

Hepatic Dietetics, Liver Nutrition & Hepatology Specialization Course

6 Month Advanced Specialization Course

COURSE POSITIONING

Designed for nutrition and dietetics students, graduates and practicing dietitians who want advanced competence in medical nutrition therapy across the spectrum of hepatic disease. The specialization develops clinical reasoning from liver physiology and specialized assessment through metabolic, inflammatory, cholestatic and advanced liver disease, critical care, oncology, surgery and transplantation.

The Course Moves Participants Away From

Common Oversimplification

Advanced Clinical Direction

Fatty liver means lose weight

Integrate liver disease severity with metabolic health, body composition, diabetes and cardiovascular risk

Cirrhosis means low protein

Protect protein intake and muscle while individualizing care according to complications and nutritional status

Ascites means stop drinking water

Individualize sodium and fluid according to clinical status and hepatology management

High ammonia means remove protein

Understand hepatic encephalopathy as a clinical condition and avoid routine severe protein restriction

Liver disease needs detox foods

Understand normal hepatic detoxification physiology and reject unsupported detox protocols

Core Learning Pathway

Liver Physiology → Hepatic Assessment → MASLD and MASH → Chronic Liver Disease → Cirrhosis → Malnutrition, Sarcopenia and Frailty → Ascites and Hepatic Encephalopathy → Acute Liver Failure and ACLF → Nutrition Support → HCC and Liver Surgery → Transplantation → NCP and Advanced Case Defense

Course Roadmap

Month

Primary Development Area

Participant Development

Month 1

Liver Physiology, Hepatology Foundations & Specialized Nutrition Assessment

Understand normal liver function, relevant investigations, liver disease pathways and comprehensive hepatic nutrition assessment

Month 2

Steatotic, Alcohol Associated, Viral, Autoimmune & Cholestatic Liver Disease

Apply disease specific nutrition reasoning before and during chronic liver disease progression

Month 3

Cirrhosis, Malnutrition, Sarcopenia & Decompensation

Develop advanced competence in compensated and decompensated cirrhosis, muscle loss, ascites and nutrition deterioration

Month 4

Hepatic Encephalopathy, Acute Liver Failure, ACLF & Critical Care Nutrition

Manage complex acute hepatic nutrition situations and understand nutrition support escalation

Month 5

Hepatocellular Carcinoma, Liver Surgery & Liver Transplantation

Integrate oncology, perioperative, frailty and transplant nutrition into hepatology practice

Month 6

Advanced Hepatic Dietetic Practice & Complex Case Management

Apply NCP, ADIME, monitoring, multidisciplinary care and advanced hepatic case reasoning

Specialization Philosophy

The participant is trained to treat the nutrition problem within liver disease, not to treat the liver diagnosis with a generic food list. Every restriction must have a clear clinical reason and must be reviewed against the risk of malnutrition, muscle loss and reduced quality of life.

MONTH 1 | Liver Physiology, Hepatology Foundations & Specialized Nutrition Assessment

Understand what the liver does before trying to prescribe a liver

diet.

Week

Focus

Learning Content

Practical Application

Week 1

Liver Anatomy & Physiology for Dietitians

Hepatic anatomy and portal circulation. Carbohydrate metabolism including glycogen storage and gluconeogenesis. Protein metabolism, urea formation and plasma protein synthesis. Lipid metabolism. Bile production. Micronutrient storage and metabolism. Physiological detoxification.

Map major liver functions to nutrition problems that can appear when hepatic function deteriorates.

Week 2

Understanding Liver Diseases

MASLD, MASH, alcohol associated liver disease, viral hepatitis, autoimmune hepatitis, primary biliary cholangitis, primary sclerosing cholangitis, inherited and metabolic liver conditions, fibrosis, cirrhosis, portal hypertension, acute liver failure, ACLF, hepatocellular carcinoma and liver transplantation.

Differentiate disease categories and identify where the dietitian works from an established medical diagnosis.

Week 3

Understanding Liver Related Clinical Information

ALT, AST, ALP, GGT, bilirubin, albumin, INR, platelets, glucose, lipids, sodium, creatinine and ammonia as clinical context. Interpret

albumin cautiously. Understand that ammonia alone does not diagnose or grade hepatic encephalopathy.

