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Criteria of Healthy Diet: Prevention and Additional Treatment of Chronic Diseases with Nutrition

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Abstract

Currently, people are very much concern about their health through the food that is balanced with all the essential nutrients needed for the maintenance of good health. For healthy diet followers food pyramid is basic principle throughout the world. Besides, there are such rules, which offer modern ways of applying opportunities (e.g. choosing proper kitchen technology). Thus, they can also help with preventing diseases and treating or curing them. These chronic, non-infectious diseases comprise obesity, cardiovascular disease, cancer, type 2 diabetes and also digestion disorders due to sedentary lifestyles and lack of fibres. The corporate enterprises have a significant role in keeping special or healthy diet. It has almost become their obligation to manage healthy diet beside covering the consumers' needs. We are concerned that getting to know healthy diet and modern kitchen technologies, and their practical application greatly contribute to our wellbeing.

Introduction

Nowadays, for many sport and physical activities, the healthy diet and prevention of diseases is very important [1]. Nevertheless, more and more surveys have been made [2,3] and also several recommendations have been formulated in this respect [4]. Among these, the most wide-spread ones are the food pyramid and the applied modern kitchen technologies. These diet recommendations can help with preventing and treating obesity [5], type 2 diabetes, cardiovascular disease, cancer and digestion disorder [6,7]. Several special diets also highlight their practical application [8] and listening to them people can easily become the followers of healthy diet. Besidesthe diet, most of the literature also raised awareness of the preventive effect of sport and physical activity, and of maintaining mental health, which can contribute to our wellbeing. Both parents and teachers have a great role in developing children's responsible health-consciousness. Through learning healthy diet the possibility of genetically determined diseases might decrease. To reach more and more people with the way towards health, several organisations and corporate enterprises manage this worthy goal. This manuscript delineates the most important principles of healthy diet and their additional elements, and then the modern kitchen technology knowledge in order to increase the chance of a healthier and fitter life.

Discussion

Key elements of healthy diet

Recommendations for the globally applicable healthy diet can be found in this chapter. Those nutritional principles are concluded through the recommendation of food pyramid, which are true anywhere in the world and are quite common. In addition, beside healthy diet, this chapter consists of essential elements, and also kitchen technologies recommended as part of modern kitchens.

Decreasing fat consumption: In applying the modern kitchen technologies using alternative fat (e.g. coconut oil), being aware of quantity limits and using vitamin enrichment, have a significant role in contributing to our health protection [9].

Moderate sweets consumption: Consuming big amount of simple sugars leads to chronic diseases. It is advised not only to reduce their consumption but also alternative opportunities (e.g. stevia) can help the recommendations needed for healthy lifestyle [10].

Milk and dairy products consumption: Consuming milk and dairy products contributes to maintaining the health of bones, preventing decalcification and also ensures beneficial macronutrients for human body. Among dairy products fermented ones are significant, as they form an integral part of several special diets (e.g. Mediterranean diet). They have also a major role in children's diet, as they help their normal development and reaching the maximum height of body [11].

Meat, Fish and Egg consumption: While consuming meat it is advised to choose products containing less fat, which also means higher protein content. In healthy diet, sea fish have a key role, as their active substances are omega-3 fatty acids, which are important for preventing several chronic diseases. Eggs ensure complex protein for the organism however, decreasing the amount of egg yolks might be necessary due to its high cholesterol content [12].

Vegetable and fruit consumption: Due to the vitamin, mineral and fibre content of vegetables and fruits, they greatly contribute to cover the water and vitamin needs of the organism, and to maintain healthy digestion. Therefore, it is suggested to consume them for every meal daily [13]. Very recently, the growing importance of fruits and vegetables in human health is discussed by Pal and Judit [14].

Whole wheat bakery product consumption: It is advised to consume bakery products with as high fibre content as possible, since they help maintaining a healthy gastro-intestinal function, or normal level of blood glucose. Therefore, it is suggested



to consider daily recommendations, and to consume them as varied as possible. Experts determine their quantity recommendations on age-group basis [15].

Daily frequent liquid consumption: Consuming 2-3 litres of liquid has the most significant role beside healthy diet to maintain water balance of the organism, and to prevent desiccation. Also, it contributes to maintaining the defensive ability of our organism. Mainly drinking water is advised, although fluid loss can also be refilled with e.g. fruit juice, vegetable juice or tea [16].

Supplementary elements for maintaining health

For those interested in healthy lifestyle, the feature of healthy diet is a potential opportunity, and also most of the corporate enterprises (e.g. supermarkets) help the consumers with maintaining the diet [17]. Besides, there are such general rules, which also permanently appear among dietary recommendations. Including decreasing salt consumption, and reduction of addictions such as caffeine and alcohol consumption. The role of sports in connection with maintaining health emerges in every study about healthy lifestyle [18], since it is proved that they contribute to the prevention of metabolic diseases or even to treat obesity. Moreover, it is worth highlighting the connections relating the quantitative limit of foodstuff, as there is no food or drink in healthy diet recommendations that should be avoided, if the consumed quantity is considered [19].

