

Part B. Chapter 2: 2015 DGAC Themes and Recommendations: Integrating the Evidence

The 2015 DGAC set out to examine a broad set of research questions in its effort to develop sound recommendations to guide public policies aimed at promoting individual and population health. As these efforts moved forward, it became clear that a number of important, overarching themes were emerging and that these areas provided a solid base of evidence for the Committee's recommendations. In this chapter, we summarize these themes and put forth our overall recommendations to the Secretaries of Health and Human Services and Agriculture.

DGAC 2015 OVERARCHING THEMES

- **The Problem.** About half of all American adults—117 million individuals—have one or more preventable, chronic diseases that are related to poor quality dietary patterns and physical inactivity, including cardiovascular disease, hypertension, type 2 diabetes and diet-related cancers.¹ More than two-thirds of adults and nearly one-third of children and youth are overweight or obese, further exacerbating poor health profiles and increasing risks for chronic diseases and their co-morbidities.^{2,3} High chronic disease rates and elevated population disease risk profiles have persisted for more than two decades and disproportionately affect low-income and underserved communities. These diseases focus the attention of the U.S. health care system on disease treatment rather than prevention; increase already strained health care costs; and reduce overall population health, quality of life, and national productivity. Other less common, but important, diet- and lifestyle-related health problems, including poor bone health and certain neuropsychological disorders and congenital anomalies, pose further serious concerns.
- **The Gap.** The dietary patterns of the American public are suboptimal and are causally related to poor individual and population health and higher chronic disease rates. Few, if any, improvements in consumers' food choices have been seen in recent decades. On average, the U.S. diet is low in vegetables, fruit, and whole grains, and high in sodium, calories, saturated fat, refined grains, and added sugars. Underconsumption of the essential nutrients vitamin D, calcium, potassium, and fiber are public health concerns for the majority of the U.S. population, and iron intake is of concern among adolescents and premenopausal females. Health disparities exist in population access to affordable healthy foods. Eating behaviors of individuals are shaped by complex but modifiable factors, including individual, personal, household, social/cultural, community/environmental, systems/sectorial and policy-level factors (see the 2015 DGAC conceptual model in *Part B. Chapter 1: Introduction*). However, a dynamic and rapidly evolving food environment epitomized by the abundance of highly processed, convenient, lower-cost, energy-dense, nutrient-poor foods makes it

37 particularly challenging to implement health promoting diet-related behavior changes at
38 individual and population levels.

- 39 • **The Dietary Patterns.** Current research provides evidence of moderate to strong links
40 between healthy dietary patterns, lower risks of obesity and chronic diseases, particularly
41 cardiovascular disease, hypertension, type 2 diabetes and certain cancers. Emerging evidence
42 also suggests that relationships may exist between dietary patterns and some neurocognitive
43 disorders and congenital anomalies. *The overall body of evidence examined by the 2015*
44 *DGAC identifies that a healthy dietary pattern is higher in vegetables, fruits, whole grains,*
45 *low- or non-fat dairy, seafood, legumes, and nuts; moderate in alcohol (among adults);*
46 *lower in red and processed meats;ⁱ and low in sugar-sweetened foods and drinks and*
47 *refined grains.* Additional strong evidence shows that it is not necessary to eliminate food
48 groups or conform to a single dietary pattern to achieve healthy dietary patterns. Rather,
49 individuals can combine foods in a variety of flexible ways to achieve healthy dietary
50 patterns, and these strategies should be tailored to meet the individual’s health needs, dietary
51 preferences and cultural traditions. Current research also strongly demonstrates that regular
52 physical activity promotes health and reduces chronic disease risk.
- 53 • **The Individual.** Sound tools and resources, like the *Dietary Guidelines for Americans* and
54 the *Physical Activity Guidelines for Americans*, can help individuals achieve healthy diet and
55 physical activity patterns. Moderate to strong evidence also demonstrates that dietary
56 interventions implemented by nutrition professionals and individual or small-group
57 comprehensive lifestyle interventions that target diet and physical activity and are led by
58 multidisciplinary professional teams provide optimal results in chronic disease risk reduction,
59 weight loss, and weight loss maintenance. Additional evidence indicates that individuals can
60 be helped in their intentions to implement healthy lifestyles by targeting specific eating and
61 physical activity behaviors (e.g., meal patterns, cooking and preparation techniques,
62 family/household meal experiences, reducing sedentary behaviors in adults and youth,
63 reducing screen time in children). Sound behavioral interventions involve engaging
64 individuals actively in the behavior change process, using traditional face-to-face or small
65 group strategies and new technological approaches (websites and mobile/telephone
66 technology), by providing intensive, long-term professional interventions as appropriate, and
67 by monitoring and offering feedback on sustainable behavioral change and maintenance
68 strategies over time.
- 69 • **The Population.** Moderate to strong evidence shows that targeted environmental and policy
70 changes and standards are effective in changing diet and physical activity behaviors and
71 achieving positive health impact in children, adolescents, and adults. Research from early
72 child care settings, schools, and worksites demonstrate that policy changes, particularly when

