

Disorders of Lipid Metabolism Toolkit Table of Contents

1. Acknowledgements
2. Overview of Disorders of Lipid Metabolism Toolkit
3. Medical Nutrition Therapy Protocol Forms for Implementing Disorders of Lipid Metabolism Evidence-Based Guideline
 - a. Medical Nutrition Therapy Summary Page for Disorders of Lipid Metabolism and Medical Nutrition Therapy Summary Page for Disorders of Lipid Metabolism with Metabolic Syndrome
 - b. Medical Nutrition Therapy Flowchart of Encounters for Disorders of Lipid Metabolism
 - c. Medical Nutrition Therapy Encounter Process for Disorders of Lipid Metabolism
4. Documentation Forms
 - a. Instructions for Medical Nutrition Therapy Sample Referral Form
 - b. Sample Referral Form: Referral for Medical Nutrition Therapy
 - c. Initial Medical Nutrition Therapy Progress Note and Follow-up Medical Nutrition Therapy Progress Note
 - d. Sample Case Study 1: Initial and Follow-up Medical Nutrition Therapy Progress Note
 - e. Sample Case Study 2: Initial and Follow-up Medical Nutrition Therapy Progress Note
5. Outcomes Management Forms
 - a. Outcomes Management: Nutrition Monitoring and Evaluation
 - b. Outcomes Monitoring Forms in Excel
 1. Individual Outcomes Monitoring Form
 2. Aggregate Input Form
 3. Aggregate Outcomes Monitoring Form
 4. Sample Individual Outcomes Form
 5. Sample Aggregate Input Form
 6. Sample Aggregate Outcomes Form
6. Client Education Resources
 - a. Executive Summary and List of ADA Client Education Resources
 - b. Client Agreement for Care
 - c. Additional Client Education Resources
 1. Do You Have Questions About Alcohol?
 2. Soluble Fiber
 3. Trans Fats Facts
 4. Health Benefits of Nuts
 5. Omega-3 Fatty Acids
 6. Heart Healthy Menu #1 and #2
7. Appendices
 - a. Appendix 1: Body Mass Index and Waist Circumference
 - b. Appendix 2: Determining Risk Level
 - c. Appendix 3: Metabolic Syndrome As A Target Of Therapy
 - d. Appendix 4: Nutrient Analysis

Medical Nutrition Therapy Summary Page for Disorders of Lipid Metabolism

Setting: Ambulatory Care or adapted for other health care settings (Adult 19+ years old)

Medical Nutrition Therapy (MNT) by an RD improves dietary patterns to reduce CVD risk (Grade I)

Encounter	Length of contact	Time between encounters
1	45-90 minutes	4-6 weeks
2 to 6 (Grade I)	30-60 minutes	4-6 weeks (# of encounters depends on risk category, amount of TLC modification, level of motivation)
Outcome Assessment Factors*	Expected Outcomes of MNT	Ideal or goal value of MNT
Biochemical Data and Anthropometric Measurements		
Lipid Profile (Fasting Blood Cholesterol, Triglycerides*, LDL-C, HDL-C*), Fasting Glucose*, BP*	↓ Total Cholesterol Trig ↓ or no change Non-HDL ↓ (if Trig >200mg/dL)* LDL-C ↓ HDL-C ↑ or no change Fasting Glucose WNL or ↓ BP WNL or ↓	Total Chol <200, Fasting Trig <150 mg/dL, Non-HDL=LDL-C goal +30* LDL-C <160 (0-1 Risk Factor) LDL-C <130 mg/dL (Multiple (2+) Risk Factors) LDL-C <100 mg/dL (CHD and CHD Risk Equivalent), HDL-C >40 mg/dL (males), >50 mg/dL (females) (ATPIII) BP <130/<85mmHg, Fasting Glucose <100mg/dL
Height, Weight, BMI, Waist Circumference* Waist-to-hip ratio#	Maintain healthy weight and appropriate waist circumference*	Within reasonable body weight*, BMI 18.5-24.9 kg/m ² Waist Circumference <40" (102 cm) males, <35" (88 cm) females (Grade: II)
Food and Nutrition and Client Data**		
Food variety and caloric intake	Selects nutrient-rich food sources and plans calorie intake toward goal.	Calories to maintain or reduce weight
Fat and cholesterol intake	Limits foods ↑ in cholesterol, saturated fat and trans fat and uses food sources of unsaturated fat, as preferred fat	Percentage of total kcal from fat: 25-35% total fat, less than 7 % sat fat and trans fat. If necessary, saturated fats can be replaced with mono and polyunsaturated fat to meet calorie requirement (Grade I). Dietary cholesterol intake of <200 mg/day (Grade: I)
Soluble fiber intake	Increases intake of foods ↑ in soluble fiber	Daily total fiber of >25g, 7-13g of which should be viscous (soluble) fiber (Grade: I)
Plant stanol or sterol products	Considers plant stanol or sterols if cholesterol and LDL goal not met.	Daily intake of 2-3 g/day stanol or sterols (Grade: I)
Omega-3 fatty acids	Includes marine and plant based sources in weekly meal plan if consistent with patient preference and not contraindicated by risks or harms.	Fatty fish (avg. of 7oz/wk) (Grade: II). In patients with heart disease, includes ~ 1g/day of EPA and DHA from fish or a supplement (Grade II), Plant-based foods with 1.5 g/day alpha-linolenic acid (1 Tbsp canola, walnut oil, 0.5 g ground flax seed) (Grade III)
Sodium	Maintains diet that is ↓ in sodium.	Daily intake of <2.3g (Grade I)
Nuts, soy protein	Includes nuts and soy protein in meal plan if consistent with patient preference and not contraindicated by risks/harms	Nuts (1 ounce ~5 times/week (Grade: II) Soy protein (~26-50g/day) (Grade: II).
Vitamin or mineral intake	Maintains dietary reference intake of vitamins and minerals.	Consistently maintains 100% of DRI through food or supplements.
Potential food or drug interaction	Verbalizes potential food or drug interaction	No food or drug interaction
Food preparation	Uses cooking techniques to ↓ fat intake	Consistently uses cooking techniques to modify fat intake
Recipe modification	Modifies recipes to ↓ saturated and trans fats	Recipes consistently modified to ↓ saturated and trans fats
Dining out	Selects appropriately from restaurant menu	Consistently selects appropriately from restaurant menu
Risks or benefits of alcoholic beverages	States the risk or benefits of alcoholic beverages	May have up to 1-2 drinks per day of an alcohol containing beverage (Grade: II)
Physical activity	Participates in aerobic activity	Moderate intensity exercise at 40%-60% of exercise capacity for ~30 min/day most days of the week (Grade: II)
Smoking cessation	Verbalizes importance of smoking cessation	Smoking cessation successful

