which was released in November 2018. 2nd Edition highlights include recommendations for children (now covers 3+ years old), the removal of length requirement for activity (the past requirement was found to be based on experimental artifacts), a discussion of sedentary behavior and health risks, and the lack of a threshold for benefits from physical activity.

- Friedl asked if these guidelines were omitting an important health piece by not addressing sleep in addition to diet and exercise. While research workshops on certain health topics do address this area, members did not note any specific internal or cross-agency groups working on something like sleep guidelines.
- Wright asked when the secretaries can expect the DGAC report. May 2020 is the anticipated date.
- Starke-Reed asked about the new approach of focusing the DGAC review and report on pre-defined topics, which was criticized by some. Haven thinks this approach was helpful and is an improvement to the process. Haven notes the pre-defined topics were not "cherry-picked" but were determined through stated criteria and subject to a public comment period. Olson noted that not having a more defined focus or specific charge actually made past DGAC processes unusual compared to other federal advisory committees.
- Lynch asked about the planned strategy for 2020-2025 DGA communication and outreach. Haven noted USDA and HHS are committed to simple and easy to understand messaging and are working with professional educators and social media outlets.

Dietary Reference Intakes Subcommittee (DRI): Drs. David Klurfeld (USDA) & Karl Friedl (DOD)

Klurfeld reported that the DRI subcommittee has sponsored two NASEM consensus studies over the last two years: *Guiding Principles for Developing Dietary Reference Intakes Based on Chronic Disease* (released August 2017), which was established after a deliberate nomination process to prioritize re-reviews of DRIs and three highest priority nutrients all potentially affected chronic disease endpoints, and *Dietary Reference Intakes for Sodium and Potassium* (released March 2019), which was mandated by Congressional budget language to CDC to not pursue any activities related to reducing sodium intake until a re-review of the DRI was performed. The DRI Subcommittee is now in the middle of a small project with NASEM to examine literature available on human milk composition to estimate nutrient requirements of infants, which will also serve as a model for selective re-review of age-specific DRI's. The committee for this project will meet in November 2019. Klurfeld explained that the next planned DRI review would cover macronutrients and total energy requirements, but that the estimated budget of ~$11 million+ (for at least 10 systematic reviews and 2 NASEM consensus studies) is an insurmountable barrier with the current funding approaches (no dedicated funding, almost always end-of-year contributions in inconsistent small amounts from multiple agencies – see below). Friedl noted that in this latest discussion over "who's next" for DRI re-review, it did not make sense to not take a systematic approach and try to establish a more foundational approach moving forward.

- Wright asked how often DRIs should be re-reviewed if money was not an issue. Klurfeld considered maybe every 10 years, depending on a review of the literature to determine if new scientific research was directly relevant to setting DRIs.
- Davis asked if there was any consideration on looking at ratios of different macronutrients or thinking in terms of absolute intakes. Klurfeld acknowledged the importance of these considerations and noted that the Subcommittee is incorporating that into their discussions and plans.

National Nutrition Database Subcommittee: Ms. Karen Regan (NIH)

This update presentation was postponed to the next scheduled ICHNR meeting.

2. Funding Issues with the Dietary Reference Intakes (DRI): Dr. David Klurfeld, USDA

Several factors create a demand for routinely reviewed and appropriately updated DRIs. DRIs are used by health professionals, food industry, and multiple federal agencies to design foods and diets for a healthy population. Additionally, while some DRIs are based on observation and experimentation a lot are instead based on extrapolation, especially for the young and old. Established in the late 1990s, the current processes to develop (and re-review) DRIs incurs significantly increased work and costs, including independent systematic literature reviews and NASEM consensus committee reports. Both the US and Canadian DRI committees have prioritized macronutrients as the next target. Modular reports are envisioned for this review: the first would cover total carbohydrate, protein, fat, and energy; subsequent reports would cover essential fatty acids, essential amino acids, carbohydrate components, and fiber. A Canadian workshop in February 2020 will discuss the important chronic disease endpoints to study. This will be an enormous undertaking estimated to take at least 5 years and cost $10-12 million or more but there is no dedicated appropriation for this. Current practice is to obtain end-of-fiscal year commitments from multiple agencies to piece together the full cost. Although this strategy was previously workable, new NASEM contracting rules and inconsistent budgetary commitments from partner agencies now require new approaches. The subcommittee is recommending $2 million/year be placed in some agency's budget permanently to fund this activity.

