

Weight Loss Maintenance

Help Veterans Put Lapses Into Perspective

- Frame as a temporary dip in the trend line.
- Avoid self recrimination or other negative emotional reactions.
- Avoid giving up because of a brief lapse.
- Engage in realistic positive thinking.
- Immediately resume appropriate weight control habits.

Ten Relapse Prevention Strategies

- Continued counseling contact
- Social support
- Contingency plans for high-risk situations
- Self-monitoring
- Environmental cues for weight control behaviors
- Achievable daily goals
- Self-reinforcement system
- Alternative sources of pleasure besides food
- Positive thinking
- “Alarm” system for behaviors and weight

Strategies For Long-Term Weight Loss Maintenance*

- Use of both dietary restriction and physical activity
- Limiting calorie and fat intake and limiting portion sizes
- Use of regular (daily) physical activity, average of 60-90 min/day
- Consuming breakfast daily
- Self-monitoring of weight, at least weekly
- Maintaining dietary consistency over the weekends and holidays

*From participants in the National Weight Control Registry

Patient handouts for maintenance available on the *MOVE!* website

MOVE!

Pocket Guide

for

Physical Activity Specialists

Developed by:

**VA National Center for Health Promotion
and Disease Prevention —
a program office of VHA Patient Care Services**

and

VA Employee Education System

MOVE! Website
vawww.move.med.va.gov



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Level 4 - Brief Residential Treatment

Currently, this service is limited to very few VHA facilities and may not be available for all qualified patients at this time. Consult the *MOVE!* website for the latest information on availability.

Level 5 - Bariatric Surgery

Currently, this service is limited to few VHA facilities and may not be available for all qualified patients at this time. Consult the *MOVE!* website for the latest information on availability.

Candidates For Bariatric Surgery

1. BMI \geq 40; (BMI \geq 35 with obesity-associated conditions considered case-by-case), AND
2. Participation in *MOVE!* Levels 1-2 or a similar multidisciplinary, behaviorally based weight management program for at least three months, AND
3. Formal psychological evaluation that finds patient mentally and emotionally stable, likely to be able to control eating related impulses and comply with a restricted diet post-surgery, and likely to maintain the frequent and long term follow up necessary after this procedure; AND
4. Medical evaluation that finds patient has no medical contraindications to surgery.

Post-Operative Patient Guidance

- Expected Wt Loss \approx 30-35% of body weight, peak loss 12-18 mos
- Nutrition - diet advanced from clear liquids to solids over 6-8 wks
 - Avoid drinking liquids with meals
 - Prioritize protein-rich foods
 - Slow pace of eating, chew food thoroughly
 - Meal should be sized to fit in palm of hand
 - Daily multivitamin/mineral supplement, other supplements as directed by dietitian, primary care provider, or surgeon
- Psychologic - anticipate changes in self-image and relationships
- Physical Activity - begin slow and gradually increase
- Lifelong surveillance and care required

Level 3 - Weight Loss Medications

Medications For Weight Loss And Maintenance

- Require a non-formulary drug request
- Should always be used in conjunction with other weight management behaviors (reduced calorie diet and/or increases in physical activity) as part of Level 1 or Level 2
- Result in an average additional loss of 5-11 lbs over a 12 month period compared to a behavioral program alone

Orlistat (Xenical®)

- Blocks fat absorption by the gut
- Dosed as 120 mg capsules t.i.d. with meals
- Side effects:
 - fatty/oily stools
 - fecal urgency and incontinence
 - dyspepsia
 - oily spotting
 - abdominal pain
 - bloating
- Potential for fat-soluble vitamin deficiencies

Criteria for Initial 30-day supply:

- BMI ≥ 30 , or ≥ 27 with obesity-associated condition(s)
- Enrolled in *MOVE!* Level 1 and/or 2 or similar program
- No allergy to orlistat, malabsorption syndromes, or cholestasis
- Demonstrated ability to comply with low-fat diet
- Taking a multivitamin/mineral supplement with Vitamins A, D, E, K

Sibutramine (Meridia®)

- Suppresses appetite and induces a feeling of fullness
- Starting dose is 10 mg q.d. Maximum dose is 15 mg q.d.
- Side effects:
 - increase in heart rate
 - increase in blood pressure
 - insomnia
 - dry mouth
 - constipation
 - nausea

Criteria for initial 30-day supply:

