

Analyses of Indonesian Food Consumptions: Differences of Rural and Urban Consumers' Food Choices between 2007 and 2017

Ujang Sumarwan, Professor of Consumer Behavior, Bogor Agricultural University (BAU)
Hustina Rachman Purnawati, Lecturer, Department of Community Nutrition, BAU
sumarwan@apps.ipb.ac.id

Paper presented at Regional Seminar on Drivers of Consumer Food Choices March 13-14, 2018, Holiday Inn Bangkok Sukhumvit, Bangkok, Thailand

Organized by International Life Sciences Institute Southeast Asia (ILSI SEA) Region and its Thailand Country Committee, and the collaborator, Food Science and Technology Association of Thailand (FoSTAT)

Purposes of The Study

The Objectives of the study were to examine Indonesian consumer food consumption

- The study compared a number of food items consumed between 2007 and 2017.
- The study also examined differences in food consumption between rural and urban consumer.
- The study used data published by National Agency of Statistics: Badan Pusat Statistik (BPS).
- The books presented the results of Survey Sosial Ekonomi Nasional (SUSENAS) or National Socio Economic Survey.

14 Food Groups in the Survey

- | | |
|--|---|
| 1. Padi-padian/Cereals | 9. Minyak dan Kelapa/Oil and coconut |
| 2. Umbi-umbian/Tubers | 10. Bahan minuman/Beverages stuffs |
| 3. Ikan/udang/cumi/kerang/ Fish/shrimp/common squid/shells | 11. Bumbu-buan / Spices |
| 4. Daging/Meat | 12. Konsumsi lainnya/ Miscellaneous food items |
| 5. Telur dan susu/Eggs and milk | 13. Makanan dan minuman jadi/ Prepared food and beverages |
| 6. Sayur-sayuran/Vegetables | 14. Rokok dan Tembakau/ Cigarettes and Tobacco |
| 7. Kacang-kacangan/Legumes | |
| 8. Buah-buahan/Fruits | |

Four types of Food Consumption changes between 2007 and 2017

1. Urban and Rural consumers consumed less in 2017 than in 2007
2. Urban and Rural consumers consumed more in 2017 than in 2007
3. Food groups consumed more by urban consumers and consumed less by rural consumers in 2017 than in 2007
4. Food groups consumed less by urban consumers and consumed more by rural consumers in 2017 than in 2007.

These changes in consumption represent food choice behavior differences between urban and rural consumers in 2017 and 2007.

Food Groups: Major contributor to total food consumption for urban and rural consumers in 2007 and 2017

Cereal,
oil and coconut, and
prepared food and beverages

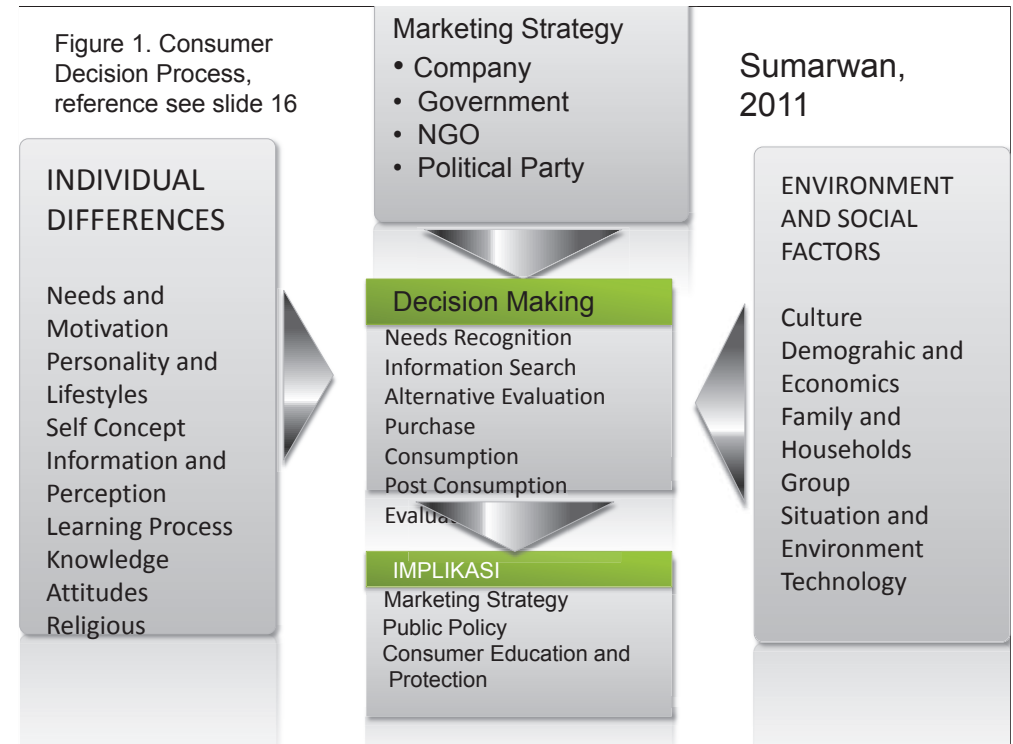
Some Changes in consumer food choice between 2007 and 2017