ⁱ As lean meats were not consistently defined or handled similarly between studies, they were not identified as a common characteristic across the reviews. However, as demonstrated in the food pattern modeling of the Healthy U.S.-style and Healthy Mediterranean-style patterns, lean meats can be a part of a healthy dietary pattern.

73 combined with multi-faceted programs (e.g., nutrition educational initiatives, parent
74 engagement, food labeling, nutrition standards, nutrition and behavioral intervention
75 services) can increase healthy food choices and overall dietary quality, and improve weight
76 outcomes. Population approaches that engage parents and families, as appropriate, involve
77 collaborations across systems and sectors (e.g., schools, food retail, health care institutions
78 and providers, and health insurers), and mobilize public-private partnerships to provide
79 effective models for producing synergistic effects on diet, physical activity, and health-
80 related outcomes.

81 • **The Long-term View.** The 2015 DGAC also examined the near- and long-term
82 sustainability of healthy dietary patterns as well as the safety of certain key dietary
83 constituents (i.e., caffeine and aspartame). Quantitative modeling research showed how
84 healthy dietary patterns relate to positive environmental outcomes that improve population
85 food security. Moderate to strong evidence demonstrates that healthy dietary patterns that are
86 higher in plant-based foods, such as vegetables, fruits, whole grains, legumes, nuts, and
87 seeds, and lower in calories and animal-based foods are associated with more favorable
88 environmental outcomes (lower greenhouse gas emissions and more favorable land, water,
89 and energy use) than are current U.S. dietary patterns. Furthermore, sustainable dietary
90 patterns can be achieved through a variety of approaches consistent with the *Dietary*
91 *Guidelines for Americans* and, therefore, offer individuals many options and new
92 opportunities to align with personal and population health and environmental values systems.
93 Healthy, sustainable dietary patterns also may provide new themes for consumer education
94 and communication on lifestyle practices that can promote food security now and for future
95 generations and create a “culture of health” at individual and population levels.

96 In summary, the research base reviewed by the 2015 DGAC provides clear and consistent
97 evidence that persistent, prevalent, preventable health problems, notably overweight and obesity,
98 cardiovascular diseases, diabetes, and certain cancers, have severely and adversely affected the
99 health of the U.S. population across all stages of the lifespan for decades and raise the urgency
100 for immediate attention and bold action. Evidence points to specific areas of food and nutrient
101 concern in the current U.S. diet. Moderate to strong evidence pinpoints the characteristics of
102 healthy dietary and physical activity patterns established to reduce chronic disease risk, prevent
103 and better manage overweight and obesity, and promote health and well-being across the
104 lifespan.

