



May 16, 2022

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Office of Disease Prevention and Health Promotion  
Office of the Assistant Secretary for Health  
Department of Health and Human Services  
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Dear Ms. de Jesus:

The American Institute for Cancer Research (AICR) presents these comments to support the work of the U.S. Department of Health and Human Services (HHS) and U.S. Department of Agriculture (USDA) (the Departments) and as they craft research questions for the 2025 Dietary Guidelines Advisory Committee (DGAC) to inform the development of the 2025-2030 Dietary Guidelines for Americans (DGA).

AICR is the leading U.S. authority on the links between diet, weight, and physical activity, and cancer prevention and survival. Our mission is to champion the latest and most authoritative scientific research from around the world on cancer prevention and survival through these lifestyle factors to help people make informed choices to reduce their cancer risk.

The following are our recommendations to the Departments, which are described in more detail in the sections that follow:

- 1. Additional information should be made available on the process for updating the alcohol consumption guidelines. This process should include a rigorous examination of the evidence, specifically consider the connection between alcohol and cancer, and include an opportunity for input by public health experts.**
- 2. The evidence regarding the connection between dietary patterns and additional cancer types beyond the four most common cancer types (breast, colorectal, lung, prostate) and the connection between obesity and cancer should be considered.**
- 3. The DGAC's literature review should include systematic reviews and meta analyses conducted by experts outside of the federal government.**
- 4. The DGAC's evidence review should include educational, behavioral, and population level strategies to help people follow the DGA.**
- 5. The DGA should provide recommendations that are appropriate for the millions of Americans with diet-related chronic conditions such as obesity and cancer.**
- 6. In its review of evidence on the connection between dietary patterns and health outcomes, the DGAC should specifically review the evidence on the connection between dietary patterns that are high versus low in whole grains, red/processed meats, and added sugars.**
- 7. The DGAC should further review the evidence on the health benefits of breastfeeding for both the mother and child, including for cancer prevention (for the mother) and obesity prevention (for the child).**

8. **There should be a transparent mechanism for the DGAC to revise or add to the research questions as they deem appropriate, based on their expertise and as they review the literature.**

## **Background**

AICR is the U.S. charity in the World Cancer Research Fund International network (WCRF). Together, we fund, gather, and comprehensively analyze global scientific research on the roles of diet, weight, and physical activity in cancer risk and publish expert reports. The Continuous Update Project (CUP) is the WCRF network's ongoing program to do this work that underpins current cancer prevention recommendations and policy priorities. It is a trusted, authoritative scientific resource used by experts worldwide.

*AICR has produced a series of landmark comprehensive reports on dietary and nutritional risk factors for cancer over the last 25 years. AICR/WCRF's Third Expert Report: Diet, Nutrition, Physical Activity and Cancer: a Global Perspective, published in 2018, includes 10 Cancer Prevention Recommendations, which provide individuals with a blueprint for healthy living to reduce their risk of cancer.<sup>1</sup> The Recommendations were derived from systematic reviews and meta-analyses of epidemiological evidence, supported by experimental evidence from human and animal studies. The evidence was judged by the CUP Panel of independent experts and were generally based on strong evidence, when the panel judged that a particular *exposure* was convincingly or probably causally linked to cancer risk. These two key judgements of 'convincing' and 'probable' denote the panel's judgement that the evidence of causality – that a factor either decreases or increases the risk of cancer – is strong enough to justify recommendations.<sup>2</sup> AICR uses these recommendations as the scientific basis for our work, which includes education, health information campaigns, behavioral change programs, and public policy advocacy.*

### **I. Alcohol Consumption**

Historically, the DGA has provided recommendations on intake of alcoholic beverages, which are part of the dietary patterns for millions of Americans. Given that approximately 60% of Americans drink alcohol,<sup>3</sup> this information is critical for reducing alcohol-related harms. However, the Departments have stated that alcoholic beverages will be “examined in a separate effort led by HHS Agencies that support work on this topic.” Yet no additional detail on this process has been provided. **Additional information should be made available on the process for updating the alcohol consumption guidelines. Further, to ensure that the DGA remains an evidence-based and trusted source of guidance for Americans, this process should include a rigorous examination of the evidence, specifically consider the connection between alcohol and cancer, and include an opportunity for input by public health experts while avoiding alcohol industry influence.**

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<sup>1</sup> World Cancer Research Fund/American Institute for Cancer Research. Diet, Nutrition, Physical Activity and Cancer: a Global Perspective. 2018. Available at <https://www.wcrf.org/diet-activity-and-cancer/global-cancer-update-programme/about-the-third-expert-report/>.