Review a simulated liver profile and separate information relevant to nutrition care from medical diagnosis.

Week 4

Comprehensive Hepatic Nutrition Assessment

Etiology and disease stage. Dietary intake. Energy and protein. Sodium and fluid. Alcohol history. Weight and dry weight considerations. Ascites and edema. Muscle and frailty. Appetite and GI symptoms. Biochemical information. Medications. Function and social factors.

Complete a comprehensive liver specific nutrition assessment.

Month 1 Development Outcome

Move from high liver enzymes equal liver diet toward understanding diagnosis, disease stage, complications and the actual nutrition problem.

MONTH 2 | Steatotic, Alcohol Associated, Viral, Autoimmune & Cholestatic Liver Disease

Different liver diseases require different nutrition priorities.

Week

Focus

Learning Content

Practical Application

Week 5

MASLD & MASH

Current terminology. Insulin resistance. Obesity and body composition. Diabetes. Dyslipidemia. Cardiovascular risk. Sustainable dietary patterns. Physical activity. Appropriate weight reduction when indicated. Avoid crash dieting and liver detox claims.

Develop individualized MNT for MASLD with metabolic comorbidity.

Week 6

Alcohol Associated Liver Disease

Alcohol related liver injury as medical context. Reduced intake and nutrient displacement. Severe malnutrition risk. Energy and protein adequacy. Micronutrient concerns. Abstinence within addiction treatment. Refeeding risk in severe nutritional depletion.

Develop nutrition care for alcohol associated liver disease with marked weight and muscle loss.

Week 7

Viral Hepatitis & Autoimmune Hepatitis

Hepatitis B and C as medical diagnoses. Nutrition support around antiviral treatment. Chronic disease nutrition. Autoimmune hepatitis and immunosuppressive treatment context. Steroid related glucose, weight and bone concerns. Herbal and liver cleanse product safety.

Separate supportive nutrition from unsupported antiviral or immune modifying food claims.

Week 8

Cholestatic & Inherited Liver Disorders

Primary biliary cholangitis. Primary sclerosing cholangitis. Cholestasis. Fat malabsorption and fat soluble vitamin risk. Pruritus

and intake. Wilson disease. Hereditary hemochromatosis. Selected metabolic liver disorders.

Compare cholestatic and inherited liver disease cases and identify nutrition priorities and referral boundaries.

Month 2 Development Outcome

Replace the idea of one liver diet with disease specific nutrition reasoning.

MONTH 3 | Cirrhosis, Malnutrition, Sarcopenia & Decompensation

In cirrhosis, preserving nutrition and muscle can be more important than adding restrictions.

Week

Focus

Learning Content

Practical Application

Week 9

Compensated & Decompensated Cirrhosis

Cirrhosis and altered hepatic function. Compensated disease. Decompensation. Portal hypertension. Reduced intake. Early satiety. Fatigue. Altered fasting metabolism. Nutrition implications of disease progression.

Compare nutrition priorities in compensated and decompensated cirrhosis.

Week 10

Malnutrition, Sarcopenia & Frailty

Disease related malnutrition. Skeletal muscle loss. Frailty. Sarcopenic obesity. Limitations of BMI and scale weight when ascites or edema is present. Functional and strength considerations.

Assess a patient whose apparent body weight masks severe muscle depletion.

Week 11

Energy, Protein & Meal Distribution in Cirrhosis

Energy assessment. Protein requirements. Why routine protein restriction is inappropriate. Meal frequency. Reduction of prolonged fasting. Late evening nutrition concepts. Oral nutrition supplements. Muscle preservation and rehabilitation.

Redesign an unnecessarily low protein liver diet that is worsening nutritional status.

Week 12

Ascites, Edema, Sodium & Fluid

Ascites and portal hypertension context. Dry weight. Sodium modification while maintaining palatability. Fluid restriction only when clinically indicated. Early satiety. Diuretics. Hyponatremia and electrolyte considerations.

Design nutrition care for ascites while protecting energy and protein intake.

Month 3 Development Outcome

Move from cirrhosis equals low protein, low salt and low fluid toward individualized energy, protein, sodium and fluid care.