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106 Although behavior change is complex, moderate to strong evidence now points to effective
107 strategies to promote healthy lifestyle behavior changes at individual and population levels. This
108 overall research evidence base can be used to inform policy changes, multi-sectorial
109 collaborations, as well as product/service reformulation as needed. It can be used with
110 confidence to provide guidelines and standards for nutrition and lifestyle intervention
111 services/programs in traditional health care and public health settings. It also provides
112 frameworks for public and private sector initiatives and community programming to make

113 innovative environmental changes that can change population diet and physical activity
114 behaviors to promote population health.

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116 Overall, the evidence base on the links between diet, physical activity, and health has never been
117 as strong or more compelling. The strength of evidence on “what works” to improve individual
118 and population lifestyle behaviors for health also has never been more robust, with solutions and
119 models of “best practices.” Furthermore, the increasing convergence of research evidence
120 showing that healthy dietary patterns not only reduce disease risks and improve health outcomes
121 but are associated with food security and sustainability provide a further, convincing rationale for
122 focused attention on prevention and individual and population health promotion. Additional
123 research must be conducted to strengthen this evidence base, and recommendations for such
124 research are made in each of the chapters in *Part D. Science Base* (see *Appendix E-1: Needs for*
125 *Future Research* for a compilation of the DGAC’s research recommendations).

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128 **DGAC 2015 RECOMMENDATIONS FOR ACTION**

129 It will take concerted, bold action on the part of individuals, families, communities, industry, and
130 government to achieve and maintain healthy dietary patterns and the levels of physical activity
131 needed to promote a healthy U.S. population.

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133 This will entail dramatic paradigm shifts in which population health is a national priority and
134 individuals, communities, and the public and private sectors seek together to achieve a
135 population-wide “culture of health” through which healthy lifestyle choices are easy, accessible,
136 affordable and normative—both at home and away from home. In such a culture, preventing
137 diet- and physical activity-related diseases and health problems would be much more highly
138 valued, the resources and services needed to achieve and maintain health would become a
139 realized human right across all population strata, the needs and preferences of the individual
140 would be seriously considered, and individuals and their families/households would be actively
141 engaged in promoting their personal health and managing their preventive health services and
142 activities. Health care and public health professionals would embrace a new leadership role in
143 prevention, convey the importance of lifestyle behavior change to their patients/clients, set model
144 standards for prevention-oriented activities and client/employee services in their own facilities,
145 and manage patient/client referrals to evidence-based nutrition and comprehensive lifestyle
146 services and programs. Communities and relevant sectors of our economy, including food,
147 agriculture, private business, health care (as well as insurance), public health and education,
148 would seek common ground and collaborations in promoting population health. Initiatives would
149 be incentivized to engage communities and health care systems to create integrated and
150 comprehensive approaches to preventing chronic diseases and for weight management.
151 Environmental changes, including policy changes, improved food and beverage standards,

152 reformulation of products and services as needed, and programs that enhance population lifestyle
 153 behavior changes and support preventive services also would be incentivized.

154
 155 Although these propositions are extremely challenging, it is imperative to seek novel and
 156 creative, evidence-based solutions. The costs of failing to do so are the continuation of the very
 157 high rates of preventable diet- and physical activity-related health problems we confront as a
 158 Nation and the worsening of their serious adverse effects on our quality of life, population
 159 productivity, and already highly strained healthcare costs. The evidence base has never been
 160 stronger to guide solutions. What is needed are strong commitments and leadership, the
 161 development of targeted public and private policies and partnerships, and the implementation of
 162 evidence-based, cross-sectorial initiatives to achieve them. In the remainder of this chapter, the
 163 DGAC summarizes specific recommendations guided by our conceptual model, which is
 164 grounded in the socio-ecological theory model of individual and population lifestyle behavior
 165 change for health promotion and disease prevention (see *Part B. Chapter 1: Introduction*).

