CCHCS Care Guide: Dyslipidemia

October 2015

SUMMARY

GOALS

- Decrease morbidity and mortality of atherosclerotic cardiovascular disease (ASCVD)
- Appropriately identify and treat patients at risk for ASCVD
- High-intensity statin therapy for ALL ASCVD patients

DECISION SUPPORT

HYPERCHOLESTEROLEMIA DIAGNOSTIC CRITERIA/EVALUATION

For treatment of total cholesterol or LDL: Goal is no longer "treat to target" or to consider "lower is better." Manage according to patient’s ASCVD risk.

EVALUATION:

- Assess each patient for personal ASCVD risk factors and family history ASCVD
- Obtain lipid panel (non-fasting is acceptable for screening) in:
  - males > 35 years or 20-35 years at increased risk for ASCVD
  - females > 45 years or 35-45 years at increased risk for ASCVD
- Estimate patient’s 10-year ASCVD risk group based on sex, age, race, total cholesterol, HDL, BP, history of DM, and smoking history using the newly developed Pooled Cohort Equation: http://clincalc.com/Cardiology/ASCVD/PooledCohort.aspx

PATIENT EDUCATION/SELF MANAGEMENT

ALERTS

- Muscle pain or weakness
- No more total cholesterol or LDL treatment targets
- Minimize statin adverse effects & potential drug interactions

4 DEFINED STATIN BENEFIT GROUPS

<table>
<thead>
<tr>
<th>SECONDARY PREVENTION</th>
<th>GROUP 1</th>
<th>Individuals with clinical ASCVD (ACS, MI, stable angina or other arterial revascularization, stroke, TIA, or PAD of atherosclerotic origin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY PREVENTION</td>
<td>GROUP 2</td>
<td>Individuals with LDL-C of ≥190 (age ≥ 21 years and a candidate for statin therapy)</td>
</tr>
<tr>
<td></td>
<td>GROUP 3</td>
<td>Individuals with diabetes, LDL-C of 70 to 189, age 40 to 75 years, and without clinical ASCVD (If DM patients age &lt;40 or &gt;75 years or, LDL-C &lt;70 mg/dl; treatment is individualized)</td>
</tr>
<tr>
<td></td>
<td>GROUP 4</td>
<td>Non-diabetic individuals with a 10-year ASCVD risk ≥7.5%, age 40 to 75 years, with LDL of 70 to 189, and with a 10-year ASCVD risk of &gt;7.5% (Consider treatment for primary prevention in individuals with a 10-year ASCVD risk of 5 to 7.5%)</td>
</tr>
</tbody>
</table>

TREATMENT

- Healthy lifestyle changes: a 3 month trial of lifestyle changes such as diet, exercise, weight loss, smoking cessation, and control of HTN and/or DM may be appropriate in groups 2, 3, 4.
- Prior to statin initiation: TSH, ALT, CK, A1C if diabetic status is unknown.
- Statin therapy: Strongly recommended as first line therapy for all dyslipidemias when medication is indicated.
- Non-statin therapies: (e.g., ezetimibe, fibrates, fish oil, niacin) alone or in combination with statins DO NOT provide acceptable risk reduction benefits compared to adverse effects. With a few exceptions, these agents should be avoided.
- Statin intensity: Initiate or continue the appropriate intensity of statin therapy for all four of the defined statin benefit groups (see algorithm page 2).
- Statin intolerance: If patient cannot tolerate statin due to muscle weakness, muscle pain, or tenderness: re-address lifestyle issues, decrease statin dose, try another statin, check vitamin D levels and replace (low levels associated with statin myopathy), if low evaluate for other conditions that may cause muscle weakness.
- There are limited recommendations for treatment of individuals who are not in the 4 statin benefit treatment groups described above. In these individuals whose 10-year risk is < 7.5%, or when the decision is unclear, other factors (family history of premature CAD, LDL > 160 mg/dl, increased C-reactive protein [CRP] greater than 2.0, coronary calcium greater than 300, ABI < 0.9) should be considered.
- There is insufficient data to make specific recommendations regarding statin therapy in the following groups: NYHA class 2-4 CHF, dialysis, HIV patients, and solid organ transplant patients.