- BMI ≥ 30 , or ≥ 27 with obesity-associated condition(s)
- Enrolled in *MOVE!* Level 1 and/or 2 or similar program
- No allergy or contraindications to sibutramine
 - Pseudoephedrine or MAOI, SSRI, SNRI, triptan or other serotonin affecting drug use within 2 weeks
 - Anorexia or bulimia
 - Uncontrolled hypertension (BP >145/90 mmHg)
 - History of CAD, CHF, arrhythmia, stroke, narrow angle glaucoma
- Enrolled in the VA sibutramine safety registry by pharmacist

Program Overview - 1

General Characteristics Of *MOVE!*

- Emphasis on health and well-being, not appearance
- Lifetime/lifestyle focus
- Population-based
- Evidence-based
- Tiered treatment
- Multidisciplinary content: behavior, nutrition, physical activity
- Individually tailored with patient-determined intensity of treatment
- Integration within primary care and existing resources
- Standard program tools and materials available

Program Flow--See Algorithm On Page 4

1. Screen for overweight/obesity at least once every 2 years.
2. Determine benefit from or eligibility for weight management.
3. Risk educate overweight or obese patients who would benefit.
4. Offer *MOVE!* participation.
5. Enroll into *MOVE!* using the *MOVE!*23 Patient Questionnaire.
6. Determine intensity of treatment with veteran.
7. Support self-management; provide additional treatment as requested/needed.
8. Monitor progress, address barriers, and support maintenance.

MOVE! Program Levels

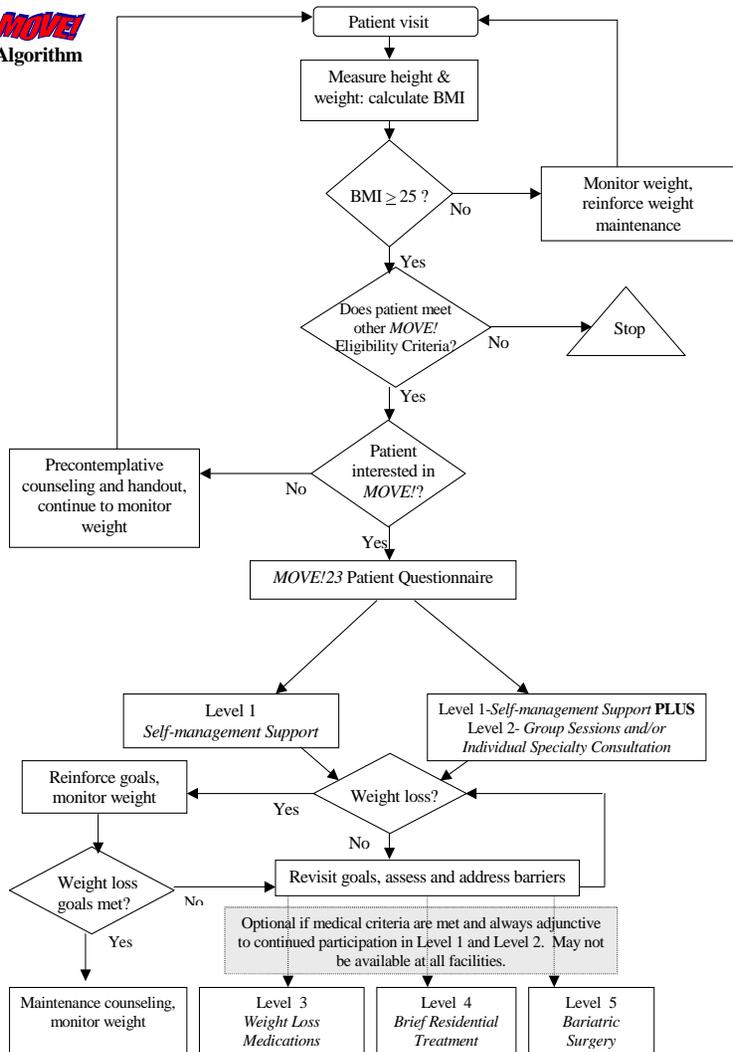
Level 1 - *Self-management Support*

Level 2 - *Group Sessions and/or Individual Specialty Consultation*

Level 3 - *Weight Loss Medications*

Level 4 - *Brief Residential Treatment*

Level 5 - *Bariatric Surgery*



Level 2 - Group Sessions and Individual Specialty Consultation

Provide Level 2 services at any time you or the veteran feels it would be beneficial.