- Giroir asked for an elaboration on the 'multiple endpoints' considered for study. Klurfeld explained that for protein, for example, one could consider different sources (animal vs. plant, red meat vs. other meat). It is also desirable to identify clear health end points rather than changing risk factors. Friedl noted that while examining multiple endpoints is theoretically possible, it is not practical and efforts would need to narrow in on the areas with the strongest evidence.
- Giroir asked if consideration would be given to whether a macronutrient could be good for one endpoint but detrimental for another. Klurfeld agreed that is an important consideration and noted that the Chronic Disease Endpoint DRI Committee addressed that in their report.
- ICHNR members are aware of several private foundations, and it was asked if there was any possibility for public-private partnerships to act as a funding source.

- Friedl said that historically no single federal agency has taken the lead on establishing and reviewing DRIs, noting it may be in part an issue of agencies being authorized but not appropriated to do so. Friedl reiterated that the current funding model may become untenable.
- Hutchins asked if there were international participants other than Canada. Klurfeld responded that the rest of the world looks to the U.S. and Canada for leadership in this area, and there is some international interest in standardizing the approach of setting dietary intake recommendations, but that currently the U.S. would also be looked to pay for most of any such efforts.
- Giroir suggested that establishing consistent support for the DRI process is an important issue to resolve

3. Federal Interagency Domiciled Feeding Center: Needs and Potential Benefits: Dr. Naomi Fukagawa, USDA

Human nutrition research is supported by several federal agencies but many gaps in knowledge remain. Confusion remains about what constitutes a "healthy plate" that is affordable and accessible. Randomized controlled trials in human nutrition are difficult to conduct, costly, and restricted by numerous confounding factors (individual variability, available biomarkers, time of exposure, disease, etc). An argument has been made that these fundamental challenges in applying the scientific method to nutrition science could be addressed by researching nutrition and dietary intake in "domiciled feeding centers", which could facilitate large sample sizes and precisely prescribed and measured dietary exposures. Fukagawa presented herself as an advocate of what could be possible if the U.S. federal government committed to an interagency feeding research center. The current capacities of the six (6) USDA ARS Human Nutrition Research Centers were discussed, as well as their goal to bridge the growing gaps between agriculture, academic research, and public health.

- Friedl noted that although an interagency domiciled research feeding center would be expensive, it may be more productive and impactful than a larger number of smaller projects.
- Giroir asked what the difference between this domiciled feeding research center and the NIH Metabolic Clinic Research Unit would be. Fukagawa responded that a dedicated center would have higher capacity, would be able to perform at a higher pace, and would not use facilities in competition with hospital beds.
- Davis asked whether the existing efforts at USDA Human Nutrition Research Centers suggest there may be difficulties in ensuring the needed prioritization, support, and commitment of man hours to accomplish the proposed goals.
- Guthrie asked if the major strength of an interagency domiciled research feeding center would be the capacity for conducting research on a large number of subjects. Fukagawa indicated yes, and that having a centralized infrastructure is really needed to accomplish that. Lynch adds that major strengths also includes the ability to know exactly what research subjects ate.
- Lynch suggested that an interagency domiciled research feeding center could also provide the best means to conduct research for establishing DRIs. However, Guthrie noted that such research would be very costly, since it would necessitate ethically

incentivizing a captive and restricted test subject population (Guthrie noted historical studies that informed DRIs were performed on prisoners and sanitarium patients). Guthrie asked if advocating for Congressional support would be helpful or necessary, suggesting that discussing as a national health and security issue could help secure funding.