MONITORING

- Prior to statin therapy: assess response to trial of lifestyle changes
- During statin therapy:
  - If symptomatic in the first 3 months of rx:
    - check ALT, CK
    - search for drug-drug interactions
    - decrease statin dose, try another statin
    - check vitamin D levels and replace if low
    - check TSH
  - If asymptomatic: follow up in 6-12 months as appropriate
  - Routine CK/ALT testing not indicated
  - Annual: lipid panel for stable long term statin therapy patients (more frequent if indicated to monitor patient adherence).

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- Hypertriglyceridemia
- Secondary Causes of Dyslipidemia
- Medications
- Patient Education
- Patient Education (Spanish)
### Four Statin Therapy Benefit Groups Algorithm

- **Age ≥21y and Statin therapy candidate**
  - **Group 1** Clinical ASCVD (ASCVD Risk calculation not needed)
    - Yes → **Age ≤75y High-intensity statin** (Moderate-intensity statin if not candidate for high-intensity statin)
    - No → **Age >75y** OR if not candidate for high-intensity statin **Moderate-intensity statin**
  - No → **Group 2** LDL-C ≥190 mg/dl (ASCVD Risk calculation not needed)
    - Yes → **High-intensity statin** (Moderate-intensity statin if not tolerating high-intensity statin)
    - No → **Group 3** Diabetes 1 or 2 LDL-C 70-189 mg/dl Age 40-75y (Calculate ASCVD risk)
      - Yes → **Moderate-intensity statin**
      - No → **Group 4** 10-y ASCVD risk ≥7.5% Age 40-75y (Calculate ASCVD risk)
        - Yes → **Moderate-to-high intensity statin**
        - No → **Reassessment:**
          - In individuals aged 40-75y without clinical ASCVD or diabetes and with LDL-C 70-189 mg/dl not receiving cholesterol-lowering drug therapy, calculate 10-year ASCVD risk every 4-6 years.
          - Consider treatment for those with ASCVD risk factor 5-7.5%.
          - Statin benefits less clear in other groups:
            - In selected individuals, consider additional factors influencing ASCVD risk and potential ASCVD risk benefits and adverse effects, drug-drug interactions, and patient preferences for statin treatment.

### Summary

**High-intensity statin**
- Lowers LDL-C ≥50%
- Atorvastatin 40-80 mg daily
- Simvastatin 20-40 mg/d

**Moderate-intensity statin**
- Lowers LDL-C 30-50%
- Atorvastatin 10-20 mg/d

**Low-intensity statin**
- Lowers LDL-C <30%
- Use with high or moderate-intensity statin intolerance
- Simvastatin 10 mg/d

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*ASCVD risks include nonfatal MI, CHD death, nonfatal and fatal stroke

**http://clincalc.com/Cardiology/ASCVD/PooledCohort.aspx

Source: Adapted from 2013 ACC/AHA Blood Cholesterol Guidelines pg S9; downloaded from http://circ.ahajournals.org by guest on July 9, 2015
CCHCS Care Guide: Dyslipidemia

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Hypertriglyceridemia Diagnostic Criteria/ Evaluation

**DIAGNOSIS:**
- Confirm diagnosis based on fasting triglyceride level >150 mg/dl
- Mild-moderate hypertriglyceridemia diagnosis aids in evaluation of cardiovascular risk
- Severe or very severe hypertriglyceridemia should be considered a risk for pancreatitis
- Patients with triglycerides >500 mg/dl should be evaluated for a genetic disorder of lipid metabolism (primary dyslipidemia)

**TRIGLYCERIDE LEVEL** | **GOAL** | **INTERVENTION**
--- | --- | ---
**Mild Hypertriglyceridemia** | 150-199 mg/dl | Reduce ASCVD risk |
- Lifestyle changes: especially appropriate diet composition, physical activity, weight reduction in overweight and obese
- Evaluate all patients with hypertriglyceridemia for secondary causes
- Statin indicated for mild to moderate triglyceride elevation (proven to be of most benefit to reduce CV risk)
- Avoid fibrates in mild-moderate hypertriglyceridemia (increased risk of pancreatitis)

