



Lifestyle the BEST Medicine

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Objectives

- Review chronic disease statistics
- Define Lifestyle Medicine
- Understand the relationship between Lifestyle Medicine and Chronic Disease
- Recognize lifestyle medicine's role in the Quintuple Aim
- Discuss lifestyle changes that can prevent, treat, and in some cases reverse chronic diseases



Cost of Chronic Disease

What percentage of the \$5.3 Trillion healthcare dollars are spent on chronic & mental health conditions?

90%



Chronic Disease in America

Overall, **76.4%** of US Adults have a chronic disease

- Young adults (18-34) = 59.5%
- Midlife (35-64) = 78.4%
- Older adults (65+) = 93%

Multiple Chronic Conditions (≥ 2) = **51.4%**

- Young adults = 27.1%
- Midlife = 52.7%
- Older adults = 78.8%



What % of Chronic Disease can be Prevented?

80%

It is estimated that up to 80% of chronic disease can be prevented through lifestyle



The Best Medicine

What if there was a type of medicine so powerful that it could prevent, treat, and in some cases reverse many chronic conditions?



Same
prescriptions
for many
conditions



Positive
side
effects

Lifestyle Medicine





Nutrition

The Power of Plants!



A whole food, predominantly plant-based diet is important in preventing, treating the root-cause, and, in some cases reversing chronic conditions.

Such a diet is nutrient dense, rich in fiber and antioxidants, with a variety of minimally processed vegetables, fruits, whole grains, legumes, nuts, and seeds.



Physical Activity

Regular and consistent physical activity is important to offset sedentary behavior, manage chronic conditions and support overall health.





Restorative Sleep

Restorative sleep is important for overall health and chronic disease treatment.



Inadequate sleep can lead to:

- Sluggishness
- Low attention span
- Increased risk of impaired memory
- Increased risk of dementia
- Increased risk of heart disease
- Depressed mood
- Decreased daytime caloric burn

7-9 hours nightly is associated with optimal health; under six hours or more than nine hours is associated with increased mortality.



Stress Management

Stress, when appropriate, may improve health and productivity.

Chronic stress can impact health issues such as:

- Cardiovascular disease
- Depression
- Insulin Resistance



Older Adult Yoga pexels-vlada-karpovich-8939840

Helping patients recognize negative stress responses, identify coping mechanisms and stress reduction techniques leads to improved well-being and treatment of chronic conditions.

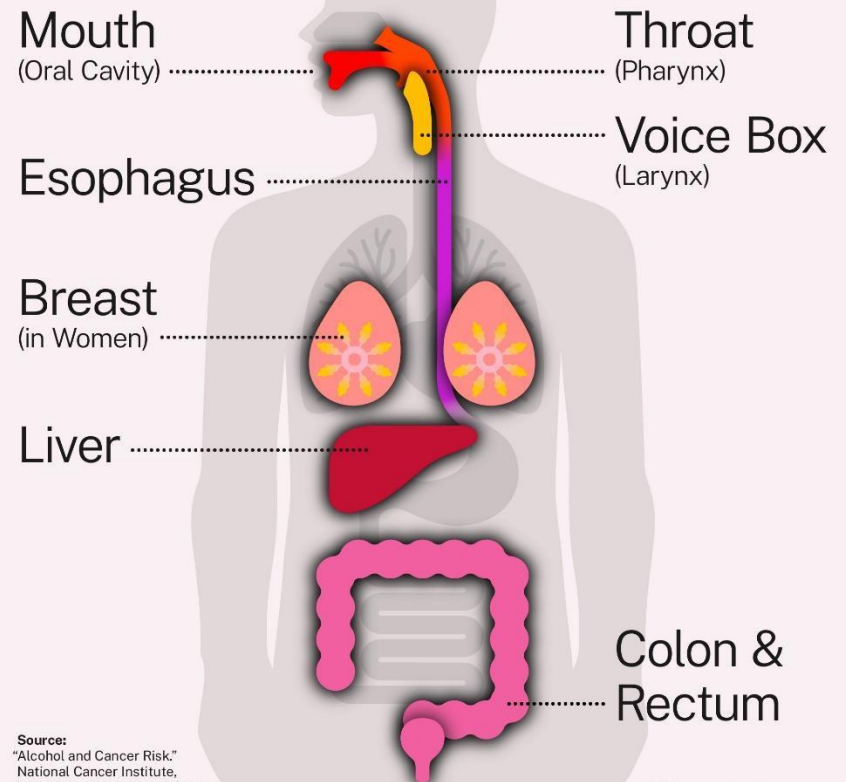
Avoidance of Risky Substances

Tobacco and drinking increases the risks of several chronic conditions.

Risky substances can be associated with behavioral, cognitive, and physiological issues.



Consuming alcohol increases the risk of developing at least 7 types of cancer



Source:
"Alcohol and Cancer Risk,"
National Cancer Institute,
<https://www.cancer.gov/about-cancer/causes-prevention/risk/alcohol/alcohol-fact-sheet>

Office of the
U.S. Surgeon General

Positive Social Connection

Positive social connections may be the most important predictor of happiness and longevity. They can positively impact blood pressure, heart rate and may even reduce the risk of depression and dementia.





Some of the Evidence



2009 EPIC Study

25,000 men & women - Prevention

- 78% ↓ chronic disease
- 93% ↓ Type 2 diabetes
- 81% ↓ myocardial infarction
- 50% ↓ stroke
- 36% ↓ cancer

1. Never Smoking
2. BMI < 30
3. PA > 3.5 hr/wk
4. Healthy Diet

Lifestyle Factors on Life Expectancy (2018)

Over 100,000 People – Risk of dying

Data from Nurses' Health Study &
Health Professionals Follow-up Study

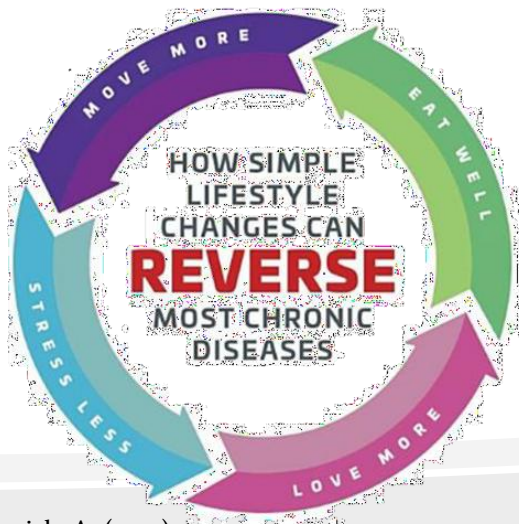
- 74% ↓ all causes
- 82% ↓ cardiovascular disease
- 65% ↓ cancer