Group Sessions

General format:

- Individual weigh-in
- 1-2 topic discussions (nutrition, physical activity, behavior)
- General group discussion, problem-solving, and support

Engaging Patients in Discussion:

- Write major points on a whiteboard
- Ask veterans to read parts of handout out loud
- Encourage questions
- Solicit thoughts, feelings, opinions
- Ask how topic applies to them personally
- Ask veterans to complete specific written or verbal exercises
- Ask veterans to complete some "homework" for the next session
- Ask veterans to bring information on a selected topic for the next session
- Ask veterans how they personally plan to implement the information or suggestions discussed

Sample group modules are available on the [MOVE! website](http://www.move.med.va.gov).

Individual Specialty Consultation

Use this option when veterans require additional evaluation, treatment, or guidance beyond that available through Level 1-Self-management Support or Level 2-Group Session participation.

Level 1 - Self-management Support - 2

Patient Handouts (available on the MOVE! website)

- 10 standard handouts (S01-S10)
- Nutrition log
- Physical activity log
- Other nutrition, physical activity, and behavior handouts
- Select additional handouts based on patient barriers, patient request, or relevant goals for the week

Arrange Follow-up

- Within 1 week of initial enrollment
- Every 2-4 weeks thereafter, adjust intervals as needed
- Use telephone follow-up when possible

Suggested Format For Telephone Follow-up

- Call patient (or they call you)
- Reestablish rapport
- Assess progress on weight and established goals
- If appropriate, reevaluate importance, and confidence
- Discuss barriers and assist with problem-solving
- Provide positive reinforcement
- Provide information as needed
- Agree on new (or same) goals
- Arrange next follow-up contact

Connect Patient With VA And Community Resources

- MOVE! Program materials
- Pedometers
- Local parks and recreation facilities, community programs, low-cost, or free health department or cooperative extension services
- Church and community sponsored programs, facilities, or events, or events

Screening - 1

Use BMI To Screen For Overweight/Obesity (every 2 yrs)

- Measure height without shoes
- Measure weight
- Calculate BMI (in CPRS or use chart on page 6)

$$\text{BMI} = \frac{\text{weight (in kilograms)}}{\text{height (meters)}^2}$$

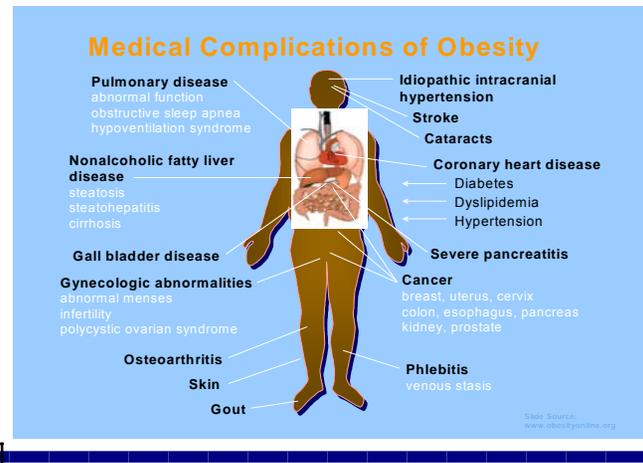
Classify Veteran By BMI Category

BMI	Classification
< 18.5	Underweight
18.5-24.9	Normal Weight
25-29.9	Overweight
≥ 30	Obese

Assess Benefit From Weight Management Participation

See MOVE! Eligibility Screening Chart (page 7)

Discuss Risks Of Overweight/obesity With Those Eligible



Level 1 - Self-management Support - 1

Foundation For All Levels Of MOVE!

- Emphasizes patient's central role in treatment
- Uses goal-setting, action planning, problem-solving, and follow-up
- Connects patients to internal and external resources

MOVE!23 Patient Questionnaire And Reports

- Assesses importance, confidence, and readiness
- Identifies "red flags" for further medical evaluation
- Identifies problem nutrition & physical activity behaviors
- Offers problem-solving tips
- Points to specific patient handouts, tailoring advice

Using MOVE!23

- Patient access via:
 - VA intranet: vaww.move.med.va.gov
 - Internet: www.move.med.va.gov
 - MyHealthVet: www.myhealth.va.gov
 - Link from CPRS
- Review patient report with patient and print copy.
- Use staff report to guide discussion.
- Assist patient with setting between 1-3 short-term behavior, nutrition, or physical activity goals. Goals should be SMART:

SPECIFIC: "I will take a 30 minute walk after dinner each night for the next week."

