The Open Public Health Journal
DOI: 10.2174/0118749445324926240729055755, 2024, 17, e18749445324926
ISSN: 1874-9445
1

RESEARCH ARTICLE **OPEN ACCESS**

The Impact of the Economic Crisis on the Eating Behavior and Lifestyle of the Young Lebanese Population

Rola El Cheikh[1,#], Ali Al Khatib[1,#], Samer Sakr[2,#], Suzana Salhab[3,#] and Imtithal Sheet[2,#*]

[1]*Department of Nutrition and Food Sciences, School of Arts and Sciences, Lebanese International University, Beirut, Lebanon- PO Box: 146404 Mazraa, Lebanon*
[2]*Department of Biological and Chemical Sciences, School of Arts and Sciences, Lebanese International University, Beirut, Lebanon- PO Box: 146404 Mazraa, Lebanon*
[3]*Department of Biological Science, Faculty of Science, Beirut Arab University, Lebanon*

Abstract:

Introduction: The onset of an economic crisis can have a tremendous influence on many aspects of life, including food consumption, lifestyle behaviors, purchasing items, and overall anxiety level. To cope with the challenging circumstances, individuals and family members regularly implement significant shifts in their lifestyles and habits. Lebanon began experiencing one of the most catastrophic economic downturns in the country's recent past in 2019.

Objective: The current study aimed to assess the impact of the economic crisis on the young Lebanese population's dietary habits and lifestyle. Additionally, we evaluated the effect of the economic crisis on anxiety levels.

Methods: A cross-sectional descriptive study was conducted among 803 Lebanese individuals, mostly aged between 18 and 25 years, using a self-administered questionnaire in both Arabic and English. Descriptive statistics were used to report the demographic characteristics. Using inferential statistics, the variables' differentiating, association, and correlating characteristics were presented.

Results: Results showed that fast food consumption decreased by 25% among those with low incomes and multimember households. Meat and seafood consumption dropped, while homemade food consumption rose by 75% of individuals' income in Lebanese currency. Purchases of olive oil dropped by 25% in households with five or more members, while purchases of vegetable oil decreased by 50–75% for private businesses and private sector employees. Low-income individuals increased their smoking habits, but young adults lowered their caffeine usage. Furthermore, a significant decrease in physical activity was noticed.

Conclusion: Nutritional and lifestyle habits changed negatively as a result of the financial crisis; nevertheless, some positive habits were promoted during the crisis.

Keywords: Economic crisis, Food consumption, Food purchasing, Lifestyle, Anxiety, Lebanon.

*Address correspondence to this author at the Department of Biological and Chemical Sciences, School of Arts and Sciences, Lebanese International University, Beirut, Lebanon- PO Box: 146404 Mazraa; Tel: 009613174932;
E-mail: imtithal.sheet@liu.edu.lb
#These authors contributed equally to this work

Cite as: El Cheikh R, Al Khatib A, Sakr S, Salhab S, Sheet I. The Impact of the Economic Crisis on the Eating Behavior and Lifestyle of the Young Lebanese Population. Open Public Health J, 2024; 17: e18749445324926.
http://dx.doi.org/10.2174/0118749445324926240729055755

Received: May 14, 2024
Revised: July 06, 2024
Accepted: July 09, 2024
Published: November 7, 2024

1. INTRODUCTION

The World Health Organisation (WHO) categorized the variables of healthy living into three categories: socioeconomic environment, physical environment, lifestyle, and behaviour [1]. Any economic crisis has an adverse impact on both the general population and industry, and financial stability is an essential factor that influences lifestyle and behaviour [2, 3]. The most significant and immediate consequence of the financial crisis is a decrease or absence of income, which is accompanied by a rise in the unemployment rate and a fall in poverty [4]. Economic shock can have an impact on the well-being of individuals in a variety of domains, including their financial, psychological, and behavioural health [4, 5]. Previous research has found that factors such as quality, flavour, freshness, price, nutritional content, and manufacturing methods impact customer purchase behaviour. These standards, nevertheless, may be contested during financial crises [7-9]. According to a 2009 study, 56% of US, 53% of British, 81% of Italians, and more than 50% of German consumers believed the recession had an impact on their lifestyle [10]. Lebanon started to experience the most devastating financial crisis in its recent history in 2019, which was characterised by high inflation, currency devaluation, and a shortage of basic goods. The sixth worst food crisis globally by the share of the population that is food insecure, after South Sudan, Yemen, Haiti, Afghanistan, and the Central African Republic, is Lebanon [11].

Lebanon has faced several obstacles in the past year, including a socioeconomic crisis, instability in politics, and deteriorating health systems due to COVID-19. Furthermore, the Beirut Port Explosion in August destroyed the area, increasing vulnerability and exacerbating poverty. The capacity of Lebanon to produce food has been restricted by the financial crisis [8], leading to an increase in the cost of cereals, pesticides, feed ingredients, raw materials, and other agricultural items. As a result, Lebanon's agricultural output capability has been jeopardized. Moreover, the pound's depreciation has also resulted in the loss of income-generating prospects for many Lebanese, leading to an annual inflation rate of over 200% in November 2021 and a food inflation rate of over 350%. The Food and Agriculture Organisation (FAO) reported an estimated unemployment rate of 11.4%, representing 40% of the workforce [13]. A study carried out in Chicago showed that obtaining nutritious food was more challenging in low-income regions compared with other prospective areas [14]. Due to these challenging circumstances, individuals and households have been forced to drastically alter their daily routines and habits, especially regarding food intake and lifestyle decisions, leading to consumers adopting less healthy lifestyles [15]. Food consumption had been reduced during the Asian Financial Crisis in 1997, resulting in lower energy intake [16, 17]. Additionally, Mexico's economic crisis in 1994 had a detrimental effect on food consumption, with differences across rural and urban areas [18]. Lebanese individuals are opting for less expensive, processed, and less healthy food alternatives. This deterioration in diet quality raises concerns about the Lebanese population's long-term health effects since a lack of access to healthy food can lead to malnutrition, micronutrient deficiency, and diet-related disorders. The fact that Lebanon was previously known for having a varied and healthy Mediterranean diet creates concerning implications [19].

Economic crises influence not only food purchases and consumption but also mental health, which may have an impact on lifestyle choices. Due to financial constraints, most individuals have been forced to abandon hobbies, social outings, and other aspects of their previous lifestyle since they have been forced to prioritize spending on the basics. Furthermore, the fear of financial insecurity, job loss, and lower income leads to anxiety. The economic crisis was found to have a considerable impact on employees' anxiety and depression levels [20]. This anxiety can further influence eating behaviour and lifestyle choices, such as smoking. Unemployed individuals are more likely to smoke during economic crises, according to Dutch research on socioeconomic inequality [2]. Simultaneously, people with low incomes were more likely to start smoking [21].

Lebanon has limited statistics on how the economic crisis has significantly affected the young population's eating habits and lifestyle. This study aims to assess the impact of the economic crisis on the eating behaviour, lifestyle, and anxiety levels of the general young population in Lebanon.

2. MATERIALS AND METHODS

2.1. Study Design, Sample Size, and Data Collection

A questionnaire-based survey was conducted among Lebanese citizens aged 18 and above, with 803 respondents participating in this survey *via* Google Forms between August 7 and January 11, 2022. Participants were required to be aged 18 or older and reside in Lebanon. The questionnaire had four sections: socio-demographics, anthropometrics, food habits, and lifestyle. 11 questions were composed in the first section and included age, gender, family member number, marital status, education level, field of study, work status, and residential region. Three questions in the second section focused on anthropometric information, such as height and weight. The third section focused on dietary habits, such as the likelihood of consuming certain food items (rice, pasta, bread, meat, chicken, eggs, seafood, fruits, vegetables, legumes) and the likelihood of purchasing many food products (nuts, teabags, sugar, vegetable oil, olive oil, butter, soft drinks, and coffee). The Fourth section focused on lifestyle, asking about changes in smoking habits, caffeine consumption, weekly physical activity, and anxiety levels during the economic crisis. In the last part, participants were asked to rate their degree of anxiety level throughout the economic crisis on a scale from 0 (no anxiety) to 9 (severe anxiety). This study adhered to the STROBE guidelines for cross-sectional epidemiological studies in terms of design, setting, analysis, and reporting.

2.2. Questionnaire Validation

The survey was designed by the research team and is available in Arabic and English languages. The participants were informed about the study's objectives and ensured the confidentiality and privacy of their survey responses and personal information, with an assurance that the information gathered through the survey would be used for research purposes only. A pilot study with 21 participants was conducted to assess the questionnaire's reliability, with Cronbach's alpha coefficient indicating acceptable reliability at 0.873. Minor modifications were made to the questionnaire for further reliability assessment.

2.3. Scoring Criteria

In this study, participants were requested to assess their anxiety level using a scale ranging from 0 to 9, with 9 representing extreme anxiety and 0 indicating the absence of anxiety. Notably, the assessment of anxiety was based on a single question without employing predetermined weighting or combining variables to derive composite scores.

2.4. Ethical Approval

This study was reviewed and approved by the Lebanese International University Institutional Review Board (IRB) ethical committee (Reference LIUIRB-220201-IS-113).

2.5. Statistical Analysis

The data was analyzed using SPSS software version 25, with Spearman correlation calculated for association between variables. The chi-Square test of independence and Fischer exact test were performed to assess associations between categorical variables. Pearson correlation was used to validate responses to the total score. Significant results were considered ($p<0.05$).

3. RESULTS

3.1. Sociodemographic Characteristics

The survey included 803 participants, predominantly aged between 18 and 25 years (72.6%). Geographically, participants were distributed across Lebanon, with the majority from the south (39.6%). Females constituted the majority (79.8%), and most participants were unmarried (77.7%) with large household sizes (55.9%). Educationally, 65.5% held bachelor's degrees, and 71.1% majored in health-related fields. Employment was skewed towards the public sector (52%), while monthly household income ranged from 1,500,000 to 3,000,000 L.L. for 37.0% of respondents, whereas 18.9% received monthly payments in US dollars. The vast majority received payments in Lebanese lira (81.1%). A thorough, summarised description of demographic traits is given in Table **1**.

3.2. The Impact of the Economic Crisis on Food Consumption

Table **2** illustrates changes in dietary habits amid economic crises. Across all 15 food-related questions, notable differences were observed concerning social and demographic variables. Particularly, participants with lower family incomes (<1,500,000 L.L.) reported a substantial 25% reduction in fast food consumption (81%), contrasting with those from higher-income households (>5,000,000 L.L.), where 73% noted similar declines ($p<0.001$). Moreover, 63% of respondents with incomes in US dollars maintained home-cooked meals, while 20% of those in Lebanese Lira households increased homemade food consumption by 75%. Interestingly, while married participants showed a 25% decrease in fast food intake (85%), their overall food consumption remained stable. Conversely, unmarried participants demonstrated shifts, with 24% increasing homemade food consumption and 6% increasing fast food intake by 75% or more ($p<0.001$). Employment status also played a role, with variations in fast food and snack consumption observed across different sectors. Additionally, household size correlated significantly with snack consumption, with reductions noted among larger households (60%) and those with three members (61%) ($p<0.001$).

In terms of carbohydrate intake, individuals with monthly incomes between 3,000,000 L.L. and 5,000,000 L.L. exhibited consistent bread consumption (75%), while rice and pasta consumption remained relatively stable (45%) ($p<0.001$). Married respondents showed no significant changes in carbohydrate consumption, whereas unmarried individuals increased their consumption of bread (15%), rice (20%), and pasta (27%) by over 75%. Bread consumption patterns were consistent across employment sectors, with 90% in the public sector and 49% in the private sector and among unemployed individuals maintaining regular bread consumption ($p<0.001$). Notably, bread consumption differed significantly between income groups, with 75% of those earning between 3,000,000 L.L. and 5,000,000 L.L. and 65% of those earning over 5,000,000 L.L. maintaining consistent consumption ($p<0.001$). Regional differences were also observed, with the Beirut region displaying the lowest likelihood of altering bread-eating habits (29.7%), while the North and Bekaa regions had the lowest likelihood of changing rice and pasta consumption habits (22%). The economic crisis had minimal impact on egg consumption, with 34% of married respondents and 7% of unmarried participants reporting no change ($p<0.001$). Similarly, 39% of individuals with the lowest household incomes (<1,500,000 L.L.) maintained their egg consumption levels ($p<0.001$). Chicken consumption saw a decline of 25% among 60% of both married and unmarried respondents. This decrease was also observed in 65% of individuals with incomes exceeding 5,000,000 L.L. and 79% employed in the private sector. Notably, nearly half of the participants in South Lebanon reduced their chicken intake by 25–50% ($p<0.001$), showing the highest variation among regions. Fruit consumption remained stable for individuals with an income of 1,500,000 L.L. (44%) and vegetables for 63%. However, employment in the private sector (77%) and other sectors (73%) led to a 25–50% reduction in fruit intake. Marital status also

correlated significantly with vegetable intake (p<0.001), with 46% of married participants reducing consumption compared to 17% of unmarried participants. Milk and dairy consumption showed minimal variation among respondents with incomes of 1,500,000 L.L. to 3,000,000 L.L. (10%) and those earning in USD (47% and 43%, respectively; p<0.001).

Legume usage remained unchanged for 63% of respondents in the Beirut region with low incomes (<1,500,000 L.L.), while 38% of unemployed individuals increased consumption by over 75% (p<0.001). Meat consumption decreased by 25% among 63% of participants in the private sector, 57% in the public sector, and 68% in private businesses (p<0.001), particularly pronounced among those with low family incomes and large household sizes. South Lebanon experienced the greatest growth in meat consumption, with 60% of respondents residing there. Interestingly, (19%) of those with a USD income consumed 50–75% more meat, whereas (53%) of those without a USD income reported a 25% decline in meat intake (P = 0.004). Seafood consumption also saw a 25% decrease among 81% of low-income individuals and 71% of households with 5 or more members prior to the crisis.

