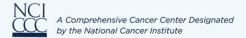


PATIENT CARE
RESEARCH
EDUCATION
COMMUNITY

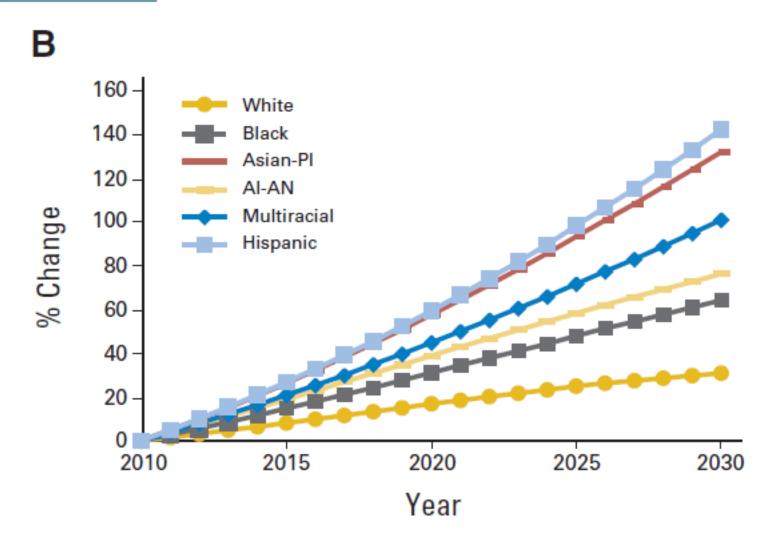
Promoting Healthy Lifestyles for Cancer Survivors

Lucile Adams-Campbell, Ph.D.
Professor of Oncology
Associate Director, Minority Health & Health Disparities Research
Georgetown Lombardi Cancer Center