MEASURABLE: "I will eat one more fruit and vegetable each day this week."

ATTAINABLE: "I will use the stairs instead of the elevator whenever I'm going up 2 flights or less."

RELEVANT: "I will drink diet instead of regular whenever I drink soda."

TIME-BASED: "Within 7 days, I will find out more information about local park trails for walking."

MOVE! Body Mass Index

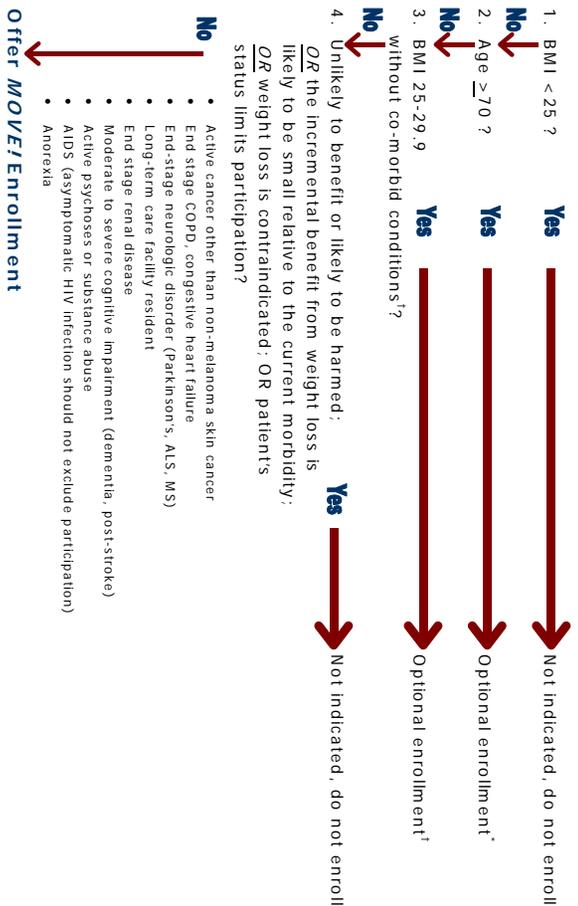
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4'6"	29	31	34	36	39	41	43	46	48	51	53	56	58	60	63	65	68	70	72	75	77	80
4'7"	28	30	33	35	37	40	42	44	47	49	51	54	56	58	61	63	65	68	70	72	75	77
4'8"	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58	61	63	65	67	70	72	74
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6'5"	14	15	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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6'7"	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
6'8"	13	14	15	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
6'9"	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
6'10"	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

Underweight: BMI = less than 18.5
 Normal weight: BMI = 18.5 to 24.9
 Overweight: BMI = 25 to 29.9
 Obesity: BMI = 30 to 39.9
 Extreme Obesity: BMI = 40 and above

Source: National Obesity Educational Initiative

MOVE! Eligibility Screening Chart

The MOVE! Program is designed to reach the most high-risk patients and those most likely to benefit. The enrollment eligibility screening chart provides population and evidence based guidance in addition to addressing workload concerns. As the MOVE! program evolves in your medical center, enrollment criteria can become less stringent.



* BMI not as strongly correlated with mortality in elderly population, so weight/BMI reductions probably have decreased benefit compared to younger population. Enrolling patients over age 70 requires mandatory medical clearance prior to beginning new physical activity and closer nutritional supervision to minimize protein, vitamin, and mineral deficiencies.
† Co-morbid conditions include conditions such as diabetes, high blood pressure, high cholesterol, osteoarthritis, heart disease, sleep apnea, or other obesity associated conditions. Enrollment in MOVE! is strongly recommended for veterans with BMI 25-29 AND co-morbid conditions.

Physical Activity - 6

Questions To Ask Patients To Help With Setting Goals

- What are some of the opportunities you see in your everyday life to be more physically active?
- What physical activities do you enjoy?
- What equipment and/or facilities do you have access to?
- What can you do over the next week to be more physically active?