3.3. Economic Crisis Impact on the Purchasing of Certain Food Items

The financial crisis in Lebanon prompted shifts in food purchasing behaviour, as reflected in Table **3**. Among married participants, 72.1% reported no change in tea bag purchases, while 92.2% reported no change in sugar purchases (p<0.001). Individuals with the lowest monthly income (<1,500,000 L.L.) were more likely to purchase tea bags and sugar in reduced quantities, with 46.6% and 41.8%, respectively, opting for 25–50% less compared to before the recession. Notably, the South Lebanon area saw the highest frequency of 25% reduced purchases for both tea bags (56.6%) and sugar (41.8%) compared to other regions (p<0.001).

Regarding oil purchases (olive and vegetable oils), 69.8% of married individuals maintained the same amount of vegetable oil purchases, with an increase of 50–75% compared to unmarried individuals (p<0.001). Reductions in vegetable oil purchases to 50–75% were observed among those with incomes below 1,500,000 L.L. (45.9%) and between 1,500,000 L.L. and 3,000,000 L.L. (38.7%) (p<0.001). Similarly, reductions in olive oil purchases by up to 25% were seen among participants in the private sector (53.9%), the public sector (92.8%), and the unemployed (53.9%) (p<0.001). Married (33.5%) and unmarried individuals (47%) decreased their olive oil purchases by 25% (p<0.001), particularly in households with more than five members (59.2%) (p<0.001).

For butter purchases, 43% of married individuals reported no major shift, while 47% of unmarried individuals decreased their purchases by 25% (p<0.001). Reductions in butter purchases to 25–50% were observed among those with the lowest incomes (33.7%), those with monthly incomes between 3,000,000 L.L. and 5,000,000 L.L. (72.2%), and those over 5,000,000 L.L. (62.5%) (p<0.001).

A significant 25% decrease in nut purchases was noted in households with five or more members (78.3%) and among participants receiving monthly income in Lebanese Lira (70.9%) (P = 0.025). Similarly, a significant decrease in nut purchases by 25% was observed among participants in South Lebanon (86.1%) compared to other regions (p<0.001).

In terms of coffee purchases, no noticeable impact was found among married groups (p<0.001), but reductions to 25–50% were seen among individuals employed in the public sector and 25% less among the unemployed (p<0.001). Soft drink consumption declined by 25% among groups with incomes over 5,000,000 L.L. (63.6%) and households with five or more members (65.2%) (p<0.001), as well as across different employment sectors (100%) (p<0.001). The South exhibited the greatest decline in soft drink purchases by 25% (p<0.001).

3.4. The Influence of the Economic Crisis on Young Populations' Eating Habits in Relation to their BMI Levels

Table **4** demonstrates the reduction in the consumption of snacks, fast food, and homemade food consumption and their impact on BMI levels. Participants from private businesses, unemployed individuals, and students were found to have a normal BMI (18–24.9%) (p<0.001). The groups with incomes between 3,000,000 L.L. and 5,000,000 L.L. had the greatest BMI percentage (92%), followed by those with the least income (81.75%). However, a BMI level of 25–29.9 kg/m2 was seen in 70.7% of those with income exceeding 5,000,000 L.L. (p<0.001).

3.5. The Economic Crisis's Influence on Lifestyle (Caffeine Consumption, Smoking, and Physical Activity)

Table **5** illustrates the impact of economic crises on lifestyle behaviours, highlighting significant correlations between demographic characteristics and behaviours such as coffee intake, smoking habits, and physical activity. Caffeine consumption decreased notably among individuals aged 26 to 35 (31.5%), with 77.4% of those aged 36 and older ceasing caffeine intake. Lower-income individuals (<1,500,000 L.L.) reported fewer changes in caffeine consumption (65.5%), while 44.7% of those earning between 3,000,000 L.L. and 5,000,000 L.L. started consuming less caffeine (p<0.001). Notably, 100% of individuals with lower education levels (“senior high or below”) reduced caffeine consumption, while 18.1% with bachelor's degrees increased consumption (p<0.001). Smoking habits were significantly influenced by age, income, and employment status. Younger individuals (18–25) reduced smoking (16.3%), while higher-income earners (>5,000,000 L.L.) showed no change, and 16.8% of those earning between 1,500,000 L.L. and 3,000,000 L.L. quit smoking. Employment status also played a role, with 50% of individuals in the public sector reducing smoking compared to 73% of the unemployed maintaining

habits (p<0.001). The study on physical activity showed that younger respondents were more likely to engage in regular exercise, with 27.4% of those under 25 participating 2-4 days per week, although this frequency decreased with age. Among individuals with the lowest incomes, 24.3% reported no physical exercise. Notably, a higher proportion of employees in private businesses (30.4%) and the public sector (62%) engaged in physical activity 2-4 days a week compared to the unemployed (21%) (p<0.001). Interestingly, individuals with master's degrees had the highest participation rates in physical exercise, with 32.9% engaging 2-4 days a week and 35% more than 5 days (p<0.001). Regarding gender and lifestyle behaviours, no significant correlation was found. Both males and females showed similar rates of quitting smoking and reducing caffeine intake. Furthermore, a substantial percentage of both male (40.4%) and female (39.5%) respondents did not engage in any physical exercise.

3.6. The Effects of the Economic Crisis on Lebanon's Young Population's Anxiety

The impact of the economic crisis on anxiety levels was evident, as revealed in Table **6**. Participants in the age groups of 26–35 years old and those over 36 years old exhibited significantly higher levels of anxiety (7-9) (p<0.001). Interestingly, 89.4% of single individuals reported severe anxiety, while 53.1% of married individuals experienced minimal to no anxiety. Those with incomes less than 1,500,000 L.L. were most likely to suffer from moderate anxiety (5–6), comprising 44.6% of respondents. Conversely, 92.8% of individuals with incomes above 5,000,000 L.L. reported mild to severe anxiety (p<0.001). Notably, individuals with a Master's degree showed the largest increase in severe anxiety (92.1%) across all educational levels (p<0.001). Additionally, all employed individuals, whether in the public sector, private sector, private business, or other employment types, reported significantly higher levels of severe anxiety (p<0.001).

Table **7** highlights the significant correlation between anxiety levels and smoking habits (p<0.001). Among those who started smoking less during the economic crisis, as well as those reporting no changes in smoking behaviour, 60.6% and 87%, respectively, reported mild to severe anxiety. Conversely, 61.3% of those who quit smoking reported nil to low anxiety, while 38.8% experienced moderate anxiety. Furthermore, 43.6% of individuals who increased smoking during the recession expressed moderate anxiety.

4. DISCUSSION

Lebanon, a Middle Eastern country, has been suffering an extensive economic crisis, resulting in significant inflation and an upsurge in essential item prices of over eight hundred percent. Additionally, the COVID-19 epidemic and political unrest exacerbated the situation, resulting in a notable decline in the value of the “Lebanese Currency” and a severe financial crisis [22]. A diverse range of responses regarding eating habits during the economic crisis in Lebanon revealed our current research. Although some individuals reported negative impacts on their dietary habits and lifestyle, others demonstrated beneficial adjustments.

Table 1. Socio demographic characteristics of the participants (n=803).

Socio-demographic Characteristics	N(%)
Gender	
Female	641(79.8%)
Male	162(20.2%)
Age	
18-25	583(72.6%)
26-35	127(15.8%)
36+	31(3.9%)
Marital Status	
Married	179(22.3%)
Not married	624(77.7%)
Educational level	
Senior High or below	119(14.8%)
Bachelor	526(65.5%)
Masters	140(17.4%)
PhD/MD	18(2.2%)
Field of Study	
Health-related	571(71.1%)
Non-health related	190(23.7%)
Other	42(5.2%)
Employment Status	
Student	477(59.4%)
Unemployed	89(11.1%)
Public sector employee	42(52.0%)
Private sector employee	102(12.7%)
Private Business	79(9.8%)
Other	11(1.4%)
Family income status	
<l,500,000 LBP	148 (18.4%)
1 ,500,000- 3,000,000 LBP	297(37.0%)
3, 000,000-5,000,000 LBP	190(23.7%)
>5,000,000 LBP	168(20.8%)
Family members	
1	15(1.9%)
2	44(5.5%)
3	123(15.3%)
4	172(21.4%)
5+	449(55.9%)
Region of Residence	
Beirut	145 (18.1%)
Bekaa	168(20.1%)
Mount Lebanon	127(15.8%)
North Lebanon	45(5.6%)
South Lebanon	318(39.6%)
Monthly Income in USD	
YES	152(18.9%)
NO	651(81.1%)

Table 2. The impact of the economic crisis on the consumption of certain food items. (Carbohydrate Group).

How likely are you to consume the following products compared to before?		Rice					-	Pasta					-
		More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value
Marital status	Married	0	0	0	0	179 (100.0%)	p<.001	0	0	0	0	179 (100.0%)	p<.001
	Not married	122 (20.0%)	198 (32.0%)	214 (34.0%)	62 (10.0%)	28 (4.0%)		168 (27.0%)	182 (29.0%)	152 (24.0%)	99 (16.0%)	23 (4.0%)	
Employment	other	0	0	4 (36.0%)	7 (64.0%)	0	p<.001	0	1 (9.0%)	3 (27.0%)	7 (64.0%)	0	p<.001
	Private business	18 (23.0%)	22 (28.0%)	19 (24.0%)	0	20 (25.0%)		23 (23.9%)	21 (27.0%)	15 (19.0%)	0	20 (25.0%)	
	Private sector employee	24 (24.0%)	23 (23.0%)	14 (14.0%)	41 (40.0%)	0		29 (28.0%)	23 (23.0%)	9 (9.0%)	41 (40.0%)	0	
	Public sector	1 (2.0%)	2 (5.0%)	18 (43.0%)	13 (31.0%)	8 (19.0%)		2 (5.0%)	2 (5.0%)	17 (40.0%)	18 (43.0%)	3 (7.0%)	
	Student	59 (12.0%)	127 (27.0%)	111 (23.0%)	1 (0%)	179 (38.0%)		90 (19.0%)	111 (23.0%)	71 (15.0%)	26 (5.0%)	179 (38.0%)	
	Unemployed	19 (21.0%)	22 (25.0%)	48 (54.0%)	0	0		22 (25.0%)	23 (26.0%)	37 (42.0%)	7 (8.0%)	0	
Family income	<1,500,000	28 (19.0%)	**52 (35.0%)**	40 (27.0%)	1 (1.0%)	27 (18.0%)	p<.001	37 (25.0%)	50 (34.0%)	25 (17.0%)	9 (6.0%)	27 (18.0%)	p<.001
	1,500,000-3,000,000	50 (17.0%)	97 (33.0%)	75 (25.0%)	0	75 (25.0%)		75 (25.0%)	83 (28.0%)	47 (16.0%)	17 (6.0%)	75 (25.0%)	
	3,000,000 –5,000,000	19 (10.0%)	23 (12.0%)	63 (33.0%)	0	85 (45.0%)		25 (13.0%)	22 (11.6%)	51 (27.0%)	7 (4.0%)	85 (45.0%)	
	>5,000,000	25 (14.8%)	26 (15.0%)	36 (21.0%)	61 (36.0%)	20 (12.0%)		31 (18.0%)	27 (16.0%)	29 (17.0%)	66 (39.0%)	15 (9.0%)	
House hold	1	3 (20.0%)	5 (33.0%)	3 (20.0%)	1 (7.0%)	3 (20.0%)	p<.001	3 (20.0%)	5 (33.0%)	3 (30.0%)	1 (7.0%)	3 (20.0%)	p<.001
	2	10 (23.0%)	13 (30.0%)	11 (25.0%)	0	10 (23.0%)		11 (25.0%)	14 (32.0%)	6 (14.0%)	3 (7.0%)	10 (23.0%)	
	3	18 (14.6%)	51 (41.5%)	32 (26.0%)	0	22 (17.9%)		26 (21.1%)	49 (39.8%)	19 (15.4%)	7 (5.7%)	22 (17.9%)	
	4	28 (16.0%)	58 (34.0%)	50 (29.0%)	0	36 (21.0%)		50 (29.0%)	43 (25.0%)	31 (18.0%)	12 (7.0%)	36 (21.0%)	
	5+	63 (14.0%)	71 (15.5%)	118 (26.0%)	61 (14.0%)	136 (30.0%)		78 (17.0%)	71 (15.5%)	93 (20.7%)	76 (17.0%)	**131 (29.0%)**	
Region	Beirut	27 (18.6%)	52 (36.0%)	40 (28.0%)	1 (0.7%)	25 (17.2%)	p<.001	36 (24.8%)	50 (34.5%)	25 (17.2%)	9 (6.2%)	25 (17.2%)	P=0.01
	Bekaa	23 (14.0%)	59 (35.0%)	49 (29.0%)	0	37 (22.0%)		34 (20.0%)	54 (32.0%)	29 (17.0%)	14 (8.0%)	37 (22.0%)	
	Mount Lebanon	26 (20.5%)	36 (28.0%)	26 (20.5%)	0	39 (31.0%)		39 (31.0%)	28 (22.0%)	18 (14.0%)	3 (2.0%)	39 (31.0%)	
	North	12 (27.0%)	13 (29.0%)	10 (22.0%)	0	10 (22.0%)		18 (40.0%)	8 (18.0%)	5 (11.0%)	4 (9.0%)	10 (22.0%)	
	South	34 (11.0%)	38 (12.s).0%)	89 (28.0%)	61 (19.0%)	96 (30.0%)		41 (13.0%)	42 (13.0%)	75 (24.0%)	69 (22.0%)	91 (29.0%)	
USD income	No	94 (14.0%)	144 (22.0%)	174 (27.0%)	61 (9.0%)	178 (27.0%)	p<.001	131 (20.1%)	130 (20.0%)	127 (19.5%)	90 (13.8%)	173 (27.0%)	p<.001
	Yes	28 (18.0%)	54 (36.0%)	40 (26.0%)	1 (0.7%)	29 (19.0%)		37 (24.0%)	52 (34.0%)	25 (16.0%)	9 (6.0%)	29 (19.0%)	

(Table 2) contd.....

