

Table. An example of knowledge about nutrients' positive effect on depression.

Nutrient	Event	Result
Chromium	Intake	Trigger atypical depression
Cobalamin	Sufficient	Reduce dementia
DHA	Sufficient	Reduce depression
Folate	Deficiency	Trigger depression
Folate	Sufficient	Enhance effectiveness of antidepressant medication
Iodine	Deficiency	Trigger severe cerebral dysfunction
Iron	Deficiency	Trigger depression and attention deficit hyperactivity disorder
Lithium	Treatment	Bipolar disorder
Magnesium	Deficiency	Trigger depression
Omega-3	Deficiency	Trigger depression
Omega-3 (Type PUFA)	Deficiency	Decrease brain and neural function
Protein	Deficiency	Trigger anxiety
Selenium	Deficiency	Trigger anxiety
Zinc	Intake	Improve depression

Reference

[1] Rao T S, Asha M, Ramesh B, Jagannatha K. Understanding nutrition, depression and mental illnesses. Indian J Psychiatry. 2008;77–82. [doi:10.4103/0019-5545.42391]

Table. An example of knowledge about nutrient degradation and effectiveness.

Nutrient	Degradation Factor	Effectiveness Factor
Anthocyanin	Moisture causes the pigment to dissolve sodium and potassium cause the color dark.	None
Beta-Carotene	Heat deteriorates value	Fat
Calcium	Oxalic acid blocks absorption	Vitamin D
Carbohydrate (Type Starch)	None	Heat cooks them so the body can digest them
Chlorophyll	Heat causes dull colors	None
Folate	Heat deteriorates value	None
Iron	None	Vitamin C
Lutein	Heat deteriorates value	Fat
Lycopene	None	Fat, Heat
Vitamin C	Heat deteriorates value	Vitamin E
Vitamin D	None	Fat
Vitamin E	Heat deteriorates value	Fat
Zeaxanthin	Heat deteriorates value	Fat

Reference

[1] Gisslen W. Professional Cooking. 7th ed. Wiley, New York; 2009.

[2] Nix S. Williams' Basic Nutrition and Diet Therapy. Missouri, USA. Elsevier; 2013.

Table. An example of knowledge about suitable food for some physical illnesses.

Type	Physical Illness	Suitable Food	Food to Avoid
Disease	Type 2 diabetes	Complex carbohydrate food	Simple carbohydrate food
	Hypertension	Complex carbohydrate food, High potassium food, High magnesium food, High calcium food	High sodium food
	Weight gain	High protein food, Food with dietary fiber (Highly insoluble type)	High fat food
	Weight loss	High calorie food from starch, sugars, protein, Unsaturated fatty acid	High saturated fatty acid food
Symptom	Constipation	Food with dietary fiber (Highly insoluble type), Moisture or Watery food	None
	Dental caries	Soft or Tender texture food	Crisp or crunch texture food, Tough texture food
	Diarrhea	Moisture or Watery food, Low-residue food	Gas formation food, High fat food, Hot and spicy food, Acidic food
	Dry mouth	Appetite food, Saliva induced food	None
	Flatulence	Moisture or Watery food, Carminative food	Gas formation food
	Mouth ulcers	Soft food, Room temperature food	
	Oral ulcer	Soft texture food, Room temperature food, Carminative food	Hot and spicy food, Acidic food
	Peptic ulcers	Low-residue food, Soft or tender texture food	Hot and spicy food
	Tooth Decay	Soft or tender texture food	Crisp or Crunch texture food, Tough texture food

Reference

- [1] DeBruyne LK. Nutrition and diet therapy. Massachusetts, USA. 9th ed. Cengage Learning; 2016.
- [2] Hui YH, Stanfield PS. Nutrition and diet therapy: Self-instructional modules. Sudbury, MA. Jones & Bartlett Publishers; 2010.
- [3] Nix S. Williams' basic nutrition and diet therapy. Missouri, USA. Elsevier; 2013.
- [4] Ruth AR. Nutrition and diet therapy. New York, USA. 10th ed. Delmar, Cengage Learning; 2011.

Table. An example of knowledge about food cooking and preparation methods.