Special Concerns With Obese Patients

- Difficulty bending, moving, or reaching
- May be self-conscious in group exercise settings
- Difficulty getting on/off the floor
- Difficulty finding clothes and equipment for activity

Addressing These Concerns

- Encourage life-style activities that can be done at home without special equipment or clothes.
 - Chair-dancing
 - Walking
 - Yoga or pilates adapted for a chair or bed
- Shop around to find a fitness center where they feel at ease, if programmed activity is desired.
- Check weight rating on gym machines.
- Use recumbent bikes (They have wider seats).
- Wear clothes that prevent inner thigh chafing.
- Incorporate flexibility exercises into plan.
- Encourage non-weight bearing activities for less stress on painful joints.
 - Stationary bicycling
 - Swimming
 - Water aerobics or water walking
- Adapt activities patients are interested in.
 - Add rest/breathing breaks
 - Modify range of motion
 - Use a cane or walker for support

Health Behavior Change Counseling - 1

Patients with BMI ≥ 25 who would benefit from weight management should be offered *MOVE!* participation.

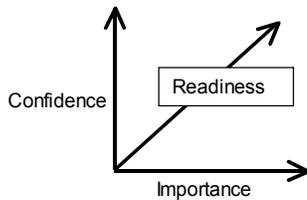
Assess Readiness And Interest

"Mr. Jones, your body mass index is 33; this is considered unhealthy. Your weight is probably contributing to your diabetes and it may lead to future health problems like sleep apnea or high blood pressure. I'm concerned about your health...have you thought about trying to lose some weight?"

Stages Of Readiness To Change

Pre-contemplation..... no intention to change at the present time
 Contemplationconsidering a change
 Preparation.....preparation following the decision to change behavior
 Action.....currently engaged in behavior change activities
 Maintenance.....continuation of changed behavior beyond six months

Factors That Determine Readiness



Effective Counseling

- Is supportive, empathetic, and patient-centered
- Targets stage of readiness to change
- Uses open-ended questions and affirmations
- Uses reflective listening, summarizing, and elicits self-motivational statements

Physical Activity - 5

Measuring Intensity

Talk Test:

Light intensity: able to sing
 Moderate intensity: able to carry on a conversation
 Vigorous intensity: unable to carry on a conversation

Target Heart Rate:

Moderate intensity: 50-70% of maximum heart rate
 Vigorous intensity: 70-85% of maximum heart rate
 Maximum heart rate (bpm) = 220 – Age

Self-perceived Exertion:

The Borg Category Rating Scale

The Borg Category Rating Scale		
Least Effort		
6		
7	very, very light	
8		
9	very light	
10		
11	fairly light	*****
12		Aerobic Training Zone
13	somewhat hard	*****
14		
15	hard	*****
16		Strength Training Zone
17	very hard	*****
18		
19	very, very hard	
20		
Maximum Effort		

Physical Activity - 4

Types of Physical Activity

Lifestyle Physical Activity

- Walk or ride bicycle for transportation instead of car or bus.
- Take the stairs instead of the elevator.
- Park at the far end of the parking lot, and walk to your destination.
- Mow the grass, and rake the leaves.
- Get off the bus one stop early, and walk the rest of the way.
- Walk every hole if you play golf.
- Dance at every opportunity you have.
- Walk the dog, if you don't have one, borrow someone else's.
- Do some extra laps when you are shopping at the mall.
- Chop or split wood.
- Wash your car.
- Vacuum often.
- Get up to change the TV channel.
- March in place during TV commercials.
- Walk upstairs every time you have something to carry up, instead of waiting for a pile.
- Walk down the hall to talk to a coworker instead of picking up the telephone or sending an email.
- Stretch while watching TV
- Stand up while you're talking on the telephone

Programmed Physical Activity

Aerobic

- Walking
- Jogging
- Stair climbing
- Swimming**
- Water walking*
- Water aerobics*
- Gardening
- Dancing-any type
- Aerobic classes
- Bicycling**
- Roller or ice skating
- Snow skiing
- Chair exercises**
- Machines
 - Treadmill
 - Stair climber
 - Stationary bike**
 - Row machine**
 - Ski machine*
 - Elliptical trainer*
- Sports
 - Basketball
 - Tennis
 - Golf
 - Touch football
 - Ultimate frisbee
 - Soccer

Strength

- Free weights (dumbbells)
- Elastic bands
- Circuit machines
- Pilates
- Conditioning exercises
- Medicine balls

Flexibility

- Stretching
- Yoga
- Tai Chi

* = low-impact activities
** = non-weight bearing activities

Pedometer Reference

- 1 mile ≈ 2,000 steps
- 10 minutes moderately-paced walking ≈ 1,200 steps
- Leisurely cycling ≈ 100 steps/minute
- Raking yard 30 minutes ≈ 1,000 steps

Components Of An Exercise Prescription - FITT

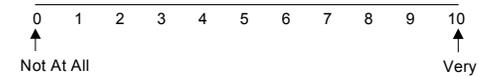
- Frequency
- Intensity
- Time (duration)
- Types of Activities

Health Behavior Change Counseling - 2

Pre-contemplation Counseling

• Explore Importance and Confidence

- Ask patient to rate on a scale of 0-10, how personally important it is for him/her to make changes to manage weight.
- Ask patient to rate on a scale of 0-10, how confident he/she is in his/her ability to make changes to manage weight.



