Available online at www.rajournals.in

RA JOURNAL OF APPLIED RESEARCH
ISSN: 2394-6709
DOI:10.47191/rajar/v9i5.07
Volume: 09 Issue: 05 May-2023

International Open Access

Impact Factor- 8.174

Page no.- 301-305

Determination of Hope Food Pattern Score (PPH) Score Based On the Study of Finished Food Components

Asep Hodijat
Department of Food Technology, Facultuy of Agriculture, Ma'soem University. Jln. Raya Cipacing No. 22 Jatinangor Sumedang 45363, Sumedang Regency, West Java, Indonesia

ARTICLE INFO

Published Online:
31 May 2023

ABSTRACT

Research has been conducted on the determination of the Hope Food Pattern Score (PPH) based on the study of finished food components. Finished foods are processed foods, traditional foods, culinary foods, which can be consumed immediately, without the need to reprocess them. Finished food is considered important for the determination of the PPH score targeted by the national food security agency, which has a PPH score of 92.5. This was stated by the Government through the Ministry of Agriculture in 2019, targeting nationally the score for PPH food diversification based on local resources to reach 92.5.

The target of achieving a PPH score of 92.5 is difficult to achieve because in reality the 2019 SUSENAS data does not include the value of finished food energy into the PPH food group component, even though in the calculation, the finished food component is very influential on the results of calculating PPH, the energy is around 15-20% of total energy. From the calculation results, the Hope Food Pattern Score calculated based on the Average Calorie Consumption Per Capita a Day (Kcal) of West Java Province SUSENAS 2019 data plus ready-made food purchased at hawker places in food center centers, has not met the PPH score in accordance with the target, namely kupat tahu average PPH score 68.84, chicken porridge - average PPH score 80.06, fried rice has an average PPH score of 80.95, kupat sayur has an average PPH score of 83.94, and gado-gado has an average PPH score of 87.95.

For this reason, with this study, it is recommended to make finished food recipes with food components whose forming raw materials are arranged then grouped according to the expectation food pattern group and simulated the value of the PPH quality score so that it has a score of around PPH 92.5.

Corresponding Author:
Asep Hodijat

KEYWORDS: Food Pattern Score Hope (PPH), Finished food, Food Security

I. INTRODUCTION

The success of a nation's development is determined by food availability, social, economic, cultural and political factors (Unicef, 1990), Food security development is the responsibility of the government and society. When nutritional Lack and malnutrition, can be an inhibiting factor in national development, The preparation of coordinated food and nutrition programs in the context of development in the field of food and nutrition needs to be improved so that the level of people's welfare to get adequate, nutritious and safe food, because food is one of the fundamental important factors, which in quantity and quality must be met and available for the needs of human survival. Government Regulation No. 68 of 2002, food security as a condition of food fulfillment for households which is reflected in the availability of sufficient food in terms of quantity and quality of comfortable, equitable and affordable. To illustrate food security, diversity and food availability are indicated by PPH score figures. The purpose and direction of food and nutrition development is the improvement of food consumption towards the Food Hope Pattern (PPH), the ideal PPH score shows the diversity (diversification) of food consumed. The ideal PPH score achievement target for each region can be obtained through food and nutrition planning, one of which is by analyzing data from the National Socioeconomic Survey (SUSENAS) to food consumption patterns and food availability in the region. (Hasmawati, 2009) The government, through the Ministry of Agriculture in 2019, targets the national score for PPH for local resource-based food diversification to reach (92.5). The target of achieving

the PPH score is difficult to achieve because in reality the 2019 SUSENAS data does not include the value of finished food energy into the PPH food group component, even though in the calculation, the finished food component is very influential on the results of calculating PPH, the energy is around 15-20% of the total energy. It is with this in mind that this research is important to conduct. In order to determine the PPH score in accordance with expectations and programs that have been targeted by the government. Food availability, indicated by the level of food production and distribution. The availability of food around the clock, in sufficient quantities and at affordable prices largely determines the level of food consumption at the home level stairs, but a variety of foods commonly consumed by the Indonesian people both ready-to-eat or raw foods, many types of food, unknown content along with nutritional value, because these foods have not been included in the List of Food Ingredients Composition (DKBM) or in the List of Snack Food Composition (DKGJ). Therefore, to realize community welfare in realizing food security programs, systematic and directed steps need to be outlined in assessing food quality based on the food hope score (PPH). because if the food score (dietary score) in a region has a high PPH score, the higher the food quality score, because it shows that the food situation in an area will be more diverse and the better the composition and quality of nutrition, and If the food score (dietary score) in a region has a low PPH score, then the lower the food quality score, it shows that the food situation in an area will be less good in composition and nutritional quality, so the government needs steps to realize food security in a region.

