



LIFESTYLE MEDICINE: ADDRESSING CHRONIC DISEASE WITH HEALTHY LIFESTYLES

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OBJECTIVES

Define lifestyle medicine

Discuss the impact of chronic disease in the United States

Describe chronic diseases and health risks our clients commonly face

Describe principles of lifestyle medicine

Identify how occupational therapy practitioners can incorporate principles of lifestyle medicine to enhance their practice.



LIFESTYLE MEDICINE

“the application of environmental, behavioral, medical and motivational principles to the management of lifestyle-related health problems in a clinical setting including self-care and self-management” (Egger, Bins, Rossner, & Sagner, p. 3).



LIFESTYLE MEDICINE

Across the healthcare continuum to maximize health in all persons

- Primary Prevention – prevent disease from developing by modifying behaviors or environment
- Secondary Prevention – modifying risk factors to avoid disease
- Tertiary Prevention – rehabilitation for the disease and working to prevent it from reoccurring



LIFESTYLE MEDICINE FOCUSES ON 6 AREAS TO IMPROVE HEALTH



**THE PILLARS OF
LIFESTYLE
MEDICINE**

PHYSICAL ACTIVITY: *HEALTH MANAGEMENT OTPF, 2020. P. 32*

- Completing cardiovascular exercise, strength training, and balance training to improve or maintain health and decrease risk of health episodes, such as by incorporating walks into daily routine
 - Health Management—Activities related to developing, managing, and maintaining health and wellness routines, including self-management, with the goal of improving or maintaining health to support participation in other occupations.
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HEALTHFUL EATING: *HEALTH MANAGEMENT OTPF, 2020, P 32*

- Implementing and adhering to nutrition and hydration recommendations from the medical team, preparing meals to support health goals, participating in health-promoting diet routines
 - Health Management—Activities related to developing, managing, and maintaining health and wellness routines, including self-management, with the goal of improving or maintaining health to support participation in other occupations.
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STRESS MANAGEMENT: *HEALTH MANAGEMENT OTPF, 2020*

- Identifying personal strengths and assets, managing emotions, expressing needs effectively, seeking occupations and social engagement to support health and wellness, developing self-identity, making choices to improve quality of life in participation
 - Health Management—Activities related to developing, managing, and maintaining health and wellness routines, including self-management, with the goal of improving or maintaining health to support participation in other occupations.
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RELATIONSHIPS: *SOCIAL PARTICIPATION OTPF, 2020*

SLEEP: *SLEEP & REST OTPF, 2020, P32*

- Activities related to obtaining restorative rest and sleep to support healthy, active engagement in other occupations
 - Rest – promoting engagement in relaxing activities that restore energy and calm
 - Sleep preparation – sleep hygiene, routines to support sleep – grooming, reading/listening to music, meditation, goodnight to others, prayers, preparing physical environment, setting alarm, closing up home, etc.
 - Sleep participation
-

RISKY SUBSTANCES:

A COMBINATION & AREA WE ALL NEED TO BE ATTENTIVE TO

- Health management
 - Social and emotional health promotion and maintenance
 - Medication management
 - Physical activity
 - Healthy eating
 - Sleep
 - Social
 - Self-care
-

WHY LIFESTYLE MEDICINE?

- Advances in technology – excess food, decreased need for physical activity
- People need to be active in their health
- Changes in how we eat, move, connect, and cope can impact our health
- Considers the environment
- Cost effective
- It makes sense



KEY MEDICATIONS IN LIFESTYLE MEDICINE

- Exercise and nutrition are the penicillin
- Psychosocial support and education is the surgery



LIFESTYLE MEDICINE IS ABOUT LIVING

Life today...