- Both Urban and Rural consumers consumed :
 - more prepared food and beverages in 2017 than in 2007
 - less cereal in 2017 than in 2007
- The calorie intake from prepared food and beverages has increased for both urban and rural consumers between 2007 and 2017
- Cereal consumption of urban and rural consumer has decreased between 2007 and 2017

Table 1: the percentage of calorie intake (kcal) per capita per day by food group to total food for Urban and Rural Consumers in 2007 and 2017 (Source of data, see slide 17)

BY	FOOD GROUP	2017			2007			% Changes
		Urban	Rural	% Changes	Urban	Rural	% Changes	
1	cereals	35,7	42,7	-16,4	43,9	51,5	-14,7	
2	tubers	1,6	1,5	5,9	2,9	3,6	-19,5	
3	fish/shrimp.common	2,2	2,3	-4,4	2,4	2,3	1,9	
4	meat	3,8	2,8	37,4	2,4	1,4	65,3	
5	eggs and milk	3,4	3,9	-12,3	2,1	1,9	14,3	
6	vegetables	1,6	2,1	-20,7	2,0	2,5	-20,7	
7	legumes	2,9	3,9	-24,6	2,6	3,4	-24,7	
8	fruits	2,4	2,4	3,1	2,5	2,5	-1,7	
9	oil and coconut	11,5	12,4	-7,0	12,0	12,1	-1,0	
10	beverage stuffs	4,3	5,7	-25,1	4,9	5,6	-13,1	
11	spices	0,6	0,9	-40,0	0,6	0,8	-31,1	
12	miscellaneous food items	3,2	4,2	-24,1	2,7	2,9	-5,4	
13	prepared food and beverages	26,7	15,3	75,0	19,2	9,5	102,7	
		100	100		100	100		

Figure 1. Consumer Decision Process, reference see slide 16



Sumarwan, 2011

Why Consumers Consumed more Prepared Food and Beverages?

indicated a change in consumer lifestyles both in urban and rural areas.

consumers spend more time to eat outside home and buy more prepared foods and beverages.

Consumers seem to have less time to process food at home because they spend more time to work outside home and to do other works.

Consume more prepared food and beverages is a way to keep up with consumers' lifestyle with less time at home to cook and to prepare dinner, breakfast and lunch.

Why Consumers Consumed more Prepared Food and Beverages?

The availability of the products in the market. Consumers are easy to find prepared food and beverages with affordable price.

Food and beverages industries are motivated to distribute their products intensively in a wider areas to reach consumers as many as possible.

More and more prepared food and beverages are available in many minimarkets. Consumers are more convenience to buy the products.

For the last five years, chain minimarket has grown dramatically, it was widely spread to many regions and many villages and rural areas.

The same brands and types of Prepared food and beverages are available both in urban and rural areas.