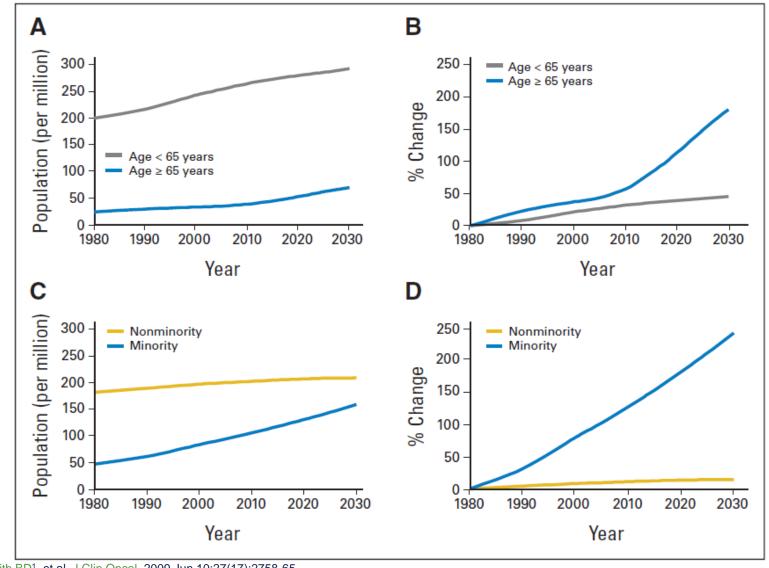


Nothing to Disclose

Cancer Incidence for the US from 2010 to 2030



Cancer Incidence for the US from 2010 to 2030



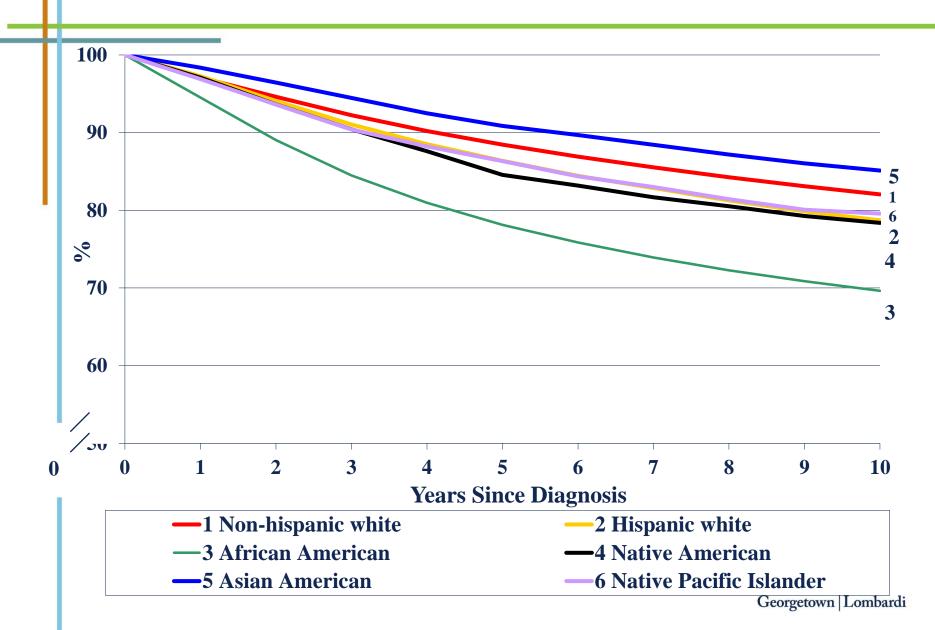
Smith BD1, et al. J Clin Oncol. 2009 Jun 10;27(17):2758-65.

Georgetown | Lombardi

Changes in Incidence

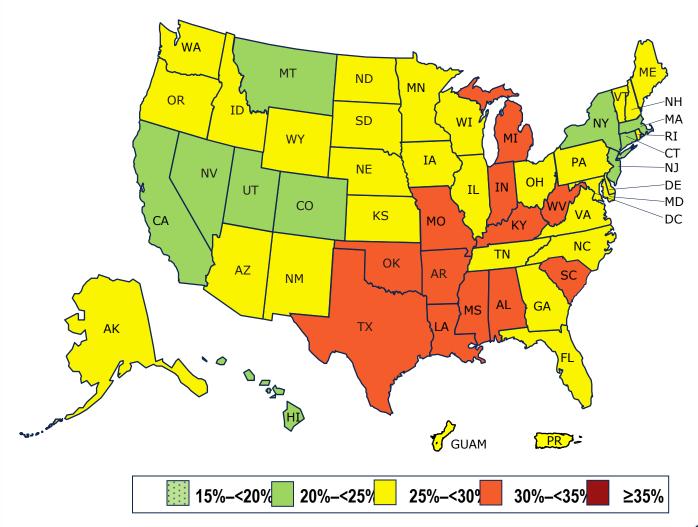
- From 2010-30, total cancer incidence will increase from 1.6 to 2.3 million
- A 99% increase is anticipated for minorities, compared with 33% for whites
- Percentage of all cancers diagnosed in minorities will increase from 21% to 28%

Female Breast Cancer Survival by Race/Ethnicity SEER 1995 - 2010



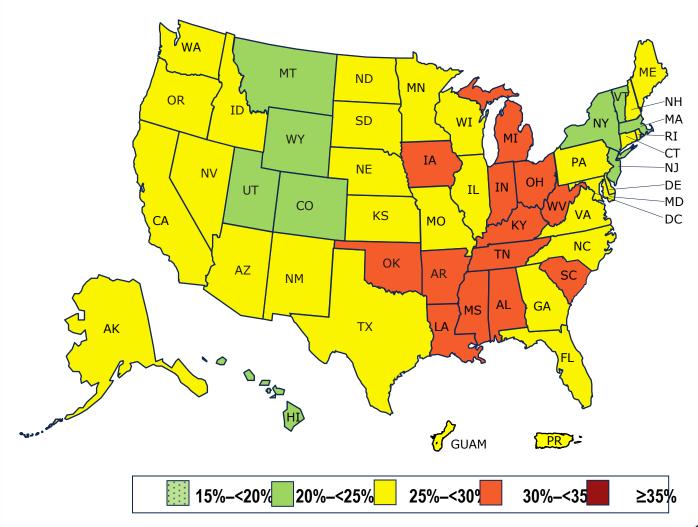
Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2011

*Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



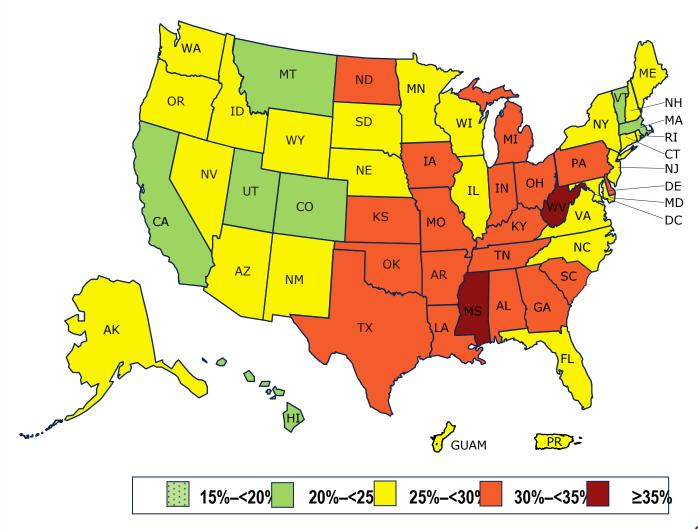
Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2012

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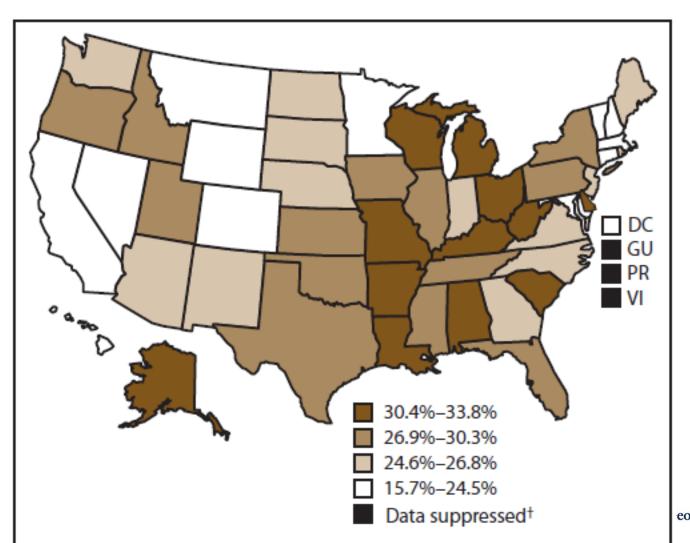


Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2013

*Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.

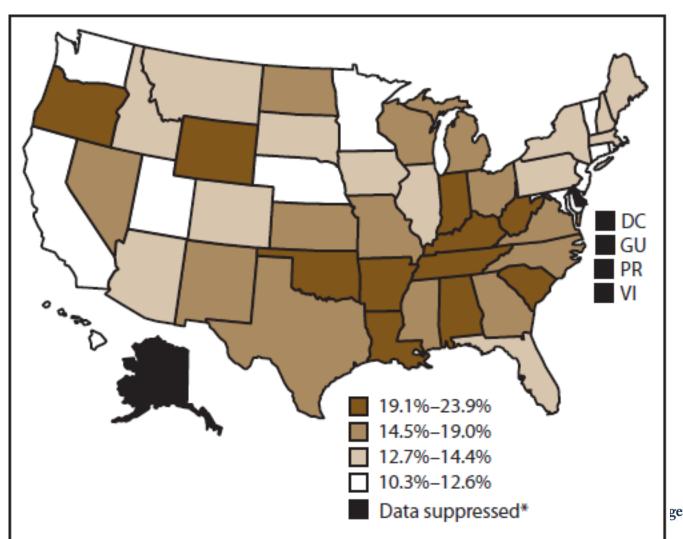


Prevalence of Obesity Among Adult Breast Cancer Survivors (BRFSS)



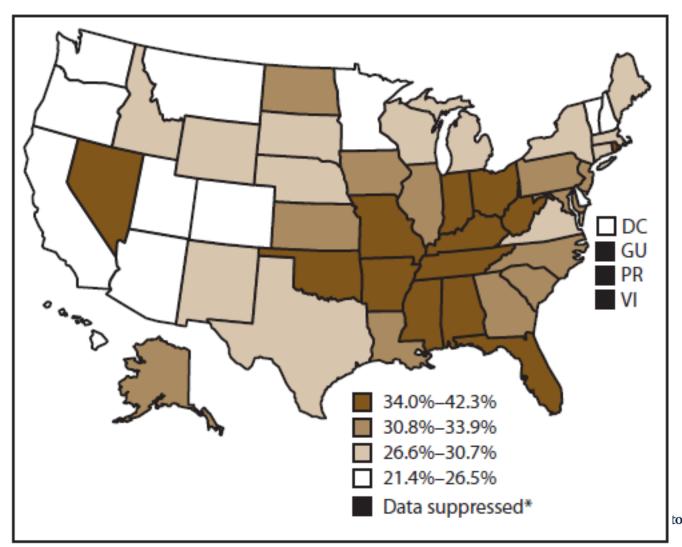
eorgetown | Lombardi

Prevalence of Cigarette Smoking Among Adult Cancer Survivors (BRFSS)



