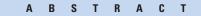
JOURNAL OF CLINICAL ONCOLOGY

ASCO SPECIAL ARTICLE

American Society of Clinical Oncology Position Statement on Obesity and Cancer

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Rates of obesity have increased significantly over the last three decades in the United States and globally. In addition to contributing to heart disease and diabetes, obesity is a major unrecognized risk factor for cancer. Obesity is associated with worsened prognosis after cancer diagnosis and also negatively affects the delivery of systemic therapy, contributes to morbidity of cancer treatment, and may raise the risk of second malignancies and comorbidities. Research shows that the time after a cancer diagnosis can serve as a teachable moment to motivate individuals to adopt risk-reducing behaviors. For this reason, the oncology care team-the providers with whom a patient has the closest relationships in the critical period after a cancer diagnosis—is in a unique position to help patients lose weight and make other healthy lifestyle changes. The American Society of Clinical Oncology is committed to reducing the impact of obesity on cancer and has established a multipronged initiative to accomplish this goal by 1) increasing education and awareness of the evidence linking obesity and cancer; 2) providing tools and resources to help oncology providers address obesity with their patients; 3) building and fostering a robust research agenda to better understand the pathophysiology of energy balance alterations, evaluate the impact of behavior change on cancer outcomes, and determine the best methods to help cancer survivors make effective and useful changes in lifestyle behaviors; and 4) advocating for policy and systems change to address societal factors contributing to obesity and improve access to weight management services for patients with cancer.

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INTRODUCTION

The prevalence of obesity in the United States has increased dramatically since 1990, with more than one third of US adults (more than 72 million people) and 17% of US children and adolescents categorized as obese.^{1,2} Overweight and obesity are terms used for ranges of weight that are greater than what is generally considered healthy for a given height.³ The terms also identify ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems. Obesity itself was recently categorized as a disease state by the American Medical Association. For adults, overweight and obesity ranges are determined by using weight and height to calculate body mass index (BMI). Although there is increased debate on the precise definition of obesity,⁴ the WHO categorizes overweight as a BMI between 25 and 29.9 kg/m² and obesity as a BMI \geq 30 kg/m² (Table 1).

Obesity plays a role as a contributor to several major illnesses, including cardiovascular disease, diabetes, and cancer—in terms of both risk and mortality. In 2008, medical costs associated with obesity were estimated at \$147 billion.⁵ Obesity is a major under-recognized contributor to the nation's cancer toll and is quickly overtaking tobacco as the leading preventable cause of cancer. As many as 84,000 cancer diagnoses each year are attributed to obesity, and overweight and obesity are implicated in 15% to 20% of total cancer-related mortality.^{6,6a,6b}

There is increasing evidence linking obesity to elevated risk of cancer, recurrence, and cancerrelated mortality in individuals diagnosed with early-stage disease:

- A recent meta-analysis of 82 studies including more than 200,000 patients with breast cancer demonstrated a 75% increase in mortality in premenopausal women and a 34% increase in mortality in postmenopausal women who were obese at the time of breast cancer diagnosis, as compared with patients who were of normal weight at diagnosis.⁷
- Obese men seem to be at increased risk of developing biologically aggressive prostate

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	Body Weight (lbs)																
Height	Normal Weight (BMI [kg/m ²])						Overweight (BMI [kg/m ²])					Obese (BMI [kg/m ²])					
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
4'10"	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	165	16
4'11"	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	17
5′0″	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	17
5′1″	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	18
5′2″	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	19
5′3″	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	19
5′4″	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	20
5′5″	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	21
5′6″	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	2
5′7″	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	22
5′8″	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	23
5′9″	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	23
5′10″	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	24
5′11″	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	25
6′0″	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	2
6′1″	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	20
6'2"	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	2

cancers and also are more likely to have advanced disease at the time of prostate cancer diagnosis.⁸

- A BMI ≥ 35 kg/m² may be associated with an increased risk of colon cancer recurrence and mortality, but the data are less consistent.^{9,10}
- Emerging data suggest that obesity may be a prognostic factor in other malignancies as well.¹¹⁻¹⁵