MONTH 4 | Hepatic Encephalopathy, Acute Liver Failure, ACLF &

Critical Care Nutrition

Advanced liver disease requires more clinical reasoning, not more food restrictions.

Week

Focus

Learning Content

Practical Application

Week 13

Hepatic Encephalopathy & Nutrition

HE as a neuropsychiatric complication of liver disease. Limits of ammonia interpretation. Maintain adequate protein. Selected plant and dairy protein strategies when appropriate. Constipation and lactulose context. Sarcopenia and ammonia metabolism concepts.

Correct an inappropriate prolonged low protein intervention in a patient with HE.

Week 14

Acute Liver Failure

Rapid severe hepatic dysfunction as a medical emergency. Etiology as clinical context. ICU care. Glucose instability. Energy and protein assessment. Oral, enteral and parenteral routes according to condition. Encephalopathy and airway implications.

Identify nutrition priorities while recognizing the emergency medical nature of acute liver failure.

Week 15

Acute on Chronic Liver Failure

Acute deterioration in chronic liver disease. Precipitating illness.

Sepsis. Renal dysfunction. Catabolism. Rapid nutritional deterioration. Critical care feeding. Frequent reassessment and transplant evaluation context.

Follow a simulated patient from compensated cirrhosis through ACLF and ICU admission.

Week 16

Enteral, Parenteral & Critical Care Nutrition

Oral nutrition first when adequate and safe. Oral supplements. Enteral nutrition. Parenteral nutrition when GI feeding is inadequate or impossible. Refeeding risk. Electrolytes. Glucose. Fluid management within ascites, renal and ICU care.

Choose and justify the appropriate nutrition support pathway for advanced hepatic cases.

Month 4 Development Outcome

Develop dynamic nutrition reasoning for acute hepatic deterioration and critical care.

MONTH 5 | Hepatocellular Carcinoma, Liver Surgery & Liver Transplantation

Hepatic nutrition continues from chronic disease into oncology, surgery and transplantation.

Week

Focus

Learning Content

Practical Application

Week 17

Hepatocellular Carcinoma & Liver Cancer Nutrition

HCC as medical context. Coexisting cirrhosis or metabolic liver disease. Malnutrition, appetite loss and muscle depletion. Nutrition implications of locoregional and systemic therapy. Oncology collaboration.

Develop nutrition care for HCC with underlying cirrhosis.

Week 18

Liver Surgery & Hepatic Resection

Preoperative malnutrition, frailty and sarcopenia. Prehabilitation concepts. Catabolic stress. Postoperative feeding progression. Energy and protein for healing. Complication related reassessment.

Develop a perioperative nutrition pathway for hepatic surgery.

Week 19

Pretransplant Nutrition & Frailty

Malnutrition, sarcopenia, frailty, ascites, obesity, sarcopenic obesity, dietary intake, functional capacity, micronutrient concerns and alcohol related issues where relevant.

Develop nutrition priorities for a patient undergoing liver transplant evaluation.

Week 20

Post Liver Transplant Nutrition

Early recovery. Energy and protein support. Food safety. Immunosuppressive medication context. Post transplant diabetes. Dyslipidemia. Weight gain. Bone health. Kidney health and long term cardiometabolic nutrition.

Follow a simulated patient from cirrhosis through transplant and

long term follow up.

Month 5 Development Outcome

Reassess nutritional goals as the patient moves from advanced liver disease to surgery and transplantation.

MONTH 6 | Advanced Hepatic Dietetic Practice & Complex Case Management

Treat the nutrition diagnosis within liver disease, not the liver diagnosis itself.

Week

Focus

Learning Content

Practical Application

Week 21

Hepatic Nutrition Diagnosis & PES

Nutrition diagnoses related to inadequate energy intake, inadequate protein intake, malnutrition, unintended weight loss, excessive sodium intake where applicable, altered GI function, inadequate micronutrient intake, overly restrictive intake and food related knowledge or behavior problems.

Develop and defend PES statements for MASLD, cirrhosis, ascites and hepatic malnutrition cases.

Week 22

Hepatic Nutrition Intervention & Monitoring

Individualized energy and protein. Meal pattern. Sodium when clinically indicated. Fluid only when medically required. Micronutrient correction based on assessment. Oral supplements. Enteral and parenteral nutrition. Monitoring intake, dry weight, muscle, strength, symptoms and clinical data.

