

Adolescent Nutrition, Growth & Clinical Dietetics Specialization Course

6 Month Advanced Specialization Course

COURSE POSITIONING

Designed for nutrition and dietetics students, graduates and practicing dietitians who want advanced competence in adolescent growth, puberty, nutritional requirements, micronutrient adequacy, obesity and metabolic health, eating disorders, mental health, sports nutrition, RED S, menstrual health, chronic disease, counseling and transition toward independent adult nutrition care. The specialization focuses approximately on the 10 to 19 year age group while teaching participants to individualize according to biological maturity, pubertal development and clinical condition rather than chronological age alone.

The Course Moves Participants Away From

Common Oversimplification

Advanced Clinical Direction

Teenagers just need more calories because they are growing

Individualize energy, protein and micronutrients according to growth velocity, puberty, activity and clinical condition

An overweight teenager should simply eat less

Protect growth, development, nutritional adequacy and psychological safety while addressing metabolic risk

Skipping meals is normal teenage behavior

Assess whether meal skipping reflects routine, poor access, medication effects, dieting or emerging disordered eating

A lean teenage athlete must be healthy

Assess energy availability, growth, menstrual or hormonal health, bone health, recovery and performance

Irregular periods are always normal during adolescence

Recognize when menstrual patterns require medical and nutrition assessment

Eating disorders only occur in thin girls

Recognize eating disorders across sex, gender and body size

Core Learning Pathway

Understand Growth & Puberty → Assess Growth & Requirements → Protect Nutritional Adequacy → Manage Growth & Metabolic Concerns → Recognize Eating Disorders & Mental Health Needs → Integrate Sports & Menstrual Health → Apply NCP & Build Independence → Transition & Defend Complex Cases

Course Roadmap

Month

Primary Development Area

Participant Development

Month 1

Adolescent Growth, Puberty, Physiology & Specialized Assessment

Understand rapid growth, pubertal development, body composition and adolescent specific nutrition assessment

Month 2

Nutritional Requirements, Micronutrients, Bone Health & Growth Problems

Develop competence in nutritional adequacy, poor growth, underweight and common deficiencies

Month 3

Adolescent Obesity, Metabolic Health, PMOS & Weight Management

Provide safe weight related care without compromising growth or encouraging disordered eating

Month 4

Eating Disorders, Mental Health, Body Image & Behavioral Nutrition

Recognize high risk eating behaviors and provide care within specialist multidisciplinary pathways

Month 5

Sports Nutrition, Menstrual Health, RED S & Special Adolescent Populations

Integrate growth with exercise, reproductive health, school, lifestyle and special dietary patterns

Month 6

Chronic Disease, Counseling, Transition Care, ADIME & Complex Case Management

Apply adolescent MNT across disease, independence development and transition toward adult healthcare

Specialization Philosophy

Adolescent dietetics is not simply pediatric nutrition for older children. Care must integrate growth, puberty, cognition, autonomy, body image, school life, sport, family influence and chronic disease while protecting psychological safety and helping the young person gradually develop their own nutrition competence.

MONTH 1 | Adolescent Growth, Puberty, Physiology & Specialized Assessment

Adolescent nutrition cannot be understood without understanding growth and puberty.

Week

Focus

Learning Content

Practical Application

Week 1

Adolescent Growth & Development

Growth velocity, pubertal growth spurt, changes in height and weight, muscle mass, fat distribution, sex related body composition changes, hormonal influence, bone mineral accumulation, brain development and changing energy requirements.

Compare adolescents of the same age but different stages of growth and explain why their nutritional priorities differ.

Week 2

Puberty & Nutrition

Pubertal development, growth hormone, sex hormones, insulin like growth factor concepts, menarche, menstrual development, male pubertal development, changes in muscle and adiposity, delayed or early puberty as medical context.

Integrate pubertal development into nutrition assessment without independently diagnosing pubertal disorders.

Week 3

Adolescent Growth Assessment

Height and weight trajectories, BMI for age, growth charts, height

velocity, weight velocity, developmental context, body composition where useful and family growth patterns.

Interpret longitudinal growth rather than one isolated measurement or percentile.

Week 4

Comprehensive Adolescent Nutrition Assessment

Growth history, pubertal information, dietary intake, school eating, breakfast, snacks, fast food, energy drinks, caffeine, protein, fruit, vegetables, calcium rich foods, iron, supplements, activity, sport, sleep, menstrual history where relevant, GI symptoms, medication, body image, eating disorder risk, mental health, family environment, food access, cooking ability, peer influence and social media exposure.