II. MATERIALS AND METHODS

This research uses a descriptive type of research with quantitative and qualitative approaches. by way of comparison, or linking with other variables, Sugiyono (2012: 13). In this study, data was obtained through the results of analysis in the laboratory and based on survey results from Susenas 2019 data. The data from the l analysis, is ready-made food data formulated by itself to meet the PPH Score targeted by the West Java Food Security Agency as well as sample data taken from finished food sales centers, or finished food sellers who go around to homes, then analyzed in food laboratories The data analyzed from each food were grouped based on the Food group of the Food Hope Pattern (PPH). Each food group was analyzed for carbohydrate, fat and protein levels. Each data obtained will be calculated energy, then added the energy of the finished food former, and the energy fractions of the components of the finished food group will be calculated, then determined the PPH score.

III. RESULTS AND DISCUSSION

Pola Pangan Harapan (PPH) is an arrangement of various foods or food groups based on their energy contribution, both absolute and relative to total energy both in terms of food availability and consumption, which is able to meet needs by considering social, economic, cultural, religious, taste aspects (Ministry of Health RI, 2005). The results of this study, to determine the caloric value of each food component. This value is important because it will contribute to.

The Hope Food Pattern Score (PPH) is strongly influenced by the caloric value of each food component. This value is important because it will contribute to the target achievement of the ideal PPH score for each region. through food and nutrition planning National Socioeconomic Survey (SUSENAS) data on the study of consumption patterns per day, this population average must be met so that the PPH score value that has been determined by The West Java food security agency can be achieved, the PPH score is in accordance with the target by the West Java provincial food security agency, which has a PPH score of 92.5. The target of achieving the PPH score is difficult to achieve because in reality the 2019 SUSENAS data does not include the value of finished food energy into the components of the PPH food group, even though in the calculation, the components finished food is very influential on the results of calculating PPH, the energy is about 15-20% of total energy, therefore with the PPH score approach that takes into account the finished food component.

Based on the list of finished foods in the 2019 Susenas data, as well as the results of market surveys that are widely found sold in West Java, the samples of foods determined in this study are, lontong sayur, fried rice (nasi goreng), gado-gado, and other types of foods, namely chicken porridge(bubur ayam) and kupat-tahu.

Lontong sayur is an Indonesian food originating from Minangkabau, West Sumatra. This rice cake is identical to coconut milk soup served with round eggs, fried noodles.

Gado-gado is a typical Jakarta food containing boiled vegetables, sliced eggs and tofu, and sprinkled with fried onions and crackers. Vegetables are added with peanut seasoning or sauce from peanuts that have been mashed which is then stirred evenly

Kupat-tahu, made from ketupat, tofu, cabbage, and bean sprouts that have been fried, mixed with peanut sauce and soy sauce

In determining PPH, it is necessary to determine the components of the finished food ingredients. Based on the results of calculating the Hope Food Pattern Score from the average population's consumption pattern per day), the PPH score can be seen in the PPH Score graph of Daily Consumption Patterns Plus Finished Food can be seen in the Graph in Figure 3.1

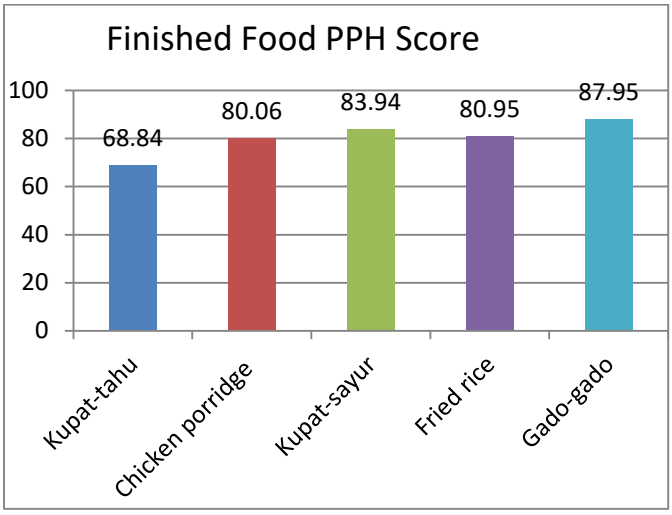

Figure 3.1. PPH Score of Daily Consumption Patterns Plus Finished Food Samples

Based on the graph in Figure 3.1, finished food has a score contribution to the increase and decrease in PPH score, so finished food needs to be studied further related to its PPH score. From the results. this study, samples of finished foods in food centers, have not met the PPH score in accordance with the target by the West Java provincial food security agency, so that existing ready-made foods need to be made or modified food recipes, so that they have values in accordance with the expected target