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168 **Actions for Individuals and Families/Households**

- 169 • Think prevention, know your lifestyle-related health risk profile, make personal goals and
 170 commitments, and take action to promote personal and household/family health. Work with
 171 health professionals to assess and monitor your health risks and to personalize your
 172 preventive lifestyle behavior plan of action.
- 173 • Know and understand how to modify your diet and physical activity to reduce personal and
 174 family member health risks. Know your current dietary pattern, including your healthy
 175 choices that can be maintained as well as areas for potential change. Act on this information.
 176 Seek to make gradual and sustainable changes in your dietary behaviors to achieve one of
 177 several sound healthy dietary pattern options (e.g., Healthy U.S.-style Pattern, the Healthy
 178 Mediterranean-style Pattern, or the Healthy Vegetarian Pattern; see *Part D. Chapter 1: Food
 179 and Nutrient Intakes, and Health: Current Status and Trends*). For most people, this will
 180 mean:
- 181 ○ Improving food and menu choices, modifying recipes (including mixed dishes and
 182 sandwiches), and watching portion sizes.
 - 183 ○ Including more vegetables (without added salt or fat), fruits (without added sugars),
 184 whole grains, seafood, nuts, legumes, low/non-fat dairy or dairy alternatives (without
 185 added sugars).
 - 186 ○ Reducing consumption of red and processed meat, refined grains, added sugars, sodium,
 187 and saturated fat; substituting saturated fats with polyunsaturated alternatives; and
 188 replacing solid animal fats with non-tropical vegetable oils and nuts.

- 189 • The 2015 DGAC advocates achieving healthy dietary patterns through healthy food and
190 beverage choices rather than with nutrient or dietary supplements except as needed.
- 191 • Use available Dietary Guidelines for Americans tools and other sound resources to initiate
192 positive personal lifestyle changes to improve dietary and physical activity behaviors,
193 including goal setting and self-monitoring.
- 194 ○ As needed, seek regular advice from qualified health care providers to establish a
195 personalized plan for prevention that includes steps to adopt healthy dietary patterns and
196 physical activity. As appropriate, engage with nutrition and health professionals to
197 address personal health risks that can be lowered with sound diet and physical activity, or
198 participate in comprehensive lifestyle interventions conducted by trained interventionists
199 (registered dietitians/nutritionists, exercise and behavioral specialists).
- 200 ○ Achieve and maintain a healthy weight. Know your level of obesity risk. Know your
201 energy needs and how they change with varying levels of physical activity. Take personal
202 action for obesity prevention or weight loss management, as needed, using sound,
203 evidence-based tools and resources. Seek to achieve a dietary pattern consistent with the
204 *Dietary Guidelines for Americans*, recognizing that many evidence-based options can
205 facilitate weight loss and weight loss maintenance. As appropriate, work with qualified
206 nutrition professionals and health providers to create a personalized plan of action for
207 obesity prevention. When needed, engage in intensive, long-term nutrition counseling or
208 comprehensive lifestyle intervention strategies to achieve maximal, long-term weight loss
209 and weight maintenance results.
- 210 ○ Ensure at home and in public settings, such as schools and early child care programs, that
211 young children achieve a high-quality dietary pattern and level of physical activity.
212 Encourage their active participation in food experiences and activity choices so that the
213 importance of dietary quality and physical activity are reinforced, and healthy lifestyle
214 behaviors become normative, habitual, and easier to maintain through adolescence and
215 lifelong.
- 216 ○ Follow on a regular basis, the *Physical Activity Guidelines for Americans*. Engage in at
217 least 2.5 hours a week of moderate-intensity aerobic physical activity, such as brisk
218 walking, or 1.25 hours a week of vigorous-intensity aerobic physical activity. For weight
219 control, at least 1 hour a day of moderate- to vigorous-intensity physical activity may be
220 required. Engage children in at least 1 hour a day of moderate- to vigorous-intensity
221 physical activity each day. Limit children’s screen time to no more than two hours per
222 day. Adults should limit sedentary activity and replace it with aerobic and strengthening
223 exercises. As needed, engage with qualified professionals in comprehensive lifestyle
224 interventions to achieve maximal impact on healthy dietary and physical activity patterns
225 and health outcomes. Get enough sleep!