1. Never Smoked
2. Not Overweight
3. PA 30 min/day
- ▶  Drinking/Excess
5. Healthy Diet



Ornish Program

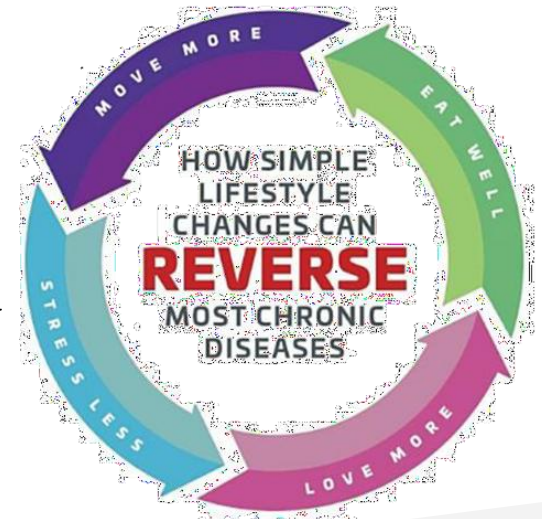
- **Eat Well** - Whole-Foods Plant-Based Diet
- **Move More** - Moderate Exercise
- **Stress Less** - Stress Management
- **Love More** - Love, Social Support, & Intimacy



Ounce of prevention
Pound of cure

Reversing Chronic Disease with Dr. Ornish's Lifestyle Medicine Program

- Coronary Heart Disease
- Type 2 Diabetes
- Early-Stage Non-Aggressive Prostate Cancer (Reverse, slow or stop progression)
- High Blood Pressure
- Elevated Cholesterol Levels
- Obesity
- Some Types of Early-Stage Dementia
- Some Autoimmune Conditions
- Emotional Depression & Anxiety





Ornish Program Research

- 1983 – severe heart disease reversal (↑ cardiac function after 30 days)
- 1990 – severe heart disease reversed (reversals in coronary artery blockages after one year)
- 1998 – even more reversal of coronary artery blockages after 5yrs than after 1yr (PET scans – 99% patients stopped or reversed heart disease)
- 2005 – progression of early-staged prostate cancer may be stopped or reversed after one year.

- Ornish, D. et al. (1983).
- Ornish, D. et al. (1990).
- Ornish, D. et al. (2005).
- Ornish D. & Ornish, A. (2019).



Ornish Program Research (Cont)

- 2008 – After 3 months on program **over 500 genes were changed** (turn on health enhancing genes, turn off genes that promote heart disease, prostate, breast & colon cancers)

2010 – Medicare began to cover Dr. Dean Ornish's Program for Reversing Heart Disease

- 2024 – Progression of mild cognitive impairment or early dementia due to Alzheimer's disease.
Significantly improved cognition & function (20 wks), at 40 wks improvements maintained or improved.



Heart Disease Reversal

Dr. Caldwell Esselstyn

- Patients with established coronary disease
- Initial study (1985)
 - 23 patients
 - Intervention
 - Plant-based diet
 - Results
 - 5 dropped within first 2 years (10 coronary events)
 - 18 (Beginning avg chol = 249, during study = 132 GOAL= ↓ 150)
 - Prior - 49 coronary events
 - Following 11 years, 1 coronary event
 - 2003 - all alive in 70's & 80's,
 - 2011 - 5 passed (none from coronary heart disease)



The Power of
Plants!



Heart Disease Reversal, Dr. Esselstyn (Cont.)

Purpose: Degree of adherence & outcomes

- 198 patients – established heart disease
- Intervention
 - 5-hour counseling seminar
 - Diet: Plant-based diet + Multivitamin, B12 and flax meal.
 - Exercise encouraged but not required
- Results (Mean 3.7 years)
 - Adherent = 89% (n = 177)
 - 1 stroke
 - Non-adherent = n = 21
 - 16 adverse events



**What can we do
about it?**

Lifestyle Prescription as the First Treatment Option





Lifestyle Change as First Treatment Option

Clinical guidelines state that diet and physical activity changes are a critical first line for preventing and treating many chronic conditions (e.g., diabetes, obesity, hypertension), often before any medication is prescribed.

Leading national and international organizations reinforce this.





Review and Synthesis of 78 Clinical Practice Guidelines for Commonalities

Included studies

- 78 clinical practice guidelines published between 2010 and 2021 that address nutrition for a variety of health conditions, as well as general health promotion, were included in this study.
 - 83% major medical professional societies.
 - 12% governments.
 - 5% large health stakeholder associations

Recommendations for:

- Overall dietary patterns
- Major food groups
- Food components frequently addressed in research and clinical settings, such as salt, saturated fat, protein, sugar, etc.