- Physical activity – increased opportunities to be sedentary – work, television, technology that does things for us
 - Transportation – we tend to drive or use public transportation; less walking and biking
 - More processed foods
 - Technology and social connectedness – Impacts us in positive and negative ways
 - Technological advances in health care – we live longer...but do we live longer with QOL or with disease and disability?
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CHRONIC DISEASE & LIFESTYLE RISK FACTORS THAT OUR PATIENTS FACE

Chronic disease accounts for 71% of total deaths worldwide, ~41 million people/year (WHO, 2021)



Cause

Eliminate



Poor Diet



Sedentary Behavior



Smoking

Prevent

80% of heart disease & stroke

80% of type 2 diabetes

40% of cancer

Lifestyle Medicine providers treat and reverse chronic disease

Solution

Restore Health

Whole-food, plant predominant diet

1



150 mins/wk of moderate exercise

2



8 hours of restful sleep

3



Daily relaxation time to lower stress

4



No Smoking

5



Regular connection to positive people

6



What is the most common chronic disease your patients have?

Cancer

Cardiovascular disease

Diabetes

Obesity

Other

CANCER

- Go into various chronic diseases – CDC 2022
- Lifestyle risk factors
 - Smoking and substance use
 - Stress
 - Inactivity
 - Poor eating habits



CARDIOVASCULAR DISEASE

- Lifestyle risk factors
 - Smoking and substance use
 - Stress
 - Inactivity
 - Poor eating habits

DIABETES

- Lifestyle risk factors
 - Smoking and substance use
 - Stress
 - Inactivity
 - Poor eating habits

OBESITY

- Lifestyle risk factors
 - Smoking and substance use
 - Stress
 - Inactivity
 - Poor eating habits

HIERARCHY OF CHRONIC DISEASE DETERMINANTS

(EGGERS ET AL, P. 27)

Distal	Medial	Proximal	Markers
Environment -physical -political -economic -socio-cultural	Stress Anxiety Depression Technology Work Relationships Inequality	Diet Inactivity Smoking, Alcohol, Drugs Pollution Sun Exposure	Obesity HTN Lipids

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graph LR; Distal --> Medial; Medial --> Proximal; Proximal --> Markers;
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APPLYING PRINCIPLES OF LIFESTYLE MEDICINE

THE 5 A'S OF LIFESTYLE MEDICINE

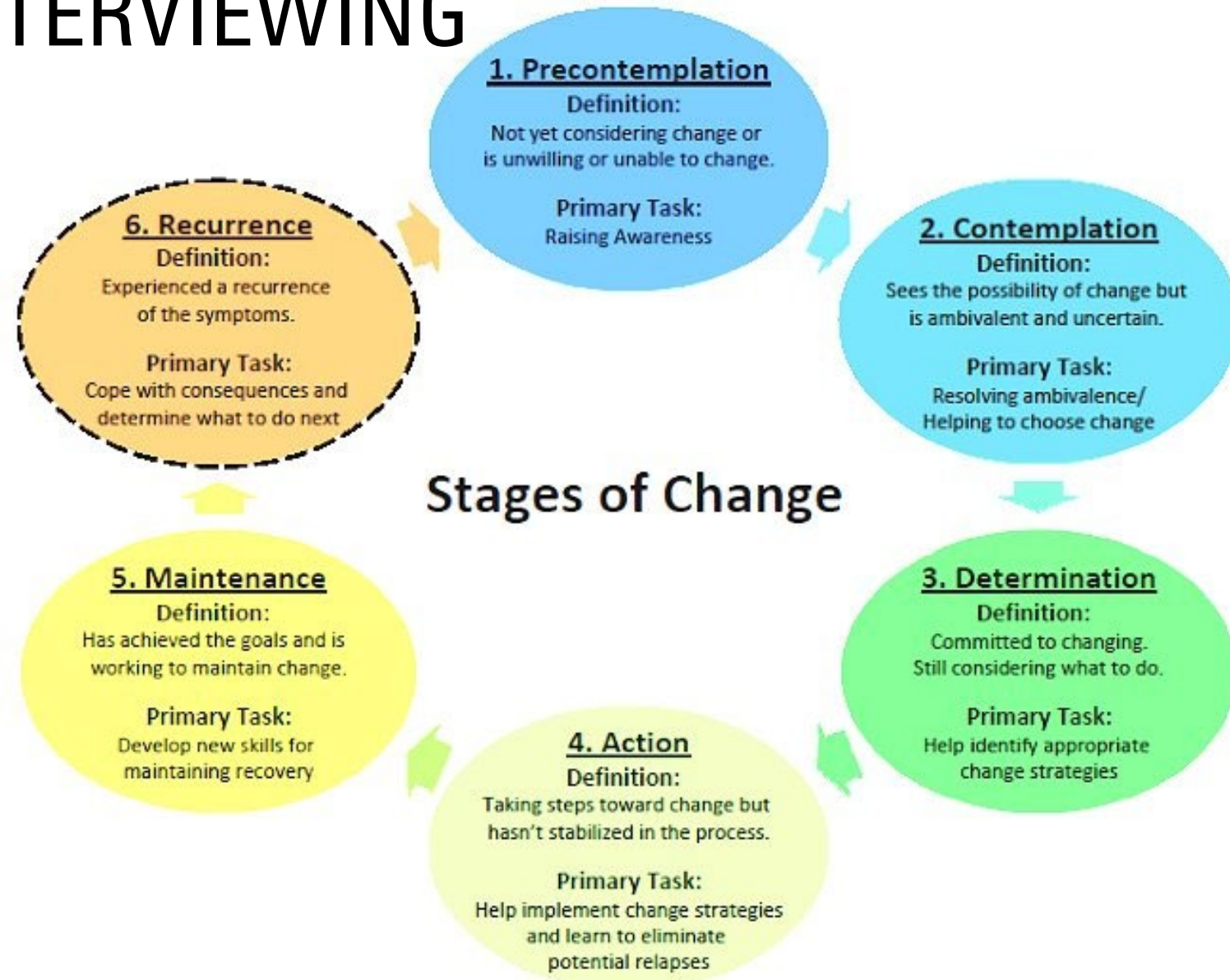
- Ask
- Assess
- Advise
- Assist
- Arrange