• Sample Dialog:

Staff: Now, I'd like to understand more about how confident you are that you can make changes in your eating and physical activity to manage your weight. On a scale of 0-10 with 0 meaning not confident at all and 10 meaning very confident, you gave yourself a "2". Why did you give yourself a "2" instead of a "0" or "1"?

Patient: Well, I was able to lose a little bit of weight in the past by taking regular walks after dinner; so, I know this can help, but it was hard to keep up.

Staff: So you know from past success that you CAN do this. What would it take to give yourself a "4" or "5" in confidence?

Patient: I would need to find a way to keep walking; also, I'd have to learn more about what diet I should try and what foods I should or shouldn't eat.

• More Tips

- Exchange information (elicit knowledge, provide information, elicit reaction).
- Give good news, support self-efficacy.
- Explore past successes.
- Convey health importance and reinforce relevance.
- Explore the pros and cons of change.
- Develop discrepancy.
- Avoid argument and roll with resistance.

Stage of Change	Barriers	Goal of Counseling	Techniques to Use
Pre-Contemplation (not ready to change diet and physical activity behaviors to lose weight)	Not important to patient Low confidence Denial Defensiveness Lack of awareness	Advise and encourage	Express empathy Develop discrepancy Listen reflectively Examine the pros and cons of change, summarize Provide information if needed Acknowledge decision Offer help when ready
Contemplation (thinking about changing diet and physical activity behaviors to lose weight)	Low confidence Procrastination Low social or environmental support Competing demands	Explore ambivalence and shift towards making a decision to change	Express empathy Develop discrepancy Acknowledge ambivalence Listen reflectively Examine pros and cons of change, summarize Provide information if needed Affirm positive statements Reinforce partnership and willingness to help
Preparation (getting ready to change diet and physical activity behaviors to lose weight)	Confidence may still be low Unsure of specific actions	Strengthen commitment, plan specific actions	Provide information and discuss options Provide assistance with selected actions Express confidence in patient Affirm positive statements Reinforce partnership and willingness to help
Action (has begun changes in diet and physical activity behaviors)	Some obstacles persist Confidence may still be low At risk for relapse	Praise and reinforce, plan for contingencies	Provide frequent positive affirmation Provide ongoing assistance with barriers Express confidence in ability to maintain the change
Maintenance (successfully maintained new behaviors for at least 6 months)	At risk for relapse	Praise and reinforce, plan for contingencies	Provide frequent positive affirmation Provide ongoing assistance with barriers Express confidence in ability to maintain the change

Physical Activity - 3

[Four-step Approach To Counseling On Physical Activity](#)

1. Set goals and choose activities.
2. Start slow and keep it simple.
3. Increase duration and/or intensity.
4. Maintain activity and prevent relapse.

[Physical Activity Recommendations For Health Benefits](#)

Moderate activity for 30 minutes or more on 5 or more days per week
or
Vigorous activity for 20 minutes or more on 3 or more days per week

[Physical Activity For Weight Loss](#)

Aerobic activities: longer duration is better than harder intensity
Strength activities: 2-3 times per week, examples:

- own body weight for resistance (sit-ups, push-ups)
- elastic bands, dumbbells, or household objects (water bottles)
- specialized machines at gym or fitness club

Flexibility activities: end aerobic and strength activities with 10-20 minutes of gentle stretching

[Contingency Planning For High Risk Situations](#)

- Bad weather
- Change of job or work schedule
- Out-of-town travel or vacation
- Increasing family or work demands on time
- Loss of access to gym, track, pool
- Injury or illness

Physical activity patient handouts are available on the [MOVE! website](#).

Pre-Exercise Cardiovascular Risk Stratification

- 1. Unstable Disease?** → YES Class D

 - Ischemia
 - Uncompensated heart failure
 - Uncontrolled arrhythmias
 - Severe or symptomatic aortic stenosis
 - Other conditions aggravated by exercise.