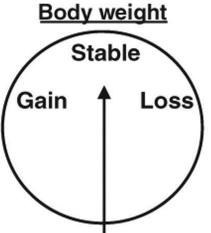
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Prevalence of No Leisure Time Physical Activity past 30 Days Among Adult Cancer Survivors (BRFSS)



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Energy Balance



Physical activity

Resting metabolic rate

Energy needed to maintain

body function at rest. Accounts for approximately 60% to 75% of expenditure. Modified by

lean body mass (age), and external/internal temperature.

Energy needed for activity.
Usually accounts for
15% to 30% of expenditure, but
most modifiable component

Thermic effect of food

Energy needed for digestion or metabolism. Accounts for <10% of expenditure. Modified somewhat by digestibility, capsaicin, caffeine.

Calorie Intake

Modified by ingestion and/or absorption (e.g., changes in microflora, surgery, pharmacologic agents)

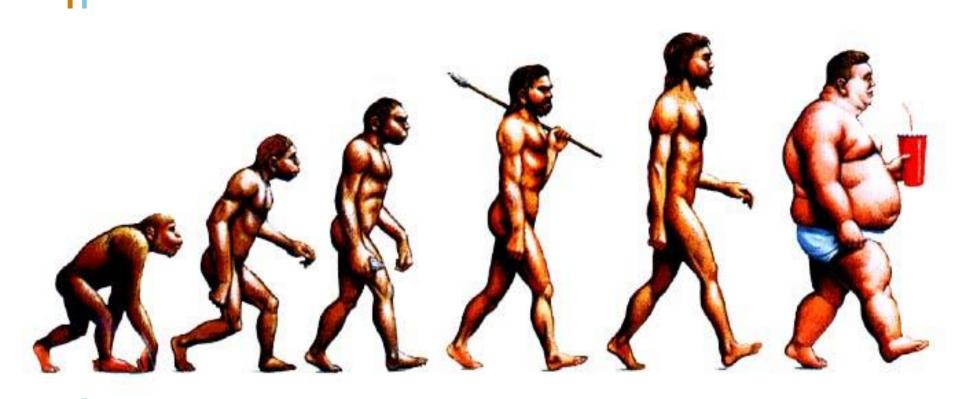
Energy intake

(energy in)