Build an intervention directly linked with a clearly identified nutrition diagnosis.

Week 23

ADIME, Medication Awareness & Multidisciplinary Hepatology

Hepatic ADIME. Medication awareness including diuretics, lactulose and transplant medicines. Collaboration with hepatology, gastroenterology, transplant surgery, pharmacy, renal, endocrine, oncology, addiction, rehabilitation and palliative teams.

Prepare a specialized hepatic ADIME note and multidisciplinary referral communication.

Week 24

Advanced Hepatic Case Defense

Integrate etiology, disease stage, compensated or decompensated status, ascites, HE, portal hypertension, renal function, dry weight, muscle, frailty, dietary intake, protein, sodium, fluid, medications, transplant status, nutrition diagnosis, intervention and monitoring.

Defend one metabolic or chronic liver case, one decompensated cirrhosis case and one acute, oncology or transplant case.

Month 6 Development Outcome

Be able to explain why every restriction or nutrition support decision is appropriate for the specific patient.

Hepatic Specialization Case Portfolio

Case Area

Practical Competency

MASLD

Integrate liver and cardiometabolic nutrition care

MASH

Address metabolic risk within progressive liver disease

MASLD With Diabetes

Integrate glycemic and hepatic nutrition priorities

Alcohol Associated Liver Disease

Manage severe nutritional risk within multidisciplinary treatment

Viral Hepatitis

Provide supportive nutrition without antiviral diet claims

Autoimmune Hepatitis

Address nutrition and treatment related metabolic concerns

PBC or PSC

Assess cholestasis and nutritional consequences

Cholestasis

Evaluate fat malabsorption and fat soluble vitamin concerns

Compensated Cirrhosis

Protect nutritional status before decompensation

Decompensated Cirrhosis

Manage complex intake, ascites and disease complications

Cirrhosis With Malnutrition

Restore energy and protein while minimizing unnecessary restriction

Sarcopenia

Integrate nutrition with muscle and functional recovery

Sarcopenic Obesity

Recognize muscle loss despite higher body weight

Ascites

Individualize sodium, food intake and fluid related care

Hepatic Encephalopathy

Maintain adequate protein while supporting medical treatment

Acute Liver Failure

Understand critical care nutrition priorities

ACLF

Manage rapidly changing nutrition needs

Enteral Nutrition

Develop hepatic feeding and monitoring strategy

Refeeding Risk

Identify risk and support safe escalation

HCC

Integrate hepatology and oncology nutrition

Liver Surgery

Develop perioperative nutrition pathway

Pretransplant

Address malnutrition, frailty and metabolic status

Post Transplant

Support recovery and long term metabolic health

Final Case Defense

Defend complete hepatic nutrition care

Professional Scope Integration

Situation

Hepatic Dietitian's Role

Elevated Liver Enzymes

Assess nutrition after appropriate medical evaluation rather than diagnosing liver disease from laboratory values

MASLD

Provide cardiometabolic MNT within medical assessment and liver disease management

Viral Hepatitis

Support nutritional status while antiviral treatment remains medical

Autoimmune Liver Disease

Provide nutrition support while immune disease management remains medical

Alcohol Associated Liver Disease

Treat nutrition problems while addiction and liver disease treatment remain multidisciplinary

Cirrhosis

Provide advanced nutrition assessment and individualized MNT

Ascites

Manage dietary sodium and nutritional adequacy within hepatology fluid management

Hepatic Encephalopathy

Maintain appropriate nutrition while diagnosis and pharmacological management remain medical

Hyperammonemia

Do not independently diagnose HE or prescribe severe protein restriction based only on ammonia

Malnutrition

Diagnose and treat the nutrition problem

Sarcopenia and Frailty

Integrate nutrition with rehabilitation and specialist care

Acute Liver Failure

Provide nutrition within ICU and transplant center management

HCC

Provide oncology nutrition within multidisciplinary cancer care

Liver Surgery

Support preoperative and postoperative nutritional recovery

Liver Transplant

Manage pretransplant and post transplant nutrition within transplant teams

Supplements and Herbal Products

Evaluate indication, evidence, toxicity and potential interactions

Complex Liver Disease

Collaborate with hepatology, gastroenterology, renal, endocrine, oncology and transplant teams