✓ No activity recommended for conditioning purposes

✓ Treat subject and restore to class C or higher
- NO

2. Moderate to High Risk Individual? → YES Class C

 - Cardiomyopathy or low LV ejection fraction (< 30%)
 - Moderate valvular heart disease
 - Non-ischemic EST* abnormalities
 - Ventricular fibrillation or cardiac arrest that did not occur during acute ischemic event
 - Complex ventricular arrhythmias that are uncontrolled at mild to moderate work intensities with medication
 - Three vessel or left main disease
 - CAD with the following characteristics:
 - 2 or more MIs
 - NYHA Class 3 or higher
 - Exercise capacity < 6 METs
 - Horizontal or downsloping ST depression of 4mm or more
 - Angina or fall in SBP during exercise
 - Previous episode of primary cardiac arrest
 - Ventricular tachycardia at a workload of < 6 METs
 - Other associated problems that may be life-threatening
 - Lower risk individuals who are unable to self-regulate activity or to understand recommended activity level

✓ EST* required† for safety and prescriptive purposes.

✓ Activity should be individualized with exercise prescription by qualified personnel.

✓ Continuous ECG and BP monitoring during exercise session until safety is established (usually in 6-12 sessions).

✓ Medical supervision during all exercise session until safety is established. (i.e. formal rehabilitation program)
- NO

3. Lower Risk Individual? → YES Class B

 - Stable CAD with the following characteristics:
 - NYHA Class 1 or 2
 - Exercise capacity > 6 METs
 - No evidence of heart failure
 - Ischemia free at rest and with exercise ≤ 6 METs
 - Appropriate SBP rise with exercise
 - No sequential ectopic ventricular contractions
 - Ability to self-monitor intensity of activity
 - Stable cardiomyopathy, congenital heart and valvular disease
 - EST* abnormalities that don't meet Class C

✓ EST* required† for safety and prescriptive purposes.

✓ Activity should be individualized with exercise prescription by qualified personnel.

✓ Continuous ECG and BP monitoring during exercise may be used during the early prescription phase.

✓ Medical supervision during the prescription phase, non-medical supervision for other exercise sessions until the individual understands how to monitor his or her activity. (i.e. formal cardiac rehabilitation program at least initially)
- NO

4. Individual without known CAD? → YES Class A2
A3

 - Male ≥ 45 y or Female ≥ 55 y
 - Any age with Diabetes or ≥ 2 cardiac risk factors

✓ EST* recommended prior to vigorous† activity

✓ No monitoring or supervision during exercise is required
- NO

5. Apparently Healthy Younger Individual with no more than 1 cardiac risk factor. → Class A1

✓ No EST required prior to moderate or vigorous† activity

✓ No monitoring or supervision is required

* EST = exercise stress test

† Within the past year

Vigorous defined as activities ≥ 6 METs or exercise intense enough to represent a substantial cardiorespiratory challenge. Moderate activities defined as the equivalent of brisk walking (~3.4 MPH)

From:

ACSM's Guidelines for Exercise Testing and Prescription 6th Ed. American College of Sports Medicine. Lippincott Williams & Wilkins. Philadelphia, PA. 2000. and Balady GJ et al. Recommendations for Cardiovascular Screening, Staffing, and Emergency Policies at Health/Fitness Facilities. AHA/ACSM Scientific Statement. Circulation. 1999;97: 2293-2295.

ACC/AHA 2002 guideline update for exercise testing: summary article: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee to Update the 1997 Exercise Testing Guidelines). Circulation. 2002 Oct 1; 106(14):1893-92.

Nutrition Basics - 1

1 gm carbohydrate = 4 Calories 1 gm protein = 4 Calories
 1 gm fat = 9 Calories 1 gm alcohol = 7 Calories
 1 lb weight loss ≈ 3500 Calories

Food Categories

- Grains
- Fruits
- Vegetables
- Dairy
- Protein (eggs, meat, poultry, fish, beans, nuts, seeds)
- Fats and oils
- Refined sugars

Food Selection

- Match energy intake with energy needs
- Balance
- Moderation
- Variety

Individual Energy Needs

Calorie Range	
(Sedentary → Active)	
Females	
19-30 years	2,000—>2,400
31-50 years	1,800—>2,200
51+ years	1,600—>2,200
Males	
19-30 years	2,400—>3,000
31-50 years	2,200—>3,000
51+ years	2,000—>2,800