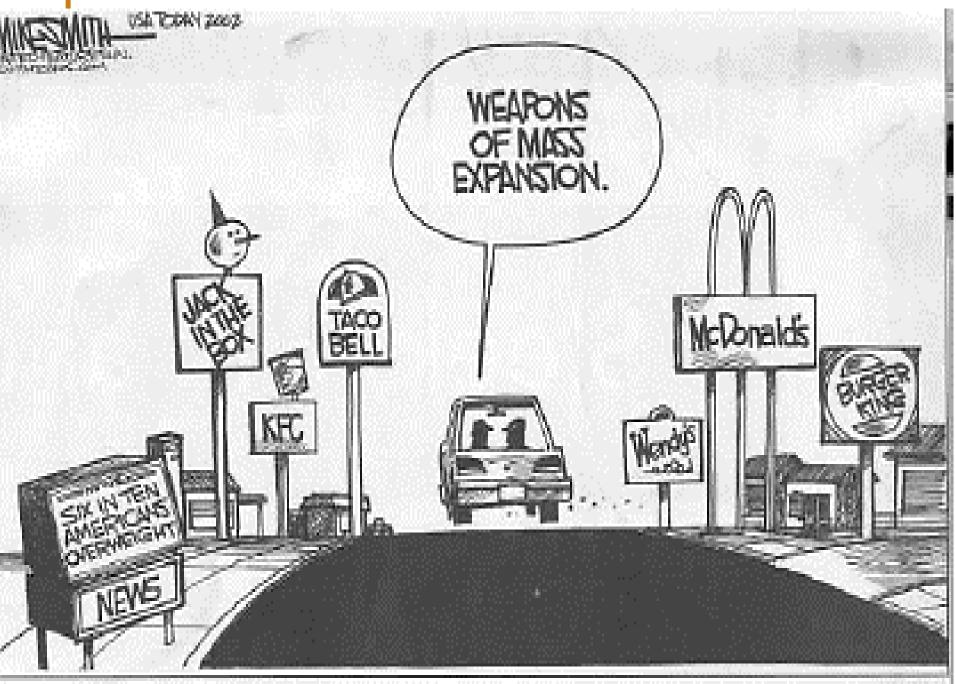


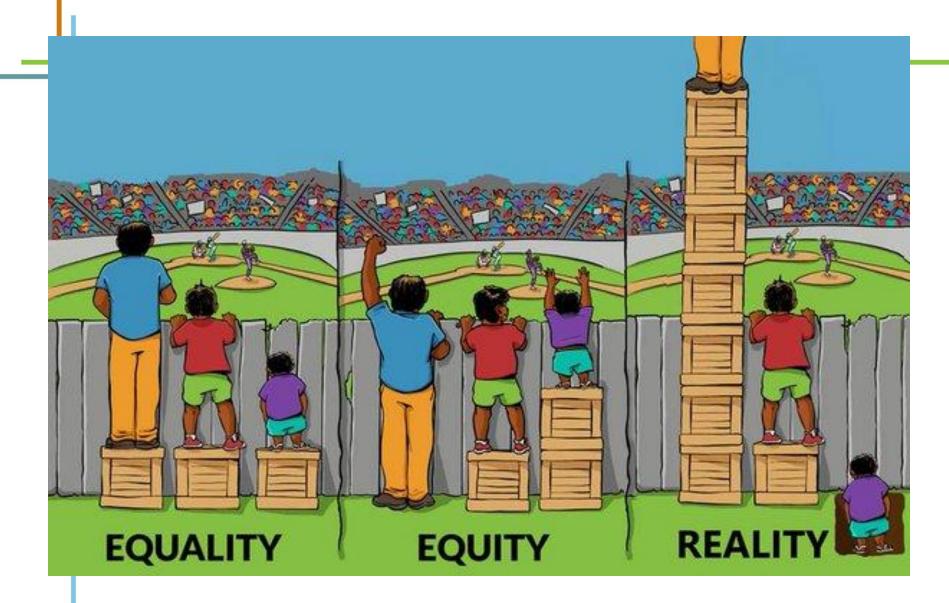
Total energy expenditure (energy out)

Evolution?