Figure 2. Average Monthly Expenditures per capita for prepared food and beverages in urban and rural areas (source of data see slide 18 and 19)

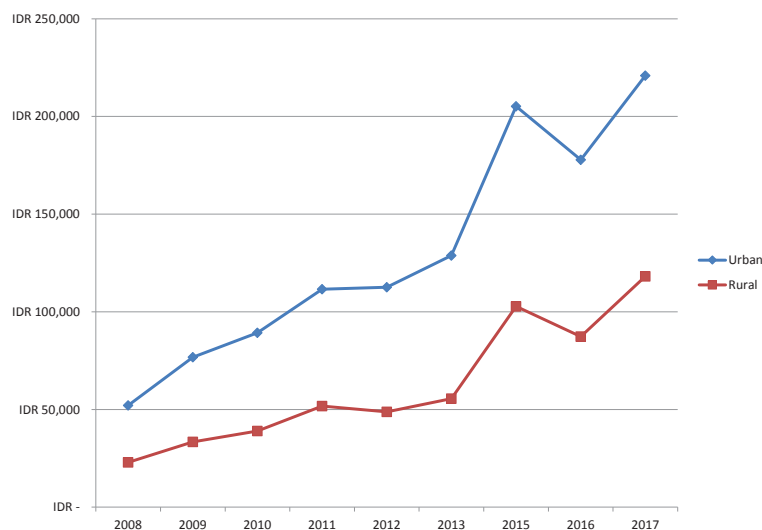


Figure 3. Percentage of Calories Contributed from prepared food and beverages (source of data see slide 20 and 21)

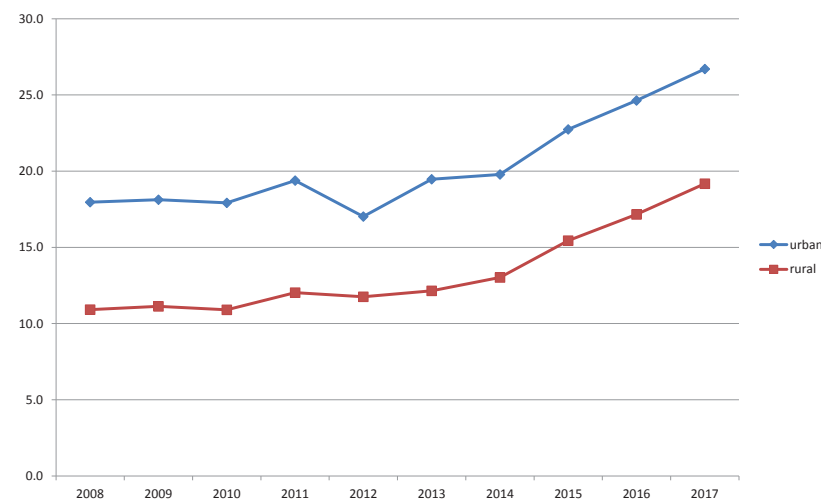
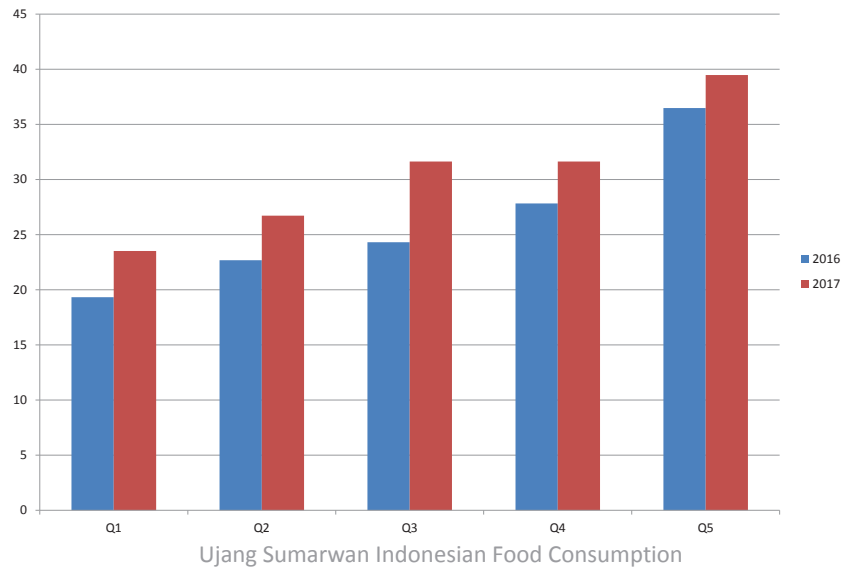


Figure 4. Percentage of Expenditure of prepared food and beverages per capita by wealth quintiles (source of data see slide 22)



Conclusions

Food Choices have changed dramatically among Indonesian Consumers in Urban and Rural Areas during the past ten years.

