



Table 4-A-I-2 Comparison of Dietary Components Across Dietary Pattern Scores and Indices

Components	Med Diet Score (MDS) Trichopoulou et al. 2003 EPIC-Greece	Relative Med Diet Score (rMED) Buckland et al. 2009 EPIC-Spain	Healthy Eating Index (HEI)* Kennedy et al. 1995 1990 DGAs	Diet Quality Index International (DQI-I) Kim et al. 2003 US(CSFI) and China (CHNS)	DGA Adherence Index (DGA)†† Fogli-Cawley et al. 2006 2005 DGAs	Programme National Nutrition Santé Guideline Score (PNNS-GS) Estaquio et al. 2009 2001 PNNS
	Total Score 0-9	Total Score 0-18	Total Score 0-100	Total Score 0-100	Total Score 0-20	Total Score 0-15
Vegetables	Vegetables ⁽⁺⁾ ≥Median=1 <Median=0	Vegetables (except potatoes) ⁽⁺⁾ 0,1,2 (low to high)	Vegetables ⁽⁺⁾ 0-10 3-5 serv/d=10	Vegetables ⁽⁺⁾ 0-5 3-5 serv/d=5 0 serv/d=0	Vegetables ⁽⁺⁾ Meets DGA=1 Meets >33%=0.5 Meets<33%=0 & Dark green, orange ⁽⁺⁾ , starchy ^{††(+)} and (-)	Fruit & Vegetables ⁽⁺⁾ 0,0.5,1,2
Legumes	Legumes ⁽⁺⁾ ≥Median=1 <Median=0	Legumes ⁽⁺⁾ 0,1,2			Legumes ⁽⁺⁾ 0,0.5,1	
Fruits and/or Nuts	Fruits and/or Nuts ⁽⁺⁾ ≥Median=1 <Median=0	Fruits (& nuts & seeds, not juice) ⁽⁺⁾ 0,1,2	Fruits ⁽⁺⁾ 2-4 serv/d=10	Fruits ⁽⁺⁾ 2-4 serv/d=5 0 serv/d=0	Fruit, variety of fruit & vegetables ⁽⁺⁾ 0,0.5,1	Fruit & Vegetables ⁽⁺⁾ 0,0.5,1,2
Cereals and Whole Grains	Cereals and Whole grains ⁽⁺⁾ ≥Median=1 <Median=0	Whole grain & refined flour, pasta, rice, bread, grains ⁽⁺⁾ 0,1,2	Grains ⁽⁺⁾ 6-11 serv/d=10	Grains ⁽⁺⁾ 6-11 serv/d=5; 0 serv/d=0 Fiber ⁽⁺⁾ 20-30g/d=5;0g/d=0	Grains ⁽⁺⁾ and (-), Whole grains ⁽⁺⁾ ≥50% whole=1 Fiber ⁽⁺⁾ 14g/1,000kcal=1	Bread, cereal, potatoes, legumes ⁽⁺⁾ 0-1 Whole grains ⁽⁺⁾ 0-1
Fish or Fresh Fish	Fish or Fresh Fish ⁽⁺⁾ ≥Median=1 <Median=0	Fish or Fresh Fish ⁽⁺⁾ 0,1,2		<i>Fish is included in "Variety"</i>		Seafood ⁽⁺⁾ ≥2 serv/wk=1
Fat	MUFA/SFA ⁽⁺⁾ ≥Median=1 <Median=0	Olive oil ⁽⁺⁾ 0,1,2	Total fat ⁽⁻⁾ 10-0 <30%E - >45%E SFA ⁽⁻⁾ 10-0 <10%E - >15%E	Total fat ⁽⁻⁾ 6-0 ≤20%E=6; 20-30%E=3; >30%E=0 SFA ⁽⁻⁾ 6-0 ≤7%E=6; 7-10%E=3 >10%E=0	Total fat ^(+m) 20-35%E=1, SFA<10%E=1, > or < =0, Low-fat choices ^(+m) ≥75%=0.5 [meat & milk each]	Vegetable fat ⁽⁺⁾ Veg/total ≤0.5=0 Veg/total >0.5=1 Added fat ⁽⁻⁾ ≥16%E=0 <16%E=1
Alcohol	Alcohol ^(+m) 5-25♂, 10-50♂ g/d=1	Alcohol ^(+m) Moderate=2 > or < moderate=0 (mod defined using MDS cutoffs)		Empty calorie foods ^(+m) ≤3%E=6; 3-10%E=3; >10%E=0	Alcohol ^(+m) ≤2 drinks/d ♂=1 ≤1 drinks/d ♀=1 >above=0	Wine ^(+m) ≤3 glasses/d ♂=0.8≥0 ≤2 glasses/d ♀=0.8; ≥0 Abstainers or <1/wk=1
Total Meat	Meat & Poultry ⁽⁻⁾ ≥Median=0 <Median=1	Total & processed meat ⁽⁻⁾ 2,1,0 (low to high)	Meat ⁽⁺⁾ 2-3 serv/d=10 [legumes if needed for 10]	<i>Meat is included in "Variety"</i>	Meat ⁽⁺⁾ and (-) & Legumes ⁽⁺⁾ 0,0.5,1,0.5 ⁽⁺⁾ [legumes ⁽⁺⁾ if needed to meet 1.0]	Meat, poultry, seafood, eggs ⁽⁺⁾ and (-) 0,0.5,1,0
Dairy Products	Dairy Products ⁽⁻⁾ ≥Median=0 <Median=1	Low & high fat milk, yogurt, cheese, desserts ⁽⁻⁾ 2,1,0	Milk ⁽⁺⁾ 2-3 serv/d=10	<i>Dairy is included in "Variety"</i>	Milk & Milk products ⁽⁺⁾ and (-) 0,0.5,1	Milk & Dairy products ⁽⁺⁾ and (-) 0,0.5,1,0.5
Sweets or Sugar Products				Empty calorie foods ⁽⁻⁾ ≤3%E=6 3-10%E=3 >10%E=0	Added sugar ⁽⁺⁾ and (-) <5%E=1 5-8.5%E=0.5 >8.5%E=0	Sweetened foods ⁽⁻⁾ -0.5,0,1 Soda ⁽⁻⁾ 0,0.5,0.75,1