- 226 ○ Seek and demand the creation and maintenance of food and physical activity
227 environments and resources in your community and in local public, private and retail
228 settings so as to promote a “culture of health.” These are strongly needed to facilitate the
229 ease of initiating and meeting the U.S. Dietary Guidelines recommendations at home and
230 away from home.

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232 **Actions for Communities and Populations**

- 233 ● Aim to make healthy lifestyles and prevention a national and local priority and reality.
- 234 ○ Create public and private policy changes at the national level that direct and incentivize
235 collaborations by multiple sectors of influence, including health care, public health,
236 education, food and agriculture, transportation, food retail, the media, non-governmental
237 organizations, and service sectors.
- 238 ○ Incentivize the development of policies and initiatives at local, state, and Federal levels
239 that are carried out using cross-sectorial collaborations to promote individual healthy
240 lifestyle behavior changes and create community “cultures of health.” These may include
241 improvements in built and physical environments to create safe and accessible resources
242 and settings for increased physical activity and more widely available healthy food
243 choices. They may entail changes in policies, standards, and practices in retail, and public
244 and private settings and programs that promote “cultures of health” and facilitate the
245 initiation and maintenance of healthy lifestyle behaviors at individual and community
246 levels.
- 247 ● Seek a paradigm shift in health care and public health toward a greater focus on prevention
248 and integration with food systems.
- 249 ○ Incentivize and support nutrition professionals, health care providers, and other qualified
250 professionals in their unique roles of encouraging and counseling patients and clients to
251 adopt healthy dietary and physical activity and in offering evidence-based nutrition
252 services and comprehensive lifestyle interventions. Integrate preventive lifestyle
253 screening, referral, and interventions and services for weight management and chronic
254 disease risk reduction into routine practice guidelines and quality assurance standards.
- 255 ○ Support health care facilities, such as hospitals and clinics, in seeking to model
256 prevention and achieving “cultures of health” by offering healthy food choices for
257 patients, visitors, and staff; implementing preventive nutrition services and
258 comprehensive lifestyle intervention programs; and making referrals to Federal and local
259 food assistance programs as needed by their staff and clients.
- 260 ○ Require health insurance providers to use financial and other positive incentives to
261 encourage and motivate health care settings and businesses to support individuals in

- 262 adopting healthy behaviors and engaging, as appropriate, in nutrition and exercise
 263 counseling and comprehensive lifestyle behavior interventions.
- 264 ○ Encourage and incentivize health care innovations and community prevention through
 265 Affordable Care Act (ACA) policies and programs, including expanding preventive
 266 lifestyle services in traditional health services environments and new retail health
 267 services environments that link to Federal and local food assistance programs. These
 268 should provide resources for individuals to engage and sustain personal lifestyle behavior
 269 change. In addition, ACA programs and policies should increase access to qualified
 270 professionals and programs and services that promote healthy diet and physical activity
 271 behaviors.
 - 272 ○ Incentivize businesses to establish employee health benefits plans that include access to
 273 resources and services that encourage personal health promotion and healthy lifestyle
 274 behavior changes. Support employers in using positive motivation strategies to realize
 275 these changes.
- 276
- 277 ● Establish healthy food environments.
 - 278 ○ Establish local, state, and Federal policies to make healthy foods accessible and
 279 affordable and to limit access to high-calorie, nutrient-poor foods and sugar-sweetened
 280 beverages in public buildings and facilities. Set nutrition standards for foods and
 281 beverages offered in public places. Improve retail food environments and make healthy
 282 foods accessible and affordable in underserved neighborhoods and communities.
 - 283 ○ Develop and expand programs that encourage healthy eating and physical activity habits
 284 in young children and adolescents within school and early care and other education
 285 settings. Establish and implement policies and programs that provide nutritious foods,
 286 limit sugar-sweetened beverages and other unhealthy foods, incorporate nutrition
 287 curricula and experiences and physical activity opportunities, and increase provider and
 288 teacher skills to develop and promote these programs.
 - 289 ○ Implement the comprehensive school meal guidelines (National School Lunch Program)
 290 from the USDA that increase intakes of vegetables (without added salt), fruits (without
 291 added sugars), and whole grains; limit sodium, added sugars, saturated fat, and trans fat;
 292 limit marketing unhealthy foods to children; make drinking water freely available to
 293 students throughout the day; ensure competitive foods meet the national nutrition
 294 standards (e.g., *Dietary Guidelines for Americans*); and eliminate sugar-sweetened
 295 beverages.
 - 296 ○ Improve, standardize and implement Nutrition Facts labels and Front of Package labels to
 297 help consumers, including those with low literacy levels, make healthy food choices. The
 298 Nutrition Facts label should include added sugars (in grams and teaspoons) and include a