The low Kupat Tahu PPH score of 68.8 is lower than the PPH score of the average daily consumption pattern of the population from the 2019 Susenas data (82.2), this is due to the additional energy from kupat tahu has an actual score of one of the food components, namely beans (44.4) which is too excessive compared to the maximum score of 10, so there is a score value that does not affect the PPH quality score of 44.4, as table 3.1 follows

Table 3.1: Expected Food Pattern Score from consumption patterns per day The average sitting plus finished food kupat-tahu

No	Food Group	EC (Kcal)	%	W	AS	MS	QS
1	Rice paddy	1178.1	49.3	0.5	24.7	25.0	24.7
2	Tuber tubers	104.9	4.4	0.5	2.2	2.5	2.2
3	Animal Food	160.3	6.7	2.0	13.4	24.0	13.4
4	Oils and Fats	219.8	9.2	0.5	4.6	5.0	4.6
5	Oily Fruits/Seeds	5.3	0.2	0.5	0.1	1.0	0.1
6	Legumes	530.8	22.2	2.0	44.4	10.0	10.0
7	Sugar	45.3	1.9	0.5	0.9	2.5	0.9
8	Vegetables and Fruits	61.7	2.6	5.0	12.9	30.0	12.9
9	Miscellaneous	82.9		0.0	0.0	0.0	0.0
	Sum	2389.0			103.3	100.0	68.8

Notes
EC Energy consumption (Kcal)
W Weight
AS Actual Score
MS Maximum Score
QS Quality Score

Likewise, the gado-gado, which has an average PPH score of 87.95, has a high vegetable and fruit food group compared to other processed foods, namely 35.61, while the vegetable and fruit food group has the highest maximum score among the 8 food groups, namely 30. so a high score greatly influences the PPH score as shown in table 3.2

Table 3.2: Expected Food Pattern Score from consumption patterns per day Th e average sitting plus finished food gado-gado

No	Food Group	EC (Kcal)	%	W	AS	MS	QS
1	Rice paddy	921.0	42.8	0.5	21.42	25.0	21.42
2	Tuber tubers	77.9	3.6	0.5	1.81	2.5	1.81
3	Animal Food	199.3	9.3	2.0	18.54	24.0	18.54
4	Oils and Fats	513.4	23.9	0.5	11.94	5.0	5.00
5	Oily Fruits/Seeds	5.3	0.3	0.5	0.13	1.0	0.13
6	Legumes	151.7	7.1	2.0	14.10	10.0	10.00
7	Sugar	45.3	2.1	0.5	1.06	2.5	1.06
8	Vegetables and Fruits	153.1	7.1	5.0	35.60	30.0	30.00
9	Miscellaneous	82.9		0.0	0.00	0.0	0.00
	Sum	2149.7			104.59	100.0	87.95

Notes
EC Energy consumption (Kcal)
W Weight
AS Actual Score
MS Maximum Score
QS Quality Score

Simulation results, for finished food recipes. Finished food has an influence on PPH scores. The effect of energy is about 15-20% of the total energy, food needed to achieve PPH Score = 92.5, the energy content needed to achieve the score is around 385.29 kcal (Susenas, 2019).

The average daily consumption pattern PPH score of the population from the 2019 susenas data (82.2) to obtain a PPH score of 92.5 less 10.3, can be simulated from food groups that have not been maximized as in table 3.3

Table 3.3: Differences between actual score and maximum modifiable score

No	Food Group	Act. Score	Max Score	Qual Score	Draw back
1	Rice paddy	28.05	25	25	0
2	Tuber tubers	0.62	2.5	0.62	1.88
3	Animal Food	21.82	24	21.82	2.18
4	Oils and Fats	7.48	5	5	0
5	Oily Fruits/Seeds	0.18	1	0.18	0.82
6	Legumes	7.06	10	7.06	2.94
7	Sugar	1.54	2.5	1.54	0.96
8	Vegetables and Fruits	20.98	30	20.98	9.02
	Sum			82.2	17.8

From the simulation results, for the finished food recipe studied in this study, the composition of food ingredients needed so that the energy content is around 385.29 kcal with PPH Score = 92.5, is as in Figure 3.2, Figure 3.3 and Figure 3.4. For fried rice recipes, the energy composition of foodstuffs needed for energy levels of around 385.361 kcal is as in Figure 3.2.