Complete a specialized adolescent nutrition assessment.

Month 1 Development Outcome

Move from interpreting a single BMI value toward understanding growth trajectory, puberty, diet, body composition, behavior and clinical context.

MONTH 2 | Nutritional Requirements, Micronutrients, Bone Health & Growth Problems

Adolescence is one of the most nutritionally demanding stages of life.

Week

Focus

Learning Content

Practical Application

Week 5

Energy, Protein & Macronutrient Requirements

Growth related energy demand, individual variation, physical activity, sports, protein for growth, carbohydrate for activity, dietary fat, essential fatty acids, fiber and hydration.

Compare requirements for a sedentary adolescent, competitive athlete, adolescent with poor growth and adolescent with obesity.

Week 6

Iron, Calcium, Vitamin D & Bone Health

Growth related iron requirements, menstrual losses, vegetarian diets, athletes, fatigue, iron deficiency and anemia as clinical context. Peak bone mass, calcium, vitamin D, protein, weight bearing activity, hormonal health and low energy availability.

Assess an adolescent with fatigue and heavy menstrual bleeding while recognizing when medical investigation is required.

Week 7

Common Adolescent Micronutrient Concerns

Iron, vitamin D, calcium, vitamin B12, folate, zinc, iodine, magnesium, vitamin A and omega 3 intake. Symptoms should trigger assessment rather than automatic supplementation.

Build a micronutrient assessment from diet pattern, clinical history and relevant laboratory information.

Week 8

Underweight, Poor Growth & Growth Faltering

Inadequate intake, food insecurity, poor appetite, GI disease, celiac disease, IBD, chronic disease, hyperthyroidism as medical context, mental health, eating disorders, ARFID, excessive exercise and medication related appetite suppression. Energy enrichment, protein, snacks, ONS where appropriate and micronutrient correction.

Develop a nutritional restoration plan while investigating why growth has slowed.

Month 2 Development Outcome

Move from simply telling an adolescent to gain weight toward identifying nutritional, medical, psychological and socioeconomic causes of poor growth.

MONTH 3 | Adolescent Obesity, Metabolic Health, PMOS & Weight Management

Adolescent weight management must never compromise growth, development or psychological health.

Week

Focus

Learning Content

Practical Application

Week 9

Adolescent Obesity Assessment

Growth charts, BMI for age, central adiposity, family history, puberty, dietary pattern, activity, sleep, screen time, medication, mental health, weight stigma, food environment, socioeconomic factors and metabolic comorbidity.

Complete a weight related assessment without automatically prescribing calorie restriction.

Week 10

Adolescent Weight Management

Family based intervention, food quality, portions, meal structure, sugary beverages, fast food, fiber, protein, activity, sleep, behavior change, weight stabilization during growth and when actual weight

reduction may be appropriate.

Compare weight stabilization with intentional weight reduction and choose the safer goal for different cases.

Week 11

Insulin Resistance, Prediabetes & Metabolic Health

Insulin resistance as medical context, prediabetes, type 2 diabetes risk, family history, central adiposity, dyslipidemia, hypertension, MASLD, inactivity and sleep.

Develop MNT for an adolescent with obesity and insulin resistance without extreme carbohydrate restriction.

Week 12

PMOS & Adolescent Reproductive Metabolic Nutrition

Menstrual irregularity as clinical information, insulin resistance, body composition, weight stigma, diet quality, activity, sleep, micronutrients, body image, fertility myths and supplement misinformation.

Integrate reproductive and metabolic nutrition while requiring appropriate clinical evaluation before assuming a diagnosis.

Month 3 Development Outcome

Move from restrictive weight loss plans toward safe metabolic care that protects growth, development and eating behavior.

MONTH 4 | Eating Disorders, Mental Health, Body Image & Behavioral Nutrition

A teenager asking for weight loss may actually require eating disorder assessment.

Week

Focus

Learning Content

Practical Application

Week 13

Eating Disorder Recognition

Anorexia nervosa, bulimia nervosa, binge eating disorder, ARFID, other specified eating disorders, atypical presentations, eating disorders at higher body weights, medical instability, rapid weight loss, growth suppression, delayed puberty, menstrual disruption, bradycardia as medical context, electrolyte abnormalities and refeeding risk.