How likely are you to consume the following products compared to before?		Bread					-	Meat					
		More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N (%)	The Same N(%)	P-value
Marital status	**Married**	0	0	0	0	179 (100.0%)	**p<0.001**	0	0	0	139 (78.0%)	40 (22.0%)	**p<0.001**
	Not married	95 (15.0%)	88 (14.0%)	131 (21.0%)	55 (9.0%)	255 (41.0%)		31 (5.0%)	113 (18.0%)	180 (29.0%)	295 (47.0%)	5 (1.0%)	
Employment	**other**	0	0	0	1 (9.0%)	10 (91.0%)	**p<0.001**	0	1 (9.0%)	10 (91.0%)	0	0	**p<0.001**
	Private business	13 (16.0%)	10 (13.0%)	16 (20.0%)	5 (6.0%)	35 (44.0%)		4 (5.0%)	11 (14.0%)	10 (13.0%)	54 (68.0%)	0	
	Private sector	19 (19.0%)	10 (10.0%)	18 (18.0%)	5 (5.0%)	50 (49.0%)		3 (3.0%)	7 (7.0%)	28 (17.0%)	64 (63.0%)	0	
	Public sector	1 (2.0%)	1 (2.0%)	0	2 (5.0%)	38 (90.0%)		3 (7.0%)	9 (21.0%)	6 (14.0%)	24 (57.0%)	0	
	Student	48 (10.0%)	57 (12.0%)	79 (17.0%)	36 (8.0%)	257 (54.0%)		12 (3.0%)	59 (12.0%)	92 (19.0%)	270 (57.0%)	44 (9.0%)	
	Unemployed	13 (15.0%)	9 (10.0%)	18 (20.0%)	5 (6.0%)	44 (49.0%)		8 (9.0%)	26 (29.0%)	32 (36.0%)	22 (25.0%)	1 (1.0%)	
Family income	**<1,500,000**	24 (16.0%)	19 (13.0%)	36 (24.0%)	24 (16.0%)	45 (30.0%)	**p<0.001**	0	13 (9.0%)	42 (28.0%)	86 (58.0%)	7 (5.0%)	**p<0.001**
	1,500,000-3,000,000	37 (12.0%)	47 (16.0%)	61 (21.0%)	16 (5.0%)	136 (46.0%)		17 (6.0%)	51 (17.0%)	63 (21.0%)	136 (46.0%)	30 (10.0%)	
	3,000,000 –5,000,000	14 (6.8%)	11 (5.5%)	16 (8.0%)	6 (3.0%)	143 (75.0%)		7 (4.0%)	32 (17.0%)	29 (15.0%)	117 (62.0%)	5 (3.0%)	
	>5,000,000	20 (12.0%)	11 (7.0%)	18 (11.0%)	9 (5.0%)	110 (65.0%)		7 (4.0%)	17 (10.0%)	46 (27.3%)	95 (56.5%)	3 (2.0%	
House hold	**1**	3 (20.0%)	1 (7.0%)	3 (20.0%)	1 (7.0%)	7 (47.0%)	**p<0.001**	0	2 (13.3%)	4 (26.7%)	7 (46.7%)	2 (13.3%)	**P=0.001**
	2	8 (18.0%)	6 (14.0%)	9 (20.0%)	5 (6.7%)	16 (46.7%)		0	2 (4.5%)	17 (38.6%)	24 (46.7%)	1 (13.3%)	
	3	15 (12.2%)	15 (12.2%)	39 (31.7%)	21 (17.1%)	33 (26.8%)		0	13 (10.6%)	29 (23.6%)	75 (61.0%)	6 (4.9%)	
	4	22 (13.0%)	35 (20.0%)	28 (16.0%)	9 (5.0%)	78 (45.0%)		8 (4.7%)	34 (20.0%)	39 (28.0%)	74 (43.0%)	17 (10.0%)	
	5+	47 (11.0%)	31 (7.0%)	52 (12.0%)	19 (4.0%)	300 (67.0%)		23 (5.0%)	62 (14.0%)	91 (20.0%)	254 (57.0%)	19 (4.0%)	
Region	**Beirut**	24 (16.6%)	18 (12.4%)	36 (24.8%)	24 (16.6%)	43 (29.7%)	**p<0.001**	0	12 (8.3%)	42 (29.0%)	84 (57.9%)	7 (5.0%)	**p<0.001**
	Bekaa	18 (11.0%)	25 (15.0%)	38 (23.0%)	9 (5.0%)	78 (47.0%)		6 (3.6%)	34 (20.0%)	35 (21.0%)	81 (48.0%)	12 (7.0%)	
	Mount Lebanon	17 (13.0%)	22 (17.0%)	22 (17.0%)	7 (5.0%)	59 (47.0%)		10 (8.0%)	18 (14.0%)	28 (22.0%)	53 (42.0%)	18 (14.0%)	
	North	9 (20.0%)	9 (20.0%)	6 (13.0%)	2 (4.0%)	19 (42.0%)		3 (7.0%)	6 (13.0%)	7 (16.0%)	25 (56.0%)	4 (9.0%)	
	South	27 (9.0%)	14 (4.0%)	29 (9.0%)	13 (4.0%)	235 (74.0%)		12 (4.0%)	43 (14.0%)	68 (21.0%)	191 (60.0%)	4 (1.3%)	
USD income	**No**	71 (11.0%)	68 (10.0%)	94 (14.4%)	31 (5.0%)	387 (59.0%)	**p<0.01**	31 (5.0%)	100 (15.0%)	137 (21.0%)	345 (53.0%)	38 (6.0%)	**P=0.04**
	Yes	24 (15.8%)	20 (13.0%)	37 (24.0%)	24 (15.8%)	47 (31.0%)		0	13 (19.0%)	43 (28.0%) 55)	89 (59.0%)	7 (4.0%)	

(Table 2) contd.....

How likely were you to consume these products compared to before?		Chicken					-	Eggs					-
		More than 75% N(%)	50-75% N(%)	25-50% (N%)	25% Less (N%)	The Same N(%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value
Marital status	**Married**	0	0	23 (13.0%)	107 (60.0%)	49 (27.0%)	**p<.001**	0	0	0	119 (66.0%)	60 (34.0%)	**p<.001**
	Not married	66 (11.0%)	162 (26.0%)	210 (34.0%)	176 (60.0%)	10 (2.0%)		36 (6.0%)	131 (21.0%)	259 (42.0%)	153 (25.0%)	45 (7.0%)	
Employment	**other**	1 (9.0%)	2 (18.0%)	8 (73.0%)	0	0	**p<.001**	0	3 (27.0%)	8 (73.0%)	0	0	**p<.001**
	Private business	9 (11.0%)	16 (20.0%)	26 (33.0%)	28 (35.0%)	0		4 (5.0%)	11 (14.0%)	25 (32.0%)	39 (49.0%)	0	
	Private sector	8 (10.0%)	13 (13.0%)	79 (77.0%)	0	0		3 (3.0%)	16 (16.0%)	83 (81.0%)	0	0	
	Public sector	12 (29.0%)	6 (14.0%)	24 (57.0%)	0	0		3 (7.0%)	12 (29.0%)	26 (62.0%)	1 (2.0%)	0	
	Student	25 (5.0%)	66 (14.0%)	95 (20.0%)	233 (49.0%)	58 (12.0%)		17 (4.0%)	62 (13.0%)	84 (18.0%)	210 (44.0%)	104 (22.0%)	
	Unemployed	8 (9.0%)	58 (65.0%)	0	22 (25.0%)	1 (1.0%)		8 (9.0%)	26 (29%)	32 (36.0%)	22 (25.0%)	1 (1.0%)	
Family income	**<1,500,000**	5 (3.0%)	16 (11.0%)	34 (23.0%)	81 (55.0%)	12 (8.0%)	**p<.001**	0	21 (14.0%)	34 (23.0%)	35 (24.0%)	58 (39.0%)	**p<.001**
	1,500,000-3,000,000	25 (8.0%)	68 (23.0%)	38 (13.0%)	136 (46.0%)	30 (10.0%)		22 (7.0%)	46 (15.0%)	63 (21.0%)	136 (46.0%)	30 (10.0%)	
	3,000,000 -5,000,000	12 (6.0%)	56 (29.0%)	51 (27.0%)	66 (35.0%)	5 (3.0%)		7 (4.0%)	32 (17.0%)	45 (24.0%)	101 (53.0%)	5 (3.0%)	
	>5,000,000	24 (14.0%)	22 (13.0%)	110 (65.0%)	0	12 (7.0%)		7 (4.0%)	32 (19.0%)	117 (70.0%)	0	12 (7.0%)	
House hold size	**1**	2 (13.0%)	2 (13.0%)	2 (13.0%)	2 (13.0%)	7 (47.0%)	**p<.001**	0	4 (27.0%)	2 (13.0%)	0	9 (60.0%)	**p<.001**
	2	1 (2.3%)	7 (15.6%)	11 (25.0%)	24 (53.5%)	1 (2.3%)		0	8 (26.7%)	11 (13.3%)	0	25 (57.0%)	
	3	3 (2.4%)	10 (8.1%)	29 (23.6%)	75 (61%)	6 (4.9%)		0	13 (10.6%)	29 (23.6%)	55 (44.7%)	26 (21.1%)	
	4	15 (8.7%)	36 (21.0%)	30 (17.0%)	74 (43.0%)	17 (10.0%)		13 (8.0%)	29 (17.0%)	39 (23.0%)	74 (43.0%)	17 (10.0%)	
	5+	45 (10.0%)	107 (23.8%)	161 (36.0%)	108 (24.0%)	28 (6.0%)		23 (5.0%)	77 (17.0%)	178 (40.0%)	143 (32.0%)	28 (6.0%)	
Region	**Beirut**	5 (3.0%)	15 (10.0%)	34 (23.0%)	79 (55.0%)	12 (8.0%)	**p<.001**	0	20 (14.0%)	34 (23.0%)	33 (23.0%)	58 (40.0%)	**p<.001**
	Bekaa	14 (8.0%)	26 (16.0%)	35 (21.0%)	81 (48.0%)	12 (7.0%)		11 (6.5%)	29 (17.0%)	35 (21.0%)	81 (48.0%)	12 (7.0%)	
	Mount Lebanon	10 (8.0%)	43 (34.0%)	3 (2.0%)	53 (42.0%)	18 (14.0%)		10 (8.0%)	18 (14.0%)	28 (22.0%)	53 (42.0%)	18 (14.0%)	
	North	3 (7.0%)	13 (29.0%)	0	25 (56.0%)	4 (9.0%)		3 (7.0%)	6 (13.0%)	7 (16.0%)	25 (56.0%)	4 (9.0%)	
	South	34 (11.0%)	65 (20.0%)	161 (51.0%)	45 (14.0%)	13 (4.0%)		12 (4.0%)	58 (18.0%)	155 (49.0%)	80 (25.0%)	13 (4.0%)	
USD income	**No**	61 (9.0%)	146 (22.0%)	198 (30.4%)	199 (30.6%)	47 (7.0%)	**p<.001**	36 (5.0%)	110 (17.0%)	224 (34.0%)	234 (36.0%)	47 (7.0%)	**p<.001**
	Yes	5 (3.0%)	16 (10.5%)	35 (23.0%)	84 (55.0%)	12 (8.0%)		0	21 (14.0%)	35 (23.0%)	38 (25.0%)	58 (38.0%)	

(Table 2) contd.....