Results

Top Encouraged Food Groups



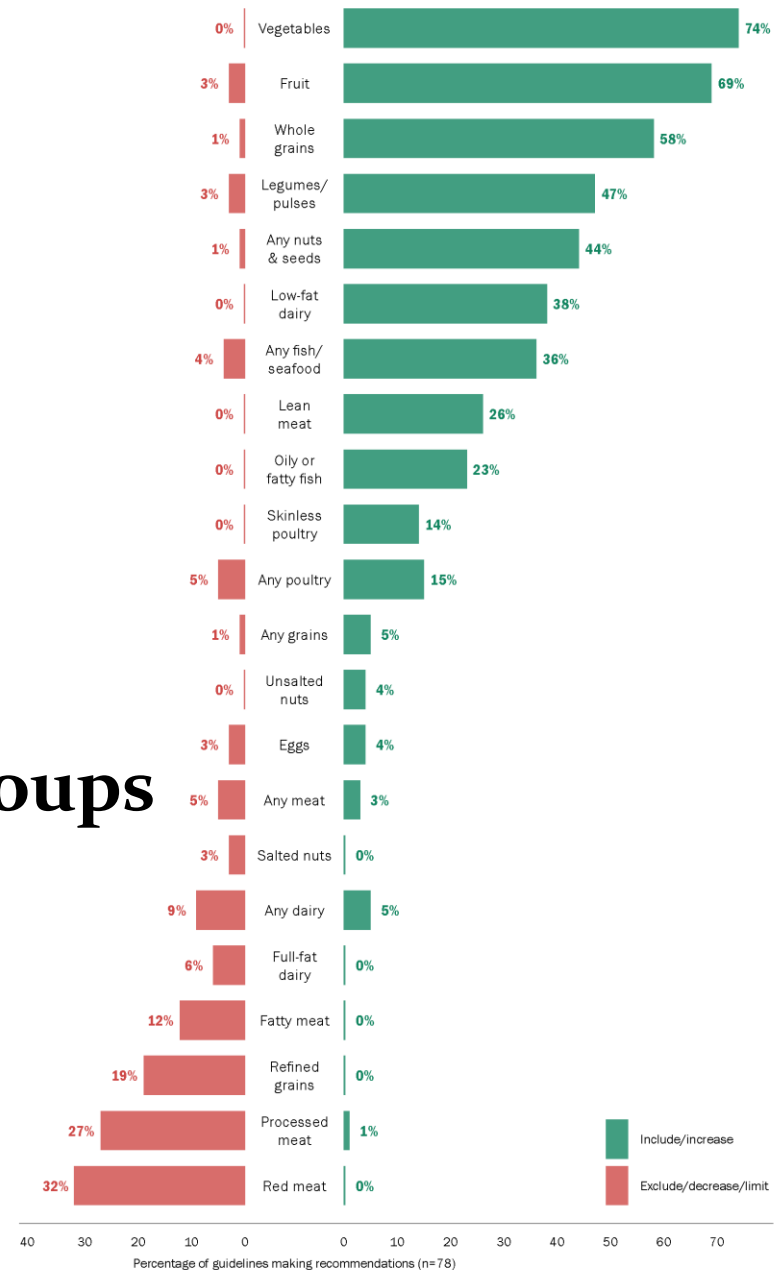
- Vegetables (74%)
- Fruit (69%)
- Whole grains (58%)
- Legumes/pulses (47%)
- Any nuts and seeds (44%)
- Low-fat dairy (38%)

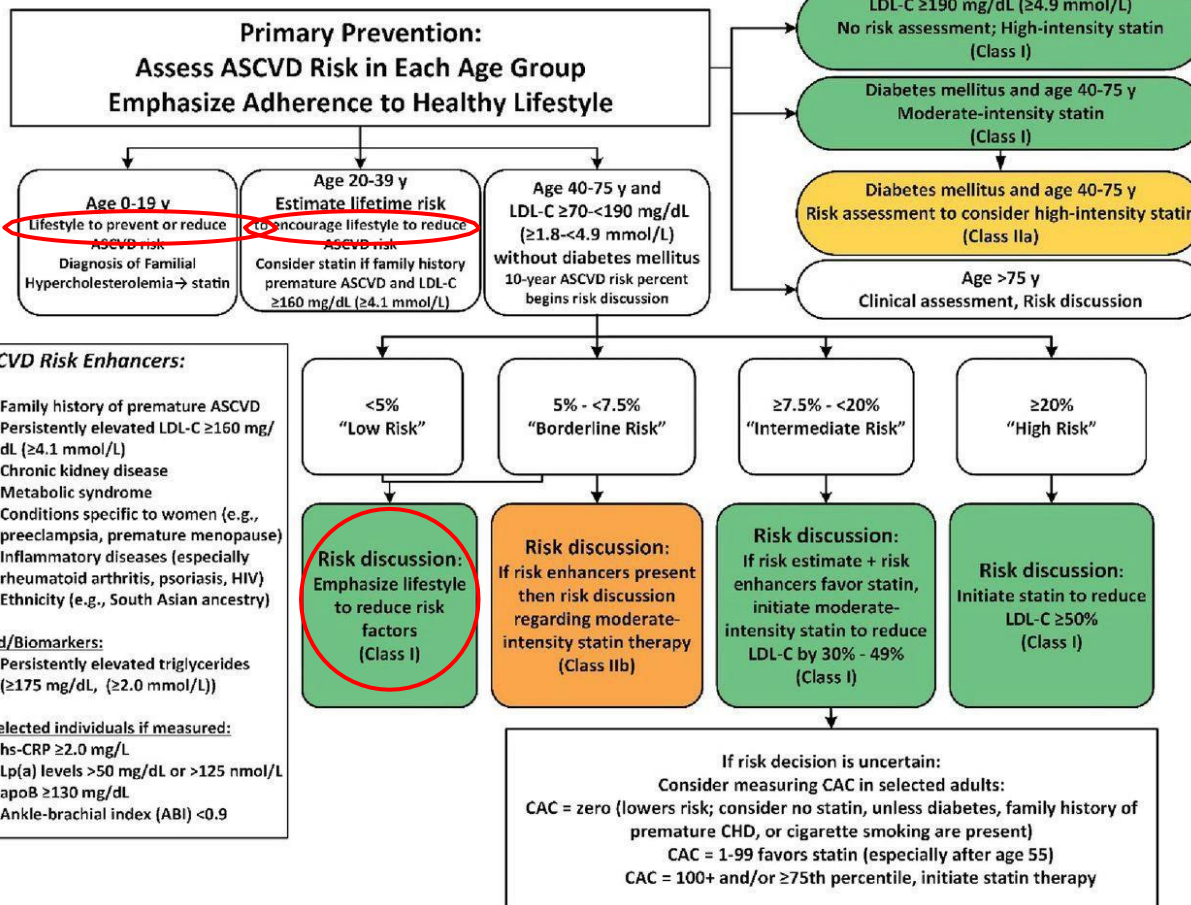
Most Discouraged Food Groups



- Fatty Meat (12%)
- Refined grains (19%)
- Processed meat (27%)
- Red meat (32%)

Cara, K.C., et al. (2023)