Final Specialization Portfolio

Portfolio Component

Final Output

Hepatic Nutrition Assessment

Complete specialized liver assessment framework

Liver Laboratory Exercise

Nutrition focused interpretation within professional scope

MASLD Case

Complete cardiometabolic hepatic MNT

Alcohol Associated Liver Disease Case

Malnutrition and recovery framework

Cholestatic Disease Case

Nutrient absorption and deficiency assessment

Cirrhosis Case

Complete clinical nutrition care process

Sarcopenia and Frailty Tool

Muscle and functional assessment framework

Ascites Case

Sodium, intake and fluid related intervention

Hepatic Encephalopathy Case

Appropriate protein and meal pattern strategy

Hepatic Malnutrition Case

Nutritional restoration pathway

Acute Liver Failure Case

Critical care nutrition framework

ACLF Case

Dynamic advanced care plan

Enteral Nutrition Case

Feeding and monitoring plan

HCC Case

Hepatology and oncology nutrition integration

Liver Surgery Case

Perioperative nutrition pathway

Pretransplant Case

Nutrition and frailty optimization

Post Transplant Case

Recovery and long term metabolic health plan

Supplement Appraisal

Critical review of liver detox and supplement claims

Hepatic ADIME Portfolio

Complete professional documentation

Referral Framework

Hepatology, transplant, renal, oncology, addiction and critical care pathways

Final Case Defense

Advanced hepatic nutrition presentation

Expected Specialization Transformation

At Entry

At Completion

Fatty liver means lose weight

I integrate metabolic health, body composition, diabetes, cardiovascular risk and liver disease severity

High liver enzymes need a liver diet

I understand that abnormal enzymes require medical interpretation before nutrition care is individualized

Liver disease needs detoxification

I understand hepatic detoxification physiology and reject unsupported detox protocols

Cirrhosis means low protein

I protect protein intake and muscle unless a specific clinical reason requires temporary modification

High ammonia means stop protein

I understand that hepatic encephalopathy is clinically assessed and routine severe protein restriction is inappropriate

Ascites means no water

I individualize sodium and fluid advice according to clinical status and hepatology management

High BMI means the cirrhosis patient is well nourished

I assess sarcopenia, frailty and dry weight rather than relying on BMI

Alcohol related liver disease only needs abstinence

I recognize major malnutrition and micronutrient risks requiring specialized nutrition care alongside addiction treatment

Liver failure patients should eat very little protein

I understand the importance of preventing further catabolism and muscle loss

After transplant the liver diet continues

I reassess nutrition for recovery, immunosuppression, food safety and long term metabolic health

Hepatic dietetics means foods to avoid

I can conduct, document and defend a complete hepatic medical nutrition therapy process

Final Learning Pathway

Learning Step

Learning Step

Understand Liver Physiology

Interpret Liver Related Clinical Information

Conduct Specialized Hepatic Assessment

Manage MASLD & MASH Nutrition

Support Alcohol Associated Liver Disease

Understand Viral, Autoimmune & Cholestatic Disease

Manage Compensated Cirrhosis

Identify Malnutrition, Sarcopenia & Frailty

Manage Decompensated Cirrhosis

Individualize Sodium & Fluid

Support Hepatic Encephalopathy

Understand Acute Liver Failure

Manage ACLF Nutrition

Provide Oral & Enteral Nutrition Support

Understand Parenteral Nutrition

Support HCC & Liver Surgery

Manage Pretransplant Nutrition

Manage Post Transplant Nutrition

Develop Nutrition Diagnosis

Provide Individualized Hepatic Intervention

Monitor Nutritional & Functional Outcomes

Document & Collaborate

Defend Advanced Hepatic Cases

In One Line

This specialization develops dietitians who can provide structured, evidence informed medical nutrition therapy across MASLD and MASH, alcohol associated liver disease, viral and autoimmune liver disease, cholestatic disorders, compensated and decompensated cirrhosis, ascites, hepatic encephalopathy, malnutrition, sarcopenia, acute liver failure, acute on chronic liver failure, hepatocellular carcinoma, liver surgery and transplantation while maintaining clear professional boundaries within multidisciplinary hepatology care.