-		Seafood					-	Fruits					-
-		More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value
Marital status	**Married**	0	0	0	149 (83.0%)	30 (17.0%)	**p<.001**	0	0	68 (38.0%)	48 (27.0%)	**63 (35.0%)**	**p<.001**
	Not married	21 (3.0%)	44 (7.0%)	122 (20.0%)	432 (69.0%)	5 (1.0%)		67 (11.0%)	165 (26.0%)	242 (39.0%)	101 (16.0%)	49 (8.0%)	
Employment	**Other**	0	1 (9.0%)	2 (18.0%)	8 (73.0%)	0	**p<.001**	1 (9.0%)	2 (18.0%)	8 (73.0%)	0	0	**p<.001**
	Private business	4 (5.0%)	4 (5.0%)	12 (15.0%)	59 (75.0%)	0		10 (13.0%)	15 (19.0%)	54 (68.0%)	0	0	
	Private sector	3 (3.0%)	7 (7.0%)	13 (13.0%)	79 (77.0%)	0		10 (10.0%)	13 (13.0%)	79 (77.0%)	0	0	
	Public sector	3 (7.0%)	9 (21.0%)	6 (14.0%)	24 (57.0%)	0		12 (29.0%)	6 (14.0%)	24 (57.0%)	0	0	
	Student	3 (1.0%)	22 (5.0%)	54 (11.0%)	364 (76.0%)	34 (7.0%)		25 (5.0%)	70 (15.0%)	136 (29.0%)	135 (28.0%)	111 (23.0%)	
	Unemployed	7 (8.0%)	1 (1.0%)	34 (38.0%)	46 (52.0%)	1 (1.0%)		8 (9.0%)	58 (65.0%)	8 (9.0%)	14 (16.0%)	1 (1.0%)	
Family income	**<1,500,000**	0	5 (3.0%)	16 (11.0%)	120 (81.0%)	7 (5.0%)	**p<.001**	5 (3.0%)	16 (11.0%)	34 (23.0%)	28 (19.0%)	65 (44.0%)	**p<.001**
	1,500,000-3,000,000	7 (2.0%)	18 (6.0%)	43 (14.0%)	201 (68.0%)	28 (9.0%)		25 (8.0%)	72 (24.0%)	49 (16.0%)	121 (41.0%)	30 (10.0%)	
	3,000,000 -5,000,000	7 (4.0%)	4 (2.0%)	41 (22.0%)	138 (73.0%)	0		13 (7.0%)	55 (29.0%)	117 (62.0%)	0	5 (3.0%)	
	>5,000,000	7 (4.0%)	17 (10.0%)	22 (13.0%)	122 (73.0%)	0		24 (14.0%)	22 (13.0%)	110 (65.0%)	0	12 (7.0%)	
House hold	**1**	0	2 (13.0%)	2 (13.0%)	9 (60.0%)	2 (13.0%)	**p<.001**	2 (13.0%)	2 (13.0%)	2 (13.0%)	0	9 (60.0%)	**p<.001**
	2	0	1 (2.3%)	7 (15.9%)	35 (60%)	1 (2.3%)		1 (2.3%)	7 (15.9%)	11 (25.0%)	0	25 (57.0%)	
	3	0	3 (2.4%)	10 (8.1%)	104 (84.6%)	6 (4.9%)		3 (2.4%)	10 (8.1%)	29 (23.6%)	48 (39.0%)	33 (26.8%)	
	4	0	15 (9.0%)	27 (16.0%)	113 (66.0%)	17 (10.0%)		15 (9.0%)	40 (23.0%)	26 (15.0%)	74 (43.0%)	17 (10.0%)	
	5+	21 (5.0%)	23 (5.0%)	76 (17.0%)	320 (71.0%)	9 (2.0%)		46 (10.0%)	106 (24.0%)	242 (54.0%)	27 (6.0%)	28 (6.2%)	
Region	**Beirut**	0	5 (3.0%)	15 (10.0%)	118 (81.0%)	7 (5.0%)	**p<.001**	5 (3.0%)	15 (10.0%)	34 (23.0%)	26 (18.0%)	65 (45.0%)	**p<.001**
	Bekaa	0	14 (8.0%)	26 (16.0%)	116 (69.0%)	12 (7.0%)		14 (8.0%)	27 (16.0%)	34 (20.0%)	81 (48.0%)	12 (7.0%)	
	Mount Lebanon	6 (5.0%)	4 (3.0%)	18 (14.2%	83 (65.0%)	16 (13.0%)		10 (8.0%)	46 (36.0%)	11 (9.0%)	4 2 (33.0%)	18 (14.0%)	
	North	3 (7.0%)	0	6 (13.0%)	36 (80.0%)	0		3 (7.0%)	13 (29.0%)	25 (56.0%)	0	4 (9.0%)	
	South	12 (4.0%)	21 (7.0%)	57 (18.0%)	228 (72.0%)	0		35 (11.0%)	64 (20.0%)	206 (65.0%)	0	13 (4.0%)	
USD income	**No**	21 (3.0%)	39 (6.0%)	106 (16.0%)	457 (70.0%)	28 (4.0%)	**P=0.02**	62 (9.5%)	149 (30.0%)	275 (42.0%)	118 (18.0%)	47 (7.0%)	**p<.001**
	Yes	0	5 (3.0%)	16 (10.5%)	124 (82.0%)	7 (4.6%)		5 (3.0%)	16 (10.5%)	35 (23.0%)	31 (20.0%)	65 (43.0%)	

(Table 2) contd.....

-		Vegetables					-	Milk					
		More than 75% N(%)	50-75% N (%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	More than 75% N(%)	50=75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value
Marital status	Married	0	0	83 (46.0%)	21 (12.0%)	75 (42.0%)	p<0.001	0	0	0	119 (66.0%)	60 (34.0%)	p<0.001
	Not married	177 (28.0%)	207 (33.0%)	107 (17.0%)	53 (8.0%)	80 (13.0%)		47 (8.0%)	119 (19.0%)	230 (37.0%)	188 (30.0%0	40 (6.0%)	
Employment	Other	3 (27.0%)	8 (73.0%)	0	0	0	p<0.001	1 (9.0%)	2 (!8.0%)	8 (73.0%)	0	0	p<0.001
	Private business	18 (23.0%)	7 (9.0%)	54 (68.0%)	0	0		4 (5.0%)	11 (14.0%)	10 (13.0%)	54 (68.0%)	0	
	Private sector	23 (23.0%)	68 (67.0%)	11 (11.0%)	0	0		5 (5.0%)	14 (14.0%)	80 (78.0%)	3 (3.0%)	0	
	Public sector	18 (43.0%)	7 (17.0%)	17 (40.0%)	0	0		3 (7.0%)	11 (26.0%)	15 (36.0%)	13 (31.0%)	0	
	Student	79 (17.0%)	84 (18.0%)	86 (18.0%)	74 (16.0%)	154 (32.0%)		25 (8.0%)	54 (11.0%)	84 (18.0%)	215 (45.0%)	99 (21.0%)	
	Unemployed	34 (38.0%)	32 (36.0%)	22 (25.0%)	0	1 (1.0%)		8 (9.0%)	26 (29.0%)	32 (36.0%)	22 (25.0%)	1 (1.0%)	
Family income	<1,500,000	21 (14.0%)	34 (23.0%)	0	0	93 (63.0%)	p<0.001	5 (3.0%_	16 (11.0%)	34 (23.0%)	40 (27.0%)	53 (36.0%)	p<0.001
	1,500,000-3,000,000	68 (23.0%)	63 (21.0%)	47 (16.0%)	74 (25.0%)	45 (15.0%)		25 (8.0%)	43 (14.0%)	63 (21.0%)	136 (46.0%)	30 (10.0%)	
	3,000,000 -5,000,000	42 (22.0%)	26 (14.0%)	117 (62.0%)	0	5 (3.0%)		7 (4.0%)	32 (17.0%)	29 (15.0%)	117 (62.0%)	5 (3.0%)	
	>5,000,000	46 (27.3%)	84 (50.0%)	26 (15.0%)	0	12 (7.0%)		10 (6.0%)	28 (17.0%)	104 (62.0%)	14 (8.0%)	12 (7.0%_	
House hold	1	4 (27.0%)	2 (13.0%)	0	0	9 (60.0%)	p<0.001	2 (13.0%)	2 (13.0%)	2 (13.0%)	0	9 (60.0%)	p<0.001
	2	8 (18.0%)	11 (25.0%)	0	0	25 (57.0%)		1 (2.3%)	7 (15.9%)	11 (25.0%)	0	25 (57.0%)	
	3	13 (10.6%)	29 (23.6%)	0	5 (4.1%)	76 (61.8%)		3 (2.4%)	10 (8.0%)	29 (24.0%)	69 (49.0%)	21 (17.0%)	
	4	42 (24.0%)	39 (23.0%)	5 (3.0%)	69 (40.0%)	17 (10.0%)		15 (9.0%)	27 (16.0%)	39 (23.0%)	74 (43.0%)	17 (10.0%)	
	5+	110 (24.5%)	126 (28.0%)	185 (41.0%)	0	28 (6.2%)		26 (5.8%)	73 (16.3%)	149 (33.2%)	173 (38.5%)	28 (6.2%)	
Region	Beirut	20 (14.0%)	34 (23.0%)	0	0	91 (63.0%)	p<0.001	5 (3.0%)	15 (10.0%)	34 (23.0%)	38 (26.0%)	53 (37.0%)	p<0.001
	Bekaa	40 (24.0%)	35 (21.0%)	0	64 (38.0%)	29 (17.0%)		14 (8.0%)	26 (16.0%)	35 (21.0%)	81 (48.0%)	12 (7.0%) (	
	Mount Lebanon	28 (22.0%)	28 (22.0%)	43 (34.0%)	10 (8.0%)	18 (14.0%)		10 (8.0%)	18 (!4.0%)	28 (22.0%)	53 (42.0%)	18 (14.0%)	
	North	9 (20.0%)	7 (16.0%)	25 (56.0%)	0	4 (9.0%)		3 (7.0%)	6 (13.0%)	7 (16.0%)	25 (56.0%)	4 (9.0%)	
	South	80 (25.0%)	103 (32.0%)	122 (38.0%)	0	13 (4.0%)		15 (5.0%)	54 (17.0%)	126 (40.0%)	110 (35.0%)	13 (4.0%)	
USD income	No	156 (24.0%)	172 (26.0%)	190 (29.0%)	74 (11.0%)	59 (9.0%)	p<0.001	42 (6.5%)	103 (15.8%)	195 (30.0%)	264 (40.6%)	47 (7.0%)	p<0.001
	Yes	21 (14.0%)	35 (23.0%)	0	0	96 (63.2%)		5 (3.0%)	16 (10.5%)	35 (23.0%)	43 (28.0%)	53 (34.0%)	

(Table 2) contd.....

-		Dairy Products					-	Legumes					-
-		More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same (N%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less (N%)	The Same N(%)	P-value
Marital status	**Married**	0	0	55 (31.0%)	61 (34.0%)	63 (35.0%)	**p<.001**	0	0	55 (31.0%)	53 (30.0%)	71 (40.0%)	**p<.001**
	Not married	58 (9.0%)	162 (26.0%)	234 (38.0%)	121 (19.0%)	49 (8.0%)		165 (26.0%)	185 (30.0%)	99 (16.0%)	103 (17.0%)	72 (12.0%)	
Employment	**Other**	1 (9.0%)	2 (18.0%)	8 (73.0%)	0	0	**p<.001**	3 (27.0%)	8 (73.0%)	0	0	0	**p<.001**
	Private business	4 (5.0%)	21 (27.0%)	42 (53.0%)	12 (15.0%)	0		15 (19.0%)	10 (13.0%)	37 (47.0%)	17 (22.0%)	0	
	Private sector	10 (10.0%)	13 (13.0%)	79 (77.0%)	0	0		19 (19.0%)	45 (44.0%)	38 (37.0%)	0	0	
	Public sector	9 (21.0%)	9 (21.0%)	24 (57.0%)	0	0		13 (31.0%)	5 (12.0%)	24 (57.0%)	0	0	
	Student	25 (5.0%)	58 (12.0%)	135 (28.0%)	148 (31.0%)	111 (23.0%)		79 (17.0%)	84 (18.0%)	55 (12.0%)	117 (25.0%)	142 (30.0%)	
	Unemployed	8 (9.0%)	58 (65.0%)	0	22 (25.0%)	1 (1.0%)		34 (38.0%)	32 (36.0%)	0	22 (25.0%)	1 (1.0%)	
Family income	**<1,500,000**	5 (3.0%)	16 (11.0%)	34 (23.0%)	28 (19.0%)	65 (44.0%)	**p<.001**	21 (14.0%)	34 (23.0%)	0	0	93 (63.0%)	**p<.001**
	1,500,000-3,000,000	25 (8.0%)	60 (20.0%)	46 (15.0%)	136 (46.0%)	30 (10.0%)		68 (23.0%)	63 (21.0%)	0	133 (45.0%)	33 (11.0%)	
	3,000,000-5,000,000	7 (4.0%)	61 (32.0%)	99 (52.0%)	18 (9.0%)	5 (3.0%)		39 (21.0%)	29 (15.0%)	94 (49.0%)	23 (12.0%)	5 (3.0%)	
	>5,000,000	21 (13.0%)	25 (15.0%)	110 (65.0%)	0	12 (7.0%)		37 (22.0%)	59 (35.0%)	60 (36.0%)	0	12 (7.0%)	
House hold	**1**	2 (13.0%)	2 (13.0%)	2 (13.0%)	0	9 (60.0%)	**p<.001**	4 (27.0%)	2 (13.0%)	0	0	9 (60.0%)	**p<.001**
	2	1 (2.3%)	7 (15.9%)	11 (25.0%)	0	25 (57.0%)		8 (18.0%)	11 (25.0%)	0	0	25 (57.0%)	
	3	3 (2.0%)	10 (8.0%)	29 (24.0%)	48 (39.0%)	33 (27.0%)		13 (11.0%)	29 (24.0%)	0	17 (14.0%)	64 (52.0%)	
	4	15 (9.0%)	28 (16.0%)	38 (22.0%)	74 (43.0%)	17 (10.0%)		42 (24.0%)	39 (23.0%)	0	74 (43.0%)	17 (10.0%)	
	5+	37 (8.2%)	115 (25.6%)	209 (46.5%)	60 (13.0%)	28 (6.2%)		98 (22.0%)	104 (23.0%)	154 (34.0%)	65 (14.5%)	28 (6.2%)	
Region	**Beirut**	5 (3.4%)	15 (10.0%)	34 (23.0%)	26 (18.0%)	65 (45.0%)	**p<.001**	20 (14.0%)	34 (23.0%)	0	0	91 (63.0%)	**p<.001**
	Bekaa	14 (8.0%)	26 (16.0%)	35 (21.0%)	81 (48.0%)	12 (7.0%)		40 (24.0%)	35 (21.0%)	0	76 (45.0%)	17 (10.0%)	
	Mount Lebanon	10 (8.0%)	35 (28.0%)	11 (9.0%)	53 (42.0%)	18 (14.0%)		28 (22.0%)	28 (22.0%)	0	53 (42.0%)	18 (14.0%)	
	North	3 (7.0%)	13 (29.0%)	3 (7.0%)	22 (49.0%)	4 (9.0%)		9 (20.0%)	7 (16.0%)	0	25 (56.0%)	4 (9.0%)	
	South	26 (8.0%)	73 (23.0%)	206 (65.0%)	0	13 (4.0%)		68 (21.0%)	81 (26.0%)	154 (48.0%)	2 (0.6%)	13 (4.0%)	
USD income	**No**	53 (8.0%)	146 (22.0%)	254 (39.0%)	151 (23.0%)	47 (7.0%)	**p<.001**	144 (22.0%)	150 (23.0%)	154 (23.7%)	156 (24.0.%)	47 (7.0%)	**p<.001**
	Yes	5 (3.0%)	16 (10.5%)	35 (23.0%)	31 (20.0%)	65 (43.0%)		21 (14.0%)	35 (23.0%)	0	0	96 (63.0%)	

(Table 2) contd.....