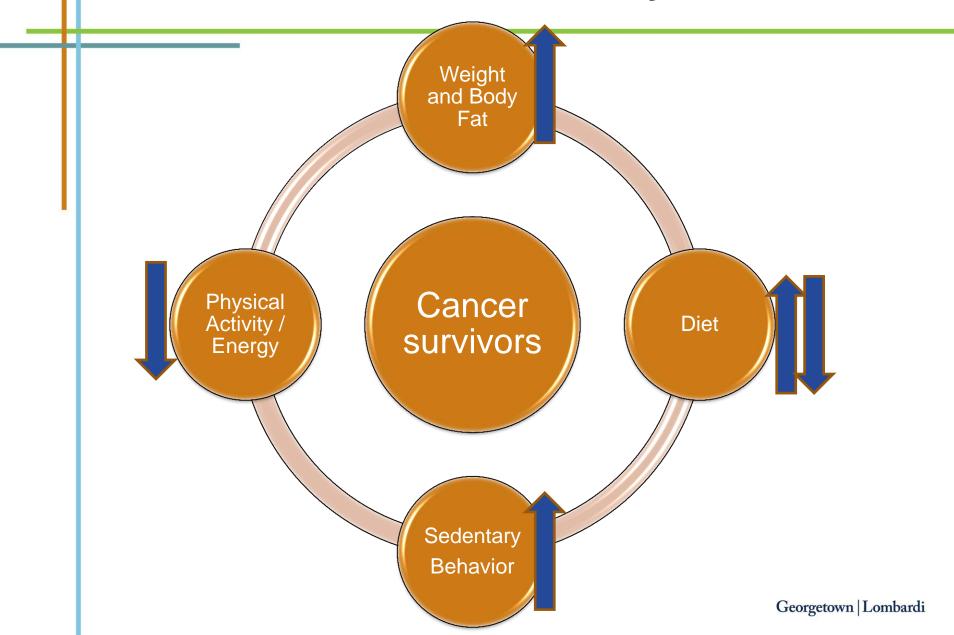


The Economist Dec. 13, 2003





Cancer Survivors & Lifestyles



BREAST CANCER SURVIVORS



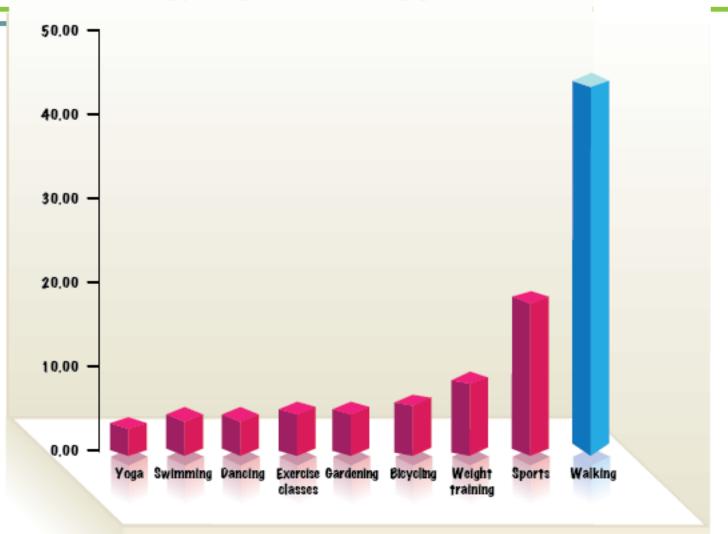
Survivors need regimens that are simple Innovations are needed to support adherence Regimens that can be done without supervision Group-based activities appear acceptable Time constraints may limit study participation Home-based exercise regimens are key

Adherence in Survivors

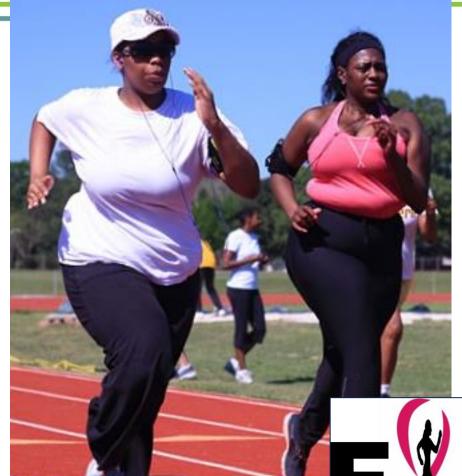
- Few survivors adherence to guidelines for Physical Activity and Nutrition
- AA survivors are more likely to be overweight and obese than Whites
- Among first behavioral interventions to improve PA and diet in AA survivors using peers as interventionists.



Figure 1. Physical Activities Breast-cancer Survivors Typically Find Most Enjoyable



Note: The sports category included minimal reporting of sailing, kayaking, tennis and snowshoeing, and higher reporting of golf and skiing (both downhill and cross-country). Exercise classes included both water-based and organized instructor-led workouts.



FXERCE

Focused Intervention on Exercise to Reduce CancEr

Anthropometric Changes in 3-Months by Study Arm

	Mean (SD)		
	Supervised	Home-based	Control
Weight in kg			
Baseline	94.9 (18)	97.1 (20)	97.4 (21)
3 months	95.2 (19)	96.2 (20)	97.6 (21)
Change	+0.10	-0.53	-0.16
ВМІ			
Baseline	35.2 (6)	36.2 (7)	35.8 (8)
3 months	35.2 (7)	35.9 (7)	35.9 (7)
Change	+0.01	-0.18	+0.01
Waist circumference in cm			
Baseline	107.9 (14)	109.8 (13)	109.8 (14)
3 months	107.5 (14)	109.4 (14)	109.6 (14)
Change	-0.12	-0.48	+0.45
Waist to Hip ratio			
Baseline	0.88 (0.09)	0.89 (0.08)	0.88 (0.06)
3 months	0.87 (0.08)	0.88 (0.07)	0.88 (0.06)
Change	-0.003	-0.005	+0.008



Risk Reduction Strategy Lifestyle Intervention

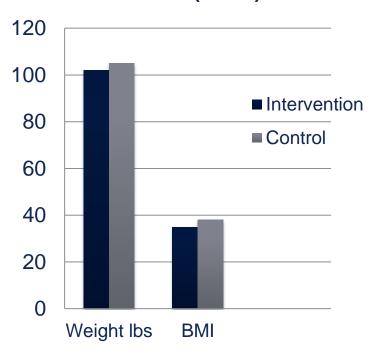
Intervention

- Interventionist team
- 150/min per week exercise
- Group & phone counseling

Intervention group

- û Physical activity

Baseline and 12 week Outcomes (Mean)