<sup>2</sup> World Cancer Research Fund International. *Judging the evidence*. Global Cancer Update Programme. <https://www.wcrf.org/diet-activity-and-cancer/global-cancer-update-programme/judging-the-evidence/>

<sup>3</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

The DGA development process should include a rigorous review of the evidence related to alcohol consumption and health. Since most Americans choose to drink alcohol,<sup>4</sup> the impact of alcohol intake on health is crucial to understanding the health effects of varied dietary patterns. In addition, emerging studies indicate that patterns of alcohol consumption have changed since the beginning of the COVID-19 pandemic,<sup>5</sup> underscoring the need for review of the evidence on the public health implications.

Given the impact of alcohol intake on risk for several common cancer types, we recommend that the connection between alcohol and cancer be considered in the review of the evidence. Research shows that 4.8 percent of cancer cases and 4.3 percent of cancer deaths in men, and 6.4 percent of cancer cases and 3.6 percent of cancer deaths in women are due to alcohol consumption,<sup>6</sup> making it the third leading cancer risk factor in women and the fourth leading risk factor in men.<sup>7</sup> Systematic literature reviews conducted as part of WCRF/AICR's CUP have found strong evidence that consumption of alcoholic drinks increases the risk of mouth/pharynx/larynx, esophageal, liver, colorectal, breast (pre- and post-menopausal) and stomach cancers.<sup>8</sup> Less than one standard serving of alcohol per day is enough to significantly increase risk for cancers of the breast, esophagus, and mouth/pharynx/larynx, and cancer risk increases with increased alcohol consumption for every cancer type associated with alcohol consumption. It is essential that the DGA recommendations reflect this evidence.

During the 2020-2025 DGA development process, the DGAC reviewed the evidence on the connection between alcohol intake and health outcomes. The DGAC concluded that “no evidence exists to relax current *Dietary Guidelines for Americans* recommendations, and there is evidence to tighten them for men such that recommended limits for both men and women who drink would be 1 drink per day on days when alcohol is consumed.”<sup>9</sup> However, this finding was not reflected in the 2020-2025 DGA. It is important that the process to update the alcoholic beverage guideline be transparent, public, and free from alcohol industry influence. Recognizing the importance of the DGA being unbiased and scientifically-sound, the National Academies of Sciences, Engineering and Medicine report, *Redesigning the Process for Establishing the Dietary Guidelines for Americans*, states, “All stakeholders could provide input into the process; however, only experts as appointed by the secretaries of USDA and HHS ought to be involved in decision-making processes throughout the development of the DGA, including the DGA Policy Report.”<sup>10</sup> We wholeheartedly agree that the DGA should be developed by scientific experts in a transparent, systematic manner without undue influence by industry stakeholders.

## II. Dietary Patterns and Cancer

*Comments on Proposed Research Question: What is the relationship between dietary patterns consumed and risk of certain types of cancer (breast, colorectal, lung, prostate)?*

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<sup>4</sup> Ibid.

<sup>5</sup> Patrick, M. E., Terry-McElrath, Y. M., Miech, R. A., Keyes, K. M., Jager, J., & Schulenberg, J. E. (2022). Alcohol use and the COVID-19 pandemic: Historical trends in drinking, contexts, and reasons for use among U.S. adults. *Social science & medicine* (1982), 301, 114887. Advance online publication. <https://doi.org/10.1016/j.socscimed.2022.114887>

<sup>6</sup> Islami F, Sauer AG, Miller K, et al. Proportion and Number of Cancer Cases and Deaths Attributable to Potentially Modifiable Risk Factors in the United States. *CA Cancer J Clin* 2018; 68: 31-54.

<sup>7</sup> Ibid.

<sup>8</sup> <https://www.aicr.org/research/the-continuous-update-project/alcoholic-drinks/>

<sup>9</sup> Dietary Guidelines Advisory Committee. 2020. Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC.

<sup>10</sup> National Academies of Sciences, Engineering, and Medicine. 2017. *Redesigning the Process for Establishing the Dietary Guidelines for Americans*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24883>.

We are pleased that the DGAC will review the evidence on the connection between dietary patterns and risk of the four leading cancer types. In responding to this research question, we urge the DGAC to make full use of the systematic literature reviews (SLRs) and reports of the WCRF/AICR CUP, which regularly review the research regarding dietary patterns and components that may define dietary patterns and their impact on cancer risk. As noted previously, the WCRF/AICR CUP is unique in its comprehensive approach and methodological rigor. The CUP reports provide high quality evidence for the components of dietary patterns and cancer risk. We also recommend that the DGAC utilize additional, existing up-to-date, high-quality systematic reviews and meta-analyses.