Source: Nutrition Evidence Library. A series of systematic reviews on the relationship between dietary patterns and health outcomes. Alexandria, VA: U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, March 2014.



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Components	Med Diet Score (MDS) Trichopoulou et al. 2003 EPIC-Greece	Relative Med Diet Score (rMED) Buckland et al. 2009 EPIC-Spain	Healthy Eating Index (HEI)* Kennedy et al. 1995 1990 DGAs	Diet Quality Index International (DQI-I) Kim et al. 2003 US(CSFI) and China (CHNS)	DGA Adherence Index (DGA)†† Fogli-Cawley et al. 2006 2005 DGAs	Programme National Nutrition Santé Guideline Score (PNNS-GS) Estaquio et al. 2009 2001 PNNS
	Total Score 0-9	Total Score 0-18	Total Score 0-100	Total Score 0-100	Total Score 0-20	Total Score 0-15
Sodium			Sodium ⁽⁻⁾ 10-0 <2,400mg - >4,800mg	Sodium ⁽⁻⁾ ≤2,400mg/d=6 2,400-3,400mg/d=3 >3400mg/d=0	Sodium ⁽⁺⁾ and ⁽⁻⁾ <2,300mg=1 >2,300mg=0	Salt ⁽⁻⁾ -0.5 – 1.5
Cholesterol			Cholesterol ⁽⁻⁾ 10-0 <300mg - >450mg	Cholesterol ⁽⁻⁾ 6-0 ≤300mg=6; 300-400mg=3; >400mg=0	Cholesterol ⁽⁺⁾ and ⁽⁻⁾ <300mg=1 >300mg=0	
Trans fat					Trans fat ⁽⁺⁾ and ⁽⁻⁾ <1%E naturally occurring=1	
Protein				Protein ⁽⁺⁾ 10% E=5 0% E=0		
CHO:PRO:FAT				CHO:PRO:FAT ⁽⁺⁾ 0-6 55-65:10-15:15-25=6		
PUFA:MUFA:SFA				PUFA:MUFA:SFA ⁽⁺⁾ P/S & M/S=1-1.5=4 P/S & M/S=0.8-1.7=2 Other=0		
Iron, Calcium, Vitamin C				Fe, Ca, Vit C ⁽⁺⁾ 100% RDA (or AI)=5 0%=0		
Variety			Variety ⁽⁺⁾ 10-0 16 dif foods/3d=10 <6 dif foods/3d	Overall food variety ⁽⁺⁾ 0-15 (meat/poultry/fish/eggs; dairy/beans; grain; fruit; vegetables) Protein food variety ⁽⁺⁾ 0-5 (meat, poultry, fish, dairy, beans, eggs)	Variety based on score for fruit and vegetables ⁽⁺⁾	
Physical Activity					Included in determining subject calorie level	Adherence to physical activity recommendations 0-1.5

*Gao et al. compared the original HEI with their customized version, HEI-05, based on the levels of calorie need specified by the 2005 DGAs (men and women 45-50y - active, mod active, sedentary; men and women >50y - active, mod active, sedentary).

†Along with other diet scores, both Lassale et al. and Woo et al. used the DQI-I that has 4 groups of components as follows:

Variety: overall food group variety (0-15 points); within-group variety for protein source (0-5 points).

Adequacy: vegetables, fruits, cereals, fiber, protein, Fe, Ca, vitamin C (0-5 points each). Nutritional recommendations are specific to the country where the score is applied, here France.

Moderation: total fat, saturated fat, cholesterol, Na, empty-energy foods (0-6 points each).

Overall balance: macronutrient ratio (carbohydrate: protein: fat, 0-6 points); fatty acid ratio (PUFA:MUFA:SFA, 0-4 points).

††DGA penalized for overconsumption for energy dense (ED) foods (in grey) w/ -0.5 pt for exceeding recommended intakes ≥5 servings

(+) Positive components; (-) Negative components; (+m) Positive in moderation

Component score based on correspondence to recommendations: maximum points for meeting guidelines and proportional points for percent deviation, (+) and (-)

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