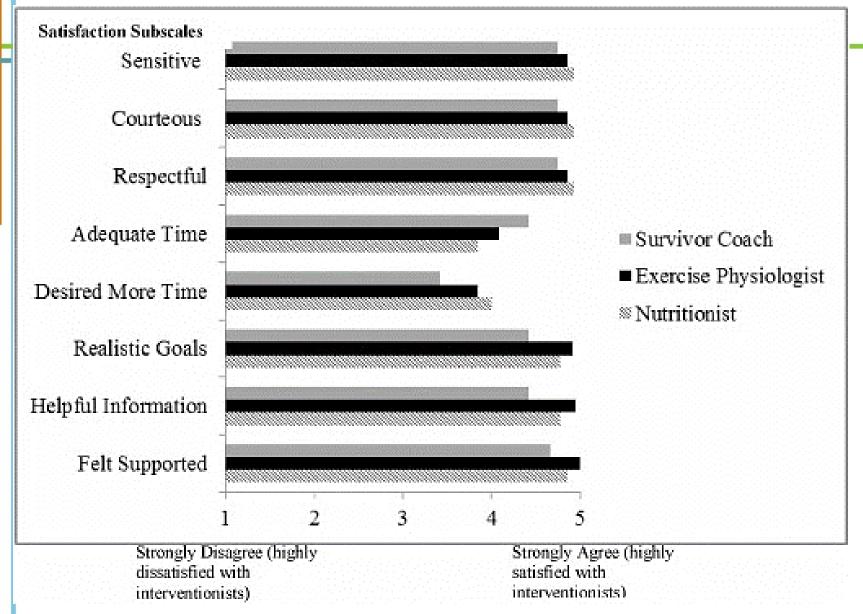


Lessons Learned Participant Recommendation

Intervention		
Bi-weekly Groups	 Enhance team-building in groups 	
Co-led: exercise physiologist &	 Encourage group interactions 	
nutritionist.	 Group connections were valued 	
	 Women valued opportunities to "tell 	
Group-based physical activity (e.g.,	their story"	
walking)		
Education: physical activity & Diet	Improvements suggested	
Didactic, demonstration	 Increase study length (24 weeks 	
·	and booster)	
	 More interaction between groups 	
	 More opportunities to share their 	
	The opportunities to chare their	

"stories"

Mean satisfaction ratings scores of study interventionists



Barriers to Physical Activity among African American Breast Cancer Survivors

- Low level of education
- Weight gain after diagnosis and therapy
- Lack of discipline, energy, time, and interest (related to weight gain after diagnosis)
- Fatigue and poor functional status as a result of therapy
- Neighborhood characteristics: safety, high proportion of renters versus homeowners, lack of easy access to parks and exercise facilities

Meadows R, Bonner T, Dobhal M, Borra S, Killion JA, Paxton R. Pathways between physical activity and quality of life in African-American breast cancer survivors. Support



Contents lists available at ScienceDirect

Contemporary Clinical Trials





An exercise trial to reduce cancer related fatigue in African American breast cancer patients undergoing radiation therapy: Design, rationale, and methods*



Chiranjeev Dash ^{a,*}, Pamela D. Randolph-Jackson ^b, Claudine Isaacs ^a, Mary Mills ^a, Kepher Makambi ^c, Vivian V. Watkins ^a, Lucile L. Adams-Campbell ^a

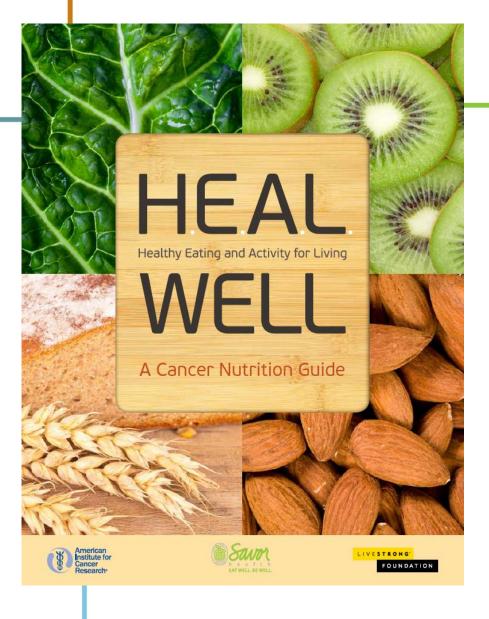
- ^a Georgetown Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington, D.C., United States
- ^b Department of Radiation Oncology, Medstar Washington Hospital Center, Washington, D.C., United States
- ^c Georgetown Lombardi Comprehensive Cancer Center, Biostatistics & Bioinformatics Shared Resource, Washington, D.C., United States