**Moderate Hypertriglyceridemia** | 200-999 mg/dl | Reduce pancreatitis risk |
- Avoid alcohol abuse
- Reduce dietary fat and simple carbohydrate intake
- Fibrate indicated first line therapy for severe to very severe hypertriglyceridemia, AVOID gemfibrozil with statin
- Fenofibrate may be considered concomitantly with a low or moderate-intensity statin only if the benefits from ASCVD risk reduction or triglyceride lowering when triglycerides are >500 mg/dl are judged to outweigh the potential risk for adverse effects (Renal status should be evaluated before fenofibrate initiation (see page 6)
- Nicotinic acid: doses of 1500-2000 mg/day are required to reduce triglycerides. Flushing is a very significant adverse effect (occurs in 92% of patients). Reduce incidence by starting at low dose and increasing slowly. Premedication 30 minutes prior to niacin dose with 325mg aspirin or 200 mg ibuprofen can alleviate flushing. Patient adherence with niacin over time is poor, 52% remain on therapy at 1 year, 29% at 4 years

**Severe Hypertriglyceridemia** | 1000-1999 mg/dl | Reduce pancreatitis risk and Reduce ASCVD risk |
- Avoid alcohol abuse
- Reduce dietary fat and simple carbohydrate intake
- Fibrate indicated first line therapy for severe to very severe hypertriglyceridemia, AVOID gemfibrozil with statin
- Fenofibrate may be considered concomitantly with a low or moderate-intensity statin only if the benefits from ASCVD risk reduction or triglyceride lowering when triglycerides are >500 mg/dl are judged to outweigh the potential risk for adverse effects (Renal status should be evaluated before fenofibrate initiation (see page 6)
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**Very Severe Hypertriglyceridemia** | ≥ 2000 mg/dl | |

**SECONDARY CAUSES OF DYSLIPIDEMIA**

**CONDITIONS**
- Alcohol, excessive intake
- Diabetes mellitus, uncontrolled
- Cholestatic liver disease
- Nephrotic syndrome
- Chronic renal failure
- Hypothyroidism
- Smoking
- Obesity
- Very low fat diet
- High intake refined carbohydrates
- Pregnancy (cholesterol/triglycerides increase throughout pregnancy- medications contraindicated during pregnancy and lactation)

**DRUGS (direct or by causing weight gain)**
- Thiazide diuretics
- Beta blockers
- Oral estrogens
- Atypical antipsychotics (metabolic syndrome)
- Tamoxifen
- Glucocorticoids
- Antiretroviral medications (esp. protease inhibitors)
- Retinoids
- Cyclosporine

# MEDICATIONS

## HMG CoA REDUCTASE INHIBITORS (STATINS) - Risk of skeletal muscle effects (e.g., myopathy, rhabdomyolysis) increase with higher doses and concomitant use of certain drugs. Predisposing factors include: age >65, female gender, uncontrolled hypothyroidism, and renal impairment