299 percent daily value, to assist consumers in identifying the amount of added sugars in
300 foods and beverages and making informed dietary decisions. Standardize and create easy-
301 to-understand front-of-package (FOP) label on all food and beverage products to give
302 clear guidance about a food’s healthfulness. An example is the FOP label recommended
303 by the Institute of Medicine, which included calories, and 0 to 3 “nutritional” points for
304 added sugars, saturated fat, and sodium. This would be integrated with the Nutrition Facts
305 label, allowing consumers to quickly and easily identify nutrients of concern for
306 overconsumption, in order to make healthy choices.

307 ○ Align nutritional and agricultural policies with Dietary Guidelines recommendations and
308 make broad policy changes to transform the food system so as to promote population
309 health, including the use of economic and taxing policies to encourage the production and
310 consumption of healthy foods and to reduce unhealthy foods. For example, earmark tax
311 revenues from sugar-sweetened beverages, snack foods and desserts high in calories,
312 added sugars, or sodium, and other less healthy foods for nutrition education initiatives
313 and obesity prevention programs.

314 ○ Align food assistance programs such as SNAP and WIC with the *Dietary Guidelines for*
315 *Americans*. Provide standards for purchasing that create new demands for healthy foods,
316 such as vegetables and fruits, and discourage the purchase and consumption of foods,
317 such as sugar-sweetened beverages. Support research to explore ways to improve overall
318 diet quality in Federal and local food assistance programs.

319 ○ Support changes to the food environment that can help individuals make healthy choices
320 in the foods they consume away from home and those they purchase away from home to
321 consume at home. For example, the Committee encourages the food industry to continue
322 to reformulate and make changes to improve the nutrition profile of certain foods.
323 Examples of such actions include lowering sodium and added sugars content, achieving
324 better saturated fat to polyunsaturated fat ratio, and reducing portion sizes in retail
325 settings (restaurants, food outlets, and public venues, such as professional sports stadiums
326 and arenas). The Committee also encourages the food industry to market these improved
327 products to consumers.

328 ○ Implement policies and programs at local, state and national levels in both the public and
329 private sectors to reduce added sugars and sodium in foods, limit availability of sugar-
330 sweetened beverages, and promote healthy snacks. Approaches might include:

331 ■ Making water a preferred beverage choice. Encourage water as a preferred beverage
332 when thirsty. Make water accessible in public settings, child care facilities, schools,
333 worksites and other community places where beverages are offered.

334 ■ Reducing added sugars in foods and sugar-sweetened beverages in school meals.