Obesity can interfere with the effective delivery of systemic cancer therapy and can contribute to morbidity from treatment. Obesity is a risk factor for poor wound healing, postoperative infections, and lymphedema, as well as for the development of comorbid illness (eg, heart disease, cerebrovascular disease, and diabetes), in cancer survivors.¹⁶⁻¹⁹ Obesity also places individuals at increased risk of developing second primary malignancies.²⁰⁻²² Studies suggest that more than half of the non-cancer-related deaths in cancer survivors are the result of cardiovascular disease, and diabetes has also been linked to an increased risk of death in cancer survivors.¹³ Given the excellent cancer-specific prognosis experienced by survivors of breast, prostate, and other early-stage cancers, the relationship between obesity and comorbid illness ultimately may have as great an impact on overall survival in the years after cancer diagnosis as the potential link between obesity and cancer recurrence.

Although randomized trials have not evaluated the impact of purposeful weight loss on cancer outcomes, many lifestyle intervention studies have been performed in cancer populations.²³⁻²⁶ These studies demonstrate that lifestyle changes can lead to successful weight loss in cancer survivors as well as at-risk populations.^{24,27,28} These trials also demonstrate that individuals who reduce caloric intake, improve dietary quality, and increase physical activity experience a number of benefits, including better quality of life, less fatigue (both during and after cancer treatment), better body image, lower incidence of comorbidity (eg, heart dis-

ease and diabetes), better cardiorespiratory fitness, and favorable changes in biomarkers linked to cancer risk and prognosis.^{23,26-29}

Despite the evidence linking obesity to poor outcomes in individuals with cancer and the benefits demonstrated in lifestyle intervention studies in cancer populations, cancer survivors are no more likely to be consuming a healthy diet, exercising, or maintaining a healthy weight compared with adults without a history of cancer.³⁰⁻³³ However, a cancer diagnosis may serve as a teachable moment, a term used by behavioral scientists to describe naturally occurring life transitions or health events that have the potential to motivate individuals to adopt risk-reducing or health-protective behaviors. Indeed, many cancer survivors report that they have attempted to make positive health behavior changes after a cancer diagnosis.³⁴ Although research shows that the impact of a cancer diagnosis can last for years after the event,³⁵ for many patients, the emotional impetus needed to spur behavior change dissipates rapidly. This means that the oncologist and the oncology care teamthe providers with whom a patient has the closest relationships in the critical period after a cancer diagnosis-may be in a unique position to help patients lose weight and make other healthy lifestyle changes. However, oncologists have traditionally not taken an active role in weight management for their patients and may feel that they lack the training or skills necessary to help a patient initiate behavior change. Historically, they may not have perceived this effort as directly related to the treatment of cancer itself.

Public awareness of the relationship between obesity and cancer risk remains limited, and definitive data from randomized trials demonstrating a beneficial impact of weight loss or other behavior change after cancer diagnosis are also lacking. Further complicating this issue is that there are few national resources to help patients with cancer lead healthier lives after a cancer diagnosis, so even motivated patients and providers may lack the tools necessary to help achieve weight loss and increased physical activity. Significant

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Downloaded from jco.acopubs.org on October 2, 2014. For personal use only. No other uses without permission. Copyright © 2014 American Society of Clinical Oncology. All rights reserved. efforts are needed to educate providers and patients regarding the links between obesity and cancer, to help investigators evaluate the impact of weight loss on cancer risk and outcomes, and to develop and disseminate effective strategies to help patients with cancer initiate and maintain healthy lifestyle changes after a cancer diagnosis.

As the leading medical professional oncology society dedicated to conquering cancer through research, education, prevention, and delivery of high-quality patient care, the American Society of Clinical Oncology (ASCO) is committed to reducing the impact of obesity on malignancy by working with all stakeholders to increase education and awareness, advocate for research, and promote policy change to confront the public health challenge this condition raises at a societal level.

OBESITY AND CANCER: DEFINING ASCO PRIORITIES

Over the last two decades, ASCO has undertaken a series of initiatives, led by the ASCO Cancer Prevention Committee (CaPC), to facilitate the inclusion of cancer risk assessment and prevention as integral parts of oncology practice. Recently, there has been increased interest in addressing obesity as a core activity of the CaPC. This sentiment is shared by the ASCO Cancer Survivorship Committee, which views the transition from patient with cancer to survivor as a teachable moment when oncologists have an opportunity to encourage behavioral and lifestyle changes that may help prevent or reduce the risk of recurrence, reduce risk of other diseases, and improve the overall quality and length of life.³⁶

In 2012, ASCO convened a working group, jointly represented by CaPC and Cancer Survivorship Committee members, to evaluate the evidence supporting a relationship between obesity and other energy balance factors and cancer and to help develop ASCO policies and initiatives in this area. The following year, the ASCO Board of Directors identified obesity as a strategic issue for the society and laid out several key priorities, as summarized in Table 2.