Tie in OT to each of these with examples – occupation-based, client centered –
what part of our OTPF does it relate to?

MOTIVATIONAL INTERVIEWING

- Assessing client's willingness to change
- Strengthen motivation and readiness for action





LIFESTYLE MEDICINE FOCUSES ON 6 AREAS TO IMPROVE HEALTH



**WHAT'S A
PILLAR THAT
YOU ARE
INTERESTED IN
MAKING
CHANGES IN?**

Readiness to Change Exercise

NAME _____

DATE _____

This exercise will help you assess your readiness to change behavioral areas related to health and wellness. First, rate how important making behavioral change is to you in each of the relevant areas. In the second column, please rate your current level of confidence in making change in these same areas.

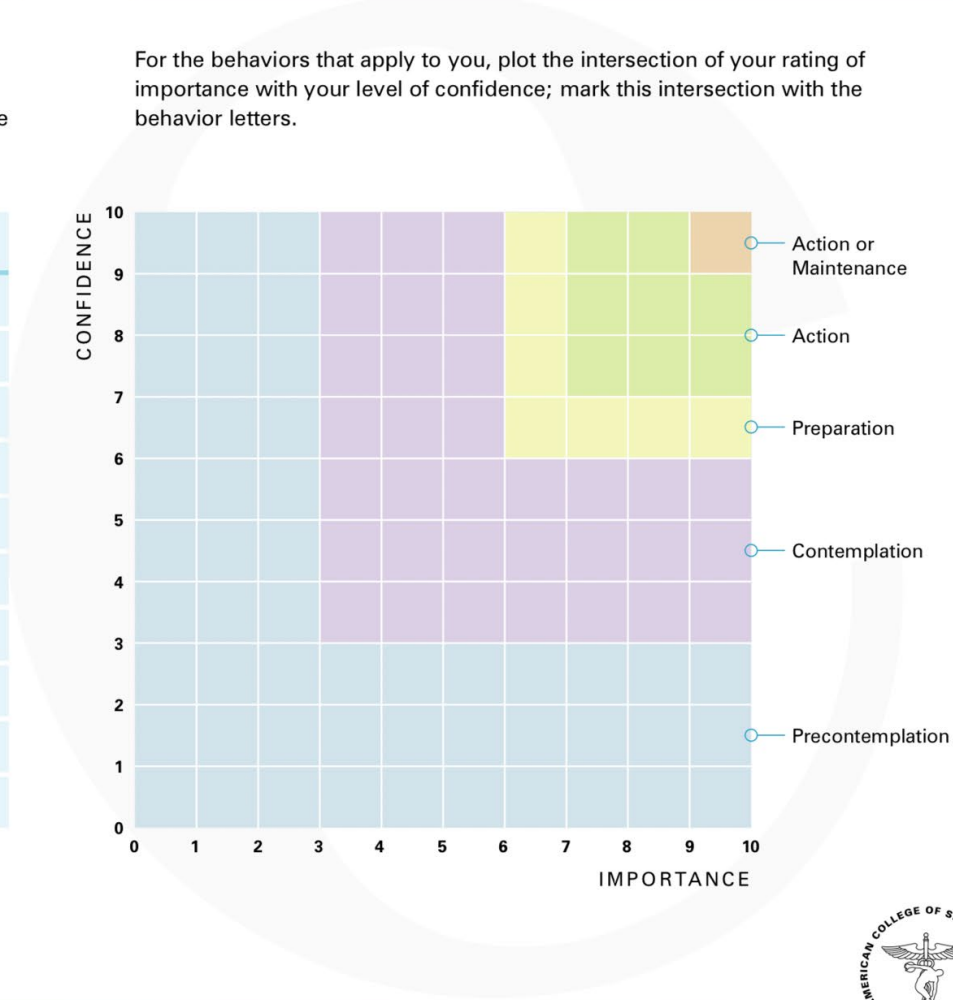
BEHAVIOR	IMPORTANCE	CONFIDENCE
Reduce/cease Smoking (SM)		
Improve Weight Management (W)		
Increase Physical Activity (P)		
Improve Nutritional (N)		
Improve Stress Management (S)		
Improve Medication Compliance (M)		

Importance of change rating:
 NA = not applicable
 1 = not important at all
 5 = somewhat important
 10 = extremely important

Confidence in change rating:
 NA = not applicable
 1 = not confident at all
 5 = somewhat confident
 10 = extremely confident

Readiness to Change Graph

For the behaviors that apply to you, plot the intersection of your rating of importance with your level of confidence; mark this intersection with the behavior letters.



SELF- MANAGEMENT

Active participation in one's health care

Knowledge, skills, and behaviors to promote health (p. 89)



Client-centered

Motivational interviewing

Health literacy

Health coaching

Group formats

SELF MANAGEMENT

- Goal of clinician is to increase the client's:
- Self-efficacy
 - Believe in his/her/they ability to do
- Determinacy
 - Motivation to want to do something about the problem
- Health literacy
 - Understanding the problem and how to effectively reduce the risks



NUTRITION & HEALTHFUL EATING

- The penicillin of lifestyle medicine