The changes in food consumption of urban and rural consumers between 2007 and 2017 indicated food choice behavior differences. Several factors contributed to food choice behavior: consumer's life styles, price of food, more convenience and easy access of food availability,

There is an annual increase of prepared food and beverages consumption from 2007 to 2017. Consumers consumed more prepared food and beverages every year.

The higher the consumer's total expenses, the larger the percentages of expenses for prepared food and beverages. Consumers with higher incomes are more likely to consume more prepared food and beverages than consumers with lower incomes.

Ujang Sumarwan Indonesian Food Consumption 1
4

Public Policy Issues

1. Food Services are more and more available in the market, food service industry ranges from small to large and chain services, the issue of food hygien and food safety getting more important for consumer welfare
2. More and more processed food are available in the market. They are produced by different scale of food industry, even the product come legal and illegalimport. The quality of foods are diverse, Indonesian consumers need two importan attribute of product, foods are safe and meet the belief of moslem consumers (meet the halal criteria).

Ujang Sumarwan Indonesian Food Consumption 1
5

References for Figure 1

Ujang Sumarwan. 2017. Perilaku Konsumen: Teori dan Penerapannya dalam Pemasaran. Cetakan ke 6. PT Ghalia Indonesia. (Consumer Behavior: Theory and Marketing Application. 6th Printed. PT Ghalia Indonesia.

Ujang Sumarwan Indonesian Food Consumption 1
6

Reference for Table 1.

Data in Table 1 were the results of data computation from the data appeared in the following references:

Badan Pusat Statistik (National Agency of Statistics). 2007. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2007. Consumption of Calorie and Protein of Indonesia and the Province 2007. Berdasarkan Hasil SUSENAS Panel Maret 2007. Based on Panel SUSENAS March 2007. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia, Table 1 pages 48

Badan Pusat Statistik (National Agency of Statistics). 2017. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2017. Consumption of Calorie and Protein of Indonesia and the Province 2017. Berdasarkan Hasil SUSENAS Panel Maret 2017. Based on Panel SUSENAS March 2017. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia, Table A1,pages 60

Ujang Sumarwan Indonesian Food Consumption 1
7

References for Figure 2

Figure 1 was constructed based on data presented from the following references

Badan Pusat Statistik (National Agency of Statistics). 2017. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2017 (Expenditure for Consumption of Indonesia 2017). Berdasarkan Hasil SUSENAS Panel Maret 2017. Based on Panel SUSENAS March 2017. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia, Table A1 pages 52

Badan Pusat Statistik (National Agency of Statistics). 2016. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2016 (Expenditure for Consumption of Indonesia 2016). Berdasarkan Hasil SUSENAS Panel Maret 2016. Based on Panel SUSENAS March 2016. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A1 pages 42

Badan Pusat Statistik (National Agency of Statistics). 2016. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2015 (Expenditure for Consumption of Indonesia 2015). Berdasarkan Hasil SUSENAS Panel Maret 2015. Based on Panel SUSENAS March 2015. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A1.1. pages 40

Badan Pusat Statistik (National Agency of Statistics). 2015. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2014 (Expenditure for Consumption of Indonesia 2014). Berdasarkan Hasil SUSENAS Panel Maret 2014. Based on Panel SUSENAS March 2014. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia

Badan Pusat Statistik (National Agency of Statistics). 2014. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2013 (Expenditure for Consumption of Indonesia 2013). Berdasarkan Hasil SUSENAS Panel Maret 2013. Based on Panel SUSENAS March 2013. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A.1.1 pages 35