Table 2. ASCO Priorities to Address Obesity-Cancer Link
Priority
Education and awareness
Increase providers' and patients' core knowledge about existing evidence on role of energy balance in cancer risk and prevention
Clinical guidance, tools, and resources
Develop practical recommendations, tools, and resources based on available evidence to help oncology providers address obesity and energy balance with their patients
Research promotion
Build and foster robust research agenda to evaluate 1) whether behavior change after diagnosis improves prognosis (weight loss, better dietary quality, and increased physical activity) and 2) test best methods to help cancer survivors make changes in energy balance behaviors after diagnosis
Policy and advocacy
Improve access to evidence-based obesity treatment services for patients with cancer and survivors
Abbreviation: ASCO, American Society of Clinical Oncology.

STRATEGIES FOR IMPLEMENTING ASCO OBESITY INITIATIVE

Education and Awareness

Education and Awareness:

- Increase core knowledge about existing evidence on the role of energy balance in cancer risk and prevention
- Integrate weight management into the oncology fellowship training curriculum
- Define who to train, what to train, and who will train
- Foster educational relationships with other organizations regarding obesity as it relates to cancer

Recent reports show that a majority of Americans are unaware that obesity can increase the risk of cancer.^{37,38} This lack of knowledge is particularly apparent in some populations, such as individuals of Hispanic and African American backgrounds and/or those of lower socioeconomic status.³⁸⁻⁴⁰ Awareness now seems higher among health care providers and is specifically documented among select groups of oncologists (eg, gynecologic oncologists, of whom 95% affirm importance of discussing obesity management with their patients).⁴¹ However, a lack of training in broaching the topic of weight control and delivering appropriate guidance often hinders health care providers from addressing weight control with their patients.^{42,43}

To address this issue, ASCO is committed to educating oncology providers and providers in training, patients, and the public about the evidence showing a relationship between obesity and the risk of developing cancer and dying as a result of the disease. Training of medical professionals should start in medical school and residency programs. ASCO will seek to partner with other organizations to develop and promote educational programs for medical trainees that provide information regarding the links between obesity and disease and that help to educate medical professionals in obesity prevention and weight management strategies.

Educational programs are also needed for practicing oncology providers. Over the last several years, ASCO has incorporated an increasing level of obesity-related education at ASCO meetings and into ASCO publications:

- The ASCO Cancer Prevention Curriculum describes the important role oncologists and other oncology care providers play in helping their patients understand potential links between behavior and cancer risk. The curriculum highlights the role of counseling regarding obesity, diet, and physical exercise as an essential part of cancer prevention.
- The ASCO Annual Meeting and thematic meetings include a growing number of sessions on obesity and cancer risk and prognosis. Over the last several years, an increasing number of obesity-related sessions have been included in ASCO meetings, focusing on topics including the association between body weight and health outcomes (including

survival) in cancer populations, the treatment of cancer in obese individuals, and the impact of obesity as a contributing factor to second cancers.

• Reflecting this increasing awareness and effort, a growing number of articles have been published addressing the issue of obesity in ASCO journals over the last several years. In *Journal of Clinical Oncology*, 55 obesity-related articles have published since 2006; roughly half²³ were published in the last four years.

ASCO has an important role in promoting public and patientoriented messages about the link between cancer and obesity through its communications channels. ASCO has developed a comprehensive set of resources for patients on diet, exercise, and weight management, available on Cancer.Net. ASCO is committed to increasing patient education about obesity and cancer and will seek to partner with other groups to develop messages for the general population regarding the role of a healthy lifestyle in preventing cancer and, for patients with cancer and their families, in improving cancer care outcomes.

