



TRANSCEND
AWARDS

Transcend Level 5
Award in Nutrient Metabolism

Qualification Unit Specification
Version 01: 24 February 2022

Welcome!

Welcome to the **Transcend Level 5 Award in Nutrient Metabolism** Unit Specification. Transcend is an Ofqual recognised awarding organisation this is a qualification that sits on the Ofqual register of regulated qualifications. This specification confirms the qualification purpose statement and delivery conditions. This specification must be read and complied with conjunction with the *Transcend Centre Recognition Conditions*, the *Qualification Specification* and *Assessment Guidance*.

Contents		
Unit 01	Nutrient Metabolism	08
Appendix		
Appendix 01	Qualification unit specification version control	16

Qualification Unit Specification

Unit 01					
Unit title:		Nutrient metabolism			Unit Level 5
Unit aim:		The aim of this unit is to develop the learner's knowledge of nutrient metabolism.			
Learning outcomes		Assessment criteria		Delivery Content and Assessment Attainment Indicators	Assessment
LO1	Understand how carbohydrates are metabolised by the human body	AC1.01	Differentiate the pathways and processes involved in carbohydrate metabolism	Critique glycolysis Critique gluconeogenesis Critique glycogenesis Critique glycogenolysis	Portfolio of evidence
		AC1.02	Critically evaluate the role of key hormones in the metabolism of carbohydrate and the regulation of blood glucose	Evaluation of the effects of insulin and glucagon Evaluation of the process by which glucose enters cells	Portfolio of evidence
LO2	Understand how fats are metabolised by the human body	AC2.01	Differentiate the pathways and processes involved in fat metabolism	Evaluation of lipolysis Evaluation of lipogenesis Evaluation of ketogenesis	Portfolio of evidence
		AC2.02	Critically evaluate the impact of dietary and lifestyle factors on cholesterol and blood lipids	Critical evaluation of the effects on cholesterol and blood lipids [Omega 3] Critical evaluation of the effects on cholesterol and blood lipids [Omega 6] Critical evaluation of the effects on cholesterol and blood lipids [monounsaturated] Critical evaluation of the effects on cholesterol and blood lipids [polyunsaturated] Critical evaluation of the effects on cholesterol and blood lipids [saturated] Critical evaluation of the effects on cholesterol and blood lipids [trans fatty acids] Critical evaluation of the effects on cholesterol and blood lipids [dietary carbohydrate] Critical evaluation of the effects on cholesterol and blood lipids [exercise]	Portfolio of evidence
LO3	Understand how proteins are metabolised by the human body	AC3.01	Evaluate the pathways and processes involved in protein metabolism	Evaluation of transamination Evaluation of deamination Evaluation of decarboxylation	Portfolio of evidence
		AC3.02	Evaluate the potential benefits and risks of high protein diets	Evaluation of the effects of high protein diets on body composition Evaluation of the effects of high protein diets on appetite Evaluation of the effects of high protein diets on kidney function Evaluation of the effects of high protein diets on calcium losses	Portfolio of evidence

L04	Understand the metabolic role of key micronutrients	AC4.01	Evaluate the role that key micronutrients play in human metabolism	<p>Evaluation of the role key micronutrients in energy releasing pathways and consequences of deficiency or excess:</p> <p>Evaluation of the role of B vitamin</p> <p>Evaluation of the role of magnesium</p> <p>Evaluation of the role of selenium</p> <p>Evaluation of the role of zinc</p> <p>Evaluation of the role of chromium</p> <p>Evaluation of the role of manganese</p> <p>Evaluation of the role of iodine</p>	Portfolio of evidence
L05	Understand the physiological factors influencing body composition	AC5.01	Evaluate how the body regulates its energy stores	<p>Evaluation of the impact of hormones on metabolism</p> <p>Evaluation of the impact of hormones on appetite regulation</p> <p>Evaluation of the impact of hormones on body fat distribution</p> <p>Evaluation of the factors affecting insulin sensitivity</p> <p>Evaluation of the evidence supporting different approaches to fat loss including macronutrient balance versus energy balance, very low-calorie diets, ketogenic diets, intermittent fasting</p>	Portfolio of evidence

Appendix: Qualification Unit Specification Version Control

This document is subject to version control. We will request feedback from centres in advance of any change. We will then inform centres of the changes made in advance and will re-publish the specification via our website. All changes will be tracked here and confirmed as an updated version.

Version	Publication	Details
Version 01	24 February 2022	Publication 01