2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease

A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. Journal of the American College of Cardiology, Volume 74, Issue 10, September 2019

Hypertension

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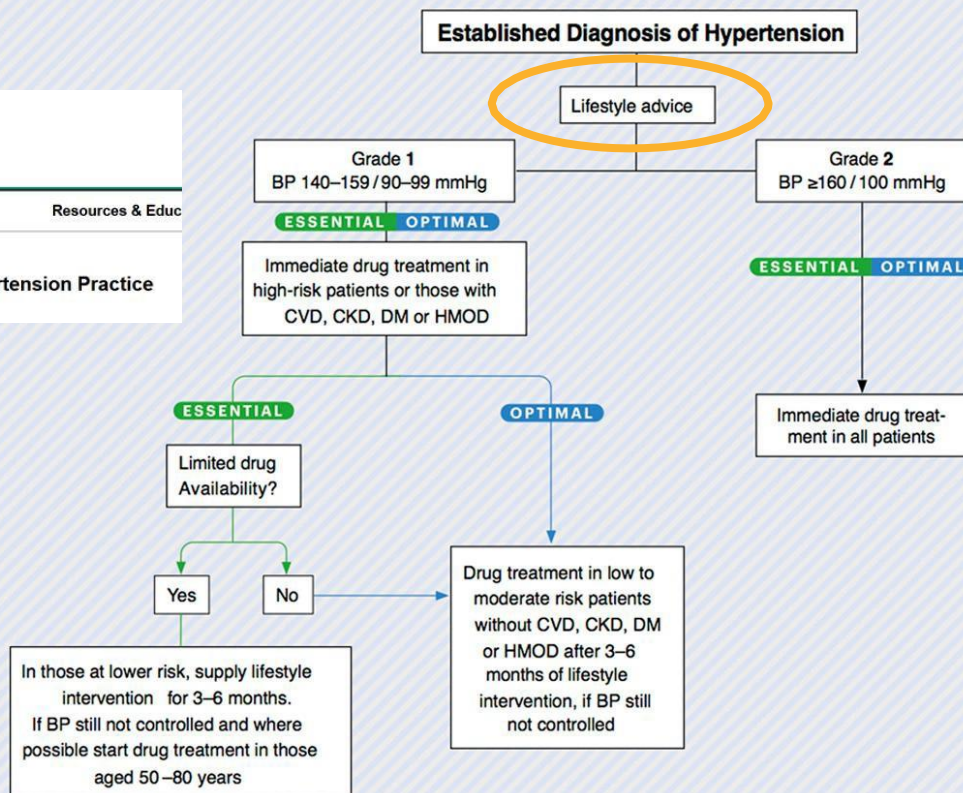
Home > Hypertension > Vol. 75, No. 6 > 2020 International Society of Hypertension Global Hypertension Practice Guidelines

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 ARTICLE COMMENTARY

2020 International Society of Hypertension Global Hypertension Practice Guidelines



Thomas Unger. Hypertension. 2020 International Society of Hypertension Global Hypertension Practice Guidelines, Volume: 75, Issue: 6, Pages: 1334-1357, DOI: (10.1161/HYPERTENSIONAHA.120.15026)



LIFESTYLE THERAPY RISK STRATIFICATION FOR DIABETES COMPLICATIONS

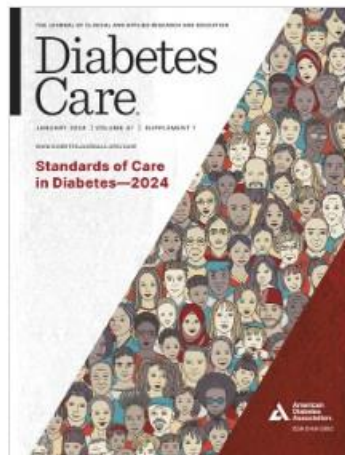
INTENSITY STRATIFIED BY BURDEN OF OBESITY AND RELATED COMPLICATIONS

Nutrition	• Maintain optimal weight • Calorie restriction (manage increased weight) • Plant-based diet; high polyunsaturated and monounsaturated fatty acids	+	• Avoid <i>trans</i> fatty acids; limit saturated fatty acids • Technological aids	+	• Structured counseling • Meal replacement
Physical Activity	• 150 min/week moderate exertion (e.g., walking, stair climbing) • Strength training • Increase as tolerated	+	• Structured program • Wearable technologies	+	• Medical evaluation/clearance • Medical supervision
Sleep	• About 6-8 hours per night • Basic sleep hygiene	+	• Screen sleep disturbances • Home sleep study	+	• Referral to sleep study
Behavioral Support	• Community engagement • Alcohol moderation	+	• Discuss mood with HCP	+	• Formal behavioral therapy
Smoking Cessation	• No tobacco products	+	• Nicotine replacement therapy and medications as tolerated	+	• Referral to structured program

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STANDARDS OF CARE | DECEMBER 11 2023

3. Prevention or Delay of Diabetes and Associated Comorbidities: *Standards of Care in Diabetes—2024*

American Diabetes Association Professional Practice Committee



Check for updates

Diabetes Care 2024;47(Supplement_1):S43–S51

<https://doi.org/10.2337/dc24-S003>

PubMed:38078581



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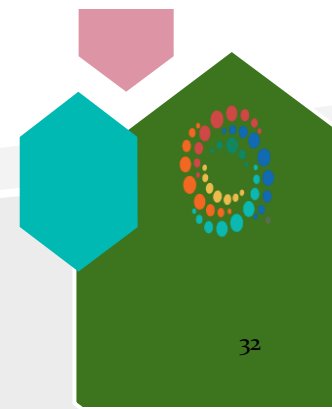
The American Diabetes Association (ADA) “Standards of Care in Diabetes” includes the ADA’s current clinical practice recommendations and is intended to provide the components of diabetes care, general treatment goals and guidelines, and tools to evaluate quality of care. Members of the ADA Professional Practice Committee, an interprofessional expert committee, are responsible for updating the Standards of Care



Dietary Interventions to Treat Type 2 Diabetes in Adults with a Goal of Remission:

An Expert Consensus Statement from the American College of Lifestyle Medicine

Conclusion: Expert consensus was achieved for 69 statements pertaining to diet and remission of T2D, dietary specifics and types of diets, adjuvant and alternative interventions, support, monitoring, adherence to therapy, weight loss, and payment and policy. Clinicians can use these statements to improve quality of care, inform policy and protocols, and identify areas of uncertainty.