Method	Process	Ingredient	Result
Trimming	Cut	Meat, Fruits, Vegetables	Square pieces, Cut into thick sheets
	Chop	Meat, Fruits, Vegetables	Small and equal sized pieces
	Crush	Meat, Fruits, Vegetables, Small seeds	Fine or coarse powder
	Debone	Land meat, poultry, fish	Meat without bone
	Dehull	Dried grains	Whole grains without shells
	Heat	Fruits, Vegetables	Soft texture
	Mill	Dried grains	Powder
	Polish	Dried grains	Whole grains without membrane
	Shred	Meat, Fruits, Vegetables	Small strips or shreds
	Slice	Meat, Fruits, Vegetables	Thin sheets
Cooking	Dry heat with fat	Simple carbohydrates, Starchy complex carbohydrates	Brown or golden-brown color, Crispy or crunchy texture
	Dry heat (Roast, Grill)	Protein, Carbohydrate	Brown color
	Heat	Fruits, Vegeta	Soft texture
	Heat	Protein	Firm texture
	Long time moist heat (Simmer)	Fish, shellfish, fatty meat, meat from little movement part	Mushy texture
		Meat from movement part, head meat	Tender texture
	Short time dry heat with fat (Boil, Steam)	Offal, meat from legs, hips, and neck	Rough, sticky texture
		Fish, shellfish, fatty meat, meat from little movement part	Tender texture

Method	Process	Ingredient	Result
Preservation	Drying	Meat, Fruits, Vegetables	Dried, tough texture
	Salting	Meat, Fruits, Vegetables	Salted
	Fermentation	Meat, Fruits, Vegetables	Sour
	Pickling	Meat, Fruits, Vegetables	Sour
	Smoking	Meat, Fruits, Vegetables	Smoked
	Pasteurization	Meat, Fruits, Vegetables	Taste and texture remain the same
	Canning	Meat, Fruits, Vegetables	Taste and texture remain the same

Reference

[1] Gisslen W. Professional cooking. New York. 7th ed. Wiley; 2009.

[2] Labensky SR, Martel P, Hause A. On Cooking. New York, USA. 5th ed. Prentice Hall; 2014.

Table. An example of a food description.

Food	Food Description
Complex carbohydrate food	Food derives from the dried seeds of the Poaceae or Fabaceae family, the corm of the Colocasia genus, the tuber of the Solanum genus, and the root of the Manihot or Ipomoea genus.
Essential amino acid food	Food derives from the meat of mammals, fish, and poultry. Mammal milk and poultry eggs.
Saturated fat food	Food derives from the fat of mammals and poultry. Fat of plants in the palm family.
Monounsaturated fat; MUFA food	Food derives from the dried seeds of plants in the Brassica, Arachis, Glycine, and Helianthus genera.
Polyunsaturated fat; PUFA food	Food derives from the meat of fish in the Scombridae, Pangasianodon genera.
Vitamin A food	Food derives from the liver of mammals or poultry, egg yolks, whole milk from mammals, yellow, orange, or red plant parts, and green leaves.
Vitamin D food	Food derives from mammals or poultry, poultry eggs, and fish meat from the Scombridae and Clarias genera.
Calcium food	Food derives from the milk of mammals, fish bones, green leaves, dried seeds of the Fabaceae family, and unpolished dried seeds of the Poaceae family.
Magnesium food	Food derives from dried seeds of the Poaceae or Fabaceae family, green leaves, meat, fish, shellfish, poultry eggs, and milk.
Potassium food	Food derives from ripe fresh fruits, dried fruits, flesh of Cucurbita, root flesh of Ipomoea, green leaves, non-processed meat, unpolished seeds of Poaceae, dried seeds of Fabaceae, and mammal milk and products.
Saliva induced food	Bright color menu, mixed color menu, hot and spicy food, sour food, herb, and spice flavor added food.
Hot and spicy menu	Menu food that contains spices, herbs, salt, and sugar.
Menu suitable serve at room temperature	Steamed menu, boiled menu, fried menu, mixed menu
Crisp-crunch menu	Fried menu with ingredients from carbohydrates
	Uncooked menu with main ingredients from vegetables and vegetable products, or fruits and fruit products, and is fresh and immature food

Reference

- [1] DeBruyne LK. Nutrition and diet therapy. Massachusetts, USA. 9th ed. Cengage Learning; 2016.
- [2] Hui YH, Stanfield PS. Nutrition and diet therapy: Self-instructional modules. Sudbury, MA. Jones & Bartlett Publishers; 2010.
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