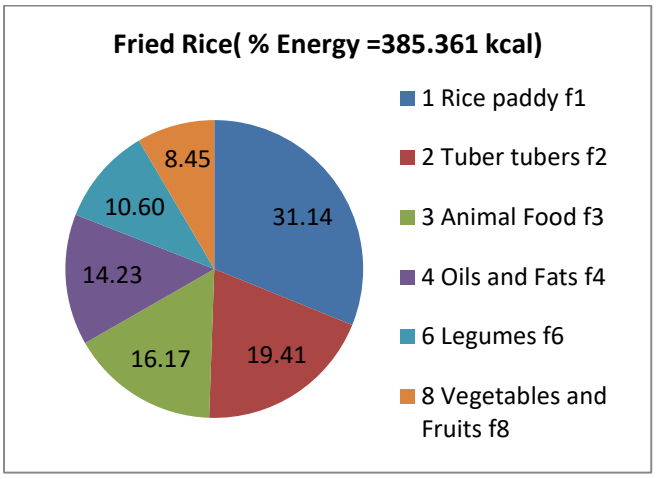

Figure 3.2. Recommended composition of fried rice foodstuffs to meet PPH score = 92.5

For the finished food recipe kupat sayur, the energy composition of the food ingredients needed so that the energy content is around 386,078 kcal with PPH Score = 92.5 is as in Figure 3.3

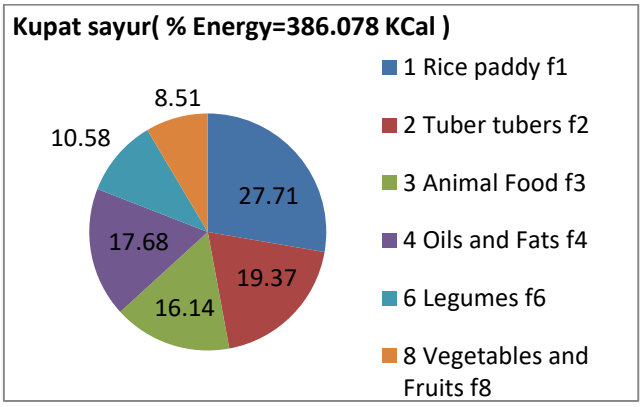

Figure 3.3. Recommended composition of kupat-sayur foodstuffs to meet PPH score = 92.5

As for the gado-gado food recipe, the energy composition of foodstuffs needed so that the energy content is around 385.39 kcal with PPH Score = 92.5 is as in Figure 3.4

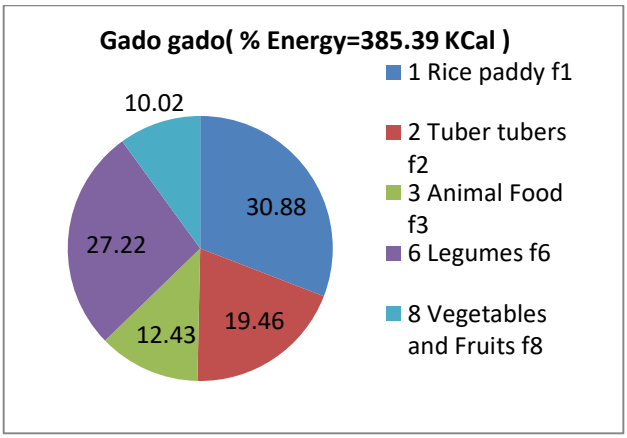

Figure 3.4. Recommended composition of gado-gado foodstuffs to meet PPH score = 92.5

Based on the composition of foodstuffs as contained in Figure 4.2, Figure 4.3 and Figure 4.4, the target PPH score = 92.5 can be achieved, because the fraction of finished food components into 8 groups of foodstuffs in each finished food already exists, DKBM and DKGJ have met the needs needed to calculate finished food for example the rice fraction, tuber fraction etc. The PPH score is calculated after the Hope Food Pattern Score from the average daily consumption pattern of the population (Data in table 4.4) plus additional KKAL with the PPH score of finished food with the composition of food ingredients contained in the Picture

CONCLUSION

1. Finished Food in the market, many do not contain various food ingredients such as those found in the hope food pattern so that the food pattern score is less than the national BKP target of 92.5
2. Finished food has an influence on the PPH score of the composition of food ingredients needed so that the energy content is around 385.29 kcal with PPH Score = 92.5
3. Based on the results of calorie c ounting, the composition of 8 fractions of food ingredients forming food patterns of

hope in accordance with the PPH score set by the National BKP (92.5), is significantly influenced by 8 fractions of finished food-forming foods

4. Target PPH Score = 92.5 can be achieved, after the Hope Food Pattern Score from the average daily consumption pattern of the population from the 2019 susenas data plus with the addition of KKAL with the PPH score from finished food with the composition of food ingredients as needed so that it is in accordance with the provisions of the Hope Food Pattern Score (PPH)

ADVICE

1. Each finished food should be written the composition of the raw materials forming it according to the expected food pattern and include the percentage of energy, similar to writing nutritional value information. Every food vendor must have standardization so that the menu is presented its energy value remains unchanged . Finished food has an influence on PPH scores. The higher the food quality score, the more diverse the food situation and the better the composition and nutritional quality.