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSING</th>
<th>ADVERSE EFFECTS/INTERACTIONS*</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simvastatin ZOCOR®</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tablet: 5 mg, 10 mg, 20 mg, 40 mg</td>
<td>Usual dose: 10-40 mg once daily in evening</td>
<td>Adverse effects: Myopathy, rhabdomyolysis, Increased liver enzymes</td>
<td>CCHCS PREFERRED AGENT</td>
</tr>
<tr>
<td></td>
<td>MODERATE-INTENSITY</td>
<td></td>
<td>Note: 80 mg dose is associated with elevated risk of muscle injury. FDA recommends 80 mg dose only for patients who have been taking this dose for at least 12 months</td>
</tr>
<tr>
<td></td>
<td>30% to &lt;50% reduction in LDL: 20-40 mg once daily in evening</td>
<td></td>
<td>Contraindications:</td>
</tr>
<tr>
<td></td>
<td>Dose adjustments: Concomitant verapamil, diltiazem, or dronedarone: max 10 mg/day</td>
<td></td>
<td>- Active liver disease or unexplained, persistent elevations of serum transaminases</td>
</tr>
<tr>
<td></td>
<td>Concomitant amiodarone, amlodipine, ranolazine, lomitapide: max 20 mg/day</td>
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<td>- Pregnancy</td>
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<td></td>
<td>Renal dosing: CrCl &gt;20 ml/min: No adjustment</td>
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<td>CrCl ≤20 ml/min: 5 mg/day, initially</td>
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<tr>
<td><strong>Atorvastatin LIPITOR®</strong></td>
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<tr>
<td>Tablet: 10 mg, 20 mg, 40 mg, 80 mg</td>
<td>Usual dose: 10-80 mg once daily</td>
<td>Adverse effects: Myopathy, rhabdomyolysis, Increased liver enzymes</td>
<td>Contraindications:</td>
</tr>
<tr>
<td></td>
<td>MODERATE-INTENSITY</td>
<td></td>
<td>- Active liver disease or unexplained, persistent elevations of serum transaminases</td>
</tr>
<tr>
<td></td>
<td>30% to &lt;50% reduction in LDL: 10-20 mg once daily</td>
<td></td>
<td>- Pregnancy</td>
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<tr>
<td></td>
<td>HIGH-INTENSITY</td>
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<td>≥ 50% reduction in LDL: 80 mg once daily, 40 mg once daily if 80 mg not tolerated</td>
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<td>Dose adjustments: Concomitant clarithromycin, itraconazole, saquinavir plus ritonavir, darunavir plus ritonavir, fosamprenavir, fosamprenavir plus ritonavir: max 20 mg/day</td>
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<td></td>
<td>Concomitant nelfinavir: max 40 mg/day</td>
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<td></td>
<td>Renal dosing: No adjustment needed</td>
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<tr>
<td><strong>Pravastatin PRAVACHOL®</strong></td>
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<tr>
<td>Tablet: 10 mg, 20 mg, 40 mg</td>
<td>Usual dose: 20-80 mg once daily</td>
<td>Adverse effects: Myopathy, rhabdomyolysis, Increased liver enzymes</td>
<td>CCHCS RESTRICTION</td>
</tr>
<tr>
<td></td>
<td>MODERATE-INTENSITY</td>
<td></td>
<td>Use restricted to patients on Coumadin®, HIV protease inhibitors, cyclosporine, or other medications impacted by the cytochrome P450 enzyme system</td>
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<tr>
<td></td>
<td>30% to &lt;50% reduction in LDL: 40-80 mg once daily</td>
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<td>Contraindications:</td>
</tr>
<tr>
<td></td>
<td>Dose adjustments: Concomitant cyclosporine: max 20 mg/d</td>
<td></td>
<td>- Active liver disease or unexplained, persistent elevations of serum transaminases</td>
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<tr>
<td></td>
<td>Concomitant clarithromycin: max 40 mg/day</td>
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<td>- Pregnancy</td>
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<tr>
<td></td>
<td>Renal Dosing: CrCl &lt;30 ml/min: initial dose: 10 mg/day</td>
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<tr>
<td><strong>Rosuvastatin CRESTOR®</strong></td>
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<tr>
<td>Tablet: 5 mg, 10 mg, 20 mg, 40 mg</td>
<td>Usual dose: 5-40 mg once daily</td>
<td>Adverse effects: Myopathy, rhabdomyolysis, Increased liver enzymes</td>
<td>Contraindications:</td>
</tr>
<tr>
<td></td>
<td>MODERATE-INTENSITY</td>
<td></td>
<td>- Active liver disease or unexplained, persistent elevations of serum transaminases</td>
</tr>
<tr>
<td></td>
<td>30% to &lt;50% LDL reduction: 5-10 mg once/day</td>
<td></td>
<td>- Pregnancy</td>
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<tr>
<td></td>
<td>HIGH-INTENSITY ≥50% LDL reduction: 20-40 mg once daily</td>
<td></td>
<td>For Asian patients, consider 5 mg/day starting dose</td>
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<tr>
<td></td>
<td>Dose adjustments: Concomitant cyclosporine: max 5 mg/d</td>
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<td></td>
<td>Concomitant lopinavir/ritonavir or atazanavir/ritonavir: max 10 mg/day</td>
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<td></td>
<td>Renal Dosing: CrCl &lt;30 ml/min: initially 5 mg/day; max 10 mg/day</td>
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</tbody>
</table>

### Notes
- **Bold = Formulary**
- *See prescribing information for complete description of adverse effects and drug interactions.
### HMG CoA Reductase Inhibitors (Statins)

Risk of skeletal muscle effects (e.g., myopathy, rhabdomyolysis) increase with higher doses and concomitant use of certain drugs. Predisposing factors include: age >65, female gender, uncontrolled hypothyroidism, and renal impairment.