2013 ACC/AHA/TOS and the 2016 AACE/ACE guidelines for the management of overweight and obesity in adults

TABLE 2. Diagnosis and Medical Management of Adult Patients With Obesity: AACE/ACE Framework³

Diagnosis		Staging and treatment	
BMI, ^a kg/m ²	Clinical component ^b	Disease stage	Suggested therapy (based on clinical judgment)
Anthropometric component			
< 25 < 23 in patients of certain ethnicities; waist circumference below regional/ethnic cutoffs	Evaluate for presence or absence of adiposity-related complications and severity of complications • Metabolic syndrome • Prediabetes • Type 2 diabetes • Dyslipidemia • Hypertension • Cardiovascular disease • Nonalcoholic fatty liver disease • Polycystic ovary syndrome • Infertility (women) • Hypogonadism (men) • Obstructive sleep apnea • Asthma/reactive airway disease • Osteoarthritis • Urinary stress incontinence • Gastroesophageal reflux disease • Mental depression	Normal weight (no obesity)	• Healthy lifestyle: Healthy meal plan/physical activity
25–29.9 23–24.9 in patients of certain ethnicities		Overweight stage 0 (no complications)	• Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions
≥ 30 ≥ 25 in patients of certain ethnicities		Obesity stage 0 (no complications)	• Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Anti-obesity medications^c: Consider if lifestyle therapy fails to prevent progressive weight gain (BMI ≥ 27)
≥ 25 ≥ 23 in patients of certain ethnicities		Obesity stage 1 ^d (1 or more mild to moderate complications)	• Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Anti-obesity medications^c: Consider if lifestyle therapy fails to achieve therapeutic target or initiate concurrently with lifestyle therapy (BMI ≥ 27)
≥ 25 ≥ 23 in patients of certain ethnicities		Obesity stage 2 ^d (at least 1 severe complication)	• Lifestyle therapy: Reduced-calorie healthy meal plan/physical activity/behavioral interventions • Add anti-obesity medication^c: Initiate concurrently with lifestyle therapy (BMI ≥ 27) Consider bariatric surgery: (BMI ≥ 35)

AACE, American Association of Clinical Endocrinology; ACE, American College of Endocrinology; BMI, body mass index.

^aBMI values are not dependent upon age or sex. However, values may not correspond to the same amount of adiposity in different populations (including certain ethnic groups).

^bStaging of a complication as mild, moderate, or severe is based on criteria specific to each particular complication.

^cThe 2016 guideline uses the term "weight-loss medications." "Anti-obesity medications" is now preferred.

^dNote that a diagnosis of obesity stage 1 or stage 2 may be given to an individual classified as overweight by BMI but who has weight-related complications.

Reprinted from Endocrine Practice, Vol22/Suppl3, Garvey WT, Mechanick JL, Brett EM, et al; Reviewers of the AACE/ACE Obesity Clinical Practice Guidelines, American Association of Clinical Endocrinologists and American College of Endocrinology comprehensive clinical practice guidelines for medical care of patients with obesity, Pages No. 1–203, Copyright (2016), with permission from Elsevier.

AICR RECOMMENDATIONS FOR CANCER PREVENTION

A Blueprint to Beat Cancer

To prevent cancer, people should aim to follow as many of the 10 Cancer Prevention Recommendations as possible. However, any change you make that works toward meeting the goals set out in the Recommendations will go some way to reducing your cancer risk.

EAT A DIET RICH IN WHOLE GRAINS, VEGETABLES, FRUITS AND BEANS

Make whole grains, vegetables, fruits and pulses (legumes) such as beans and lentils a major part of your usual daily diet

LIMIT CONSUMPTION OF RED AND PROCESSED MEAT

Eat no more than moderate amounts of red meat, such as beef, pork and lamb. Eat little, if any, processed meat

LIMIT CONSUMPTION OF "FAST FOODS" AND OTHER PROCESSED FOODS HIGH IN FAT, STARCHES OR SUGARS

Limiting these foods helps control calorie intake and maintain a healthy weight

FOR MOTHERS: BREASTFEED YOUR BABY, IF YOU CAN

Breastfeeding is good for both mother and baby

AFTER A CANCER DIAGNOSIS: FOLLOW OUR RECOMMENDATIONS, IF YOU CAN

Check with your health professional about what is right for you

BE A HEALTHY WEIGHT

Keep your weight within the healthy range and avoid weight gain in adult life

BE PHYSICALLY ACTIVE

Be physically active as part of everyday life – walk more and sit less

LIMIT CONSUMPTION OF SUGAR-SWEETENED DRINKS

Drink mostly water and unsweetened drinks

LIMIT ALCOHOL CONSUMPTION

For cancer prevention, it's best not to drink alcohol

DO NOT USE SUPPLEMENTS FOR CANCER PREVENTION

Aim to meet nutritional needs through diet alone



American
Institute for
Cancer
Research®
www.aicr.org

Not smoking and avoiding other exposure to tobacco and excess sun are also important in reducing cancer risk.

Following these Recommendations is likely to reduce intakes of salt, saturated and trans fats, which together will help prevent other non-communicable diseases.

WHO GUIDELINES FOR RISK REDUCTION OF COGNITIVE DECLINE AND DEMENTIA



Physical activity interventions

Physical activity should be recommended to adults with normal cognition to reduce the risk of cognitive decline.

Quality of evidence: *moderate*

Strength of the recommendation: *strong*

Physical activity may be recommended to adults with mild cognitive impairment to reduce the risk of cognitive decline.

Quality of evidence: *low*

Strength of the recommendation: *conditional*

Tobacco cessation interventions

Interventions for tobacco cessation should be offered to adults who use tobacco since they may reduce the risk of cognitive decline and dementia in addition to other health benefits.

Quality of evidence: *low*

Strength of the recommendation: *strong*

Nutritional interventions

The Mediterranean-like diet may be recommended to adults with normal cognition and mild cognitive impairment to reduce the risk of cognitive decline and/or dementia.