Ujang Sumarwan Indonesian Food Consumption 1
8

References for Figure 2

Badan Pusat Statistik (National Agency of Statistics). 2012. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2012 (Expenditure for Consumption of Indonesia 2012). Berdasarkan Hasil SUSENAS Panel Maret 2012. Based on Panel SUSENAS March 2012. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia. Table A1.1. pages 37

Badan Pusat Statistik (National Agency of Statistics). 2012. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2011 (Expenditure for Consumption of Indonesia 2011). Berdasarkan Hasil SUSENAS Panel Maret 2011. Based on Panel SUSENAS March 2011. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A2.1 pages 38

Badan Pusat Statistik (National Agency of Statistics). 2010. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2010 (Expenditure for Consumption of Indonesia 2010). Berdasarkan Hasil SUSENAS Panel Maret 2010. Based on Panel SUSENAS March 2010. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia, Table A.2.1 pages 31

Badan Pusat Statistik (National Agency of Statistics). 2009. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2009 (Expenditure for Consumption of Indonesia 2009). Berdasarkan Hasil SUSENAS Panel Maret 2009. Based on Panel SUSENAS March 2008. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia, Table A.2.1 pages 27,

Badan Pusat Statistik (National Agency of Statistics). 2008. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2008 (Expenditure for Consumption of Indonesia 2008). Berdasarkan Hasil SUSENAS Panel Maret 2008. Based on Panel SUSENAS March 2008. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A.2.1 p 32

Ujang Sumarwan Indonesian Food Consumption 1
9

References for Figure 3

Figure 2 was constructed based on data presented from the following references

Badan Pusat Statistik (National Agency of Statistics). 2008. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2008. Consumption of Calorie and Protein of Indonesia and the Province 2008. Berdasarkan Hasil SUSENAS Panel Maret 2008. Based on Panel SUSENAS March 2008. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia, Table A1 pages 46

Badan Pusat Statistik (National Agency of Statistics). 2010. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2010. Consumption of Calorie and Protein of Indonesia and the Province 2010. Berdasarkan Hasil SUSENAS Panel Maret 2008. Based on Panel SUSENAS March 2010. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A1 pages 42

Badan Pusat Statistik (National Agency of Statistics). 2012. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2011. Consumption of Calorie and Protein of Indonesia and the Province 2011. Berdasarkan Hasil SUSENAS Panel Maret 2008. Based on Panel SUSENAS March 2011. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A1 hal 47

Badan Pusat Statistik (National Agency of Statistics). 2012. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2012. Consumption of Calorie and Protein of Indonesia and the Province 2012. Berdasarkan Hasil SUSENAS Panel Maret 2012. Based on Panel SUSENAS March 2012. Survei Sosial Ekonomi Nasional. National Socio-Economic Survey. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. BPS, Statistics Indonesia Table A1 pages hal 51

Ujang Sumarwan Indonesian Food Consumption 2
0

References for Figure 3

Figure 2 was constructed based on data presented from the following references

Badan Pusat Statistik (National Agency of Statistics). 2014. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2013. *Consumption of Calorie and Protein of Indonesia and the Province 2013*. Berdasarkan Hasil SUSENAS Panel Maret 2013. *Based on Panel SUSENAS March 2013*. Survei Sosial Ekonomi Nasional. *National Socio-Economic Survey*. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. *BPS, Statistics Indonesia, Tabel A1 pages 49*

Badan Pusat Statistik (National Agency of Statistics). 2015. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2014. *Consumption of Calorie and Protein of Indonesia and the Province 2014*. Berdasarkan Hasil SUSENAS Panel Maret 2014. *Based on Panel SUSENAS March 2014*. Survei Sosial Ekonomi Nasional. *National Socio-Economic Survey*. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. *BPS, Statistics Indonesia Table A1 pages 51*

Badan Pusat Statistik (National Agency of Statistics). 2016. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2015. *Consumption of Calorie and Protein of Indonesia and the Province 2015*. Berdasarkan Hasil SUSENAS Panel Maret 2015. *Based on Panel SUSENAS March 2015*. Survei Sosial Ekonomi Nasional. *National Socio-Economic Survey*. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. *BPS, Statistics Indonesia Table A1 pages 50*