**In addition to the four cancer types included in the proposed research question, we suggest that the DGAC consider the following types of cancer related directly to specific dietary patterns or components of dietary patterns: breast, colorectal, endometrial, aerodigestive, liver, stomach, esophagus, and mouth, pharynx, and larynx,** as noted in table 1. We suggest the DGAC restrict its review in responding to this research question to studies conducted in adults, as dietary patterns and obesity are not known to impact the risk for childhood cancers.

**Table 1: Components of a Dietary Pattern for Which WCRF/AICR CUP Reports Have Found Strong Evidence of Increased or Decreased Cancer Risk**

		WCRF/AICR GRADING	DECREASE RISK	INCREASE RISK	CANCER SITE
<b>DIETARY PATTERNS</b> <i>(including dietary components that may define a dietary pattern)</i>	<b>STRONG EVIDENCE</b>	<b>PROBABLE</b>	<b>Alcohol</b>  <b>Whole grains</b> <b>Foods containing dietary fiber</b> <b>Non-starchy vegetables and fruit</b> <b>Dairy products</b> <b>Coffee</b>	<b>Alcohol</b>	Stomach <sup>11</sup> Breast (pre-menopause) <sup>12</sup>
				<b>Red Meat</b>	Colorectum <sup>13</sup> Kidney <sup>14</sup> Colorectum <sup>15</sup> Colorectum <sup>16</sup> Mouth, Pharynx & Larynx <sup>17</sup> Colorectum <sup>18</sup> Liver <sup>19</sup> Endometrium <sup>20</sup>
<b>DIETARY PATTERNS</b> <i>(including dietary components that may define a dietary pattern)</i>	<b>STRONG EVIDENCE</b>	<b>CONVINCING</b>		<b>Processed Meat</b> <b>Alcohol</b>	Colorectum <sup>21</sup> Esophagus <sup>22</sup> Mouth, Pharynx & Larynx <sup>23</sup> Liver <sup>24</sup> Colorectum <sup>25</sup> Breast (post-menopause) <sup>26</sup>

<sup>11</sup> WCRF/AICR. Diet, nutrition, physical activity and stomach cancer. Updated 2018. Available at <https://www.aicr.org/continuous-update-project/reports/stomach-cancer-report.pdf>, p. 30-35.

<sup>12</sup> WCRF/AICR. Diet, nutrition, physical activity and breast cancer. p. 34-43..

<sup>13</sup> WCRF/AICR. Diet, nutrition, physical activity and colorectal cancer, p. 32-40.

<sup>14</sup> WCRF/AICR. Diet, nutrition, physical activity and kidney cancer. Updated 2018. Available at <https://www.aicr.org/assets/docs/pdf/reports/cup-kidney-report.pdf>, p. 15.

<sup>15</sup> WCRF/AICR. Diet, nutrition, physical activity and colorectal cancer, p. 15-18.

<sup>16</sup> Ibid, p.18-22.

<sup>17</sup> WCRF/AICR. Diet, nutrition, physical activity and mouth, pharynx & larynx cancer, p. 22-30.

<sup>18</sup> WCRF/AICR. Diet, nutrition, physical activity and colorectal cancer, p. 45-57.

<sup>19</sup> WCRF/AICR. Diet, nutrition, physical activity and liver cancer, p. 19-22.

<sup>20</sup> WCRF/AICR. Diet, nutrition, physical activity and endometrial cancer. Updated 2018. Available at <https://www.aicr.org/continuous-update-project/reports/Endometrial-Cancer-2013-Report.pdf>, p. 13-15.

<sup>21</sup> WCRF/AICR. Diet, nutrition, physical activity and colorectal cancer. p. 32-40.

<sup>22</sup> WCRF/AICR. Diet, nutrition, physical activity and oesophageal cancer. Updated 2018. Available at <https://www.aicr.org/continuous-update-project/reports/oesophageal-cancer-cup-report.pdf>, p. 26-32.

<sup>23</sup> WCRF/AICR. Diet, nutrition, physical activity and mouth, pharynx & larynx cancer. Updated 2018. Available at <https://www.aicr.org/continuous-update-project/reports/mouth-pharynx-larynx-cancer.pdf> p. 27-39.

<sup>24</sup> WCRF/AICR. Diet, nutrition, physical activity and liver cancer. Updated 2018. Available at <https://www.aicr.org/assets/docs/pdf/reports/cup-report-liver-cancer.pdf>, p. 22-27.