2. With the trend of eating out, the development of ready-made food menus sold in the market today is very many and varied, so that the list of finished food menus needs to be updated, especially for the benefit of survey data by Susenas, preferably the data of 20 types of finished foods that will be surveyed by Susenas, in each province adjusted the order of the number of types of food that are most consumed in each province

3. The discrepancy in the number of calories of finished food when compared to the number of calories of each food fraction, this is because when sampling finished food may not be exactly the same accuracy as when calculated each component forming the finished food, because after formed food so it has been united and when sampling is done randomly (random) .

4. Each finished food should be written the composition of the raw materials forming it according to the expected food pattern and included the percentage of energy, similar to writing nutritional value information. Each finished food seller must have standardization so that the menu served the energy value remains unchanged, for example for Kupat tahu 400 KCAL, then the composition of food ingredients needs to be listed, for example one serving of kupat 200 gr, tofu 100 gr, half a portion of kupat 100, tofu 75 gr

5. Analyze the situation of food consumption of the population based on patterns Food Hope (PPH) which is more appropriate for the realization of food security through calculating the fraction of finished food components into 8 groups of food ingredients so that the income tax score can be calculated more accurately, not forced to be estimated based on references (Central Kalimantan Provincial Government, 2014)

6. For the Government, the calculation of PPH scores is intended to analyze the food consumption patterns of a community against ideal food consumption patterns (Food Pattern of Hope). This PPH score serves as:

1) Indicators of nutritional quality and diversity of consumption or food of a region.

2) As input for policy makers in the food sector in order to improve the quality of diversity of food consumption so that it can meet the Food Pattern of Expectations

7. By determining finished foods into 8 food groups, the upcoming SUSENAS is expected that the data will be directly used for determining PPH scores.

8. For academics of human resource knowledge in education, training and food extension programs, providing food and nutrition content in formal and non-formal education. Then increased cooperation and partnership between research institutions and universities, then the development of food security by improving the calculation of better and more accurate food pattern scores,

REFERENCES

1. Klosterman, Richard E. 1990 *Community Analysis and Planning Techniques*. Savage.Rowman & Littlefield, c1990
2. Smith, Stanley , Jeff, Tayman, and David, Swanson. 2001. *State and Local Population Projections: Methodology and Analysis*. New York. Kluwer Academic/ Plenum Publishers
3. Almatsir S,2004. Prinsip Dasar Ilmu Gizi. Gramedia Pustaka Utama. Jakarta
4. Hasmawati. 2009. Analisis Perencanaan Penyediaan Pangan Berdasarkan Pola Pangan Harapan (PPH) di kabupaten Sinjai Provinsi Sulawesi Selatan. Tesis.IPB Bogor
5. Sugiyono, Prof, Dr. 2012. Metode Penelitian Kuantitatif , Kualitatatif dan R&D. Penerbit Alfabeta. Bandung
6. Asep Hodijat, 2012 " Kajian Ketahanan Pangan Melalui Proyeksi Ketersediaan Dan Konsumsi Pangan Berdasarkan Pola Pangan Harapan (PPH)". Peneliti Pemula
7. BadanPusat Statistik, 2014"Konsumsi Kalori dan Protein Penduduk Indonesia dan Provinsi, September 2014"
8. Badan Pusat Statistik, 2014. *VSEN14.M* " Survei Sosial Ekonomi Nasional 2014 Pengeluaran Konsumsi Makanan Bukan Makanan Dan Pendapatan/Penerimaan Rumah Tangga"
9. Nono Rusono Ir., Msi. Dr.Ir.Anwar Suanri,MP dkk. Studi Pendahuluan Rencana Pembangunan Jangka Menengah Nasional (Rpjmn) Bidang Pangan Dan Pertanian 2015-2019
10. Biro Pusat Statsistika. STATISTIK KETAHANAN PANGAN 2019
11. Biro Pusat Statsistika. Statistik Kesejahteraan Rakyat 2019
12. Biro Pusat Statsistika. Pola Konsumsi Penduduk Provinsi Jawa Barat 2019