Quality of evidence: *moderate*

Strength of the recommendation: *conditional*

A healthy, balanced diet should be recommended to all adults based on WHO recommendations on healthy diet.

Quality of evidence: *low to high (for different dietary components)*

Strength of the recommendation: *strong*

Vitamins B and E, polyunsaturated fatty acids and multi-complex supplementation should not be recommended to reduce the risk of cognitive decline and/or dementia.

Quality of evidence: *moderate*

Strength of the recommendation: *strong*

Interventions for alcohol use disorders

Interventions aimed at reducing or ceasing hazardous and harmful drinking should be offered to adults with normal cognition and mild cognitive impairment to reduce the risk of cognitive decline and/or dementia in addition to other health benefits.

Quality of evidence: *moderate (for observational evidence)*

Strength of the recommendation: *conditional*

Cognitive interventions

Cognitive training may be offered to older adults with normal cognition and with mild cognitive impairment to reduce the risk of cognitive decline and/or dementia.

Quality of evidence: *very low to low*

Strength of the recommendation: *conditional*

Social activity

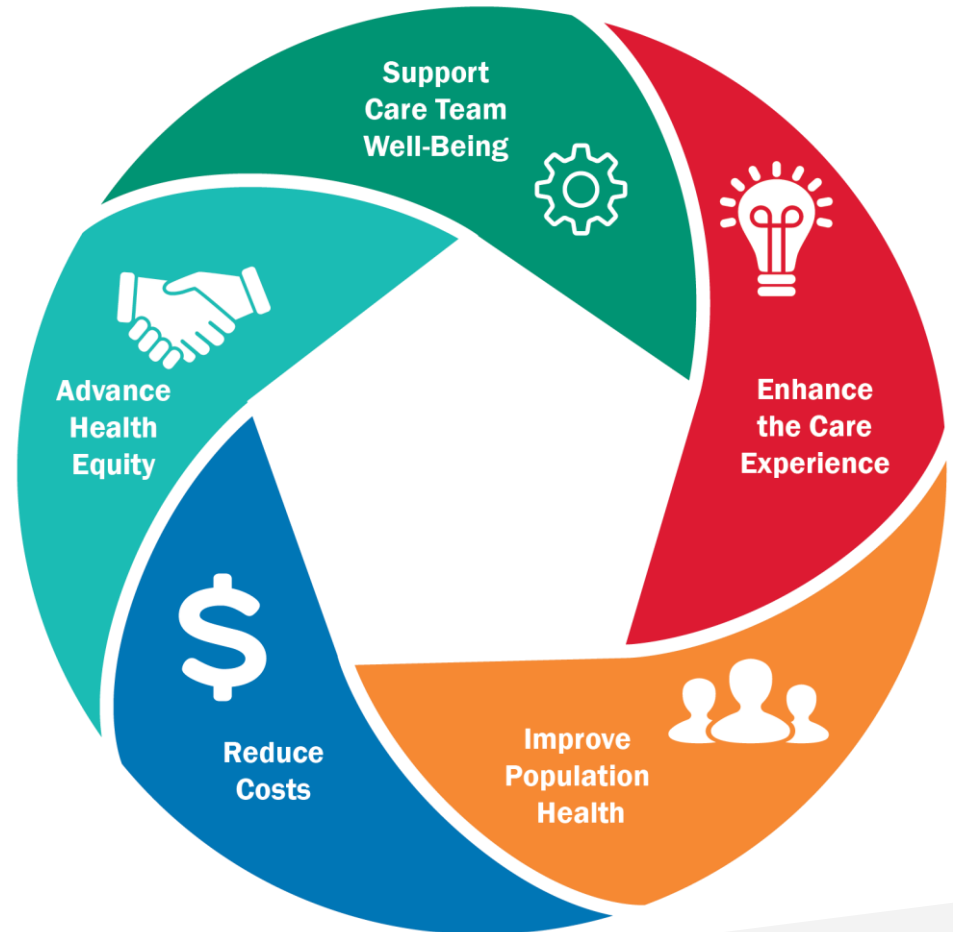
There is insufficient evidence for social activity and reduction of risk of cognitive decline/dementia.

Social participation and social support are strongly connected to good health and well-being throughout life and social inclusion should be supported over the life-course.

ii Risk reduction of cognitive decline and dementia: WHO guidelines



Lifestyle Medicine Achieves the Quintuple Aim





Lifestyle Medicine = Greater Health Benefits

Improvements in:

- ☐ Hypertension
- ☐ Blood lipids
- ☐ BMI
- ☐ Heart disease
- ☐ Mental health
- ☐ Depression

Reduced risk of:

- ☐ Alzheimer's disease
- ☐ Musculoskeletal conditions
- ☐ Certain forms of cancer

Reversal of:

- ☐ Coronary artery disease (CAD)

Remission of:

- ☐ Type 2 diabetes
- ☐ Metabolic dysfunction-associated steatotic liver disease (MASLD)

NIH-National Heart Lungs and Blood Institute, (2026).

Ornish, D. et al. (1998)

Rehackova, L. et al. (2022)

Panigrahi, G. et al. (2023).

Wright, N. et al. (2017).

Look AHEAD Research Group, et al. (2014).

Morris, M.C., et al. (2015).

Yoshioka, N. et al. (2020).

Oakes-Cornellissen, A. et al. (2023)

Morton, D. et al. (2014).

Overview of Lifestyle Medicine – March 2024

Lifestyle Medicine = Cost Effective

CHIP Lifestyle Program at Vanderbilt University Demonstrates an Early ROI for a Diabetic Cohort in a Workplace Setting: A Case Study

Dexter Shurney, MD, MBA, MPH; Sandra Hyde, MSPS; Kristine Hulsey, MSPS

Summary

Several studies have found a strong dose-response relationship between most chronic diseases and lifestyle-related risk factors. This study examined the feasibility of a comprehensive, workplace-based, intensive lifestyle training program, to help type 2 diabetics alter the course of their disease within relatively short (6, 12 and 24-month) measurement windows. An additional purpose of this study was to determine whether health care cost savings could be achieved for the lifestyle group when compared to non-intervened type 2 diabetics within the same employer-sponsored health plan.