Recognize eating disorder risk across body sizes and identify cases requiring specialist care.

Week 14

Disordered Eating & Diet Culture

Meal skipping, extreme clean eating, fear foods, calorie obsession, carbohydrate fear, compulsive weighing, body checking, compulsive exercise, social media diet trends, fasting, detox diets, supplement use, protein obsession and binge restrict cycles.

Differentiate a health conscious teenager from one developing clinically concerning restriction.

Week 15

Adolescent Mental Health & Nutrition

Depression, anxiety, ADHD, autism, psychiatric medication, poor appetite, emotional eating, sleep disruption, low motivation, executive function difficulty, sensory food issues and social isolation. ADHD specific stimulant appetite suppression, skipped lunch, poor daytime intake, evening rebound appetite and growth monitoring.

Build a practical eating structure for an adolescent whose

medication suppresses daytime appetite.

Week 16

Counseling Adolescents & Family Communication

Trust, confidentiality awareness, talking directly with the adolescent, appropriate parent involvement, avoiding shame and food policing, motivational communication, shared goals, body neutral language, autonomy and developmentally appropriate education.

Conduct a consultation that develops the adolescent's own competence while involving caregivers appropriately.

Month 4 Development Outcome

Move from parental food control toward collaborative care that develops adolescent autonomy and psychological safety.

MONTH 5 | Sports Nutrition, Menstrual Health, RED S & Special Adolescent Populations

A growing athlete is simultaneously fueling sport, growth and development.

Week

Focus

Learning Content

Practical Application

Week 17

Adolescent Sports Nutrition

Energy requirements, training load, carbohydrate, protein, fat, hydration, electrolytes, pre training nutrition, during training nutrition, recovery, competition and school plus training schedules.

Develop a realistic school day eating schedule for a teenager training after school.

Week 18

Low Energy Availability & RED S

Energy availability concepts, menstrual disruption, bone health, growth, injury, fatigue, reduced performance, immune function, psychological factors and male and female athlete risk.

Identify low energy availability concerns in a lean athlete who appears healthy by body size alone.

Week 19

Menstrual Health & Adolescent Nutrition

Menarche, cycle development, heavy menstrual bleeding, iron risk, low energy availability, amenorrhea, oligomenorrhea, bone health, PMOS context and pregnancy possibility where relevant.

Assess nutritional contributors while ensuring menstrual disorders receive appropriate medical evaluation.

Week 20

Special Dietary Patterns & Adolescent Lifestyle

Vegetarian and vegan diets, cultural patterns, religious fasting, food allergies, lactose intolerance, selective eating, food insecurity, processed food reliance, energy drinks, caffeine, sports supplements, protein powders, creatine awareness and bodybuilding culture.

Develop a nutritionally complete vegan framework for a growing adolescent athlete.

Month 5 Development Outcome

Move from focusing only on protein toward integrated energy, carbohydrate, micronutrient, hydration, growth, bone health and recovery.

MONTH 6 | Chronic Disease, Transition Care, ADIME & Complex Adolescent Practice

Adolescent dietetics must prepare the young person to eventually manage their own health.

Week

Focus

Learning Content

Practical Application

Week 21

Chronic Disease Nutrition in Adolescence

Type 1 diabetes, type 2 diabetes, celiac disease, IBD, CKD, liver disease, cystic fibrosis, cardiac disease, food allergy, cancer survivorship and neurological conditions.

Compare disease care in a child whose parents control food with an adolescent beginning to make independent decisions.

Week 22

Adolescent Pregnancy & Reproductive Nutrition

Continuing adolescent growth plus pregnancy needs, iron, folate, calcium, protein, gestational weight gain, food insecurity, nausea, gestational diabetes and social support.

Develop a nutrition framework that considers both ongoing maternal development and pregnancy.

Week 23

Adolescent Nutrition Diagnosis, ADIME & Transition to Adult Care

PES statements for inadequate energy or protein intake, malnutrition, unintended weight loss, excessive energy intake,

altered GI function, micronutrient inadequacy, food and nutrition knowledge, limited food acceptance and disordered meal patterns. Adolescent ADIME, confidentiality, family involvement, school coordination, transition readiness, meal planning, cooking, shopping and budgeting.

Prepare an adolescent ADIME note and a transition readiness plan for increasing nutrition independence.