Clinical Guidance, Tools, and Resources

Guidance, Tools, and Resources

• Develop practical recommendations, tools, and resources based on available evidence to help oncology providers address obesity with their patients

The US Preventive Services Task Force has issued recommendations on screening and treatment of obesity, and several health organizations, including the American Academy of Family Physicians, the American Heart Association, and the American College of Preventive Medicine, have issued obesity screening recommendations to guide their provider constituencies. Guidelines are also available regarding weight management strategies for the general population through the National Heart Lung and Blood Institute and the Centers for Disease Control and Prevention. Evidence shows the most effective interventions for weight loss combine nutrition education, diet and exercise counseling, and behavioral strategies to help obese patients acquire the skills they need to successfully change their eating habits and to become more physically active.^{44,45}

To date, obesity screening and weight management recommendations have not specifically focused on cancer populations. However, the growing evidence linking obesity to cancer risk and outcomes highlights the need for increased attention to weight and energy balance in oncology populations. Given the role of ASCO in the oncology community, the society has the unique ability to provide oncologists and other providers with weight management guidelines for cancer survivors, tools for initiating the conversation about weight loss with patients, and lists of resources to help patients implement behavior change.

This year, ASCO developed a toolkit that provides information for oncology providers and patients about the relationship between obesity and cancer. In addition to providing education about the link between obesity and cancer risk and outcomes, the toolkit includes resources to help providers address weight management with their patients, including information on assessment of weight status, initiation of weight-management conversations, strategies to help patients achieve behavior change, information regarding insurance coverage of weight management services, and links to national nutrition and physical activity resources.

Research Promotion

Research Promotion

- Support the development of a robust research agenda to evaluate the benefits of weight loss in cancer survivors and best practices for helping survivors make behavioral changes after diagnosis
- Host a summit for a transdisciplinary group of investigators to develop a roadmap for moving this area of research forward
- Advocate for increased funding for research in key gap areas

Despite the evidence linking obesity to both an increased risk of developing cancer and an increased risk of recurrence and mortality in patients with cancer, studies have not tested whether losing weight will reduce the risk of developing cancer or dying as a result of cancer. Given the population size and the financial costs of a study aiming to measure the effect of weight loss in preventing cancer (ie, incidence as outcome), a clinical trial is unlikely.⁴⁶ However, research regarding the impact of weight loss and other lifestyle changes, such as increasing physical activity or improving dietary quality, on cancer outcomes in individuals with early-stage disease is more feasible.⁴⁶ Such studies are urgently needed to guide recommendations for cancer survivors and to provide the rationale for development and third-party payment of weight management programs for cancer survivors.

Many other issues related to weight management in cancer survivors are the subjects of current research efforts. For example, significant questions remain regarding the best methods to enhance individuals' capability of sustaining positive changes in diet and exercise to control weight successfully over time. Similarly, we have not defined the optimal approach to promote weight control in all segments of the population, especially among minority and underserved communities, where it may be most needed. Research is needed to identify whether weight management interventions should occur during cancer treatment-when recruitment and adherence to diet and exercise may be difficult, but perhaps treatment-related weight gain may be prevented-or, alternatively, whether these interventions are best undertaken after the completion of initial therapy. In addition, research is needed to determine whether weight management interventions need to be different for cancer survivors (or even for survivors of different cancers) compared with individuals without a cancer history because of factors such as alterations in pathways (eg, insulin) affected by cancer and cancer treatment. Finally, research must address the best methods of disseminating weight management programs widely and of delivering them to all cancer survivors who need them, particularly individuals from underserved populations.

Historically, research on lifestyle interventions in cancer survivors has been conducted primarily outside of the medical oncology community. However, given the complexity and scope of this research, increased coordination among disparate research groups is needed to identify novel ways of leveraging research efforts. Given its leadership in the science and practice of oncology, ASCO is ideally situated to play an important role in improving coordination among these research groups. As a first step in this effort, ASCO will host a summit to bring together investigators from the many disciplines, including medical oncology, nutrition, physical activity, and behavioral medicine, needed to conduct successful lifestyle intervention research in cancer survivors. The meeting will focus on forging new collaborations among these groups and will provide a forum to discuss the unmet needs in this area and potential opportunities to perform large-scale lifestyle intervention studies in cancer survivors.

Funding obesity research in cancer populations is challenging and will require new partnerships. The National Cancer Institute has several ongoing research initiatives in this area. ASCO can play an important role in advocating for increased funding for research in the key gap areas we have noted, both from public sources and from nontraditional funding sources. Additional strategies include promoting obesity research through the Conquer Cancer Foundation as well as other philanthropies and increasing awareness among oncologists of the need for patient participation in obesity research studies.