*Assess for Metabolic Syndrome. See Summary Page for Disorders of Lipid Metabolism with Metabolic Syndrome, **Encounter in which behavioral topics are covered may vary according to client's readiness, skills, resources and need for lifestyle changes. Consider combination of other protocols, e.g., Hypertension, based on co-morbid conditions, # National standard unavailable

Medical Nutrition Therapy Initial Progress Note

Name: _____ MR# _____ Ethnicity: _____ Referring physician: _____ Date: _____
 DOB: _____ Age: _____ Medical Dx: _____ Time: start: _____ end: _____ total: _____

Recommendations to other Providers (request for labs, nutrition relationship to changes in meds, need for reinforcement of lifestyle changes)

Nutrition Diagnosis:

√	Nutrition Diagnosis (Problem(s))	√	Nutrition Diagnosis (Problem(s))
	NI-1.5 Excessive energy intake		NC-2.3 Food-medication interaction
	NI-2.2 Excessive oral food/beverage intake		NC-3.3 Overweight/obesity
	NI-4.3 Excessive alcohol intake		NB-1.1 Food, nutrition and nutrition related knowledge deficit
	NI-51.3 Inappropriate intake of food fats- specify:		NB-1.3 Not ready for diet/lifestyle change
	NI-53.3 Inappropriate intake of types of carbohydrate—specify:		NB-1.6 Limited adherence to nutrition-related recommendations
	NI-53.5 Inadequate fiber intake		NB-2.1 Physical inactivity
	Other:		

Nutrition Diagnosis, Related To (Etiology) As Evidenced By (Signs/Symptoms):

Nutrition Assessment *Recommendations and Nutrition Diagnosis are based on the following:*

Patient states (chief complaint):

Client History (medication/supplement and dosage [cholesterol-lowering meds, CoQ 10], social [smoking and alcohol habits], medical/health [family hx, S/P angioplasty or CABG] and personal):

Baseline for Outcomes Monitoring:

Anthropometric Measurements:

Ht. _____ Wt. _____ BMI _____ WC _____ Weight History:

Physical exam findings:(oral health, physical appearance [abdominal obesity, xanthomas], muscle/fat wasting, affect)

BP _____

Biochemical Data:

Lipid Profile/pertinent labs	Date:	Date:		Date:	Date:		Date:	Date:
Total Cholesterol mg/dL			HDL mg/dL			HbA1c %		
LDL <input type="checkbox"/> calculated <input type="checkbox"/> direct mg/dL			TG mg/dL			Other:		
Non HDL (if TG >200 mg/dL)			Glucose mg/dL					

Food and Nutrition History:

Energy intake: _____ kcal (circle): Inadequate Adequate Excessive	% calories from fat:										
% calories from sat and trans fat: _____	Total fiber: _____ g	Sodium: _____ g									
Cholesterol: _____ mg	Soluble fiber: _____ g	Potential nutrient/drug interaction (specify):									
Other nutrient analysis: _____	PA/exercise (amount/freq.): _____ (circle): Inadequate Adequate										
Patient regularly incorporates the following (check yes or no, if yes specify amount/frequency):											
Y	N	Amount/freq.	Food	Y	N	Amount/freq.	Food	Y	N	Amount/freq.	Food
		g/day	Plant stanols/sterols			g/day	Omega-3: plant sources			svgs/day	Nuts
		g/day	Soy protein			oz./week	Omega-3: fish sources				Other
		Selects appropriately when dining out (specify in pertinent information)									
		Modifies fat in food preparation/recipe									
		Maintains vitamins/minerals adequacy (specify possible deficiencies):									