Week 24

Advanced Adolescent Case Defense

Integrate age, growth stage, puberty, growth trajectory, weight, height, BMI for age, body composition, intake, energy, protein, micronutrients, menstrual health, activity, sport, sleep, mental health, medication, eating disorder risk, chronic disease, school, family, food access, autonomy, nutrition diagnosis, intervention and monitoring.

Defend one growth or underweight case, one obesity or metabolic case, one eating disorder, mental health or sports case and one chronic disease or complex adolescent case.

Month 6 Development Outcome

Be able to justify the actual nutrition problem, protect growth and psychological safety, involve the adolescent in decisions and plan measurable follow up.

Dedicated Adolescent Growth Competency Portfolio

Competency

Expected Skill

Growth Charts

Interpret longitudinal growth

BMI for Age

Use within full clinical context

Height Velocity

Identify concerning changes requiring further evaluation

Puberty

Integrate developmental stage into nutrition assessment

Energy

Individualize according to growth and activity

Protein

Support growth and muscle development

Micronutrients

Protect iron, calcium, vitamin D and other nutrient adequacy

Poor Growth

Investigate nutritional and nonnutritional contributors

Body Composition

Interpret changes cautiously

Case Defense

Defend a complete adolescent growth assessment

Dedicated Adolescent Eating Disorder Safety Portfolio

Competency

Expected Skill

Screening

Identify high risk eating behaviors

Growth Suppression

Recognize concerning deviation from expected growth trajectory

Weight Loss

Assess significance rather than praising it automatically

Higher Weight Eating Disorders

Recognize eating disorders across body sizes

ARFID

Recognize restrictive intake unrelated to weight or shape in appropriate cases

Exercise

Identify compulsive or compensatory patterns

Menstrual Health

Recognize possible low energy availability

Refeeding Risk

Identify severe restriction requiring specialist management

Communication

Avoid shame and weight stigma

Referral

Work within specialist eating disorder pathways

Adolescent Specialization Case Portfolio

Case Area

Practical Competency

Normal Growth

Determine appropriate nutritional adequacy

Delayed Growth

Identify possible nutritional contributors

Underweight

Develop nutritional restoration plan

Poor Appetite

Increase intake without excessive meal burden

Iron Deficiency Risk

Develop food based intervention and appropriate referral

Vitamin D Deficiency Risk

Integrate nutrition and medical management

Adolescent Obesity

Provide developmentally appropriate MNT

Prediabetes

Integrate metabolic health and growth

MASLD

Provide cardiometabolic nutrition

PMOS

Integrate reproductive and metabolic care

Eating Disorder Risk

Identify and refer appropriately

ARFID

Support nutritional adequacy within multidisciplinary care

Depression With Poor Intake

Manage nutrition while mental health treatment continues

ADHD Medication Appetite Suppression

Protect intake and growth

Vegan Adolescent

Protect protein and micronutrients

Adolescent Athlete

Integrate growth and performance

RED S

Identify low energy availability concerns

Amenorrhea in Athlete

Recognize need for multidisciplinary assessment

Type 1 Diabetes

Integrate independence and carbohydrate management

Type 2 Diabetes

Provide family and adolescent centered care

Celiac Disease

Support adherence and growth

IBD

Support disease related growth and nutrition

CKD

Integrate renal needs with growth

Adolescent Pregnancy

Support maternal growth and pregnancy nutrition

Transition to Adult Care

Build nutrition independence

Final Case Defense

Defend complete adolescent nutrition care

Professional Scope Integration

Situation

Adolescent Dietitian's Role

Growth Concern

Assess nutritional contribution and refer for medical evaluation
when growth is abnormal

Puberty Concern

Understand nutritional context while endocrine and developmental
diagnosis remains medical

Adolescent Obesity

Provide growth sensitive and psychologically safe MNT

PMOS

Provide nutrition support after appropriate diagnostic assessment

Menstrual Irregularity

Assess energy and nutrient factors while diagnosis remains medical

Eating Disorder

Recognize risk and work within appropriate specialist competence

RED S

Identify nutrition and energy availability concerns within sports medicine care

ADHD

Manage appetite and eating consequences while medication management remains with the prescriber

Depression and Anxiety

Support nutrition while mental health treatment remains with appropriate professionals

