CT Children's CLASP Guideline Algorithm
Lipid Abnormalities: TG Screening

UNIVERSAL SCREENING: once at ages 9-11 and 17-21

Initial Screening: Obtain non-fasting Lipid Panel

Abnormal Screening?
- **< 20 years old:** non-HDL-C ≥145 or HDL-C <40
- **20-21 years old:** non-HDL-C ≥190 or HDL-C <40

NO → Routine Care Proceed with universal screening

YES → **Obtain Fasting Lipid Panel (FLP) x 2 to calculate average results** (repeat FLP after 2 weeks to 3 months after initial FLP)

TARGETED SCREENING: (start at age 2 if any of the below are present) → YES
- Positive family history[1]
- Parent with total cholesterol ≥240 or known dyslipidemia
- Patient has established ≥1 moderate or high level risk factors (RFs)[2,3]

[1] ***POSITIVE FAMILY HISTORY***: Myocardial infarction; angina; stroke; coronary artery bypass graft/stent/angioplasty; sudden cardiac death in parent, grandparent, aunt, or uncle, male < 55 y, female < 65 y

*Lipid Measurement units expressed in mg/dL
FLP: Fasting Lipid Panel

[2] **HIGH-LEVEL RISK FACTORS (RF):**
- Diabetes mellitus (Type 1 or Type 2)
- Hypertension requiring drug therapy
- Severe Obesity (BMI ≥ 97th percentile)
- End stage renal disease/post renal transplant
- Predialysis chronic kidney disease
- Current cigarette smoker
- Kawasaki disease with persistent coronary aneurysms
- Childhood cancer survivor (stem cell recipient, chest radiation, cardiotoxic chemotherapy)
- Solid organ transplant vasculopathy
- Aortic stenosis or coarctation

[3] **MODERATE-LEVEL RISK FACTORS (RF):**
- Obesity (BMI > 95th to < 97th percentile)
- Insulin resistance with comorbidities (e.g., SLD, PCOS)
- Hypertension not requiring drug therapy
- Chronic inflammatory disease (SLE, JIA, HIV, IBD)
- Kawasaki disease with regressed coronary aneurysms
- Cardiomyopathy
- Pulmonary hypertension
- Surgically repaired congenital heart disease involving coronary artery translocation (e.g., TGA repair)

Average TG
< 10 yrs old: TG < 75
≥ 10 yrs old: TG < 90
(ACCEPTABLE)
- Routine care
- If positive family history[1] is only risk factor, can return to universal screening

Average TG
< 10 yrs old: TG 75-99
≥ 10 yrs old: TG 90-129
(BORDERLINE)
- Implement CHILD-1 Diet (see Appendix C)
- Repeat FLP in 12 months

Average TG
< 10 yrs old: TG ≥ 100
≥ 10 yrs old: TG ≥ 130
(HIGH)

<10 yrs old: average TG 100- 499
≥10 yrs old: average TG 130-499
- Nutrition Referral for CHILD 1 → CHILD-2 TG x 6 months (See Appendix C)
- If BMI ≥ 120% of the 95th percentile, refer to Weight Management Program (see Obesity CLASP tool)
- Increase dietary fish content
- Repeat FLP in 6 months*

Average TG ≥ 500 or single measurement of TG >1000
- **REFER TO CONNECTICUT CHILDREN'S LIPID CENTER**
- If BMI ≥ 120% of the 95th percentile refer to Weight Management Program (see Obesity CLASP tool)

***Repeat TG:**
< 10y: <100
≥ 10 yr: <130
- Continue CHILD-2 TG diet (see Appendix C)
- Reassess every 12 months

***Repeat TG :**
< 10yr: 100-199
≥ 10 y: 130-199
- Intensify CHILD-2 TG with Nutrition (see Appendix C)
- If overweight, facilitate weight loss
- Increase dietary fish content
- Repeat FLP in 6 months

***Repeat TG:**
≥ 200 -499

LDL- target achieved and non HDL-C ≥ 145

NO →
- Re-consult Dietician for intensified CHILD-2 TG Diet
- If overweight, facilitate weight loss
- Consider Omega-3 fatty acids 1 g BID

YES → REFER TO CONNECTICUT CHILDREN'S LIPID CENTER

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