#### Fluvastatin
- **Lescol®, Lescol® XL**
  - **Capsule, immediate-release:** 20 mg, 40 mg
  - **Tablet, extended-release:** 80 mg
  - **Usual dose:** 20-40 mg once daily at bedtime or twice daily
  - **MODERATE-INTENSITY** 30% to <50% reduction in LDL: 40 mg (IR) twice daily or 80 mg (XL) once daily
  - **Dose adjustments:** Concomitant cyclosporine or Fluconazole, max 20 mg twice daily
  - **Renal dosing:** Mild-moderate impairment: no adjustment; Severe impairment/HD/PD: not defined
  - **Adverse effects:** Headache, Nausea, Dyspepsia, Myopathy, rhabdomyolysis, Increased liver enzymes
  - **Drug interactions:** Fluvastatin may be less likely to interact with other drugs, Contraindicated with gemfibrozil, Use caution with niacin, fibrates, glyburide, phenytoin, warfarin, colchicine
  - **Contraindications:** Pregnancy, Active liver disease or persistent elevation of LFT’s

#### Pitavastatin
- **Livalo®**
  - **Tablet:** 1 mg, 2 mg, 4 mg
  - **Usual dose:** 1-4 mg once daily
  - **MODERATE-INTENSITY** 30% to <50% reduction in LDL: 2-4 mg once daily in the evening
  - **Dose adjustments:** Max 1 mg/day: Concomitant erythromycin
    - Max 2 mg/day: Concomitant rifampin
  - **Renal dosing:** CrCl <60 ml/min or HD: start 1 mg daily, max 2 mg/day
  - **Adverse effects:** Myopathy, rhabdomyolysis, Increased liver enzymes
  - **Drug interactions:** Pitavastatin may be less likely to interact with other drugs, Contraindicated with cyclosporine and gemfibrozil, Use caution with fibrates, niacin, colchicine, Consider dosage reduction with niacin
  - **Contraindications:** Pregnancy, Active liver disease or persistent elevation of LFT’s

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### FACTORS TO CONSIDER IN STATIN SELECTION

<table>
<thead>
<tr>
<th>Medication</th>
<th>Most reduction in LDL</th>
<th>Preferred with renal impairment</th>
<th>Preferred with significant liver disease</th>
<th>Fewer drug interactions</th>
<th>Possibly less myopathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simvastatin</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Atorvastatin</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Pravastatin</td>
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<td>Yes</td>
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<tr>
<td>Rosuvastatin*</td>
<td>Yes</td>
<td></td>
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</tr>
<tr>
<td>Fluvastatin*</td>
<td></td>
<td>Yes</td>
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<tr>
<td>Pitavastatin*</td>
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</tr>
</tbody>
</table>

*See prescribing information for complete description of adverse effects and drug interactions.

**Bold = Formulary**

*Nonformulary*
**FIBRIC ACID DERIVATIVES**

**Note:** Increases in creatine kinase (CK), increased risk of rhabdomyolysis, and myoglobinuria leading to acute renal failure are associated with concurrent use of fibrates and statins (significantly higher rate observed with gemfibrozil), particularly in the elderly, patients with diabetes, renal failure, or hypothyroidism.