-		Fast Food					-	Homemade Food					-	Snacks					-
-		75% More N(%)	50-75% N(%)	25-50% N(%)	25% Less (N%)	The Same	P-value	75% More (N%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same	P-value	75% More (N%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value
Marital status	Married	0	0	0	152 (85.0%)	27 (15.0%)	p<.001	0	0	0	0	179 (100.0%)	p<.001	0	0	0	130 (73.0%)	49 (27.3%)	p<.001
	Not married	37 (6.0%)	84 (13.0%)	127 (20.0%)	371 (59.0%)	5 (1.0%)		151 (24.0%)	68 (11.0%)	91 (15.0%)	54 (9.0%)	260 (42.0%)		44 (7.0%)	108 (17.0%)	148 (24.0%)	319 (51.0%)	5 (0.8%)	
Employment	Other	0	1 (9.0%)	2 (18.0%)	8 (73.0%)	0	p<.001	1 (9.0%)	2 (18.0%)	7 (64.0%)	1 (9.0%)	0	p<.001	0	1 (9.0%)	2 (18.0%)	8 (73.0%)	0	p<.001
	Private business	4 (5.0%)	11 (14.0%)	10 (13.0%)	54 (68.0%)	0		15 (19.0%)	10 (13.0%)	0	0	54 (68.0%)		4 (5.0%)	11 (14.0%)	10 (13.0%)	54 (68.0%)	0	
	Private sector employee	3 (3.0%)	7 (7.0%)	13 (13.0%)	79 (77.0%)	0		10 (10.0%)	13 (13.0%)	3 (3.0%)	52 (51.0%)	24 (24.0%)		3 (3.0%)	7 (7.0%)	13 (13.0%)	79 (77.0%)	0	
	Public sector	3 (7.0%)	9 (21.0%)	6 (14.0%)	24 (57.0%)	0		12 (29.0%)	6 (14.0%)	0	0	24 (57.0%)		3 (7.0%)	9 (21.0%)	6 (14.0%)	24 (57.0%)	0	
	Student	18 (4.0%)	30 (6.0%)	63 (13.0%)	335 (70.0%)	31 (6.0%)		78 (16.0%)	4 (1.0%)	81 (17.0%)	0	314 (66.0%)		25 (5.0%)	54 (11.0%)	84 (18.0%)	261 (55.0%)	53 (11.0%)	
	Unemployed	8 (9.%)	26 (29.0%)	32 (36.0%)	22 (25.0%)	1 (1.0%)		34 (38.0%)	32 (36.0%)	0	0	23 (26.0%)		8 (9.0%)	26 (29.0%)	32 (36.0%)	22 (25.0%)	1 (1.0%)	
Family income	<1,500,000	0	5 (3.0%)	16 (11.0%)	120 (81.0%)	7 (5.0%)	p<.001	20 (14.0%)	1 (1.0%)	34 (23.0%)	0	93 (63.0%)	p<.001	5 (3.0%)	16 (11.0%)	34 (23.0%)	86 (58.0%)	7 (5.0%)	p<.001
	1,500,000-,3,000,000	23 (8.0%)	30 (10.0%)	60 (20.0%)	159 (54.0%)	25 (8.0%)		68 (23.0%)	16 (5.0%)	47 (16.0%)	0	166 (56.0%)		25 (8.0%)	43 (14.0%)	63 (21.0%)	136 (46.0%)	30 (10.0%)	
	3,000,000 -5,000,000	7 (4.0%)	32 (17.0%)	29 (15.0%)	122 (64.0%)	0		39 (21.0%)	29 (15.0%)	0	0	122 (64.0%)		7 (4.0%)	32 (17.0%)	29 (15.0%)	117 (62.0%)	5 (3.0%)	
	>5,000,000	7 (4.0%)	17 (10.0%)	22 (13.0%)	122 (73.0%)	0		24 (14.0%)	22 (13.0%)	10 (6.0%)	54 (32.0%)	58 (35.0%)		7 (4.0%)	17 (10.0%)	22 (13.0%)	110 (65.0%)	12 (7.0%)	
House hold size	1	0	2 (13.0%)	2 (13.0%)	9 (60.0%)	2 (13.0%)	p<.001	3 (20.0%)	1 (7.0%)	2 (13.0%)	0	9 (60.0%)	p<.001	2 (13.0%)	2 (13.0%)	2 (13.0%)	7 (47.0%)	2 (13.0%)	p<.001
	2	0	1 (2.3%)	7 (15.9%)	35 (80.0%)	1 (2.3%)		8 (18.0%)	0	11 (25.0%)	0	25 (57.0%)		1 (2.3%)	7 (15.9%)	11 (25)%	24 (54.5%)	1 (2.3%)	
	3	0	3 (2.0%)	10 (8.0%)	104 (85.0%)	6 (5.0%)		13 (11.0%)	0	29 (24.0%)	0	81 (66.0%)		3 (2.0%)	10 (8.0%)	29 (24.0%)	75 (61.0%)	6 (5.0%)	
	4	14 (8.0%)	16 (9.0%)	41 (24,0%)	84 (49.0%)	17 (10.0%)		42 (24.0%)	0	39 (23.0%)	0	91 (53.0%)		15 (9.0%)	27 (15.7%)	39 (23.0%)	74 (43.0%)	17 (10.0%)	
	5+	23 (5.0%)	62 (14.0%)	67 (14.9%)	291 (65.0%)	6 (1.3%)		85 (18.9%)	67 (14.9%)	10 (2.2%)	54 (12.0%)	233 (52.0%)		23 (5.1%)	62 (13.8%)	67 (14.9%)	269 (60.0%)	28 (6.2%)	
Region	Beirut	0	5 (3.0%)	15 (10.0%)	118 (81.0%)	7 (5.0%)	p<.001	19 (13.0%)	1 (0.7%)	34 (23.4%)	0	91 (63.0%)	p<.001	5 (3.0%)	15 (10.0%)	34 (23.0%)	84 (58.0%)	7 (5.0%)	p<.001
	Bekaa	12 (7.0%)	12 (7.0%)	33 (20.0%)	99 (59.0%)	12 (7.0%)		40 (24.0%)	0	35 (21.0%)	0	93 (55.0%)		14 (8.0%)	26 (15.0%)	35 (21.0%)	81 (48.0%)	12 (7.0%)	
	Mount Lebanon	10 (8.0%)	18 (14.0%)	28 (22.0%)	58 (46.0%)	13 (10.0%)		28 (22.0%)	16 (13.0%)	12 (9.0%)	0	71 (56.0%)		10 (8.0%)	18 (14.0%)	28 (22.0%)	53 (42.0%)	18 (14.2%)	
	North	3 (7.0%)	6 (13.0%)	7 (16.0%)	29 (64.0%)	0		9 (20.0%)	7 (16.0%)	0	0	29 (64.0%)		3 (7.0%)	6 (13.0%)	7 (16.0%)	25 (56.0%)	4 (9.0%)	
	South	12 (4.0%)	43 (13.5%)	44 (13.8%)	219 (70.0%)	0		55 (17.3%)	44 (14.0%)	10 (3.0%)	54 (17.0%)	155 (49.0%)		12 (4.0%)	43 (13.5%)	44 (13.8%)	206 (65.0%)	13 (4.0%)	
USD income	No	37 (5.7%)	79 (12.0%)	111 (17.0%)	399 (61.0%)	25 (3.8%)	p<.001	131 (20.0%)	67 (10.0%)	56 (9.0%)	54 (8.0%)	343 (53.0%)	p<.001	39 (6.0%)	92 (14%)	113 (17.4%)	360 (55.3%)	47 (7.2%)	p<.001
	Yes	0	5 (3.0%)	16 (10.5%)	124 (82.0%)	7 (4.6%)		20 (13.0%)	1 (0.7%)	35 (23.0%)	0	96 (63.0%)		5 (3.0%)	16 (10.5%)	35 (23.0%)	89 (59.0%)	7 (4.6%)	

(Table 2) contd.....

How likely were you to purchase the following products compared to before the economic crisis?		Nuts						Teabags					
		More than 75% N(%)	50-75% (N%)	25-50% (N%)	25% Less N(%)	The same N(%)	P-value	More than 75% N(%)	Between 50-75% N(%)	25-50% N(%)	25% Less (N%)	The Same N(%)	P-value
Marital status	Married	0	0	0	151 (84.4%)	28 (15.6%)	p<.001	0	0	0	50 (27.9%)	129 (72.1%)	p<.001
	Not married	11 (1.8%)	56 (9.0%)	152 (24.4%)	405 (64.9%)	0		39 (6.3%)	134 (21.5%)	253 (40.5%)	198 (31.7%)	0	
Employment	Other	0	0	0	11 (100.0%)	0	p<.001	0	0	2 (18.1%)	9 (81.8%)	0	p<.001
	Private business	0	13 (16.4%)	13 (16.4%)	53 (67.0%)	0		1 (1.2%)	22 (27.8%)	31 (39.2%)	25 (31.6%)	0	
	Private sector	0	19 (18.6%)	11 (10.7%)	72 (70.5%)	0		10 (9.8%)	19 (18.6%)	29 (28.4%)	44 (43.1%)	0	
	Public sector	0	1 (2.3%)	1 (2.3%)	40 (95.2%)	0		0	2 (4.7%)	14 (33.3%)	26 (61.9%)	0	
	Student	8 (1.6%)	13 (2.7%)	107 (22.4%)	321 (67.2%)	28 (5.8%)		21 (4.4%)	74 (15.5%)	143 (29.9%)	110 (23.0%)	129 (27.0%)	
	Unemployed	3 (3.3%)	9 (10.1%)	19 (21.3%)	58 (65.1%)	0		6 (6.7%)	16 (17.9%)	33 (37.0%)	34 (38.2%)	0	
Family income	<1,500,000	2 (1.3%)	7 (4.7%)	40 (27.0%)	92 (62.1%)	7 (4.7%)	p<.001	9 (6.0%)	28 (18.9%)	69 (46.6%)	15 (10.1%)	27 (18.2%)	p<.001
	1,500,000-3,000,000	9 (3.0%)	15 (5.0%)	86 (28.9%)	166 (55.8%)	21 (7.0%)		18 (6.0%)	62 (20.8%)	97 (32.6%)	45 (15.1%)	75 (25.2%)	
	3,000,000 –5,000,000	0	14 (7.3%)	14 (7.3%)	162 (85.2%)	0		1 (0.5%)	24 (12.6%)	41 (21.5%)	109 (57.3%)	15 (7.8%)	
	>5,000,000	0	20 (11.9%)	12 (7.1%)	136 (80.9%)	0		11 (6.5%)	20 (11.9%)	46 (27.3%)	79 (47.0%)	12 (7.1%)	
House hold	1	0	0	4 (26.6%)	9 (60.0%)	2 (13.3%)	p<.001	0	3 (20.0%)	7 (46.6%)	2 (13.3%)	3 (20.0%)	p<.001
	2	1 (2.2%)	5 (11.3%)	10 (22.7%)	27 (61.3%)	1 (2.7%)		6 (13.6%)	5 (11.3%)	17 (38.6%)	6 (13.6%)	10 (22.7%)	
	3	2 (1.6%)	3 (2.4%)	34 (27.6%)	78 (63.4%)	6 (4.8%)		5 (4.0%)	21 (17.0%)	65 (52.8%)	10 (8.1%)	22 (17.8%)	
	4	5 (2.9%)	5 (2.9%)	59 (34.3%)	90 (52.3%)	13 (7.5%)		10 (5.8%)	45 (26.1%)	50 (29.0%)	31 (18.0%)	36 (21.0%)	
	5+	3 (0.6%)	43 (9.5%)	45 (10.0%)	352 (78.3%)	6 (1.3%)		18 (4.0%)	60 (13.3%)	114 (25.3%)	199 (44.3%)	58 (12.9%)	
Region	Beirut	2 (1.3%)	7 (4.8%)	39 (26.8%)	90 (62.0%)	7 (4.8%)	p<.001	9 (6.2%)	27 (18.6%)	69 (47.5%)	15 (10.3%)	25 (17.2%)	p<.001
	Bekaa	5 (2.9%)	3 (1.7%)	48 (28.5%)	103 (61.3%)	9 (5.3%)		8 (4.7%)	31 (18.4%)	60 (35.7%)	32 (19.0%)	37 (22.0%)	
	Mount Lebanon	3 (2.3%)	11 (8.6%)	38 (29.9%)	63 (49.6%)	12 (9.4%)		9 (7.0%)	30 (23.6%)	36 (28.3%)	13 (10.2%)	39 (30.7%)	
	North	1 (2.2%)	8 (17.7%)	10 (22.2%)	26 (57.7%)	0		2 (4.4%)	16 (35.5%)	9 (20.0%)	8 (17.7%)	10 (22.2%)	
	South	0	27 (8.4%)	17 (5.3%)	274 (86.1%)	0		11 (3.4%)	30 (9.4%)	79 (24.8%)	180 (56.6%)	18 (5.66%)	
USD income	No	9 (1.3%)	49 (7.5%)	110 (16.8%)	462 (70.9%)	21 (3.2%)	P= .025	30 (4.6%)	106 (16.2%)	182 (27.9%)	233 (35.7%)	100 (15.3%)	p<.001
	Yes	2 (1.3%)	7 (4.6%)	42 (27.6%)	94 (61.8%)	7 (4.6%)		9 (5.9%)	28 (18.4%	71 (46.7%)	15 (9.9%)	29 (19.1%)	

Table 3. The impact of the economic crisis on the purchasing of certain food items.