Applying modern kitchen technologies

Modern kitchen technologies include frying without fat, boiling, steaming, grilling, marinating with herbs, or baking in oven bags. These technologies have replaced deep frying, using a lot of salt and consuming food with high sugar content, which require classic technologies. During healthy diet, these classic technologies are not forbidden but consuming them regularly and in large amount is unfavourable. Moreover, the modern technologies help maintaining healthy diet, and decreasing chronic diseases. Therefore, besides basic knowledge of healthy diet, these procedures are recommended in several literature and special diets.

Conclusion

Considering nutritional factors has also a significant role in preventing diseases and treating chronic diseases. Inter alia, obesity, type 2 diabetes, cardiovascular disease and gastro-intestinal diseases are comprised. Teaching healthy lifestyle in childhood has a significant role, as thus people can have healthier life further on. Besides, involvement of corporate enterprises is also focused in order to greatly cover customers' needs and to manage healthy diet. This manuscript emphasises the importance of healthy diet, and concludes its basic principles throughout presenting the recommendations of the food pyramid, indicating their additional elements and modern kitchen technologies. Beside food science and food technology knowledge, it is important to raise awareness of the significance of regular physical activity, which also contributes to our wellbeing.

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Author's contribution

All the authors contributed equally. They read the final version, and approved it for publication.

Conflict of interest

The authors declare that they have no conflict of interest.

References

- Godin L, Sahakian M (2018) Cutting through conflicting prescriptions: How guidelines inform "healthy and sustainable" diets in Switzerland. Appetite 130(1): 123-133
- Adjoian TK, Firestone MJ, Eisenhower D, Yi SS (2016) Validation of self-rated overall diet quality by healthy eating index-2010 score among New York City adults, 2013. Prev Med Rep 3: 127-131.
- Parker EA, Feinberg TM, Lane HG, Deitch R, Zemanick A, et al. (2020) Diet quality
 of elementary and middle school teachers is associated with healthier nutritionrelated classroom practices. Prev Med Rep 18: 101087.
- Leite CJ, Coldeira S, Watze B, Wollgast J (2020) Healthy low nitrogen footprint diets. Glob Food Sec 24: 100342.
- Kim JS (2015) Experiences in healthy dieting of male college students with obesity in Korea. Osong Public Health Res Perspect 6(1): 59-63.
- Aulina A, Tauzil F, Yudhawanto MF, Ramadhan IA, Ismail R (2017) The Influence of game "nutrients hero" for healthy diet. 2nd International Conference on Computer Science and Computational Intelligence. Procedia Computer Science 116: 81-86, Indonesia.
- Schwingshacke L, Bogensberger B, Hoffmann G (2018) Diet Quality as Assessed by the Healthy Eating Index, Alternate Healthy Eating Index, Dietary Approaches to Stop Hypertension Score, and Health Outcomes: An Updated Systematic Review and Meta-Analysis of Cohort Studies. Journal Acad of Nutr Diet 118: 74-100.e 11.
- Milella RA, Gasparro M, Alagna F, Cardone F, Rotunno S, et al. (2020) Microarray data and pathway analyses of peripheral blood mononuclear cells from healthy subjects after a three weeks grape-rich diet. Data Brief 29: 105278.
- Bowser SM, McMillan RP, Boutagy NE, Tarpey MD, Smithson AT, et al. (2020)
 Serum endotoxin, gut permeability and skeletal muscle metabolic adaptations following a short term high fat diet in humans. Metabolism 103: 154041.
- Koopman KE, Booij J, Fliers E, Serlie MJ, Fleur SE (2013) Diet-induced changes in the Lean Brain: Hypercaloric high-fat-high-sugar snacking decreases serotonin transporters in the human hypothalamic region. Mol Metab 2(4) : 417-422.
- 11. Kukovics S, Figler M, Unger A, Antal E, Szakály S (2009) A tejszerepe a human táplálkozásban. MelániaKiadóKft pp.1-608.
- Boer de J, Sehöster H, Aiking H (2020) Fish as an alternative protein-A consumeroriented perspective on its role in a transition towards more healthy and sustainable diets. Appetite 152: 1-7.
- Ramsay SA, Shriver LH, Taylor CA (2017) Variety of fruit and vegetables is related to preschoolers' overall diet quality. Preventive Medicine Reports 5: 112-117.
- Pal M, Molnár J (2021) Growing importance of fruits and vegetables in human health. International Journal of Food Science and Agriculture 5: 567-569.
- Bhat NA, Wani IA, Hamdani AM (2020) Tomato powder and crude lycopene as a source of natural antioxidants in whole wheat flour cookies. Heliyon 69(1): e03042.
- Segura-Badilla O, Lazcano-Hernández M, Kammar-García A, Vera-López O, Aguilar-Alonso P, et al. (2020) Use of coconutwater (*Cocusnucifera L*) for the development of a symbiotic functional drink. Heliyon 6(3): e03653.
- Aggarwal A, Monsivais P, Cook AJ, Drewnowski A (2014) Positive attitude toward healthy eating predicts higher diet quality at all cost levels of supermarkets. J Acad Nutr Diet 114(2): 266-272.
- Powell HS, Greenberg DL (2019) Screening for unhealthy diet and exercise habits:
 The electronic health record and a healthier population. Prev Med Rep 14: 100816.
- Kanauchi M, Kanauchi K (2018) The World Health Organisation's healthy diet indicator and its associated factors: A cross-sectional study in central Kinki, Japan. Prev Med Rep 12: 198-202.