<sup>25</sup> WCRF/AICR. Diet, nutrition, physical activity and colorectal cancer, p. 63-69.

<sup>26</sup> WCRF/AICR. Diet, nutrition, physical activity and breast cancer. Updated 2018, p. 34-43.

Additionally, obesity is a significant causative factor for some of these cancers as well as cancers of the prostate, pancreas, kidney, gall bladder, ovary, and cervix. The dietary patterns or components of dietary patterns associated with an increased or decreased risk of weight gain, overweight, or obesity are presented in table 2. It is important to note that obesity is a strong risk factor for 12 types of cancer (table 3); therefore, dietary patterns that increase the risk for obesity also increase the risk for obesity-related cancers. **The DGAC should explicitly address obesity-related cancers in adults in its review of the relationship between dietary patterns and cancer risk.**

**Table 2: Components of a Dietary Pattern for Which WCRF/AICR CUP Reports Have Found Strong Evidence of an Association with Increased or Decreased Risk of Weight Gain, Overweight, and Obesity**

		WCRF/AICR GRADING	DECREASE RISK OF WEIGHT GAIN, OVERWEIGHT AND OBESITY	INCREASE RISK OF WEIGHT GAIN, OVERWEIGHT AND OBESITY
DIETARY PATTERNS (including dietary components that may define a dietary pattern)	STRONG EVIDENCE	CONVINCING		Sugar-sweetened drinks <sup>27</sup>
		PROBABLE		Fast Foods <sup>28</sup>
			Foods containing fiber <sup>30</sup>	Western-type diet <sup>29</sup>
			Mediterranean type dietary pattern <sup>31</sup>	
		Having been breast fed <sup>32</sup>		

<sup>27</sup> World Cancer Research Fund/American Institute for Cancer Research. Continuous Update Project Expert Report 2018. Diet, nutrition and physical activity: Energy balance and body fatness. Available at <https://www.aicr.org/continuous-update-project/reports/energy-balance-report.pdf>, p. 44-49.

<sup>28</sup> Ibid, p. 49–55.

<sup>29</sup> Ibid, p. 55–65.

<sup>30</sup> Ibid, p. 35–37.

<sup>31</sup> Ibid, p. 37–41.

<sup>32</sup> Ibid, p. 83–88.

**Table 3: Body Fatness and Weight Gain and the Risk of Cancer**

BODY FATNESS AND WEIGHT GAIN AND THE RISK OF CANCER					
WCRF/AICR GRADING		DECREASES RISK		INCREASES RISK	
		Exposure	Cancer site	Exposure	Cancer site
STRONG EVIDENCE	Convincing			Adult body fatness	Oesophagus (adenocarcinoma) 2016 <sup>1</sup> Pancreas 2012 <sup>1</sup> Liver 2015 <sup>2</sup> Colorectum 2017 <sup>1</sup> Breast (postmenopause) 2017 <sup>1,3</sup> Endometrium 2013 <sup>4,5</sup> Kidney 2015 <sup>1</sup>
	Probable	Adult body fatness	Breast (premenopause) 2017 <sup>1,3</sup>	Adult weight gain	Breast (postmenopause) 2017 <sup>3</sup>
		Body fatness in young adulthood	Breast (premenopause) 2017 <sup>3,6</sup> Breast (postmenopause) 2017 <sup>3,6</sup>	Adult body fatness	Mouth, pharynx and larynx 2018 <sup>1</sup> Stomach (cardia) 2016 <sup>2</sup> Gallbladder 2015 <sup>2,7</sup> Ovary 2014 <sup>2,5,8</sup> Prostate (advanced) 2014 <sup>1,9</sup>
LIMITED EVIDENCE	Limited – suggestive			Adult body fatness	Cervix (BMI ≥ 29 kg/m <sup>2</sup> ) 2017 <sup>2,5</sup>
STRONG EVIDENCE	Substantial effect on risk unlikely	None identified			

