Integrating the New AHA/ACC Guidelines with Lifestyle Behaviors: Real-World Application

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8:00 a.m. – 8:45 a.m.

Integrating the New AHA/ACC Guidelines with Lifestyle Behaviors: Real-World Application will cover the 2013 American Heart Association/American College of Cardiology guidelines focused on lifestyle modifications to reduce cardiovascular risk, overweight/obesity, assessment of cardiovascular risk, as well as the management of blood cholesterol in adults. The guidelines presented a significant shift in thinking for both providers and patients in terms of treating to risk rather than specific targets.

The presentation aims to answer the question, ‘How do we, as professionals, make sense of all the guidelines and make recommendations for our patients?’
   a) Individualize
   b) Help patients see that lifestyle matters
   c) Help patients set realistic lifestyle goals

Ultimately the goal of the presentation is to provide real-world solutions for coaching patients.

References:


Integrating the AHA/ACC Guidelines with Lifestyle Behaviors: Real-world Application
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Presenter Disclosure
Disclosed no conflict of interest.

Objectives
- Personalize nutrition and physical activity approaches for individuals with diabetes.
- Individualize statin therapy recommendations for patients with diabetes.
- Identify strategies to help patients lower their blood pressure.

2013 AHA/ACC clinical practice guidelines
1) Assessment of cardiovascular risk
2) Management of blood cholesterol in adults
3) Lifestyle modifications to reduce cardiovascular risk
4) Management of overweight and obesity in adults

ASCVD Risk Estimator
2013 AHA/ACC Cholesterol Guideline for Statin Therapy

- Known clinical ASCVD
  - Age < 75, high intensity (> 50% LDL lowering)
  - Age > 75, moderate intensity (30-50% LDL lowering)
- LDL > 190 mg/dl, age > 21
  - High intensity
- Type 1 or 2 DM, age 40-75: Moderate intensity
  - If Risk > 7.5%, then high intensity
- No CAD or DM, age 40-75:
  - Risk > 7.5%, moderate to high intensity
  - Risk 5-7.5%, consider moderate intensity statin if LDL > 160 mg/dl, has family history, CRP > 2, CAC > 300 or 75%, ABI < .9, or high lifetime risk.

What does this mean for our patients with diabetes?

### Table 6-1: Recommendations for statin and combination treatment in people with diabetes

<table>
<thead>
<tr>
<th>Age</th>
<th>Risk factors</th>
<th>Recommended statin intensity*</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;40 years</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>40-75 years</td>
<td>Any ASCVD risk factors**</td>
<td>Moderate or high</td>
</tr>
<tr>
<td>&gt;75 years</td>
<td>No ASCVD risk factors</td>
<td>Moderate plus ezetimibe</td>
</tr>
<tr>
<td></td>
<td>ASCVD or LDL cholesterol &gt; 190 mg/dl (5.2 mmol/L) in patients who cannot tolerate high-intensity statins</td>
<td>Moderate plus ezetimibe</td>
</tr>
</tbody>
</table>

*In addition to lifestyle therapy.
**ASCVD risk factors include LDL > 190 mg/dl (5.0 mmol/L), high blood pressure, smoking, overweight or obesity, and family history of premature ASCVD.

Implications of the 2013 AHA/ACC Guidelines for the Treatment of Blood Cholesterol in a Rural Community: The Heart of New Ulm Project

- Approximately 3 in 5 middle-age residents qualify for statin therapy
- Only 2/3 of those individuals were taking a statin
- Infrequent use of high-intensity statins
- 30% of residents found ineligible by the guidelines were taking a statin

Challenges of the guidelines

1. **Challenge** for providers and patients to change thinking: treat based on risk level rather than target LDL.
2. **Challenge** to get risk estimator into EMR.
3. **Challenge** to keep lifestyle behavior as a high priority.

Lifestyle is essential

The cholesterol guidelines clearly state, “It must be emphasized that lifestyle modification (i.e., adhering to a heart-healthy diet, regular exercise habits, avoidance of tobacco products, and maintenance of a healthy weight) remains a critical component of health promotion and ASCVD risk reduction, both prior to and in concert with the use of cholesterol-lowering drug therapies.”
Lifestyle Recommendations

‣ Blood Pressure
‣ Nutrition
‣ Physical Activity
‣ Obesity

Nutrition Recommendations

‣ Emphasis on food patterns vs. individual nutrients
‣ DASH Diet
  ▪ Positive reductions in blood pressure & LDL
  ▪ No impact on TG, HDL
‣ Mediterranean Diet
  ▪ Positive reductions in blood pressure
  ▪ No consistent effect on lipids

Lifestyle & JNC 8

Key Take-aways:
‣ Dietary Approaches to Stop Hypertension (DASH), AHA diet, or the USDA Food Pattern
  ▪ More vegetables, fruit, low-fat dairy, poultry, fish, legumes, non-tropical vegetable oils and nuts.
  ▪ Less sweets, sugar-sweetened beverages and red meats.
‣ Sodium reduction

Sodium Recommendation

AHA/ACC: Consume no more than 2400mg/day
⇒ 1500 mg/day is desirable

ADA & Dietary Guidelines: Reduce sodium to less than 2300 mg/day.