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSING</th>
<th>ADVERSE EFFECTS/INTERACTIONS*</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fenofibrate TRICOR®</td>
<td>Primary hypercholesterolemia or mixed dyslipidemia: 145 mg orally once daily</td>
<td>Adverse effects: Dyspepsia, Gallstones, Myopathy</td>
<td>FENOFRIBRATE AND KIDNEYS: Renal status should be evaluated before fenofibrate initiation, within 3 months after initiation, and every 6 months thereafter. Assess renal safety with both serum creatinine level and estimated GFR based on creatinine.</td>
</tr>
<tr>
<td>Tablet: 48 mg, 145 mg</td>
<td>Severe hypertriglyceridemia: 48-145 mg orally once daily</td>
<td>Drug interactions: Use caution with warfarin, bile acid sequestrants, colchicine immunosuppressants (e.g., cyclosporine, tacrolimus)</td>
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<td>$$</td>
<td>Max dose: 145 mg/day</td>
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<td></td>
<td>Renal dosing: CrCl 30-80 ml/min: 48 mg, initially</td>
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<tr>
<td></td>
<td>CrCl &lt;30 ml/min: Contraindicated</td>
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<tr>
<td>Gemfibrozil LOPID®</td>
<td>Initial and maintenance dose: 600 mg orally twice daily, 30 minutes before morning and evening meals</td>
<td>Adverse effects: Dyspepsia, Gallstones, Myopathy</td>
<td>Contraindications: Severe renal dysfunction (CrCl &lt;30 ml/min), Active liver disease, Gallbladder disease</td>
</tr>
<tr>
<td>Tablet: 600 mg</td>
<td>Renal dosing: CrCl 10-50 ml/min: Consider alternative therapy</td>
<td>Drug interactions: Avoid concomitant use with statins</td>
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</tr>
<tr>
<td>$</td>
<td>CrCl &lt;10 ml/min: Contraindicated</td>
<td>Use caution with warfarin, bile acid sequestrants, colchicine, cyclosporine</td>
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</tr>
<tr>
<td></td>
<td>Max dose: 145 mg/day</td>
<td>Contraindicated with dasabuvir, repaglinide</td>
<td></td>
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<tr>
<td></td>
<td>Renal dosing: CrCl &lt;30 ml/min: Contraindicated</td>
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</tr>
<tr>
<td>Niacin Immediate release tablets: 250 mg, 500 mg</td>
<td>Initial: 250 mg orally once daily; titrate every 4-7 days to 1.5-2 g in divided doses; after 2 months at this dose if hyperlipidemia is not adequately controlled, increase at 2-4 week intervals to 3 g/d in divided doses. (See comments on nicotinic acid page 3)</td>
<td>Adverse effects: Flushing, Hyperglycemia, Hyperuricemia (or gout), Upper GI distress, Hepatotoxicity, Pruritus</td>
<td>Contraindications: Active liver disease, Active peptic ulcer, Arterial bleeding, Severe gout, Caution in patients with diabetes, renal disease, unstable angina. Avoid hot drinks or food around time of niacin administration. Pretreat with aspirin or ibuprofen 30 minutes before each dose to reduce severity and frequency of flushing, pruritus, and GI distress.</td>
</tr>
<tr>
<td>$</td>
<td>Maintenance: 1-2 g orally 2-3 times daily</td>
<td>Drug interactions: Use caution with statins</td>
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<tr>
<td></td>
<td>Max dose: 6 g/d</td>
<td>Bile acid sequestrants may decrease absorption</td>
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<tr>
<td></td>
<td>Take with food</td>
<td>Ethanol may increase side effects of flushing and pruritus</td>
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<tr>
<td></td>
<td>Renal dosing: Use caution in renal impairment, dosing not available</td>
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<td></td>
</tr>
<tr>
<td>Bile Acid Sequestrants</td>
<td>Initial dose: 4 g orally 1-2 times daily before meals (mixed in 60-180 ml of noncarbonated beverage)</td>
<td>Adverse effects: Constipation, Gastrointestinal distress</td>
<td>NONFORMULARY AND NOT RECOMMENDED IN CCHCS Contraindications: Complete biliary obstruction (bile is not secreted into the intestine), Patients with TG &gt; 400 mg/dl, GI obstruction</td>
</tr>
<tr>
<td>Cholestyramine QUESTRAN®</td>
<td>Maintenance dose: 8-16 g/day in 2 divided doses before meals</td>
<td>Drug interactions: Decreases absorption of other drugs</td>
<td></td>
</tr>
<tr>
<td>Powder: 4 g</td>
<td>Max dose: 24 g/day</td>
<td>Administer other drugs at least 1 hour before or at least 4-6 hours after each dose</td>
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<tr>
<td>$$$</td>
<td>Renal dosing: No adjustment needed</td>
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<td></td>
</tr>
</tbody>
</table>
What is dyslipidemia or high cholesterol?
- Abnormalities in cholesterol and other lipids (fats) in your blood which may cause clogging of arteries in your heart or other parts of your body.