Policy and Advocacy

Policy and Advocacy

- Advocate for policy and systems change to address societal factors contributing to obesity and improve access to nutrition and exercise counseling services for patients with cancer
- Advocate on behalf of patients for healthy community and workplace environments
- Promote coverage of and access to obesity screening, diagnosis, and treatment services

Obesity is a complex condition and disease as well as a multifaceted societal problem with many deeply entrenched, contributing factors in our lifestyles, schools, families, and communities. As with other pressing US public health challenges, policy change is needed to create an environment for societal change.

In its 2012 report, "Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation," the Institute of Medicine recommended an expansion of the role of health care providers in increasing the support structure for achieving better population health and obesity prevention. ASCO supports integration of obesity in the science and practice of oncology and is committed to working with stakeholders to implement the actions identified in the Institute of Medicine report, as follows:

Advocate for healthy community and workplace environments. In addition to promoting healthy eating and active living within their own practices, oncology providers can serve as role models for their patients by helping to lead obesity prevention efforts in their communities and in the hospitals and clinics in which they work. ASCO can also support the development of healthy community environments by encouraging oncology providers to advocate for institutional (ie, school, worksite), community-, and state-level strategies to improve physical activity and nutrition resources for their patients.

Ensuring access to healthy food and beverage options at affordable prices is one essential key to combating obesity. ASCO can work with other groups to support the implementation, modification, and use of health-promoting food and beverage retailing and distribution policies, specifically by advocating for increased quality of local food environments, particularly in low-income communities.

Promote coverage of and access to obesity screening, diagnosis, and treatment services. In 2012, Medicare added intensive behavioral counseling for adult obesity as a covered service, which was a grade B recommendation of the US Preventive Services Task Force. However, this service is covered only when provided by a primary care physician or practitioner in a primary care setting. Medicare also provides coverage for medical nutritional therapy, a specifically tailored dietary plan developed and monitored by a registered dietician or nutrition professional, as well as coverage for bariatric surgery in qualified individuals. Medicare does not cover the services of an exercise therapist or trainer or physical exercise classes. And as yet, Medicare Part D does not cover drugs for the treatment of obesity.

Currently, few states ensure coverage of recommended treatments for adult and pediatric obesity through Medicaid or private insurance.⁴⁷ Only a minority of state Medicaid programs seem to cover all recommended obesity treatment modalities for adults. The Affordable Care Act (ACA) establishes 10 categories of essential health benefits, one of which is preventive and wellness services and chronic disease management. Under this provision, the ACA requires the Centers for Medicare and Medicaid Services and most private insurers to provide coverage, without copay, for obesity screening and counseling services. However, the Department of Health and Human Services (HHS) has remained silent on some of the key issues facing patient access to obesity treatment services in the new state health care exchange plans, including coverage for evidence-based obesity treatments such as intensive behavioral counseling, US Food and Drug Administration-approved obesity drugs, and bariatric surgery. It remains unclear whether the HHS defines management of obesity as part of chronic disease management or, at a minimum, a serious medical condition worthy of protection under departmental regulations regarding pre-existing conditions or discriminatory benefit designs. For this reason, the impact of the ACA on access to obesity treatment services remains unclear.

ASCO urges the Centers for Medicare and Medicaid Services to add obesity to the list of chronic diseases eligible for the proposed complex chronic care management services payments and encourages the HHS to clearly define access to obesity treatment services in the new state health care exchange plans, adding obesity to the list of diseases eligible for chronic disease management or, at a minimum, considering it a serious medical condition worthy of protection under departmental regulations regarding pre-existing conditions or discriminatory benefit designs.

Cancer survivors face unique challenges in obtaining access to weight management and obesity treatment services. Additional research is needed to determine optimal strategies for weight maintenance and loss in this special population. However, ASCO is committed to ensuring that health insurance coverage and access provisions address obesity prevention, screening, diagnosis, and treatment. Currently, coverage for obesity treatment is variable, and for patients with cancer, a diagnosis of cancer does not ensure coverage. ASCO will advocate for reimbursement and coverage for these services for appropriate individuals and for the availability of services at the community level. As evidence becomes available, ASCO will advocate for coverage and reimbursement for proven interventions in the cancer population to reduce cancer recurrence risk.