A How likely were you to purchase the following products compared to before the economic crisis?		Sugar						Vegetable Oil					
		More than 75%N(%)	50-75% N(%)	25-50% N(%)	25% Less (N%)	The same (N%)	P-value	More than 75%N(%)	50-75% N(%)	25-50% N(%)	25% Less (N%)	The same N(%)	P-value
Marital status	Married	0	0	0	14 (7.8%)	165 (92.2%)	p<.001	0	0	0	54 (30.2%)	125 (69.8%)	p<0.001
	Not married	46 (7.4%)	155 (24.8%)	236 (37.8%)	187 (30.0%)	0		88 (14.1%)	251 (40.2%)	10 (34.3%)	71 (11.4%)	0	
Employment	Other	0	0	2 (18.1%)	9 (81.1%)	0	p<.001	0	1 (33.0%)	2 (67.0%)	0	0	p<0.001
	Private business	1 (1.2%)	25 (31.2%)	28 (36.4%)	25 (31.2%)	0		13 (16.5%)	29 (36.7%)	20 (23.4%)	20 (23.4%)	0	
	Private sector	17 (16.6%)	13 (12.7%)	28 (27.5%)	44 (43.2%)	0		19 (18.6%)	33 (32.3%)	20 (19.6%)	30 (29.5%)	0	
	Public sector	0	2 (4.7%)	14 (33.3%)	26 (62.0%)	0		1 (2.3%)	3 (7.1%)	17 (40.5%)	21 (50.0%)	0	
	Student	21 (4.4%)	89 (18.6%)	128 (26.9%)	74 (15.5%)	165 (34.6%)		41 (8.5%)	155 (32.4%)	102 (21.3%)	54 (11.3%)	125 (26.5%)	
	Unemployed	6 (6.7%)	25 (28.0%)	35 (39.3%)	23 (26.0%)	0	p<.001	13 (14.6%)	28 (31.5%)	48 (53.9%)	0	0	
A Family income	<1,500,000	9 (6.0%)	35 (23.6%)	62 (41.8%)	15 (10.1%)	27 (18.2%)	p<.001	19 (12.8%)	68 (45.9%)	34 (22.9%)	0	27 (18.4%)	p<0.001
	1,500,000-3,000,000	18 (6.0%)	79 (26.5%)	80 (26.9%)	45 (15.1%)	75 (25.4%)		35 (11.7%)	115 (38.9%)	72 (24.2%)	0	75 (25.2%)	
	3,000,000 ƒ?"5,000,000	1 (0.5%)	27 (14.2%)	49 (25.7%)	62 (32.6%)	51 (27.0%)		14 (7.3%)	30 (15.7%)	61 (31.2%)	74 (40.1%)	11 (5.7%)	
	>5,000,000	18 (10.7%)	14 (8.3%)	45 (26.7%)	79 (47.3%)	12 (7.1%)		20 (11.9%)	38 (22.6%)	47 (27.9%)	51 (30.3%)	12 (7.3%)	
Household size	1	0	4 (26.6%)	6 (40.0%)	2 (13.3%)	3 (20.1%)	p<.001	0	8 (53.3%)	4 (26.6%)	0	3 (20.1%)	p<0.001
	2	6 (13.6%)	8 (18.1%)	14 (32.0%)	6 (13.6%)	10 (22.7%)		6 (13.6%)	19 (43.1%)	9 (20.6%)	0	10 (22.7%)	
	3	5 (4.1%)	27 (21.9%)	59 (47.9%)	10 (8.1%)	22 (18.0%)		15 (12.4%)	60 (48.7%)	26 (21.1%)	0	22 (17.8%)	
	4	10 (5.9%)	50 (29.0%)	45 (26.1%)	31 (18.0%)	36 (21.0%)		20 (11.8%)	68 (39.5%)	48 (27.9%)	0	36 (20.8%)	
	5+	25 (5.5%)	66 (14.6%)	112 (24.9%)	152 (34.0%)	94 (21.0%)		47 (10.4%)	96 (21.3%)	127 (28.2%)	125 (27.8%)	54 (12.3%)	
Region	Beirut	9 (6.2%)	34 (23.4%)	62 (42.7%)	15 (10.3%)	25 (17.4%)	p<.001	19 (13.4%)	67 (46.2%)	34 (23.4%)	0	25 (17.0%)	p<0.001
	Bekaa	8 (4.7%)	36 (21.4%)	55 (32.7%)	32 (19.0%)	37 (22.2%)		16 (9.5%)	68 (40.4%)	47 (27.9%)	0	37 (22.2%)	
	Mount Lebanon	9 (7.0%)	42 (33.1%)	24 (18.8%)	13 (10.2%)	39 (30.9%)		17 (13.3%)	46 (36.2%)	25 (19.6%)	0	39 (30.9%)	
	North	2 (4.4%)	17 (37.7%)	8 (17.8%)	8 (17.8%)	10 (22.3%)		9 (20.0%)	16 (35.6%)	10 (22.2%)	0	10 (22.2%)	
	South	18 (5.7%)	26 (8.1%)	87 (27.3%)	133 (41.9%)	54 (17.0%)		27 (8.4%)	54 (16.9%)	90 (31.0%)	125 (39.3%)	14 (4.4%)	
USD income	No	37 (5.6%)	119 (18.6%)	173 (26.5%)	186 (28.5%)	136 (20.8%)	p<.001	69 (11.0%)	181 (27.5%)	180 (27.6%)	125 (19.2%)	96 (14.7%)	p<0.001
	Yes	9 (5.9%)	36 (23.7%)	63 (41.4%)	15 (9.9%)	29 (19.0%)		19 (12.5%)	70 (46.1%)	34 (22.4%)	0	29 (19.0%)	

(Table 3) contd.....

-		Olive oil						Butter					
		More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value
Marital status	**Married**	0	0	0	60 (33.5%)	119 (66.5%)	**p<.001**	0	0	0	102 (57.0%)	77 (43.0%)	**p<.001**
	Not married	37 (5.9%)	125 (20.0%)	169 (27.1%)	293 (47.0%)	0		32 (5.0%)	115 (18.0%)	183 (29.0%)	294 (47.0%)	0	
Employment	**Other**	0	0	1 (9.0%)	10 (91.0%)	0	**p<.001**	0	0	0	11 (10.0%)	0	**p<.001**
	Private business	1 (1.2%)	22 (27.8%)	17 (21.5%)	39 (49.3%)	0		1 (1.2%)	18 (22.7%)	21 (26.5%)	39 (49.3%)	0	
	Private sector employee	8 (7.8%)	21 (20.5%)	18 (17.6%)	55 (53.9%)	0		8 (7.8%)	21 (20.5%)	18 (17.6%)	55 (53.9%)	0	
	Public sector employee	0	2 (4.7%)	1 (2.3%)	39 (92.8%)	0		0	2 (4.76%)	1 (2.3%)	39 (92.8%)	0	
	Student	21 (4.4%)	63 (13.2%)	112 (23.4%)	162 (33.9%)	119 (24.9%)		16 (3.3%)	60 (12.5%)	120 (25.1%)	204 (42.7%)	77 (16.1%)	
	Unemployed	6 (6.7%)	16 (17.9%)	19 (21.3%)	48 (53.9%)	0		6 (6.7%)	13 (14.6%)	22 (24.7%)	48 (53.9%)	0	
A Family income	**<1,500,000**	9 (6.0%)	28 (18.9%)	50 (33.7%)	34 (22.9%)	27 (18.2%)	**p<.001**	6 (4.0%)	31 (20.9%)	50 (33.7%)	34 (22.9%)	27 (18.2%)	**p<.001**
	1,500,000-3,000,000 Lmonth	18 (6.0%)	51 (17.1%)	81 (27.2%)	72 (24.2%)	75 (25.2%)		16 (5.3%)	42 (14.1%)	92 (30.9%)	114 (38.3%)	33 (11.1%)	
	3,000,000-5,000,000	1 (0.5%)	24 (12.6%)	17 (8.9%)	143 (75.0%)	5 (2.6%)		1 (0.5%)	20 (10.5%)	21 (11.0%)	143 (75.2%)	5 (2.6%)	
	>5,000,000	9 (5.3%)	22 (13.0%)	21 (12.5%)	104 (61.9%)	12 (7.1%)		9 (5.3%)	22 (13.0%)	20 (11.9%)	105 (62.5%)	12 (7.1%)	
Household size	**1**	0	3 (20.0%)	5 (33.3%)	4 (26.6%)	3 (20.0%)	**p<.001**	0	3 (20.0%)	5 (33.3%)	4 (26.6%)	3 (20.0%)	**p<.001**
	2	6 (13.6%)	5 (11.3%)	14 (31.8%)	9 (20.4%)	10 (22.7%)		3 (6.8%)	8 (18.1%)	14 (31.8%)	9 (20.4%)	10 (22.7%)	
	3	5 (4.0%)	21 (17.0%)	49 (39.8%)	26 (21.1%)	22 (17.8%)		4 (3.2%)	22 (17.8%)	49 (39.8%)	26 (21.1%)	22 (17.8%)	
	4	10 (5.8%)	34 (19.7%)	44 (25.5%)	48 (27.9%)	36 (20.9%)		9 (5.2%)	27 (15.6%)	52 (30.2%)	69 (40.1%)	15 (8.7%)	
	5+	16 (3.5%)	62 (13.8%)	57 (12.6%)	266 (59.2%)	48 (10.6%)		16 (3.5%)	55 (12.2%)	63 (14.0%)	288 (64.1%)	27 (6.0%)	
Region	**Beirut**	9 (6.2%)	27 (18.6%)	50 (34.4%)	34 (23.4%)	25 (17.2%)	**p<.001**	6 (4.1%)	30 (20.6%)	50 (34.4%)	34 (23.4%)	25 (17.2%)	**p<.001**
	Bekaa	8 (4.7%)	20 (11.9%)	56 (33.3%)	47 (27.9%)	37 (22.0%)		6 (3.5%)	22 (13.0%)	56 (33.3%)	65 (38.6%)	19 (11.3%)	
	Mount Lebanon	9 (7.0%)	30 (23.6%)	24 (18.8%)	25 (19.6%)	39 (30.7%)		9 (7.0%)	20 (15.7%)	34 (26.7%)	48 (37.7%)	16 (12.5%)	
	North	2 (4.4%)	16 (35.5%)	7 (15.5%)	15 (33.3%)	5 (11.1%)		2 (4.4%)	11 (24.4%)	12 (26.6%)	16 (35.5%)	4 (8.8%)	
	South	9 (2.8%)	32 (10.0%)	32 (10.0%)	232 (72.9%)	13 (4.0%)		9 (2.8%)	32 (10.0%)	31 (9.7%)	233 (73.2%)	13 (4.0%)	

(Table 3) contd.....

-		Soft Drinks						Coffee					
		More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	More Than 75 (N%)	50-75% N(%)	25-50% (N%)	25% Less (N%)	The Same (N%)	P-value
Marital status	Married	0	0	0	118 (65.9%)	61 (34.1%)	p<.001	0	0	0	0	179 (100.0%)	p<0.01
	Not married	36 (5.8%)	119 (19.1%)	126 (20.0%)	343 (55.0%)	0		66 (11.0%)	182 (29.0%)	167 (27.0%)	180 (29.0%)	29 (5.0%)	
Employment	Other	0	0	0	11 (100.0%)	0	p<.001	0	0	2 (18.1%)	9 (81.8%)	0	p<.001
	Private business	1 (1.2%)	22 (27.8%)	16 (20.2%)	40 (40.6%)	0		13 (16.4%)	24 (30.3%)	12 (15.1%)	10 (12.6%)	20 (25.3%)	
	Private sector employee	8 (7.8%)	21 (20.5%)	18 (17.6%)	55 (53.9%)	0		19 (18.6%)	28 (27.4%)	11 (10.7%)	44 (43.1%)	0	
	Public sector employee	0	2 (4.7%)	0	40 (95.2%)	0		1 (2.3%)	1 (2.3%)	14 (33.3%)	17 (40.4%)	9 (21.4%)	
	Student	20 (4.0%)	57 (12.0%)	75 (16.0%)	264 (55.0%)	61 (13.0%)		21 (4.0%)	108 (23.0%)	109 (23.0%)	60 (13.0%)	179 (38.0%)	
	Unemployed	6 (6.7%)	16 (17.9%)	17 (19.1%)	50 (56.1%)	0		11 (12.3%)	20 (22.4%)	18 (20.2%)	40 (44.9%)	0	
Family income	<1,500,000	8 (5.4%)	29 (19.5%)	13 (8.7%)	79 (53.3%)	19 (12.8%)	p<.001	9 (6.0%)	41 (27.7%)	56 (37.8%)	15 (10.1%)	27 (18.1%)	p<.001
	1,500,000-3,000,000 L.L/ month	18 (6.0%)	44 (14.8%)	79 (26.5%)	131 (44.1%)	25 (8.4%)		23 (7.7%)	87 (29.2%)	67 (22.5%)	45 (15.1%)	75 (25.2%)	
	3,000,000 -5,000,000 L.L/month	1 (0.5%)	24 (12.6%)	16 (8.4%)	144 (75.7%)	5 (2.6%)		14 (7.3%)	25 (13.1%)	16 (8.4%)	50 (26.1%)	85 (44.7%)	
	>5,000,000	9 (5.3%)	22 (13.0%)	18 (10.7%)	107 (63.6%)	12 (7.1%)		20 (11.9%)	29 (17.2%)	28 (16.6%)	70 (41.6%)	21 (12.5%)	
Household size	1	0	3 (20.0%)	2 (13.3%)	7 (46.6%)	3 (20.0%)	p<.001	0	5 (33.3%)	5 (33.3%)	2 (13.3%)	3 (20.0%)	p<.001
	2	5 (11.3%)	6 (13.6%)	5 (11.3%)	18 (40.9%)	10 (22.7%)		6 (13.6%)	10 (22.7%)	12 (22.7%)	6 (13.6%)	10 (22.7%)	
	3	5 (4.0%)	21 (17.0%)	21 (17.0%)	68 (55.2%)	8 (6.5%)		5 (4.0%)	34 (27.6%)	52 (42.2%)	10 (8.1%)	22 (17.8%)	
	4	10 (5.8%)	27 (15.6%)	47 (27.3%)	75 (43.6%)	13 (7.5%)		10 (5.8%)	59 (34.3%)	36 (20.9%)	31 (18.0%)	36 (20.9%)	
	5	16 (3.5%)	62 (13.8%)	51 (11.3%)	293 (65.2%)	27 (6.0%)		45 (10.0%)	74 (16.4%)	62 (13.8%)	131 (29.0%)	137 (30.5%)	
Region	Beirut	8 (5.5%)	28 (19.3%)	13 (8.9%)	77 (53.1%)	19 (13.1%)	p<.001	9 (6.2%)	40 (27.5%)	56 (38.6%)	15 (10.3%)	25 (17.2%)	p<.001
	Bekaa	8 (4.7%)	20 (11.9%)	50 (29.7%)	81 (48.2%)	9 (5.3%)		8 (4.7%)	48 (28.5%)	43 (25.5%)	32 (19.0%)	37 (22.0%)	
	Mount Lebanon	9 (7.0%)	23 (18.1%)	28 (22.0%)	51 (40.1%)	16 (12.5%)		13 (10.2%)	39 (30.7%)	23 (18.1%)	13 (10.2%)	39 (30.7%)	
	North	2 (4.4%)	16 (35.5%)	6 (13.3%)	17 (37.7%)	4 (8.8%)		9 (20.0%)	12 (26.6%)	6 (13.3%)	8 (17.7%)	10 (22.2%)	
	South	9 (2.8%)	32 (10.0%)	29 (9.1%)	235 (73.8%)	13 (4.0%)		27 (8.0%)	43 (13.5%)	39 (12.2%)	112 (35.2%)	97 (30.5%)	
USD income	No	28 (4.3%)	90 (13.8%)	111 (17.0%)	380 (58.3%)	42 (6.4%)	P=.011	57 (8.7%)	139 (21.3%)	111 (17.0%)	165 (25.3%)	179 (27.4%)	p<.001
	Yes	8 (5.3%)	29 (19.1%)	15 (9.9%)	81 (53.0%)	19 (13.0%)		9 (6.0%)	43 (28.0%)	56 (37.0%)	15 (10.0%)	29 (19.1%)	

