



**AYDIN ADNAN MENDERES UNIVERSITY  
GRADUATE SCHOOL OF HEALTH SCIENCES  
PHYSICAL EDUCATION AND SPORTS  
PHYSICAL EDUCATION AND SPORTS  
PHYSICAL EDUCATION AND SPORTS MASTER  
COURSE INFORMATION FORM**

Course Title	Sports Nutrition								
Course Code	BSÖ574		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	7	Workload	176 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Objectives of the course are to comprehend basic nutrition principals for health, to explain carbohydrate, protein, fats, water, vitamins, minerals, and their importance on sportive performance, to teach special diets applications and its' reasons, nutritional ergogenic aids, and antioxidant nutrition principles, to conceive energy balance for body weight control, basal metabolic rate and daily caloric assessment.								
Course Content	Basic nutrition principals, basic (carbohydrate, protein, fats) and supporter (vitamins, minerals and water) foods and their importance and application designs, special diets for athletes, body weight control and energy balance, daily caloric assessment								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)									

#### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

#### Recommended or Required Reading

1	Paker S. Sporda Beslenme, Onay Ajans, Ankara, 1998 (4. Baskı) Ersoy G. Egzersiz ve Spor Yapanlar için Beslenme, Nobel Yayın Dağıtım, Ankara, 2004 (3. Baskı)
2	Wolinsky I, Driskell JA. Sports Nutrition, CRC Press- Taylor&Francis Group, USA, 2008 Eberle SG. Endurans Sports Nutrition, Human Kinetics, USA, 2000

Week	Weekly Detailed Course Contents	
1	Theoretical	Conceptions of nutrient and nutrition, importance of nutrition on sportive performance, demonstrating of nutrition pyramid, introducing basic and supporter foods, basic nutritional needs for health and for athletes.
2	Theoretical	Process of energy transformation of foods, introducing energy systems (ATP-PCr, glycolytic, and oxidative pathways) during resting period, exercise and recovery.
3	Theoretical	Carbohydrate metabolism, food sources, classifications, conception of glycemic index, effects on muscle glycogen storage and sportive performance of simple and complex carbohydrates
4	Theoretical	Ingestion of proposed carbohydrate before, during and after exercise and usage reasons, supplemental carbohydrate for endurance athletes, beverages with carbohydrate
5	Theoretical	Fats; digestion process, functions, sources, daily consumptions, classifications, trans oils, omega 3-6, lipoproteins and CHD interactions, positive effects of exercise on CHD
6	Theoretical	Proteins; digestion process, functions, sources, daily consumptions, classifications, excessive and inadequate consumption, aminoacid metabolism, supplemental protein usage methods and usage amounts.
7	Theoretical	Vitamins; digestion process, functions, sources, daily consumptions, classifications, excessive and inadequate consumption, functions and requirements in exercise.
8	Theoretical	Midterm Exam
9	Theoretical	Minerals; digestion process, functions, sources, daily consumptions, classifications, excessive and inadequate consumption, functions and requirements in exercise.
10	Theoretical	Water, digestion process, functions, sources, daily consumptions, classifications, dehydration and rehydration, functions and requirements in exercise.
11	Theoretical	Nutrition principles before competition for various sporting branch, special diets for athletes
12	Theoretical	Nutrition principles during competition for various sporting branch, its' actions on body, nutrition strategies after competition, nutrition for athletes in heat
13	Theoretical	Conception of energy balance on achieving weight control and effects on health, daily caloric calculation
14	Theoretical	Conception of resting metabolic rate, thermic effect of physical activity and thermic effect of a meal, body mass index, and some measuring methods of body composition



15	Theoretical	Nutritional ergogenic aids in sports (aminoacid, BZAA, arginine, bicarbonate, caffeine, L-carnitine, CLA, creatin) utilization methods, negative and positive effects, antioxidant nutrition aspects
16	Theoretical	Final Exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	5	5	140
Individual Work	4	4	4	32
Midterm Examination	1	1	1	2
Final Examination	1	1	1	2
Total Workload (Hours)				176
[Total Workload (Hours) / 25*] = ECTS				7

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Understanding basic nutrition principals;
2	Explaining basic and supporter food components and its' digestion process;
3	Implying carbohydrate, protein, fats, vitamin, mineral and water's elementary chemical properties, sources, and results of deficiency and increment in body
4	Mastering basic and supporter nutrients' importance on sporting performance;
5	Conceiving different nutrition methods practices at before, during and after various sporting races and exercises and its' application reasons;
6	Mastering nutritional ergogenic aids in sports, utilization methods, negative and positive effects, antioxidant nutrition aspects
7	Understanding conception of energy balance on achieving weight control and of resting metabolic rate, thermic effect of physical activity and thermic effect of a meal;
8	Explaining body mass index on achieving weight control and describing of some body composition measuring methods

**Programme Outcomes (Physical Education and Sports Master)**

1	Uses application and problem solving skills in interdisciplinary studies.
2	Develops basic scientific knowledge and attitude appropriate to body and sport.
3	Interpret the results of test development and measurement for the development of individuals in physical education and sport.
4	Explains the scientific methods in physical education and sports.
5	o follow national and international developments in the field and maintain professional development.
6	Beden eğitimi ve spor örgütlerinin örgüt iklimi ve kültürünü tanımlar.

**Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High**

	L1	L2	L3	L4	L5	L6	L7	L8
P1	4	4	5	3	4	4	4	3
P2	4	4	3	5	5	5	5	5
P3	5	3	4	5	4	4	3	4
P4	3	4	4	4	5	5	4	5
P5	5	5	5	5	5	5	5	4
P6	4	5	3	3	4	3	5	3