- 1 Conclusions for adult body fatness and cancers of the following types were based on evidence marked by body mass index (BMI), waist circumference and waist-hip ratio: mouth, pharynx and larynx; oesophagus (adenocarcinoma); pancreas; colorectum; breast (pre and postmenopause); prostate (advanced); and kidney.
- 2 Conclusions for adult body fatness and cancers of the following types were based on evidence marked by BMI: stomach (cardia), gallbladder, liver, ovary and cervix (BMI ≥ 29 kg/m<sup>2</sup>).
- 3 Evidence for the link between body fatness, weight gain and breast cancer is presented separately for the risk of pre and postmenopausal breast cancer because of the well-established effect modification by menopausal status.
- 4 The conclusion for adult body fatness and endometrial cancer was based on evidence marked by BMI (including BMI at age 18 to 25 years), weight gain, waist circumference and waist-hip ratio.
- 5 There is no evidence of effect modification by menopausal status for body fatness and the risk of endometrial, ovarian or cervical cancer so the evidence for all women (irrespective of menopausal status) is presented together.
- 6 Evidence for body fatness in young adulthood and breast cancer (pre and postmenopause) comes from women aged about 18 to 30 years and includes evidence marked by BMI.
- 7 Adult body fatness may act indirectly, through gallstones, or directly, either after gallstone formation or in their absence, to cause gallbladder cancer. It is not yet possible to separate these effects.
- 8 The effect of adult body fatness on the risk of ovarian cancer may vary according to tumour type, menopausal hormone therapy use and menopausal status.
- 9 The effect of adult body fatness on the risk of prostate cancer was observed in advanced, high-grade and fatal prostate cancers.

### III. The DGAC's literature review should include systematic reviews and meta analyses conducted by experts outside of the federal government.

AICR strongly recommends that the DGAC make full use of existing high-quality systematic reviews and meta-analyses conducted by researchers and organizations outside of the federal government, in addition to any conducted by government researchers. We believe that excluding the use of high-quality, scientifically-sound external systematic reviews and meta-analyses would reduce the efficiency and effectiveness of the DGAC process. Several of the proposed DGAC research questions have been recently addressed by existing high-quality reviews and meta-analyses, and these reports provide important information concerning the relevant dose-response relationships needed to support the development of these important guidelines. For instance, dose-response meta-analyses conducted by AICR/WCRF, on the impact of overweight, obesity and weight gain on cancer risk (see table 3 above), comprehensively analyze cohort studies on adult body fatness and provides strong evidence for causal contributions to 12 types of cancer.<sup>33</sup> Because the Nutrition Evidence Systematic Review (NESR) does not conduct meta-analyses, these dose-response patterns may not be apparent if the evidence is only assessed using systematic literature reviews conducted by NESR.

For the 2020 DGAC report development process, the decision was made not to use systematic reviews conducted outside of NESR or any meta-analyses in the evidence review. This decision was counterproductive and prevented the DGAC from being able to consider the full body of evidence on key research topics. It also may have contributed to the DGAC being unable to review the evidence in all priority areas, including alcohol and cancer risk. In contrast, the 2015 DGAC utilized existing high-quality external systematic reviews, meta-analyses, or reports to answer nearly half (45%) of its research questions and Nutrition Evidence Library (NEL; NESR's predecessor) systematic reviews to answer only 27% percent of its questions.<sup>34</sup> In fact, the 2017 report from the National Academies of Sciences, Engineering, and Medicine (NASEM) on the optimal process for developing the Dietary Guidelines states, "use of existing systematic reviews, meta-analyses, and authoritative reports from leading organizations is generally appropriate and encouraged by this National Academies committee, with the understanding that they ought to be relevant, timely, and of high quality."<sup>35</sup> Although the NASEM notes, "existing systematic reviews may not use the same inclusion and exclusion criteria, may be out of date, or have different outcomes,"<sup>36</sup> in the situations where existing systematic reviews and meta-analyses are high-quality, relevant, and timely, we strongly urge that they be utilized. Given the scale of the task for the DGAC and the finite capacity of the NESR team, NESR should utilize the full body of existing science and focus its time and resources most efficiently—on updates to existing high-quality systematic reviews and development of new ones on topics for which they do not already exist.

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<sup>33</sup> World Cancer Research Fund. Continuous Update Project Expert Report 2018. Body fatness and weight gain and the risk of cancer. Available at <http://www.dietandcancerreport.org/>.

<sup>34</sup> Dietary Guidelines Advisory Committee. 2015. Scientific Report of the 2015 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Health and Human Services and the Secretary of Agriculture. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC. Available at <https://health.gov/sites/default/files/2019-09/Scientific-Report-of-the-2015-Dietary-Guidelines-Advisory-Committee.pdf>.

<sup>35</sup> National Academies of Sciences, Engineering, and Medicine. 2017. Optimizing the process for establishing the Dietary Guidelines for Americans: The selection process. Washington, DC: The National Academies Press. doi: <https://doi.org/10.17226/24637>.

<sup>36</sup> Ibid.