Table 4. The impact of the economic crisis on the consumption of certain foods items in correlation with BMI.

-		Fast Food						Homemade Food						Snacks						BMI				
		More than 75% N(%)	50-75% N(%)	25-50%N(%)	25% Less N(%)	The Same N(%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	More than 75% N(%)	50-75% N(%)	25-50% N(%)	25% Less N(%)	The Same N(%)	P-value	<18.5	18.5-24.9	25-29.9	>30	P-value
Marital status	**married**	0	0	0	152 (84.9%)	27 (15.1%)	**p<.001**	0	0	0	0	179 (100.0%)	**p<.001**	0	0	0	130 (72.6%	49 (27.4%)	**p<.001**	117 (65.4%)	62 (34.6%)	0	0	**p<.001**
	not married	37 (5.9%)	84 (13.5%)	127 (20.4%)	371 (59.5%)	5 (0.8%)		151 (24.2%)	68 (10.9%)	91 (14.6%)	54 (8.7%)	260 (41.7%)		44 (7.1%)	108 (17.3%)	148 (23.7%)	319 (51.1%)	5 (0.8%)		0	468 (75.5%)	116 (18.7%)	36 (5.8%)	
Employ-ment status	**other**	0	1 (9.0%)	2 (18.1%)	8 (72.7%)	0	**p<.001**	1 (9.0%)	2 (18.1%)	7 (63.6%)	1 (9.0%)	0	**p<.001**	0	1 (9.0%)	2 (18.1%)	8 (72.7%)	0	**p<.001**	0	0	0	10 (100.0%)	**p<.001**
	Private business	4 (5.0%)	11 (13.9%)	10 (12.6%)	54 (68.3%)	0		15 (18.9%)	10 (12.6%)	0	0	54 (68.3%)		4 (5.0%)	11 (13.9%)	10 (12.6%)	54 (68.3%)	0		0	79 (100.0%)	0	0	
	Private sector	3 (29.4%)	7 (68.6%)	13 (12.7%)	79 (77.4%)	0		10 (9.0%)	13 (12.7%)	3 (29.4%)	52 (50.9%)	24 (23.5%)		3 (2.9%)	7 (6.8%)	13 (12.7%)	79 (77.4%)	0		0	0	76 (74.5%)	26 (25.4%)	
	Public Sector	3 (7.1%)	9 (21.4%)	6 (14.2%)	24 (57.1%)	0		12 (28.5%)	6 (14.2%)	0	0	24 (57.1%)		3 (7.1%)	9 (21.4%)	6 (14.2%)	24 (57.1%)	0		0	2 (4.7%)	40 (95.2%)	0	
	Student	18 (3.7%)	30 (6.2%)	63 (13%)	335 (70.2%)	31 (6.4%)		78 (16.3%)	4 (8.3%)	81 (16.9%)	0	314 (65.8%)		25 (5.2%)	54 (11.3%)	84 (17.6%)	261 (54.7%)	53 (11.0%)		117 (24.5%)	360 (75.4%)	0	0	
	Unemployed	8 (8.9%)	26 (29.2%)	32 (35.9%)	22 (24.7%)	1 (1.0%)		34 (38.2%)	32 (35.9%)	0	0	23 (25.8%)		8 (8.9%)	26 (29.1%)	32 (35.9%)	22 (24.7%)	1 (1.12%)		0	89 (100.0%)	0	0	
Family income	**<1,500,000**	0	5 (3.3%)	16 (10.8%)	120 (81.0%)	7 (4.72%)	**p<.001**	20 (13.5%)	1 (0.6%)	34 (22.9%)	0	93 (62.8%)	**p<.001**	5 (3.3%)	16 (10.8%)	34 (22.9%)	86 (58.1%)	7 (4.7%)	**p<.001**	27 (18.2%)	121 (81.75%)	0	0	**p<.001**
	1,500,000-3,000,000	23 (7.4%)	30 (10.1%)	60 (20.2%)	159 (53.5%)	25 (84.1%)		68 (22.8%)	16 (5.3%)	47 (15.8%)	0	166 (55.8%)		25 (8.1%)	43 (14.4%)	63 (21.2%)	136 (45.7%)	30 (10.1%)		75 (25.2%)	222 (74.7%)	0	0	
	3,000,000 – 5,000,000	7 (3.6%)	32 (16.8%)	29 (15.2%)	122 (64.2%)	0		39 (20.5%)	29 (15.2%)	0	0	122 (64.2%)		7 (3.6%)	32 (16.8%)	29 (15.2%)	117 (61.5%)	5 (2.6%)		15 (7.8%)	175 (92.0%)	0	0	
	>5,000,000	7 (4.1%)	17 (10.1%)	22 (13.1%)	122 (72.6%)	0		24 (14.2%)	22 (13.1%)	10 (5.9%)	54 (32.1%)	58 (34.5%)		7 (4.16%)	17 (10.1%)	22 (13.0%)	110 (65.4%)	12 (7.1%)		0	12 (7.3%)	116 (70.7%)	36 (21.9%)	
House hold	**1**	0	2 (13.3%)	2 (13.3%)	9 (60.0%)	2 (13.3%)	**p<.001**	3 (20.0%)	1 (0.6%)	2 (13.3%)	0	9 (60.0%)	**p<.001**	2 (13.3%)	2 (13.3%)	2 (13.3%)	7 (46.6%)	2 (13.3%)	**p<.001**	3 (20.0%)	12 (80.0%)	0	0	**p<.001**
	2	0	1 (2.2%)	7 (15.9%)	35 (79.5%)	1 (2.7%)		8 (18.1%)	0	11 (25.0%)	0	25 (56.8%)		1 (2.7%)	7 (15.9%)	11 (25.0%)	24 (54.5%)	1 (2.7%)		10 (22.7%)	34 (77.2%)	0	0	
	3	0	3 (2.4%)	10 (8.1%)	104 (84.5%)	6 (4.8%)		13 (10.5%)	0	29 (23.5%)	0	81 (65.8%)		3 (2.4%)	10 (8.1%)	29 (23.5%)	75 (60.9%)	6 (4.8%)		22 (17.8%)	101 (82.1%)	0	0	
	4	14 (8.1%)	16 (9.3%)	41 (23.8%)	84 (48.8%)	17 (9.8%)		42 (24.4%)	0	39 (22.6%)	0	91 (52.9%)		15 (8.7%)	27 (15.6%)	39 (22.6%)	74 (43.0%)	17 (9.8%)		36 (20.9%)	136 (79.0%)	0	0	
	5+	23 (5.1%)	62 (13.8%)	67 (14.9%)	291 (64.8%)	6 (13.3%)		85 (18.9%)	67 (14.9%)	10 (2.2%)	54 (12.0%)	233 (51.8%)		23 (5.1%)	62 (13.8%)	67 (14.9%)	269 (59.9%)	28 (6.2%)		46 (10.3%)	247 (55.5%)	116 (26.0%)	36 (8.0%)	
Region	**Beirut**	0	5 (3.4%)	15 (10.3%)	118 (81.3%)	7 (4.8%)	**p<.001**	19 (13.1%)	1 (0.6%)	34 (23.4%)	0	91 (62.7%)	**p<.001**	5 (3.4%)	15 (10.3%)	34 (23.4%)	84 (57.9%)	7 (4.8%)	**p<.001**	25 (17.2%)	120 (82.7%)	0	0	**p<.001**
	Bekaa	12 (71.4%)	12 (7.1%)	33 (19.6%)	99 (58.9%)	12 (7.1%)		40 (23.8%)	0	35 (20.8%)	0	93 (55.3%)		14 (8.3%)	26 (15.4%)	35 (20.8%)	81 (48.2%)	12 (7.1%)		37 (22.0%)	131 (77.9%)	0	0	
	Mount Lebanon	10 (7.8%)	18 (14.0%)	28 (22%)	58 (45.6%)	13 (10.2%		28 (22%)	16 (12.5%)	12 (9.4%)	0	71 (55.9%)		10 (7.8%)	18 (14.1%)	28 (22.0%)	53 (41.7%)	18 (14.1%)		39 (30.7%)	88 (69.2%)	0	0	
	North	3 (6.6%)	6 (13.3%)	7 (15.5%)	29 (64.4%)	0		9 (20.0%)	7 (15.6%)	0	0	29 (64.4%)		3 (6.6%)	6 (13.3%)	7 (15.6%)	25 (55.5%)	4 (8.8%)		10 (22.2%)	35 (77.7%)	0	0	
	South	12 (3.7%)	43 (13.5%)	44 (13.8%)	219 (68.8%)	0		55 (17.2%)	44 (13.8%)	10 (3.1%)	54 (16.9%)	155 (48.7%)		12 (3.7%)	43 (13.5%)	44 (13.8%)	206 (64.7%)	13 (4.8%)		6 (1.9%)	156 (49.6%)	116 (36.0%)	36 (11.4%)	
USD income	**No**	37 (5.6%)	79 (12.1%)	111 (17%)	399 (61.2%)	25 (3.8%)	**p<.001**	131 (20.1%)	67 (10.2%)	56 (8.6%)	54 (8.2%)	343 (52.6%)	**p<.001**	39 (5.9%)	92 (14.0%)	113 (17.8%)	360 (55.2%)	47 (7.2%)	**p = 0.167**	88 (13.6%)	407 (62.9%)	116 (17.9%)	6 (53.5%)	**p<.001**
	Yes	0	5 (3.3%)	16 (10.5%)	124 (81.6%)	7 (4.6%)		20 (13.2%)	1 (0.7%)	35 (23.0%)	0	96 (63.2%)		5 (3.3%)	16 (10.5%)	35 (23.0%)	89 (58.6%)	7 (4.6%)		29 (19.1%)	123 (80.9%)	0	0	

Table 5. The impact of the economic crisis on the lifestyle behaviours.