- Giroir asked if public-private partnerships are plausible for this effort. Giroir supports the goals but doesn't see the necessary investment and infrastructure as readily available.

4. Updates on the FDA Nutrition Innovation Strategy: Dr. Robin McKinnon, FDA

The FDA is committed to finding new ways to reduce the burden of chronic disease through improved nutrition, and on March 29, 2018 FDA announced the Nutrition Innovation Strategy, which takes a fresh look at what can be done to reduce preventable death and disease related to poor nutrition. McKinnon presented the key elements of the Nutrition Innovation Strategy: modernizing claims, modernizing ingredient labels, modernizing standards of identity, reducing sodium, and implementing the Nutrition Facts Label and Menu Labeling regulations, including consumer education and outreach. FDA is working on an update to the regulatory definition of the nutrient content claim "healthy" to better align with advancements in nutrition science and is also exploring the development a graphic image / icon to depict "healthy" on the front of food packages. FDA is also planning to modernize standards of identity for certain foods. The goal is to maintain the basic nature and nutritional integrity of products while allowing industry flexibility for innovation to produce more healthful foods. FDA also plans to finalize the short-term sodium reduction targets, and in May 2019 issued draft guidance on an alternative name for potassium chloride in food labeling "potassium chloride salt." Potassium chloride, in some instances, can be used as a partial substitute for sodium chloride in food processing and manufacturing. The addition of the term "salt" to "potassium chloride" may encourage manufacturers to use this sodium alternative and help consumers to understand that potassium chloride can replace sodium chloride in foods. The implementation of the new Nutrition Facts Label represents the first update in over two decades – the new rules received some 500,000 public comments and for most products, the compliance date is January 1, 2020; smaller manufacturers have an additional year to comply. Lastly, FDA is developing a consumer nutrition education campaign to raise awareness and understanding of menu labeling and the updated Nutrition Facts Label. Current FDA nutrition education resources were highlighted and are accessible at www.fda.gov/nutritioneducation.

Action Items

- Hutchins and Giroir encouraged FDA to also work with agricultural extension services in their outreach and education campaigns.

5. Other items for consideration:

- Hutchins and Giroir agreed that convening ICHNR meetings twice per year was appropriate.
- Hutchins saw a lot of positive discussion and a lot of priority alignment in the topics presented. Giroir agreed and expressed a desire to address at least some of the challenges presented.

6. Adjournment

ICHNR 10/22/2019 Meeting Attendance

Co-Chairs

- Admiral Brett Giroir, Assistant Secretary for Health (HHS)
- Scott Hutchins, Deputy Under Secretary, Research, Education, and Economics (USDA)

Officers

- Pamela Starke-Reed, ARS, USDA (Co-Exec Sec)
- Christopher Lynch, NIH, HHS (Co-Exec Sec)

HHS

- Robin McKinnon, CFSAN, FDA
- Kellie Casavale, CFSAN, FDA
- Don Wright, OASH
- Richard Olson, ODPHP
- Janet de Jesus, ODPHP
- Namanjeet Ahluwalia, NCHS, CDC
- Heidi Michels Blanck, CDC
- Jennifer Seymour, DNPAO, CDC
- Christopher Lynch, NIH
- Kimberly Barch, NIH
- Karen Regan, NIH
- Cindy Davis, NIH
- Adam Kuszak, NIH
- Jill Reedy, NIH

USDA

- David Klurfeld, ARS
- Naomi Fukagawa, ARS
- Jackie Haven, CNPP
- Colette Rihane, CNPP
- Joanne Guthrie, ERS
- Peggy Biga, OCS (on behalf of Dionne Toombs)
- Donna Johnson-Bailey, FNS

DoD

- Karl Friedl, USARIEM

OSTP

- Mark Bicket

VA

- Mark Morgan (on behalf of Anne Utech)

USAID

- Kellie Stewart

NASA

- Scott Smith

NIST

- Melissa Phillips
- Laura Wood