Weight Loss Per Week	Approximate Weekly Calorie Deficit	Approximate Daily Calorie Deficit
½lb	1750	250
1 lb	3500	500
1 ½lbs	5250	750
2 lbs	7000	1000

Recommended Dietary Composition

15-20% protein 20-30% fat 50-60% carbohydrate

Physical Activity Decision Aid

<p>1. Acutely ill?</p> <p>No</p>	<p>Yes → Delay discussion of physical activity until condition improved/resolved</p> <p>Acute infection, illness, or injury. For example: acute low back pain, active retinal hemorrhage, shortness of breath at rest, undiagnosed chest pain, symptomatic hernias, uncontrolled or unstable chronic conditions. For example: hyper or hypoglycemia, heart failure exacerbation, COPD exacerbation, rheumatoid arthritis flare, severe anemia, symptomatic hypox or hypotryolemia.</p>
<p>2. Known Cardiovascular or Pulmonary Disease?</p> <p>No</p>	<p>Yes → Refer for medical evaluation prior to beginning moderate or vigorous physical activity</p> <p>Heart Disease: heart attack (MI), CABG/open heart surgery or angioplasty, angina, valvular heart disease, congestive heart failure, arrhythmias, pacemaker or implantable defibrillators</p> <p>Peripheral Artery Disease: bypass surgery in lower extremities, claudication, ischemic foot ulcers or amputation due to ischemia</p> <p>Cardiovascular Disease: stroke, transient ischemic attack (TIA), carotid artery surgery</p> <p>Pulmonary Disease: COPD or emphysema, asthma, shortness of breath</p>
<p>3. Diabetes, HTN or ≥ 2 Cardiac Risk Factors?</p> <p>No</p>	<p>Yes → Moderate aerobic activity okay; refer for medical evaluation prior to vigorous activity</p> <p>Smoking, high cholesterol or taking cholesterol lowering medication or special diet, family history of early heart disease (age < 50).</p>
<p>4. Limiting Musculoskeletal or Joint Condition?</p> <p>No</p>	<p>Yes → Moderate aerobic activity okay; refer for medical evaluation prior to vigorous activity or strength and flexibility training</p> <p>Chronic low back pain, symptomatic arthritis, amputation, spinal cord injury, osteoporosis</p>
<p>5. Man > 45 Y or Woman > 55 Y?</p> <p>No</p>	<p>Yes → Moderate aerobic, strength and flexibility training activity okay; refer for medical evaluation prior to vigorous aerobic activity</p>
<p>May participate in moderate or vigorous aerobic, strength, and flexibility activities</p>	

Definition of Moderate Exercise: Activities that are the equivalent of brisk walking at 3-4 miles/hour (i.e., a 15-20 minute mile pace). This may be considered "hard" or "very hard" by some sedentary or older individuals so moderate can alternatively be defined as intensity within the individual's capacity to sustain for a prolonged period of time (~ 45 minutes), which has a gradual initiation and progression and is noncompetitive. Some increase in heart rate and breathing, and light sweating.

Definition of Vigorous Exercise: Exercise intense enough to represent a substantial cardiorespiratory challenge (hard breathing, fast heart rate, large sweating).

Nutrition Basics - 2

Minimize

- Added salt (limit to < 2,300 mg, lower for certain patients)
- Added sugars and caloric sweeteners
- Total fats, saturated fats, and cholesterol (animal sources)
- Trans-fat (found in margarine, baked goods, prepared foods– “partially hydrogenated” on food label indicates trans-fat)
- Alcohol (empty calories)

Maximize

- Low fat dairy products (for the lactose intolerant consider lactose-free dairy, or non-dairy sources of calcium like fortified juices and cereals, soy products, canned fish, leafy greens)
- Whole grains (at least 1/2 of daily grain consumption should be from whole grain sources – whole wheat, oats, brown or wild rice, bulghur, barley, whole rye, buckwheat)
- Fruits and vegetables (choose a variety of colors)

Other Healthy Food Tips

- Get fats from monounsaturated and polyunsaturated sources like fish, nuts, vegetable oils (canola, olive, peanut, safflower, sunflower, corn, soybean)
- Select and prepare lean, low-fat, or fat-free meat, poultry, bean, and dairy products
- Use a food log or journal

Special Populations

- Age > 50 → consume foods fortified with vitamin B12 or supplement
- Older adults, dark-skinned adults, adults in northern climates or who are housebound → consume foods fortified with vitamin D or supplement
- Women of childbearing age → consume foods high in iron and folic acid or supplement