- 335 ▪ Making “smart snacks” consistent with the Dietary Guidelines in schools, child care
336 settings, parks, recreation centers, sports leagues, after-school programs, worksites,
337 colleges and universities, healthcare, and other community settings.
- 338 ▪ Implementing policies that limit exposure and marketing of foods and beverages high
339 in added sugars and sodium to all age groups, particularly children and adolescents.
- 340 ▪ Implementing economic and pricing approaches to promote the purchase of healthy
341 foods and beverages. For example, taxation on higher sugar-and sodium-containing
342 foods may encourage consumers to reduce consumption and revenues generated
343 could support health promotion efforts. Alternatively, price incentives on vegetables
344 and fruits could be used to promote consumption and public health benefits.
- 345 ▪ Mounting public education campaigns to increase the public’s awareness of the health
346 effects of excess added sugars, sodium, saturated fat, and calories.
- 347 • Support and expand access to healthy built environments and advocate wide community use.
 - 348 ○ Increase opportunities for regular public engagement in physical activity through
349 improved urban and community designs, enhanced community built environments,
350 business spaces, and transportation networks. Urban and community designs should
351 encourage and promote active transportation, such as walking and biking. Green
352 corridors can increase public safety and enhance active transportation.
 - 353 ○ Incentivize communities to make physical activity accessible, affordable, and safe.
354 Encourage public and private sectors to work together to increase access to gyms, bike
355 trails, pedestrian walkways, ball fields, and other recreation areas in the communities.
356 Promote physical activity through social media, smart phone, and other technologies.
 - 357 ○ Reach out to and engage groups such as new immigrant communities who may abandon
358 their native healthy lifestyle habits and others at highest nutritional and health risk, to
359 ensure that they learn about resources and are motivated to access, engage in, and sustain
360 healthy dietary patterns and physical activities within their cultural preferences.
- 361 • Maintain strong support for Federal food and nutrition programs.
 - 362 ○ Recognize their importance in creating demand for healthy food products as well as in
363 shaping and modeling consumer behaviors relating to healthy dietary and physical
364 activity patterns.
 - 365 ○ Align program standards with the *Dietary Guidelines for Americans* so as to achieve the
366 2015 DGAC recommendations and promote a “culture of health.”
- 367 • Recognize and place priority on moving toward a more sustainable diet consistent with the
368 healthy dietary pattern options described in this DGAC report. Access to sufficient,
369 nutritious, and safe food is an essential element of food security for the U.S. population. A

- 370 sustainable diet helps ensure this access for both the current population and future
 371 generations.
- 372 ○ Enhance what is already being done by the private and public sectors to improve
 373 environmental policies and practices around production, processing, and distribution
 374 *within* individual food categories.
 - 375 ○ Align local, state, and national practices and policies across sectors to promote a
 376 sustainable and safe food supply to ensure long-term food security. Support robust
 377 private and public sector partnerships, practices, and policies across the supply chain and
 378 extending from farms to distribution and consumption that can incentivize actions to
 379 develop a food system that embraces a core set of values that embody healthy, safe, and
 380 sustainable dietary patterns. Monitor, evaluate, and reward sectors that do this. Establish
 381 new, well-coordinated policies that include, but are not limited to, agriculture, economics,
 382 transportation, energy, water use, and dietary guidance. Encourage all participants in the
 383 food system, as they are central to creating and supporting sustainable and safe diets.
 - 384 ○ Shift toward a greater emphasis on healthy dietary patterns and an improved
 385 environmental profile across food categories to maximize environmental sustainability,
 386 including encouraging consumption of a variety of wild caught or farmed seafood.
 - 387 ○ Improve the nutrient profiles of certain farmed seafood species, particularly EPA and
 388 DHA levels, through improved feeding and processing systems and preserve the
 389 favorable nutrient profiles of other seafood. Establish strong policy, research, and
 390 stewardship to improve the environmental sustainability of farmed seafood systems.
 - 391 ○ Offer consumer-friendly information that facilitates understanding the environmental
 392 impact of different foods in food and menu labeling initiatives.
 - 393 ○ Recognize the importance of foodborne illness prevention and encourage consumer
 394 behavior consistent with the four food safety principles described in the *Dietary*
 395 *Guidelines for Americans*—Clean, Separate, Cook, and Chill, which are the foundation of
 396 the Fight BAC![®] campaign (www.fightbac.org).

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