- Decrease energy dense foods – higher levels of sugar and carbohydrates – increased calories per gram
- Decrease portion sizes
- Eating frequency – there is energy expenditure in digestion, some recommend fewer meals, while others recommend several small meals...
 - Decrease snacks

HEALTHFUL EATING (MONTEIRO, 2009, IN EGGERS, P. 141)

Food types	Description	Example	Recommendations for eating
1. Minimally processed foods	Whole foods	Fresh meat, grains, fruits, vegetables, nuts	Eat as much as you like as often as you like!
2. Substances extracted from whole foods	Usually added to other foods	Oils, fats, flours, pasta, starches, sugar	Eat sparingly
3. Ultra-processed foods	Group 2 along with salt, preservatives. There is little evidence of the original food	Bread, ice cream, chocolate, chips, chicken nuggets, french fries, hot dogs, sausage	Try to avoid or not eat very often

HEALTHFUL EATING STRATEGIES

- Self monitor
- Set goals
- Cognitive restructuring
- Relapse prevention
- Cognitive habits
- Rational emotive therapy



PHYSICAL ACTIVITY

- The penicillin of LM
- The 5 S's of Fitness
 - Stamina – cardiovascular fitness; walking, jogging, hiking, biking
 - Strength – push-ups, sit-ups, theraband, weights, machines
 - Suppleness – flexibility, lengthening of muscles
 - Size – level of obesity, increase physical activity esp stamina and strengthening
 - Stability – balance, fall prevention



PHYSICAL ACTIVITY



Key Guidelines for Adults

- ✓ Adults should move more and sit less throughout the day. Some physical activity is better than none. Adults who sit less and do any amount of moderate-to-vigorous physical activity gain some health benefits.
- ✓ For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
- ✓ Additional health benefits are gained by engaging in physical activity beyond the equivalent of 300 minutes (5 hours) of moderate-intensity physical activity a week.
- ✓ Adults should also do muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.