Type 1 Diabetes

Provide nutrition and carbohydrate management within the diabetes team

Chronic Disease

Adapt MNT while protecting growth and puberty

Supplements

Assess indication, evidence and safety

Sports Products

Evaluate age, need, contamination risk and professional scope

Adolescent Pregnancy

Provide MNT within obstetric and adolescent health care

Transition Care

Build nutrition self management and independence

Complex Case

Collaborate with pediatrics, adolescent medicine, endocrinology, mental health, sports medicine and other relevant teams

Final Specialization Portfolio

Portfolio Component

Final Output

Adolescent Nutrition Assessment

Complete specialized assessment

Growth Chart Exercise

Longitudinal growth interpretation

Growth Velocity Tool

Structured growth monitoring

Nutrient Requirement Exercise

Energy, protein and micronutrient planning

Iron Case

Adolescent iron nutrition framework

Bone Health Case

Calcium, vitamin D and growth plan

Underweight Case

Nutritional restoration pathway

Adolescent Obesity Case

Developmentally appropriate MNT

Metabolic Health Case

Diabetes risk and lifestyle care

PMOS Case

Reproductive and metabolic nutrition framework

Eating Disorder Screening Tool

Risk identification

ARFID Case

Restricted intake assessment

Mental Health Case

Functional eating support

ADHD Case

Medication related appetite management

Sports Nutrition Case

School, training and recovery plan

RED S Case

Energy availability assessment

Menstrual Health Case

Nutrition and referral framework

Vegan Adolescent Plan

Nutritionally complete dietary framework

Chronic Disease Case

Growth plus disease specific nutrition

Adolescent Pregnancy Case

Maternal and fetal nutrition plan

Adolescent ADIME Portfolio

Professional documentation

Transition Readiness Tool

Independence and self management framework

Referral Framework

Pediatric, endocrine, mental health, sports and adolescent medicine pathways

Final Case Defense

Advanced adolescent dietetics presentation

Expected Specialization Transformation

At Entry

At Completion

Teenagers need more food because they are growing

I individualize nutrition according to growth velocity, puberty, activity and clinical status

BMI tells me whether the adolescent's weight is healthy

I interpret longitudinal growth, body composition and health context

An overweight teenager should eat less

I protect growth, psychological health and nutritional adequacy

while addressing metabolic risk

Rapid weight loss in an overweight teenager is good progress

I assess whether the rate of loss is safe and screen for disordered eating

Irregular periods are normal in teenagers

I understand when menstrual patterns may require medical and nutrition assessment

Teen athletes mainly need protein

I integrate total energy, carbohydrate, protein, micronutrients, hydration and recovery

A lean athlete is well nourished

I assess energy availability, menstrual or hormonal health, bone health and performance

Eating disorders occur only in underweight girls

I recognize eating disorders across sex, gender and body size

ADHD medication appetite loss is expected

I actively protect nutritional intake and growth while coordinating with the clinical team

Parents should control the teenager's diet

I develop adolescent autonomy while appropriately involving caregivers

Pediatric nutrition ends when the child gets older

I understand the distinct nutritional, psychological and clinical needs of adolescence

Adolescent dietetics means healthier school meals

I can conduct, document and defend advanced adolescent MNT across growth, metabolic health, eating disorders, sports and chronic disease

Final Learning Pathway

Learning Step

Learning Step

Understand Adolescent Growth

Understand Puberty

Conduct Growth Assessment

Calculate Requirements

Protect Micronutrients

Support Bone Health

Manage Poor Growth

Restore Weight When Required

Manage Adolescent Obesity Safely

Support Metabolic Health

Integrate PMOS & Menstrual Health

Recognize Eating Disorders

Identify Disordered Eating

Integrate Mental Health Nutrition

Manage Medication Related Appetite Changes

Support Sports Nutrition

Recognize RED S

Support Special Dietary Patterns

Manage Chronic Disease

Support Adolescent Pregnancy

Develop Adolescent Counseling Skills

Build Nutrition Independence

Develop Nutrition Diagnosis

Apply ADIME

Transition Toward Adult Care

Defend Advanced Adolescent Cases

In One Line

This specialization develops dietitians who can provide structured, developmentally appropriate and evidence informed nutrition care throughout adolescence, integrating growth and puberty, micronutrient requirements, obesity and metabolic health, eating disorders, mental health, sports nutrition, RED S, menstrual health, chronic disease and transition toward independent adult nutrition care.