The Vanderbilt CHIP study measured participants' pre- and post-intervention health care costs (total medical and prescription drug) and health services utilization on a year-over-year (YOY) basis, and compared them with the costs and utilization of the other (non-intervened) diabetics of the plan. Biometric and lab data were collected at the beginning and end of the program and six months after the study's conclusion to document immediate and long-term changes in health outcomes and health risk behaviors.

Our six-month findings provide evidence that educating a member population about the benefits of a plant-based, whole-foods diet is feasible and can reduce associated health care costs.

Key Points

- Intensive lifestyle education and training is feasible in a workplace setting.
- Positive changes were seen among study participants in HBA1C and cholesterol results as well as positive changes in self-reported physical health and well-being.
- Health care costs were substantially reduced for study participants compared to the non-participant group.
- Approximately 23.8 percent of study participants have been able to eliminate one or more of their medications.

ORIGINAL RESEARCH

Long-Term Outcomes of a Cardiovascular and Diabetes Risk-Reduction Program Initiated by a Self-Insured Employer

Nicole D. White, PharmD, CDE; Thomas L. Lenz, PharmD, FACLM; Maryann Z. Skrabal, PharmD, CDE; Jessica J. Skradski, PharmD; Louis Lipari, PharmD candidate

BACKGROUND: Cardiovascular disease remains the leading cause of death in America and poses a significant challenge for self-insured employers attempting to improve employee health and well-being while controlling healthcare costs. Disease state management programs can be an effective means of achieving these outcomes, but the durability and long-term effects of such programs have limited evaluation.

OBJECTIVE: To assess the 5-year health, economic, and quality-of-life patient outcomes of an employer-sponsored disease state management program.

METHODS: This was a longitudinal, 5-year, quasi-experimental, pre-/post-enrollment study. Self-insured health plan members with hypertension, hyperlipidemia, diabetes, or a combination of these conditions met with a pharmacist regularly (monthly for the first year, then varied by participant) to implement lifestyle medicine programs, optimize medication therapy, and facilitate the coordination of care. Biometric markers, lifestyle behaviors, quality of life, and work productivity were assessed on an annual basis.

RESULTS: The significant biometric improvements (mean) seen after 5 years of program participation compared with pre-enrollment included decreased low-density lipoprotein cholesterol levels (96.71 mg/dL vs 84.83 mg/dL, respectively), increased high-density lipoprotein cholesterol levels (39.32 mg/dL vs 46.12 mg/dL), and decreased systolic blood pressure (132.04 mm Hg vs 123.63 mm Hg) and diastolic blood pressure (85.75 mm Hg vs 75.83 mm Hg). The average exercise time increased (50 minutes weekly vs 156.04 minutes weekly), as did fruit and vegetable consumption (3.98 servings daily vs 5.27 servings daily). The program participants reported improved general health and a reduced number of unhealthy days. The combined healthcare and productivity return on investment for the program at 5 years was \$9.64 for every \$1 invested.

CONCLUSIONS: Significant changes in employees' health, well-being, and health-related costs are possible through sustained participation in an employer-sponsored disease state management program.

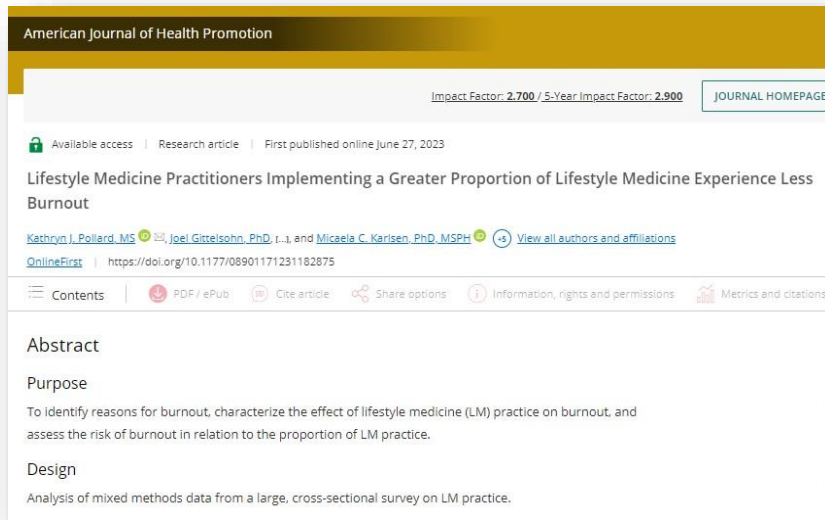
Stakeholder Perspective,
page 182

Am Health Drug Benefits.
2018;11(4):177-183
www.AHDBonline.com

Manuscript received April 18, 2017
Accepted in final form October 3, 2017

Shurney, D., et al. (2012).
White, ND, et al. (2018).

Lifestyle Medicine = Provider Health



Pollard, J. K. et al. (2023).
Merlo, G. & Rippe, J. (2020).



Participant Satisfaction



Roger's Story - <https://youtu.be/uBusAn8QR2Y>

Same LM Rx Impacts Many Diseases



Physical Activity Tips

Adults 150-300 minutes of moderate intensity or 75-150 minutes of vigorous + strength training 2 days/wk

- Aerobic Exercise
 - Walking, biking, swimming, aerobic dance, pickleball, tennis, hiking, etc.
 - Moderate – Breathing heavily, can converse, noticeably more challenging (4-6/10)
 - Vigorous – Short of breath, borderline uncomfortable, can speak a sentence (7-8/10)
- Strength Training
 - Resistance bands, weights, body weight
- Stretching

Make it fun!





Restorative Sleep Tips

Lack of, or poor-quality sleep can lead to a strained immune system.

Preparation

- Regular sleep & wake time
- Exercise (am or early pm)
- Exposure to outdoor light
- Power down before bedtime (read meditate, deep breathing, stretching) – avoid screen time 1-2 hr prior to bed
- Warm bath or shower before bed





Restorative Sleep (Cont.)

Environment

- Bedroom for sleep & intimacy
- Room Temp (60-67°)
- Dark Room/eye mask
- White noise or earplugs

Diet

- Control caffeine, nicotine & alcohol
- Eat dinner 2-3 hrs before bed

Bedtime Snacks

- Kiwis have been shown to combat insomnia
- Cherries are a natural source of melatonin.