Additional Pertinent Information (food consumption [Intake of fat, % calories from fat, type, sources of fat, total and soluble fiber, fish, soy, plant sterols] nutrition/health awareness and management, physical activity/exercise, food availability):

Barriers to Behavioral Goals:

Barriers to Biochemical, Anthropometric, Physical and Food/Nutrition Goals:

Nutrition Intervention:

Nutrition Prescription:

Nutrition Education (instruction/training in a skill or knowledge to help manage/modify food choices and eating behavior, [risk factors, physical activity]):

Comprehension ^a (circle) 1 2 3 4 5

Nutrition Counseling (theory or approach, strategy and phase used to set priorities, goals action plans):

Receptivity ^a (circle) 1 2 3 4 5

Coordination of Care (referral to or coordination of nutrition care with other health care providers [referral, recommendations]):

Food and/or Nutrient Delivery (meals/snacks, medical food supplements, vitamin/mineral supplement, bioactive substance supplement, feeding environment and nutrition-related medication management):

Expected Outcomes (Biochemical, Anthropometric, Physical and Food/Nutrition):

Outcome	Amount (if applicable)	Timeline
1.		
2.		
3.		
4.		

√	Materials Provided:	√	Materials Provided:
	Hypercholesterolemia Nutrition Therapy*		Omega-3 Fat Tips**
	Hypertriglyceridemia Nutrition Therapy*		Soluble Fiber Tips**
	Label Reading, Shopping Tips, Cooking Tips*		Plant Sterols and Stanols Tips*
	Trans Fat Tips**		Nuts Tips**
	Other:		Alcohol Tips**

From ADA Nutrition Care Manual; ** from ADA Disorders of Lipid Metabolism EAL Toolkit

^a Key for Comprehension, Receptivity, Adherence: 1=Never demonstrated, 2=Rarely demonstrated, 3=Sometimes demonstrated, 4=Often demonstrated, 5=Consistently demonstrated

Follow Up Plan for Monitoring and Evaluation

Follow-up on Expected Outcomes:

Future plans for care:

Next Visit: _____

RD Signature: _____

MEDICAL NUTRITION THERAPY INDIVIDUAL OUTCOMES MONITORING FORM							2006 American Dietetic Association Disorders of Lipid Metabolism Toolkit		
		Patient/Clients Name:							
		Patient ID/Medical Record No:							
		Phone No:							
		DOB:							
		Gender:							
		Referring Physician							
		RD:							
		Height:							
Medical Diagnoses:									
Nutrition Diagnoses:									
Date:									
Encounter	1	2	3	4	5	6	% Change	Ideal Goals	Patient Goals
Direct MNT Intervention Goals									
Kcalorie intake							0%	*	
Total fat (g)							0%	**	
Saturated fat (g)							0%	**	
Trans fat (g)							0%	**	
Saturated and trans fat (g)							0%	**	
Omega-3 fat (g/day)							0%	***	
% kcal from fat							0%	25-35%	
% kcal from sat fat							0%		
% kcal from sat and trans fat							0%	<7%	
Dietary cholesterol (mg/day)							0%	<200 mg	
% kcal from carbohydrate							0%	50-60%	
Total fiber (g/day)							0%	25-30 g/d	
Soluble fiber (g/day)							0%	7-13 g/d	
Plant sterols/stanols (g/day)							0%	2-3 g/d	
Physical activity							0%	30 min/d	
Clinical & Health Status Outcomes									
Weight (lbs)							0%		
BMI							0%	18.5-24.9	
Waist circumference (inches)							0%	<35 F <40 M	
Total cholesterol (mg/dL)							0%	<200	
LDL cholesterol (mg/dL)							0%	****	
HDL cholesterol (mg/dL)							0%	>50 F; >40 M	
Triglycerides (mg/dL)							0%	<150	
FPG (mg/dL)							0%	<100	
Blood pressure: systolic (mm Hg)							0%	<130	
Blood pressure: diastolic (mm Hg)							0%	<85	
Patient/Client-Centered Outcomes									
Health Utilization and Cost Outcomes									
	base						Final		
Change lipid-lowering med (1,2,3,4)							0	1=no med	
Change HTN med (1,2,3,4)							0	1=no med	
KEY:Change in meds from baseline		* Adjust total caloric intake to maintain desired body weight/prevent weight gain (ATP III)							
4= increase		** Based on % of Kcalorie intake							
3= no change		*** Sources: marine: 1g/day EPA DHA, plant: 1.5g/day ALA							
2=decrease		**** Refer to Appendix 2 - Determining Risk Level							
1=discontinue/not taking med									
baseline: 3 =taking med, 1=not taking med									