Key Guidelines for Older Adults

These guidelines are the same for adults and older adults:

- ✓ Adults should move more and sit less throughout the day. Some physical activity is better than none. Adults who sit less and do any amount of moderate-to-vigorous physical activity gain some health benefits.
- ✓ For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
- ✓ Additional health benefits are gained by engaging in physical activity beyond the equivalent of 300 minutes (5 hours) of moderate-intensity physical activity a week.
- ✓ Adults should also do muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.

Weight Maintenance	Weight Regain	Weight Loss and Regain
An achieved weight loss goal	Attribution of obesity to medical factors	Medical factors
More initial weight loss	Perceiving barriers for weight loss behaviors	Weight loss behaviors
Physically active lifestyle	History of weight cycling	
Regular meal rhythm	Sedentary lifestyle	
Breakfast eating	Disinhibited eating	
Less fat, more healthy foods	More hunger	Negative emotions/stress
Reduced frequency of snacks	Binge eating	
Flexible control over eating	Eating in response to negative emotions/stress	Problems
Self-monitoring	Psychosocial stressors	
Coping capacity	Lack of social support	Covariate
Capacity to handle cravings	More passive reactions to problems	
Self-efficacy	Poor coping strategies	Difficulties in maintaining weight loss and weight regain.

MANAGING STRESS AND WORRY: ADDRESSING THE PSYCHOSOCIAL SELF

- The surgery of LM
- High levels of chronic stress –
 - Changes our body – affects chemical and hormone levels – impact metabolism, muscle pain, cognition and more!
- Maladaptive responses – drug use, violence, etc
- High levels of worry and anxiety
 - Body shows the score
 - Irritable bowel syndrome
 - Fibromyalgia
 - Memory impairments



CHANGING THE STRESSOR OR STRESSEE

- What is the stressor?
 - Reduce it
 - Remove it
 - Replace it
 - Rethink it
 - Reframe it – drop it!
- Changes for the stressees
 - Physical escapes
 - Exercise
 - Vacation
 - Hobby
 - Yoga, breathing
 - Mental
 - Meditation
 - Counting to 10
 - Music, Reading
 - Restructuring