Why is dyslipidemia important?
- Dyslipidemia is a risk factor for heart attacks and strokes.
- Treating dyslipidemia will help you avoid a heart attack or stroke.

How can I tell if I have dyslipidemia?
- When you have dyslipidemia, you do not have symptoms.
- Your health care provider will order a test that measures the amount of lipids in your blood.

How do I know if I need the test?
- Your health care provider will check your lipids/cholesterol if:
  - You have a history of:
    - Previous heart attack
    - Diabetes mellitus
    - High blood pressure
    - Cigarette smoking
  - You are:
    - Overweight or obese
    - Physically Inactive
    - A man more than 44 years old
    - A woman more than 54 years old
  - You have:
    - Family history of early heart disease

How is dyslipidemia or “high cholesterol” treated?
Treatment depends on:
- your lipids levels
- your risk of heart attack
- your general health

Your primary care provider may give you a lipid-lowering medication to lower your cholesterol.

What You Should Do
Modify your daily routine and activities to lower your cholesterol:
- Lose weight
- Exercise
- Stop smoking
- Eat more fruits and vegetables
- Reduce fat in your diet (meat, milk, eggs, butter, cheese, packaged foods and snack items like cookies, crackers and chips)
- Take your medications as directed
- Report medication side effects
  - Muscle aches are commonly reported and may or may not be due to your medicine
- Get blood tests as recommended by your health care team
Guía de cuidados de CCHCS : Dislipidemia

EDUCACIÓN AL PACIENTE/ AUTOCUIDADOS

Dislipidemia (Colesterol alto)

LO QUE USTED DEBE SABER

¿Qué es la dislipidemia o colesterol alto?
- Es la alteración en los niveles de colesterol y otros lípidos (grasas) en su sangre que puede causar obstrucciones en las arterias de su corazón y otras partes de su organismo.

¿Por qué es importante la dislipidemia?
- La dislipidemia es un factor de riesgo de ataques cardíacos y derrames cerebrales.
- Tratar la dislipidemia le ayudará a evitar un ataque cardíaco o un derrame cerebral.

¿Cómo puedo saber si sufre de dislipidemia?
- La dislipidemia no presenta síntomas.
- Su médico de cabecera le dará una orden para una prueba que mide la cantidad de lípidos en su sangre.

¿Cómo saber si necesito la prueba?
- Su médico de cabecera le hará la prueba de lípidos/colesterol si:
  - Usted tiene un historial de:
    - Ataques cardíacos previos
    - Diabetes mellitus
    - Alta tensión arterial
    - Fumar
  - Ud.:
    - Tiene sobrepeso u obesidad
    - Es sedentario
    - Es un hombre mayor de 44 años
    - Es una mujer mayor de 54 años
  - Usted tiene:
    - Historial familiar de enfermedades cardíacas tempranas

¿Cómo se trata la dislipidemia o “colesterol alto”? 
El tratamiento depende de:
- los niveles de lípidos que usted presente
- el riesgo que usted tenga de un ataque cardíaco
- su salud general

Su médico de cabecera puede recetarle un medicamento hipolipemiante para reducir su colesterol.

LO QUE DEBE HACER

Cambiar su rutina y actividades diarias para reducir su colesterol:
- Perder peso
- Ejercitarse
- Dejar de fumar
- Comer más frutas y vegetales
- Reducir las grasas en su dieta (carnes, leche, huevos, mantequilla, quesos, alimentos procesados y aperitivos tales como galletas dulces y saladas y papas fritas)
- Tomar sus medicamentos tal y como sean prescritos
- Informar efectos secundarios de la medicación
  ⇒ Con frecuencia se informa de dolores musculares que pueden, o no, ser debidos a su medicamento
- Realizarse las pruebas de sangre según la recomendación de su equipo médico