Badan Pusat Statistik (National Agency of Statistics). 2016. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2016. *Consumption of Calorie and Protein of Indonesia and the Province 2016*. Berdasarkan Hasil SUSENAS Panel Maret 2016. *Based on Panel SUSENAS March 2016*. Survei Sosial Ekonomi Nasional. *National Socio-Economic Survey*. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. *BPS, Statistics Indonesia Table A1 page 70*

Badan Pusat Statistik (National Agency of Statistics). 2017. KONSUMSI KALORI DAN PROTEIN PENDUDUK INDONESIA DAN PROVINSI 2017. *Consumption of Calorie and Protein of Indonesia and the Province 2017*. Berdasarkan Hasil SUSENAS Panel Maret 2017. *Based on Panel SUSENAS March 2017*. Survei Sosial Ekonomi Nasional. *National Socio-Economic Survey*. Buku 2 / Book 2 . Badan Pusat Statistik, Jakarta – Indonesia. *BPS, Statistics Indonesia Table A1 pages 60*

Ujang Sumarwan Indonesian Food Consumption

2
1

References for Figure 4

Figure 4 was constructed based on data presented from the following references

Badan Pusat Statistik (National Agency of Statistics). 2017. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2017 (*Expenditure for Consumption of Indonesia 2017*). Berdasarkan Hasil SUSENAS Panel Maret 2017. *Based on Panel SUSENAS March 2017*. Survei Sosial Ekonomi Nasional. *National Socio-Economic Survey*. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. *BPS, Statistics Indonesia Table 1.2 pages 19*

Badan Pusat Statistik (National Agency of Statistics). 2016. PENGELUARAN UNTUK KONSUMSI PENDUDUK INDONESIA 2016 (*Expenditure for Consumption of Indonesia 2016*). Berdasarkan Hasil SUSENAS Panel Maret 2016. *Based on Panel SUSENAS March 2016*. Survei Sosial Ekonomi Nasional. *National Socio-Economic Survey*. Buku 1 / Book 1. Badan Pusat Statistik, Jakarta – Indonesia. *BPS, Statistics Indonesia Table A2 pages 23*

Ujang Sumarwan Indonesian Food Consumption

2
2



Biodata Prof Ujang Sumarwan

Prof. Ujang Sumarwan is a Professor of consumer behavior in the Department of Family and Consumer Sciences, College of Human Ecology at Bogor Agricultural University (IPB), Indonesia. He also teaches in the Master and Doctoral Program of Management and Business, School of Business, Bogor Agricultural University. He teaches Consumer Behavior and Family Economics in the Undergraduate Program, and teaches Marketing and Business Research in the Graduate Program of Management School of Business. Prof. Sumarwan was also appointed the Chair of Panelist in Developing Index of Consumer Empowerment by the Minister of Trade, Republic of Indonesia. He has done an intensive research in the areas of food consumption and food security in relation with the household social and economic welfare. His research areas include consumption behavior, consumer finances and family economics and well being, and strategic marketing and social marketing. He had published his first text book titled '*Consumer Behavior: Theory and Applications*' in 2003 which was used as one of the teaching materials in many universities in Indonesia. Prof. Sumarwan was awarded his Ph.D. in consumer studies in 1993 and his M.S. in family economics in 1990 from the College of Family and Consumer Sciences, Iowa State University, USA. His B.Sc. in Socio Economic was obtained in 1985 from Bogor Agricultural University, Indonesia. He was Deputy Director for Academic and Student Affair from 2000-2005 Master Program of Agribusiness IPB, Deputy Director for Planning and Resources from 2005-2008 Graduate Program of Management and Business IPB, Deputy Director for Academic Affairs and Students from 2008-2013 Graduate Program of Management and Business IPB. He was appointed as Department Head of Family and Consumer Sciences, Faculty of Human Ecology IPB 2013-2017. He is currently the Dean Faculty of Human Ecology Bogor Agricultural University, IPB 2018-2023.

Ujang Sumarwan Indonesian Food Consumption

2
3