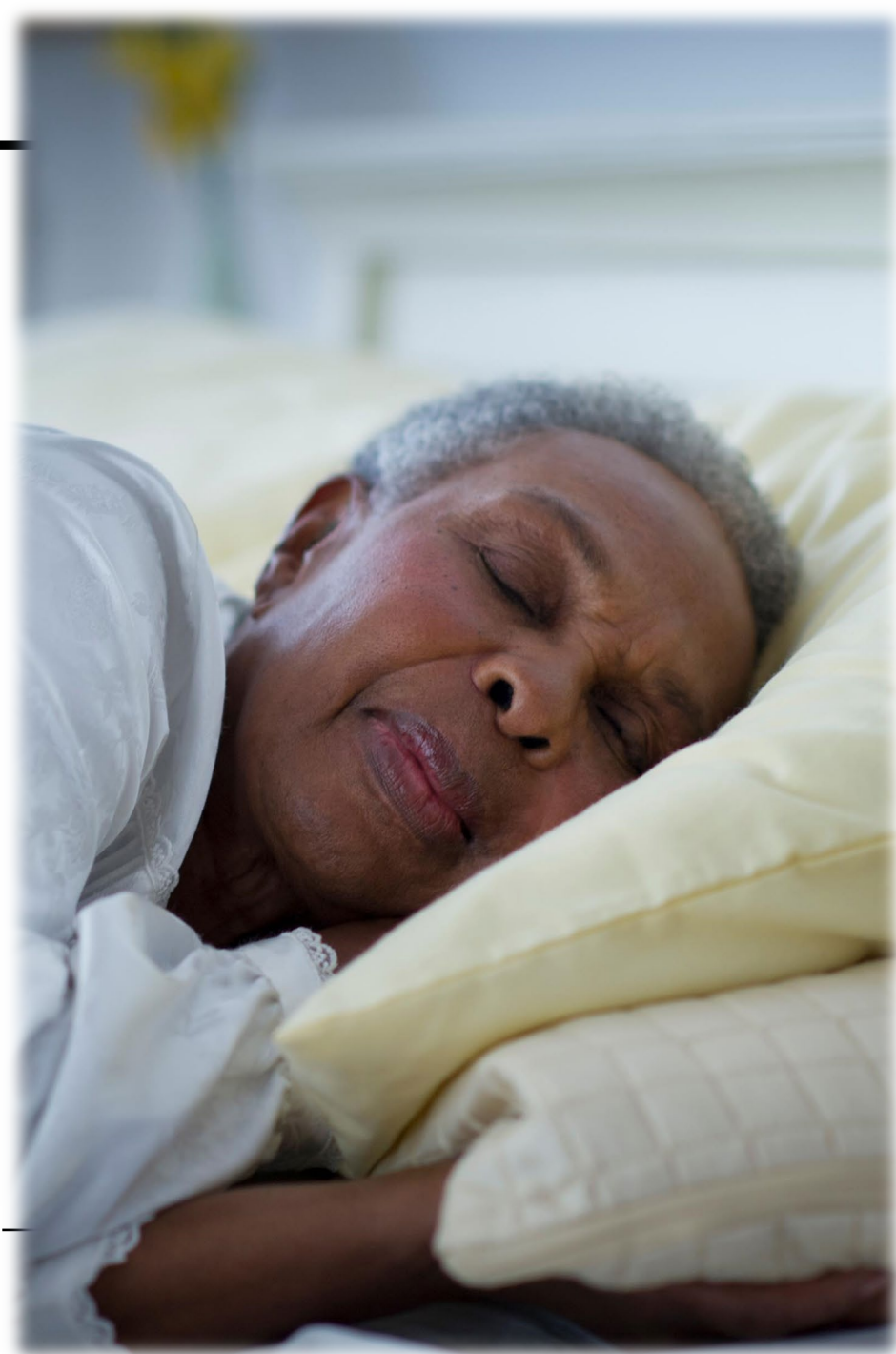


SLEEP

Age Group		Recommended Hours of Sleep Per Day
Newborn	0-3 months	14-17 hours (National Sleep Foundation) ¹ No recommendation (American Academy of S
Infant	4-12 months	12-16 hours per 24 hours (including naps) ²
Toddler	1-2 years	11-14 hours per 24 hours (including naps) ²
Preschool	3-5 years	10-13 hours per 24 hours (including naps) ²
School Age	6-12 years	9-12 hours per 24 hours ²
Teen	13-18 years	8-10 hours per 24 hours ²
Adult	18-60 years	7 or more hours per night ³
	61-64 years	7-9 hours ¹
	65 years and older	7-8 hours ¹

PROMOTING SLEEP

- Analyze sleep diary to identify points of intervention
- Reduce or avoid caffeine 8 hours before bed (lasting effects for 12 hours in some)
- Limit alcohol to 1-2 drinks for women and 3-4 drinks for men
- Incorporate daily physical activity (not at nighttime due to increases in adrenaline)
- Eat earlier – late dinners can trigger reflux/heartburn and interrupt sleep
- Avoid nicotine at bedtime as it is a stimulant
- Avoid napping
- How do you think about sleep? See it as a positive and restoring occupation
- Educate and train on coping skills to reduce anxiety and calm nerves
- Address pain management
- Leave the room if you can't sleep



LET'S GET
HEALTHY
TOGETHER

QUESTIONS?



LIFESTYLE MEDICINE FOCUSES ON 6 AREAS TO IMPROVE HEALTH