WEIGHT MANAGEMENT IN CANCER SURVIVORS: ROLE OF THE ONCOLOGIST AND CANCER CARE TEAM

Oncologists have traditionally not been involved in initiating or implementing weight loss programs for their patients. As the number of long-term cancer survivors has increased and the ramifications of obesity in cancer survivors are better understood, oncology providers are increasingly being called on to play a role in weight management for their patients. Some may feel unprepared for this task. In the future, enhanced educational programs in medical school and oncology training programs will equip oncology providers with the necessary tools to deal with the growing epidemic of obesity in patients with cancer, but today's cancer care providers need to understand how to initiate conversations with their patients regarding weight management and how to help them find the support required to achieve and maintain a healthy weight after cancer diagnosis.

It is important to recognize that long-lasting behavior change will require partnerships among oncologists, other members of the cancer care team, and professionals focused on lifestyle changes. As the care of cancer survivors shifts from oncologists to advanced-practice providers, it is important to extend education and awareness of the relationship between obesity and cancer risk and outcomes beyond physician providers and to enlist the whole treatment team in assessing weight and helping patients to initiate lifestyle change after cancer diagnosis. In addition, partnerships between oncologists, primary care providers, and other specialists, such as dietitians, physical therapists, and exercise specialists, are essential in effectively helping cancer survivors implement weight loss programs.

Knowing how and when to initiate a conversation about weight management is an important first step to helping patients lose weight and lead healthier lives after a cancer diagnosis. A practical approach to weight management in patients with cancer and survivors is summarized in Table 3.

Table 3. Approaching Weight Management in Patients With and Survivors	Cancer
Approach	
Assess patients' weight by calculating BMI	
Advise patients of their current weight status and whether the to lose weight or prevent weight gain, based on BMI cate considerations regarding disease state and treatment; enc regular exercise and healthy eating at all points from diagr term follow-up in all patients, regardless of weight status, possibility of weight gain, if appropriate, when patients init adjuvant therapy; highlight positive impact that improved of increased physical activity can have, including better qualit less fatigue, better body image, and lower incidence of co	gory and ourage losis to long- and discuss tiate liet and y of life, morbidity
Refer patients to appropriate services, such as oncology nutriti rehabilitation medicine, and exercise physiology	on,

Oncologists and other members of the oncology team can also support their patients' efforts in making healthy lifestyle choices through leading by personal example. Although a great many people struggle with diet, physical activity, and maintenance of a healthy weight to varying degrees, sharing personal experiences regarding attempts at weight loss or increased physical activity can be a powerful motivating factor for patients and family members. In addition, seeing an oncology provider taking part in community events focused on physical activity or other elements of healthy living, such as an athletic fundraiser for the cancer center or hospital, can also reinforce the importance of healthy lifestyle behaviors as part of a comprehensive cancer-control strategy.

DISCUSSION

As evidence linking obesity to cancer risk and outcomes continues to mount, concerted action is needed to convert this growing knowledge into meaningful action at both individual and societal levels so as to reduce the added cancer burden imparted by rising rates of obesity in the United States and globally. As the organization representing the nation's (and world's) cancer physicians, ASCO is firmly committed to promoting the education, research, and policy changes needed to reduce the impact of obesity on public health and, in particular, on cancer risk and outcomes. ASCO will partner with other stakeholders focusing on obesity prevention and healthy lifestyle change and will provide important insight into the unique needs of cancer survivors. New partnerships between oncology and other specialties, such as primary care, cardiology, endocrinology, nutrition, behavioral science, and exercise physiology, will be needed to develop and implement these initiatives.

Obesity is a complex societal problem, and it will take significant time and effort on the part of many organizations to reduce the incidence of overweight and obesity among ourselves, our patients, their family members, and the general population. ASCO is committed to providing leadership for the oncology community in this area and, by doing so, hopes to help reduce the burden of cancer for many years to come.

AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

Disclosures provided by the authors are available with this article at www.jco.org.

AUTHOR CONTRIBUTIONS

Conception and design: All authors

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Final approval of manuscript: All authors

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AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

American Society of Clinical Oncology Position Statement on Obesity and Cancer

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