#### IV. Educational, Behavioral, and Population Health Strategies to Improve Diet and Health

*Comments on proposed research question: What is the relationship between specific food-based strategies during adulthood and body composition, risk of overweight and obesity, and weight loss and maintenance?"*

**The DGAC's evidence review should include educational, behavioral, and population level strategies to help people follow the DGA.**

We are pleased that the DGAC will consider "Strategies for Individuals and Families Related to Diet Quality & Weight Management." However, the proposed question "*What is the relationship between specific food-based strategies during adulthood and body composition, risk of overweight and obesity, and weight loss and maintenance?"* is too narrow and should be broadened to include educational, behavioral, and population level strategies to help people follow the DGA. The narrow focus of the current question on specific food-based strategies and on obesity and weight loss, rather than healthy dietary patterns more broadly, misses an opportunity to review the full body of evidence on how to help people follow the DGA.

Unfortunately, most Americans do not follow the DGA and additional work is needed to improve adherence to them. Though the Healthy Eating Index (HEI) has not yet been updated for the 2020 DGA, the most recent HEI score is telling: Americans achieve a collective 58 out of 100.<sup>37</sup> **The DGA should provide clear, evidence-based recommendations for educational, behavioral, and policy, systems and environmental change strategies aimed at increasing adherence to the DGA. To achieve this goal, the DGAC should review the evidence on which strategies are most effective.**

The 2020 DGAC noted that "dietary recommendations are only as good as the level of adherence to them, and respecting culture-based preferences with relevant eating patterns should help improve adherence and health outcomes." The current dietary patterns recommended by the DGAC are flexible enough that they can be adjusted to different cultures. The Departments should consider how culture-based preferences drive food choices and dietary patterns so that all populations can better follow the DGA. Understanding how social determinants of health interact with the DGA should be a high priority for the Departments.

Factors such as environmental settings, food accessibility, food availability, and food affordability play a role in diet quality, dietary patterns and eating behaviors. These factors greatly influence the risk of diet-related chronic diseases, and disparities remain for certain populations of Americans, such as some racial and ethnic groups and individuals with low income.<sup>38</sup> The DGAC should also be tasked with reviewing the evidence regarding the impact of policy, systems, and environmental change strategies on improved diet quality and health outcomes. A social-ecological model for food and physical activity decisions that highlights the influence of social and cultural norms and values, sectors, settings and individual factors is important for considering the upstream factors that influence dietary patterns and eating practices.

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<sup>37</sup> SOURCES: Data—National Center for Health Statistics, *What We Eat in America/National Health and Nutrition Examination Survey, 2013-2018*. Healthy Eating Index-2015, Scores—U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.

<sup>38</sup> U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Access to foods that support health eating patterns. Healthy People 2030. <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/access-foods-support-healthy-eating-patterns#top>

## V. Dietary Guidance for People with Obesity and Other Diet-Related Chronic Conditions, including Cancer

**The DGA should acknowledge the many Americans with diet-related chronic conditions, such as obesity and cancer, and provide recommendations that are appropriate for these populations.**

While the purpose of the DGA is to give “advice on what to eat and drink to meet nutrient needs, promote health, and prevent disease,”<sup>39</sup> unfortunately the majority of the U.S. population already has obesity or another diet-related chronic disease. According to the Centers for Disease Control and Prevention (CDC), about 20% of youth and 40% of adults have obesity,<sup>40-41</sup> and about 60% of American adults have a chronic disease, such as cancer, diabetes, or heart disease.<sup>42</sup> With advances in cancer prevention and treatment, the population of cancer survivors is growing. Currently, about one in 25 Americans is a cancer survivor.<sup>43</sup> Evidence is growing on the many benefits of good nutrition for this population, including for survivorship, quality of life, and future cancer and other chronic disease risk.<sup>44-45</sup> The DGAC should review the evidence regarding whether different guidelines are needed for people with obesity and other chronic conditions. For example, AICR recommends that cancer survivors follow the cancer prevention guidelines, if they can. However, adaptations may be needed to address specific challenges caused by the cancer or its treatment. In addition, AICR recommends weight loss for people with obesity and weight maintenance for people at a healthy weight. The dietary strategies to achieve these outcomes may be different and should be considered separately by the DGAC.