Sodium Guidelines

Challenge:
‣ 9 out of 10 Americans consume too much.
‣ The average American consumes over 3400 mg/day.
‣ Most people don’t track their sodium.
Top 10 Sodium Sources
1. Breads and rolls
2. Cold cuts and cured meats
3. Pizza
4. Poultry
5. Soups
6. Sandwiches
7. Pasta dishes
8. Meat dishes
9. Snacks

Real-world Solution
Divide daily sodium recommendation into # of meals and snacks typically eaten each day.
• If patient reports eating 3 meals and 1 snack a day, recommend <600 mg per meal/snack.
• Then look at some typically eaten foods and compare.

Compare sodium content:
1 cup canned green beans 800mg
1 cup frozen green beans = 4mg

First Step Sodium Reduction
Recommendation: Reduce by at least 1000 mg/day
Result: Reduces CVD events by 30%.

Real-world solutions:
• Explain that the preference for salt is learned.
• Read labels, identify high sodium foods and find lower sodium options.
• Make lower sodium requests at restaurants: ask that salt not be added and ask for foods without toppings or served on the side.

Saturated Fat
AHA/ACC recommendation:
Aim for no more than 5-6% of calories from saturated fat.

Result: ↓LDL 11–13 mg/dL

Dietary Guidelines for Americans recommendation: <10%

Saturated Fat – Conflicting Views
• Mediterranean pattern compared to minimal dietary advice resulted in no consistent effect on plasma LDL–C, HDL–C, and TG

• PREDIMED Prevention Trial showed a 30% reduction in MI, stroke and CV death on Mediterranean diet (9-10% calories from saturated fat)

Challenge: Less than 12% of adults met the goal of less than 7%.

Real-world solution: Meet patients where they are at and help them set realistic goals.

Saturated Fat
• Consuming healthful fats (polyunsaturated fats) instead of saturated fat lowers the risk for CAD whereas replacing the saturated fat with carbohydrates may increase the risk.

• Li and colleagues found type of carbohydrate plays a critical role.
  • Replacing saturated fats with processed CHO → Ø CHD risk
  • Replacing saturated fats with whole grains → ↓9% CHD risk

Replace saturated fats with polyunsaturated first, followed by monounsaturated and whole grains.
What We Eat in America (WWEIA) Food Category analyses for the 2015 Dietary Guidelines Advisory Committee. Estimates based on day 1 dietary recalls from WWEIA, NHANES 2009-2010.

Real-world solution

- Foods with natural oils, such as seafood, nuts/seeds in place of some meat and poultry
- Use vegetable oils in place of solid fats (butter, lard, stick margarine, shortening) for food preparation
- In mixed dishes, substitute more vegetables in place of higher saturated fat items like meat or cheese

Trans Fat

**Recommendation:** Reduce percent of calories from trans fat.

**Result:** Lowers LDL with little or no impact to HDL & TG

**Challenge:** Nutrition Facts label may list 0 trans fat but the food may < .5 gm/serving.

**Real-world Solution:** Avoid foods with partially hydrogenated oil in the ingredient list.

Healthy Dietary Patterns

- **Focus** on overall eating patterns rather than individual nutrients, taking into consideration personal and cultural preferences.
- **Eat** more fruits, vegetables, legumes, nuts, whole grains, low-fat dairy, poultry and fish.
- **Limit** sweets, sugar-sweetened beverages, red meats, and processed foods.
- **Nourish** the body throughout the day when energy is most needed.
- **Adapt** calorie level to personal needs.

Physical Activity

**2013 AHA/ACC Lifestyle Guideline**

**Recommendation:** Do aerobic activity 3-4 times a week for 40 minutes at moderate to vigorous intensity.

**Results:** Lowers LDL, non-HDL and blood pressure.

**Real-world solutions:**
- Aim for a minimum of 10 minute bouts.
- Make it enjoyable.
- Change it up.
- Exercise with a friend.
- Use a tracker or app to monitor physical activity.

**2016 Standards of Medical Care in Diabetes**

- Aerobic exercise 150 min/week of moderate-intensity aerobic physical activity (50–70% of maximum heart rate) spread over 3 days/week with no more than 2 consecutive days without exercise.
- Limit the amount of time they spend being sedentary-break up time (> 90 min.) spent sitting.
- Resistance training twice a week unless contraindicated.
Obesity Guideline Highlights
- Monitor BMI and assess readiness to change.
- Emphasize sustained weight loss of 3-5% to produce clinically meaningful health benefits.
- Consume fewer calories (500 less/day) and increase physical activity based personal preferences.
- Exercise 2 ½ hours per week
- Accountability: ≥6 month intervention and 1 year maintenance.
- Consider prescribing pharmacotherapy or bariatric surgery.

Real-world Solution-5 A's
Ask - Would it be okay if we discussed your weight?
Assess - On a scale of 1-10, with 10 being 100% ready to take action, how ready are you to lose weight?
Advise - Emphasize personal risks and the benefits of 5% to 10% weight loss (10-15 lb.)
Agree on SMART goals (specific, measurable, achievable, rewarding, and timely.)
Assist - Arrange follow-up or refer to credible resources and programs.

Making Sense of the AHA/ACC Guidelines
- Spirit of the guidelines vs letter of the guidelines.
- Make it matter for patients.
- Assist patient in finding internal motivation by asking – What is most important to you?
- Individualize! Individualize! Individualize!

Acknowledgements
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  heartsbeatback.org

Questions?