American Cancer Society Guidelines On Nutrition And Physical Activity For Cancer Survivors

- Achieve and maintain a healthy weight.
 - If overweight or obese, limit consumption of high-calorie foods and beverages and increase physical activity to promote weight loss.
- Engage in regular physical activity.
 - Avoid inactivity and return to normal daily activities as soon as possible following diagnosis.
 - Aim to exercise at least 150 minutes per week.
 - Include strength training exercises at least 2 days per week.
- Achieve a dietary pattern that is high in vegetables, fruits, and whole grains.
 - Follow the American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention.

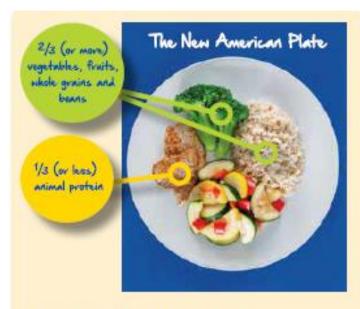
SOURCE: Nutrition and Physical Activity Guidelines for Cancer Survivors (2012)



Sections on:

- Diet and development of cancer
- Diet and nutrition during cancer treatment
- Dietary supplements
- Physical activity for people with cancer
- Cancer survivorship and beyond

Nutrition during cancer treatment – emphasizing the "The New American Plate"



The New American Plate

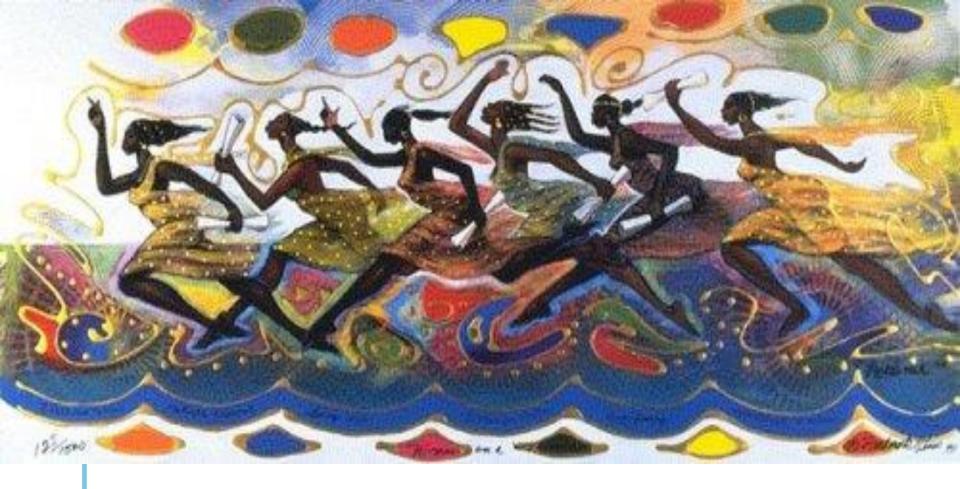
AICR's "The New American Plate" is a valuable resource that shows how to eat in a way to lower cancer risk and to manage body weight. More information is available at http://www.aicr.org/new-american-plate/ or by calling 800-843-8114.

American Institute for Cancer Research (AICR) guidelines for cancer survivors

- Be as lean as possible without becoming underweight.
- Be physically active for at least 30 minutes every day.
- Avoid sugary drinks, and limit consumption of energy-dense foods (particularly processed foods high in added sugar, low in fiber or high in fat).
- Eat more of a variety of vegetables, fruits, whole grains and legumes such as beans.
- Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats.
- If consumed at all, limit alcoholic drinks to two for men and one for women a day.
- Limit consumption of salty foods and foods processed with salt (sodium).
- Do not rely on supplements to protect against cancer
- And always remember do not smoke or chew tobacco.

Don't Drink the Kool Aid





"We have to sound the alarm"

Town hall participant