## VI. Dietary Patterns and Dietary Pattern Components

*Comments on Proposed Research Questions:*

*What is the relationship between consumption of dietary patterns with varying amounts of ultra-processed foods and growth, size, body composition, risk of overweight and obesity, and weight loss and maintenance?*

*What is the relationship between food sources of added sugars consumed and growth, size, body composition, risk of overweight and obesity, and weight loss and maintenance?*

**We are pleased that the DGAC will review the evidence on the impact of intake of ultra-processed foods on weight-related outcomes. AICR’s cancer prevention recommendations advise limiting intake**

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<sup>39</sup> Dietary Guidelines for Americans. *Purpose of the dietary guidelines*. <https://www.dietaryguidelines.gov/about-dietary-guidelines/purpose-dietary-guidelines>

<sup>40</sup> Centers for Disease Control and Prevention. (April 5, 2021). *Childhood obesity facts*. <https://www.cdc.gov/obesity/data/childhood.html>

<sup>41</sup> Centers for Disease Control and Prevention. (September 30, 2021). *Adult obesity facts*. <https://www.cdc.gov/obesity/data/adult.html>

<sup>42</sup> Centers for Disease Control and Prevention. (May 6, 2022). *Chronic diseases in America*. <https://www.cdc.gov/chronicdisease/resources/infographic/chronic-diseases.htm>

<sup>43</sup> American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.

<sup>44</sup> World Cancer Research Fund. Continuous Update Project Expert Report 2018. Survivors of breast and other cancers. Available at <http://dietandcancerreport.org/>.

<sup>45</sup> Rock, C. L., Thomson, C. A., Sullivan, K. R., Howe, C. L., Kushi, L. H., Caan, B. J., Neuhauser, M. L., Bandera, E. V., Wang, Y., Robien, K., Basen-Engquist, K. M., Brown, J. C., Courneya, K. S., Crane, T. E., Garcia, D. O., Grant, B. L., Hamilton, K. K., Hartman, S. J., Kenfield, S. A., Martinez, M. E., ... McCullough, M. L. (2022). American Cancer Society nutrition and physical activity guideline for cancer survivors. *CA: a cancer journal for clinicians*, 72(3), 230–262. <https://doi.org/10.3322/caac.21719>

of “fast foods” and other highly processed foods high in fat, starches, or sugars. WCRF/AICR’s CUP panel judged the evidence to be “probable” that a Western type diet and fast foods (high in sugar, fat, and salt) increase the risk of weight gain, overweight, and obesity.

**In addition, in its reviews of evidence on the connection between dietary patterns and health outcomes, including cancer risk, the DGAC should specifically review the evidence on the connection between dietary patterns high versus low in whole grains, red/processed meats, and added sugars.** AICR’s Cancer Prevention Recommendations advise consuming a diet rich in whole grains, vegetables, fruits, and beans and low in “fast foods” and other processed foods high in fat, starches, or sugars, red meats and processed meats, and sugar-sweetened drinks.

Evidence from AICR/WCRF’s CUP has found that consumption of whole grains reduces the risk of colorectal cancer,<sup>46</sup> and the 2020 DGA notes that they are currently underconsumed by the population. Thus, it is important for the DGAC to review the evidence on the connection between levels of whole grain and refined grain intake and the proportion of whole versus refined grains and health outcomes, including cancer risk.

It is particularly important that the DGAC review the evidence on the connection between intake of red meats, such as beef, lamb, and pork, and processed meats and cancer risk. Even small amounts of processed meat eaten regularly (0.5 ounces/day) increases the risk of colorectal cancer, and eating more than 18 ounces of red meat per week increases the risk of colorectal cancer.<sup>47</sup> The International Agency for Research on Cancer (IARC), part of the World Health Organization (WHO), has classified processed meat as a Group 1 carcinogen, meaning it is carcinogenic to humans, based on sufficient evidence in humans that the consumption of processed meat causes colorectal cancer.<sup>48</sup> Red meat is classified as a Group 2A carcinogen, meaning it is probably carcinogenic to humans, based on limited evidence that the consumption of red meat causes cancer in humans and strong mechanistic evidence supporting a carcinogenic effect.<sup>49</sup>

**We support the inclusion of the research question “*What is the relationship between food sources of added sugars consumed and growth, size, body composition, risk of overweight and obesity, and weight loss and maintenance?*”** A review conducted as part of the WCRF/AICR’s CUP has found strong evidence that consumption of sugar-sweetened drinks, the leading source of added sugars, increases the risk of weight gain, overweight, and obesity.<sup>50</sup> Overall, the evidence for an increased risk of adiposity in both adults and children with increased consumption of sugar-sweetened drinks was strong and consistent. Three published reviews conducted meta-analyses investigating consumption of sugar-sweetened drinks and adiposity in adults.<sup>51</sup> Results from meta-analyses both of randomized controlled trials and prospective cohort studies report significant positive (adverse) relationships of

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<sup>46</sup> World Cancer Research Fund. Continuous Update Project Expert Report 2018. Wholegrains, vegetables and fruit and the risk of cancer. Available at <http://dietandcancerreport.org/>.

