

# Type 2 Diabetes Master DecisionPath: Dyslipidemia

At presentation

Baseline labs:  
 1. Fasting lipid profile  
 2. ALT  
 3. CK

**Primary lipid targets**  
 LDL <100 mg/dL (<70 mg/dL with evidence of CVD); Triglycerides <150 mg/dL; HDL >40 mg/dL

**Secondary lipid targets**  
 Non-HDL <130 mg/dL (<100 mg/dL with evidence of CVD)  
 Apo B <90 mg/dL (<80 mg/dL with evidence of CVD)

<p><b>Self-management</b></p> <ul style="list-style-type: none"> <li>• Take medications as prescribed</li> <li>• Ensure tobacco free and aspirin therapy</li> </ul>	<p><b>Nutrition and activity</b></p> <ul style="list-style-type: none"> <li>• Refer for Medical Nutrition Therapy</li> <li>• Lowers LDL 20 to 30%</li> </ul>	<p><b>Emotional health</b></p> <ul style="list-style-type: none"> <li>• Psychosocial support/motivation</li> <li>• Assess for anxiety and/or depression</li> </ul>
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**Initiate and titrate statin therapy**

*Titrate to max tolerated dose and add medication if not at target within three months*

**LDL above target**

**Triglycerides above target and/or HDL below target**

**Add ezetimibe, bile acid sequestrant or niacin**

**Add fibrate**

*Titrate dose, not at target add medication if within three months*

*Titrate dose, not at target add medication if within three months*

**Add niacin**

*Titrate dose, not at target add medication if within three months*

**Check for adherence to regimen, consider referral to lipid specialist**

See next page for clinical considerations; key to abbreviations

### Key to abbreviations

**ApoB:** Apoprotein B; **CVD:** Cardiovascular disease; **DM:** Diabetes mellitus; **HDL:** High-density lipoprotein; **LDL:** Low-density lipoprotein; **Non-HDL:** Non-high-density lipoprotein.

### Clinical considerations

1. Lower LDL 30-40% regardless of baseline LDL.
2. Non-HDL = total cholesterol – HDL; reflects cholesterol in all atherogenic lipoproteins.
3. Statin therapy should be considered in all patients with type 2 diabetes and evidence of CVD and those >40 years of age with additional CV risk factor(s).
4. Determine ALT and CK level at baseline, do not initiate or consider discontinuing therapy if > 3 times upper limit of normal. Consider alternate statin (pravastatin or low dose rosuvastatin) or reducing dose for statin associated myalgia.
5. Reinforce importance of glycemic control if persistently elevated triglyceride level; reinforce need for moderating carbohydrate and alcohol intake.
6. Statin and fibrate combination therapy (especially with gemfibrozil) increases risk of myopathy and rhabdomyolysis.
7. Well tolerated, modest benefit on lowering LDL when added to statin.
8. Bile acid sequestrant contraindicated when triglycerides >500 mg/dL; colesevelam recommended because of better tolerability and impact on lipid panel; may have modest beneficial effect on lowering blood glucose.
9. Flushing a concern, consider taking aspirin prior to dose; beneficial because raises HDL, lowers triglycerides and LDL.
10. Consider 2 gm/day plant stanols/sterols for elevated triglycerides.

### Lipid algorithm references

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