Stress Management Tips

- Connect with others
- Get involved in activities
- Healthy ways to relax (deep breathing, music, exercise, dance, meditation, pray, yoga, massage, time in nature)
- Time for fun creative activities & hobbies
- Journal (gratitude or about your day)
- Take care of spiritual needs
- Find joy
- Avoid caffeine & alcohol





Avoidance of Risky Substances Tips

- **Mocktails**
- **Quit Smoking Resources (teamtobaccofree.org)**
 - Nebraska Tobacco Quit Line 1-800-QUIT-NOW
 - Free two-week supply of over-the-counter nicotine replacement therapy
 - Quit Now Mobile App
 - Quit Kits (mints, gum, figets, informational material and other items)
- **Alcohol & Addiction**
 - Nebraska Family Helpline (888) 866-8660
 - Treatment & Recovery Centers
 - Work with someone to create goals to make small steps

Positive Social Connection Tips

Being connected to others is essential to emotional resiliency and overall health

- Make and spend time with others
 - When possible, stay positive while connecting with other
- Be there for those who need you
- Smile & laugh freely
- Express gratitude daily
- Let forgiveness free you
- Support and serve others
- Participate in a support group
- Volunteer
- Love & accept yourself



Whole Food Plant-Predominate Nutrition

Eating whole plant foods is a great way to get the most nutrition and is one of the best ways to **prevent, treat and possibly reverse chronic disease**

Eat A Variety

- Fruits
- Vegetables
- Whole Grains
- Legumes
- Nuts
- Seeds

Limit/Avoid

- Sugary drinks
- Dairy
- Red meats, poultry and processed meats
- Eggs
- Processed snacks





Fruits & Vegetables Eat the Rainbow!

For optimal gut
health we should be
eating 30 different
plants per week!

Bulsiewicz, W. (2020). Fiber fueled. Avery.

Shull Clayton, J., & Bonnet, J. (2023). Foundations of lifestyle medicine: The lifestyle medicine board review manual (4th Ed.). American College of Lifestyle Medicine

The Nutrition Rainbow

The pigments that give fruits and vegetables their bright colors represent a variety of protective compounds. By eating all the colors of the nutrition rainbow, you'll harness the power of these cancer-fighting and immune-boosting foods!



- Lycopene** reduces breast and prostate cancer risk; boosts heart, brain, eye, and bone health.
- Beta-carotene** fights cancer; reduces inflammation, supports immune system, and boosts vision.
- Vitamin C and flavonoids** inhibit tumor cell growth, detoxify harmful substances, boost immune system, reduce inflammation, and boost heart health.
- Folate** builds healthy cells and genetic material and boosts heart health.
Calcium strengthens bones, muscles, and heart health.
- Indoles and lutein** eliminate excess estrogen and carcinogens and support eye health.
Allyl sulfides destroy cancer cells and reduce cell division.
- Anthocyanins** destroy free radicals, reduce inflammation, and boost brain health.
- Resveratrol** may decrease estrogen production, boosts heart and brain health.
- Fiber** boosts digestion and weight loss, removes carcinogens.

PhysiciansCommittee
for Responsible Medicine

Protein

Protein is essential for muscle and organ function.

Where do I get my protein?



Plant-based Protein Sources

It's easy to find plant-based sources of protein at the grocery store. Just look at all these options! These foods also tend to be high in fiber, vitamins, minerals and other important nutrients.

 Beans and legumes	 Broccoli	 Chickpeas	 Edamame
 Lentils	 Nut butter	 Nuts and seeds	 Oats
 Peas	 Quinoa	 Sorghum	 Soymilk
 Spinach	 Tempeh	 Tofu	 Veggie patties

Calcium

Low oxalate dark greens (i.e. Kale, okra, bok choy) = **40-60%** absorbed

Dairy = Only 32-34% absorbed

High oxalate (i.e. spinach, beet greens, Swiss chard) = **High in calcium, poorly absorbed**





Fiber

Only Found in
Plants!

Fiber is essential for metabolic and gut health, appetite regulation, and reducing chronic inflammation. It improves regularity, increases satiety, lowers risk of heart disease and some cancers & helps maintain blood glucose levels

- **Recommendations**

- Women = 25 gr with greater benefits if >40 gr
- Men = 38 gr with greater benefits if >45 gr

- < 3% of American's meet recommendations
 - American average intake = 18 grams





Carbohydrates

Primary energy source for the brain and for body weight maintenance

Refined (processed) Carbohydrates

- Added sugars, white flours, white rice
 - Low in fiber, negatively associated with health outcomes (overweight, metabolic disorders, CVD, Type 2 Diabetes)

Refined carbohydrates should be limited or avoided.

Complex Carbohydrates

- Whole foods
 - Vegetables, fruits, legumes & whole-grains
 - Fiber (only found in plants)
 - Natural Sugars (maybe protective against chronic disease)

Quality is Important!

An ounce of PREVENTION and a POUND of CURE

You can take baby steps for a little prevention,
but to reverse or truly heal, you need to go all in with lifestyle changes.

A LITTLE PREVENTION

Small daily choices
build healthy habits
and protect your
future.



A POUND OF CURE

Go all in with the
6 pillars of lifestyle
medicine to reverse,
heal, and thrive.



THE 6 PILLARS OF LIFESTYLE MEDICINE



PLANT-PREDOMINANT NUTRITION

Nourish your body.
Fuel your life.



PHYSICAL ACTIVITY

Move more.
Sit less.
Live better.



AVOIDANCE OF RISKY SUBSTANCES

Choose to protect
your body and mind.



RESTORATIVE SLEEP

Quality sleep heals
and restores.



STRESS MANAGEMENT

Manage stress.
Cultivate calm.
Strengthen resilience.



POSITIVE SOCIAL CONNECTIONS

Connect with others.
Thrive together.



Little steps today create a healthier tomorrow.

| Commit fully today. Transform your health for life.



Note. Image generated using ChatGPT by OpenAI, [2026], using the prompt: "[Image image for the saying an 'ounce of prevention and a pound of cure' related to the 6 pillars of lifestyle medicine]"https://chatgpt.com/s/m_6a54068d80dc819198350b74bcc86565

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