<sup>47</sup> World Cancer Research Fund. Continuous Update Project Expert Report 2018. Meat, fish and dairy products and the risk of cancer. Available at <http://dietandcancerreport.org/>.

<sup>48</sup> IARC. IARC Monograph: Red Meat and Processed Meat. Volume 114. 2018. Available at <https://monographs.iarc.fr/wp-content/uploads/2018/06/mono114.pdf>.

<sup>49</sup> Ibid.

<sup>50</sup> WCRF/AICR. Continuous Update Project Expert Report 2018. Diet, nutrition and physical activity: Energy balance and body fatness, p. 44-49.

<sup>51</sup> WCRF/AICR. Diet, nutrition and physical activity: Energy balance and body fatness, p. 130-139.

sugar-sweetened drink consumption on changes in weight. Three published reviews conducted meta-analyses investigating consumption of sugar-sweetened drinks and adiposity in children.<sup>52</sup> Results from meta-analyses both of randomized controlled trials and prospective cohort studies reported positive (adverse) relationships of sugar-sweetened drink consumption on measures of adiposity. There is also strong evidence that diets containing greater amounts of “fast foods” and other processed foods high in fat, starches, or sugars, and consuming a Western type diet (characterized by a high amount of free sugars, meat, and fat), are causes of weight gain, overweight and obesity by increasing the risk of excess energy intake relative to expenditure.<sup>53</sup>

## **VII. Health Benefits of Breastfeeding for Mother and Child**

AICR was pleased that the 2020 DGA, for the first time, provided dietary recommendations for infants and toddlers under 24 months old. AICR strongly supports the DGA recommendation that babies be exclusively fed human milk for the first six months, if possible, as breastfeeding can offer cancer protection for both the mother and child. Multiple studies have shown a marked decrease in breast cancer risk for the mother per five-month increase of breastfeeding duration.<sup>54</sup> Although this reduction is modest, it adds to the growing literature that breastfeeding can assist in preventing the development of chronic diseases in women post-partum. Breastfeeding can also help to prevent excess weight gain in the child, which lowers their cancer risk as adults.<sup>55</sup> As stated previously, having overweight or obesity is one of the leading causes of preventable cancers. **The 2025 DGAC should further review the evidence on the health benefits of breastfeeding for both the mother and child, including for cancer prevention (for the mother) and obesity prevention (for the child).**

## **VIII. There should be a transparent mechanism for the DGAC to revise or add to the research questions as they deem appropriate, based on their expertise and as they review the literature.**

While we appreciate that the Departments are utilizing a formal process to identify the research questions for review by the DGAC, including soliciting and incorporating public input, the DGAC should be able to revise or add to the research questions, based on their expertise and as they review the literature, using a transparent process. The DGAC members will be appointed based on their expertise related to diet and health. As such, they should be able to revise or add to the research questions, as needed, to ensure the evidence reviews are useful for providing population-based dietary guidance.

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<sup>52</sup> Ibid, p. 121-139.

<sup>53</sup> WCRF/AICR. Continuous Update Project Expert Report 2018. Body fatness and weight gain and the risk of cancer. Available at [https://www.wcrf.org/sites/default/files/Body-fatness-and-weight-gain\\_0.pdf](https://www.wcrf.org/sites/default/files/Body-fatness-and-weight-gain_0.pdf).

<sup>54</sup> WCRF/AICR. Continuous Update Project Expert Report 2018. Diet, nutrition, physical activity and breast cancer. Available at <https://www.aicr.org/continuous-update-project/reports/breast-cancer-report-2017.pdf>, p. 90–91.

<sup>55</sup> WCRF/AICR. Continuous Update Project Expert Report 2018. Diet, nutrition and physical activity: Energy balance and body fatness. Available at <https://www.aicr.org/continuous-update-project/reports/energy-balance-report.pdf>, p. 83–88.

## Conclusion

Thank you for considering our comments and recommendations regarding proposed research questions. Please contact Melissa Maitin-Shepard, Public Policy Consultant, at [MMSHealthStrategies@gmail.com](mailto:MMSHealthStrategies@gmail.com) if you have any questions or we can provide any additional information. We look forward to continuing to monitor the process and provide input to you as the 2025 DGA development process continues.

Sincerely,

A handwritten signature in black ink, appearing to read "Deirdre McGinley-Gieser". The signature is written in a cursive style with a large initial "D" and "M".

Deirdre McGinley-Gieser  
Executive Vice President  
American Institute for Cancer Research