-		Caffeine Consumption					-	Smoking Habits						Physical Activity						
-		Don't Know	Drinking Less	No Changes	Quit Drinking	Started Drinking	P-value	Don't Know	No Changes	Quit Smoking	Smoking Less	Smoking More	Started Smoking	P-value	None	Once	2-4 Days	More than 5	Don't Remember	P-value
Age	18-25	30 (5.1%)	179 (30.7%)	274 (47.0%)	34 (5.8%)	66 (11.3%)	p<.001	130 (22.3%)	274 (47.0%)	80 (13.7%)	37 (6.3%)	39 (6.7%)	23 (3.9%)	p<.001	224 (38.4%)	127 (21.8%)	160 (27.4%)	43 (7.4%)	29 (5.0%)	p<.001
	26-35	18 (14.2%)	40 (31.5%)	44 (34.6%)	1 (0.8%)	24 (18.9%)		35 (27.7%)	51 (40.2%)	0	41 (32.3%)	0	0		51 (40.2%)	25 (19.7%)	29 (22.8%)	4 (3.1%)	18 (14.2%)	
	>36	5 (16.1%)	0	0	24 (77.4%)	2 (6.5%)		5 (16.1%)	10 (32.3%)	0	16 (51.6%)	0	0		24 (77.4%)	2 (6.5%)	0	0	5 (16.1%)	
Gender	Female	53 (8.3%)	175 (27.3%)	266 (41.5%)	65 (10.1%)	82 (12.8%)	P = 0.427	154 (24.0%)	297 (46.3%)	58 (9.0%)	77 (12.0%)	36 (5.6%)	19 (3.0%)	P = 0.123	259 (40.4%)	144 (22.5%)	146 (22.8%)	40 (6.2%)	52 (8.1%)	P = 0.168
	Male	11 (6.8%)	44 (27.2%)	76 (46.9%)	18 (11.1%)	13 (8.0%)		32 (19.8%)	84 (51.9%)	22 (13.6%)	17 (10.5%)	3 (1.9%)	4 (2.5%)		64 (39.5%)	27 (16.7%)	51 (31.5%)	9 (5.6%)	11 (6.8%)	
Family income	<1,500,000	9 (6.1%)	27 (18.2%)	97 (65.5%)	9 (6.1%)	6 (4.1%)	p<.001	43 (29.1%)	78 (52.7%)	7 (4.7%)	0	13 (8.8%)	7 (4.7%)	p<.001	36 (24.3%)	36 (24.3%)	48 (32.4%)	19 (12.8%)	9 (6.1%)	p<.001
	1,500,000-3,000,000	21 (7.1%)	75 (25.3%)	156 (52.5%)	17 (5.7%)	28 (9.4%)		86 (29.0%)	136 (45.8%)	50 (16.8%)	0	9 (3.0%)	16 (5.4%)		92 (31.0%)	62 (20.9%)	99 (33.3%)	24 (8.1%)	20 (6.7%)	
	3,000,000-5,000,000	14 (7.4%)	85 (44.7%)	39 (20.5%)	8 (4.2%)	44 (23.2%)		25 (13.2%)	80 (42.1%)	23 (12.1%)	57 (30.0%)	5 (2.6%)	0		109 (57.4%)	40 (20.1%)	25 (13.2%)	2 (1.1%)	14 (7.4%)	
	>5,000,000	20 (11.9%)	32 (19.0%)	50 (29.8%)	49 (29.2%)	17 (10.1%)		32 (19.0%)	87 (51.8%)	0	37 (22.0%)	12 (7.1%)	0		86 (51.2%)	33 (19.6%)	25 (14.9%)	4 (2.4%)	20 (11.9%)	
Education	Senior high or below	0	119 (100.0%)	0	0	0	p<.001	0	0	57 (47.9%)	0	39 (32.8%)	23 (19.3%)	p<.001	119 (100.0%)	0	0	0	0	p<.001
	Bachelor's degree	0	100 (19.0%)	248 (47.1%)	83 (15.8%)	95 (18.1%)		28 (5.3%)	381 (72.4)%	23 (4.4%)	94 (17.9%)	0	0		204 (38.8%)	171 (32.5%)	151 (28.7%)	0	0	
	Master's degree	46 (32.9%)	0	94 (67.1%)	0	0		140 (100.0%)	0	0	0	0	0		0	0	46 (32.9%)	49 (35%)	45 (32.1%)	
	PHD/MD	18 (100.0%)	0	0	0	0		18 (100.0%)	0	0	0	0	0		0	0	0	0	18 (100.0%)	

(Table 5) contd.....

-		Caffeine Consumption					-	Smoking Habits						Physical Activity						
-		Don't Know	Drinking Less	No Changes	Quit Drinking	Started Drinking	P-value	Don't Know	No Changes	Quit Smoking	Smoking Less	Smoking More	Started Smoking	P-value	None	Once	2-4 Days	More than 5	Don't Remember	P-value
Field of Study	Health Bio Related	0	219 (38.4%)	174 (30.5%)	83 (14.5%)	95 (16.6%)	p<.001	0	335 (58.7%)	80 (14.0%)	94 (16.5%)	39 (6.8%)	23 (4.0%)	p<.001	323 (56.6%)	171 (29.9%)	77 (13.5%)	0	0	p<.001
	Non health related	22 (11.6%)	0	168 (88.4%)	0	0		144 (75.8%)	46 (24.2%)	0	0	0	0		0	0	120 (63.2%)	49 (25.2%)	21 (11.1%)	
	Other	42 (100.0%)	0	0	0	0		42 (100.0%)	0	0	0	0	0		0	0	0	0	0	
Employment	Other	0	0	2 (18.2%)	7 (63.4%)	2 (18.2%)	p<.001	0	11 (100.0%)	0	0	0	0	p<.001	7 (63.6%)	4 (36.4%)	0	0	0	p<.001
	Private business	13 (16.5%)	20 (25.3%)	34 (43.0%)	0	12 (15.2%)		23 (29.1%)	36 (45.6%)	0	20 (25.3%)	0	0		25 (31.6%)	15 (19.0%)	24 (30.4%)	2 (2.5%)	13 (16.5%)	
	Private sector employee	19 (18.6%)	0	39 (38.2%)	41 (40.2%)	3 (2.9%)		30 (29.4%)	56 (54.9%)	0	16 (15.7%)	0	0		41 (40.2%)	14 (13.7%)	24 (23.5%)	4 (3.9%)	19 (18.6%)	
	Public sector employee	1 (2.0%)	20 (48.0%)	8 (19.0%)	1 (2.0%)	12 (29.0%)		2 (5.0%)	19 (45.0%)	0	21 (50.0%)	0	0		26 (62.0%)	14 (33.0%)	1 (2.0%)	0	1 (2.0%)	
	Student	21 (4.0%)	179 (38.0%)	217 (45.0%)	26 (5.0%)	34 (7.0%)		105 (22.0%)	193 (40.0%)	80 (17.0%)	37 (8.0%)	39 (8.0%)	23 (5.0%)		205 (43.0%)	92 (19.0%)	123 (26.0%)	36 (8.0%)	21 (4.0%)	
	Unemployed	9 (10.0%)	0	40 (45.0%)	8 (9.0%)	32 (36.0%)		24 (27.0%)	65 (73.0%)	0	0	0	0		19 (21.0%)	31 (35.0%)	24 (27.0%)	7 (8.0%)	8 (9.0%)	
Region	Beirut	9 (6.0%)	25 (17.0%)	96 (66.0%)	9 (6.0%)	6 (4.0%)	p<.001	42 (29.00%)	78 (54.0%)	5 (3.0%)	0	13 (9.0%)	7 (5.0%)	p<.001	34 (23.0%)	36 (25.0%)	48 (33.0%)	18 (12.0%)	9 (6.0%)	p<.001
	Bekaa	8 (5.0%)	37 (22.0%)	91 (54.0%)	14 (8.0%)	18 (11.0%)		43 (26.0%)	88 (52.0%)	28 (17.0%)	0	0	9 (5.0%)		51 (30.0%)	37 (22.0%)	57 (34.0%)	15 (9.0%)	8 (5.0%)	
	Mount Lebanon	11 (9.0%)	39 (31.0%)	64 (50.0%)	3 (2.0%)	10 (8.0%)		41 (32.0%)	47 (37.0%)	23 (18.0%)	0	9 (7.0%)	7 (6.0%)		42 (33.0%)	25 (20.0%)	40 (31.0%)	10 (8.0%)	10 (8.0%)	
	North	9 (20.0%)	10 (22.0%)	18 (40.0%)	4 (9.0%)	4 (9.0%)		18 (40.0%)	17 (38.0%)	6 (13.0%)	0	4 (9.0%)	0		14 (31.0%)	7 (16.0%)	13 (29.0%)	2 (4.0%)	9 (20.0%)	
	South	27 (8.5%)	108 (34.0%)	73 (23.0%)	53 (16.7%)	57 (17.9%)		42 (13.2%)	151 (47.5%)	18 (5.7%)	94 (29.6%)	13 (4.1%)	0		182 (57.2%)	66 (20.8%)	39 (12.3%)	4 (1.3%)	27 (8.5%)	

Table 6. The impact of the economic crisis on the anxiety level of the Lebanese population.

-		Anxiety			-
		0-4 No to Minimal Anxiety	5-6 Moderate Anxiety	7-9 Mild to Severe Anxiety	P-value
Age	18-25	95 (16.3%)	150 (25.7%)	338 (58.0%)	p<.001
	26-35	0	0	127 (100.0%)	
	>36	0	0	92 (100.0%)	
Gender	Female	76 (11.9%)	115 (18.0%)	449 (70.2%)	0.565
	Male	19 (11.7%)	35 (21.6%)	108 (66.7%)	
Marital status	Married	95 (53.1%)	84 (46.9%)	0	p<.001
	Not married	0	66 (10.6%)	557 (89.4%)	
Education	Senior high or below	95 (79.8%)	24 (20.2%)	0	p<.001
	Bachelor’s degree	0	112 (21.3%)	414 (78.7%)	
	Master's degree	0	11 (7.9%)	128 (92.1%)	
	PHD/MD	0	3 (16.7%)	15 (83.3%)	
Employment	Other	0	0	11 (100.0%)	p<.001
	Private business	0	0	79 (100.0%)	
	Private sector	0	0	101 (100.0%)	
	Public sector	0	0	42 (100.0%)	
	Student	95 (19.9%)	150 (31.4%)	232 (48.6%)	
	Unemployed	0	0	89 (100.0%)	
Family income	<1,500,000	271 (18.2%)	66 (44.6%)	55 (37.2%)	p<.001
	1,500,000-, 3,000,000	68 (22.9%)	7 (2.4%)	222 (74.7%)	
	3,000,000 – 5,000,000	0	65 (34.2%)	125 (65.8%)	
	>5,000,000	0	12 (7.2%)	155 (92.8%)	
Region	Beirut	25 (17.2%)	66 (45.5%)	54 (37.2%)	p<.001
	Bekaa	37 (22.0%)	0	131 (78.0%)	
	Mount Lebanon	33 (26.0%)	6 (4.7%)	88 (69.3%)	
	North	0	10 (22.2%)	35 (77.8%)	
	South	0	68 (21.5%)	249 (78.5%)	

Table 7. The correlation between anxiety and smoking.

-		Anxiety			-
		0-4 No to Minimal Anxiety	5-6 Moderate Anxiety	7-9 Mild to Severe Anxiety	P-value
Smoking habits	Don't know	0	18 (9.7%)	168 (90.3%)	p<0.001
	No changes	0	48 (12.6%)	333 (87.4%)	
	Quit smoking	49 (61.3%)	31 (38.8%)	0	
	Smoking less	0	37 (39.4%)	57 (60.6%)	
	Smoking more	22 (56.4%)	17 (43.6%)	0	
	Started smoking	23 (100.0%)	0	0	

The study found that 81% of the Lebanese young population earning the least income have decreased their fast food consumption. The finding was comparable to that of Icelandic research [23]; however, it contradicted findings from the United Kingdom. This could be due to the cost of fast food and the shift towards home-cooked meals. The study also found that participants had not changed their consumption of homemade food, indicating that the reduction in fast food consumption is a possible explanation. This conclusion is consistent with UK evidence [24]. Moreover, it was found that the consumption of unhealthy snacks like chocolate, chips, and crackers has decreased, similar to South Africa's data [25], despite inconsistent data from the USA [26] and Italy [27]. Besides, soft drink purchases decreased, which corresponded with findings from South Africa [25] and Iceland [23]. These aforementioned items have likely dropped since they were deemed non-essential during the economic downturn. Lowering the consumption of these items might be beneficial to one's health.

On top of that, our study suggests that an economic downturn may affect meat consumption positively since excessive meat consumption can lead to obesity, circulatory system diseases, and certain types of cancer [28]. Meat consumption declined dramatically during the recession, particularly for those with the lowest incomes and those living in households with more than five individuals. This drop might be attributed to low-income households considering meat as a luxury item due to its high price. While the data from our study correlate with other studies conducted in Bulgaria [29], Indonesia [16], and Spain [30], it is not consistent with studies conducted in the UK [24] and Portugal [31]. Evidence from a Polish study revealed that although total meat consumption was low, cheaper meat varieties like chicken were increasing [32]. Although the findings of the study indicated that the consumption of chicken had decreased by 25–50%, it remained considerably lower than the consumption of meat, particularly in large households with more than five individuals. Chicken's affordability may be attributed to its local origin. Consumption of seafood has decreased by 25% since before the financial crisis, especially in large households with more than five members and those with the lowest income. Increased responsibility and the perception of seafood as a non-essential product are the reasons for this reduction. The results are in opposition to US and Polish research [33, 34]. Animal-based proteins, including chicken, meat, and seafood, were in decline as a consequence of the economic crisis related to the shortage of electricity. This may be explained by the lack of freezers, as demonstrated by a related study conducted in Greece [35].

In terms of legumes, more than half of the young population, especially those without employment, raised their consumption of legumes to more than 75%. Legumes provide an inexpensive alternative protein source during financial crises, which might explain why 63% of Beirut residents reported that the crisis did not alter the consumption of legumes. Comparable findings were found in Spain [36] and Portugal [31]. Along with that, most participants did not alter their rice and pasta consumption habits. Spanish research found a limited impact of the economic crisis on rice and pasta consumption [37]. This may be due to an increased understanding of household necessities' costs and the fact that carbohydrate-based foods are less expensive than protein-based items like meat and chicken. Nearly half of the middle-income young population, specifically 45%, did not change their consumption of rice and pasta. Furthermore, this could be attributed to the longer-lasting fullness provided by carbohydrate-based foods. The findings on rice intake align with Indonesian studies [16] but are different from those of a South African study [25]. Denmark's study, which found no variation in the use of carbohydrate-based products, is comparable to our results [38].

Commercially manufactured bread consumption was anticipated to drop during the economic crisis due to concerns in the agriculture sector, resulting in higher pricing [12, 29]. However, Lebanese households with five or more members continued to consume the same amount of bread, possibly due to having stored flour for fresh bread making or as a necessity for their daily diet. The findings align with data from Portugal [31] but contradict a Bulgarian study [29]. Furthermore, the Lebanese young

population continued to consume the same dairy products in nearly half (45%) of the lowest-income households. Additionally, 36% of those with the least income did not change their consumption due to purchasing unpasteurized milk and producing homemade dairy items. This contradicts a study in Greece [35] and Russia [39], which found that participants with the least income during an economic recession decreased their milk consumption. The current study demonstrated similar egg consumption before the economic crisis, particularly among those with lower incomes and small households with only one or two individuals. This could be due to the ownership of chickens and the lack of responsibility in small-sized households, which may have fewer eggs for consumption.

Apparently, as a result of the high expense of home fruit cultivation, the research conducted found that fruit consumption in Lebanon remained unchanged despite the economic crisis. This result is in agreement with other research performed in Portugal [31] and Spain [30, 36]. Despite the assumption that vegetable intake would remain constant in rural regions, vegetable consumption in Beirut remained consistent, particularly among those with the lowest incomes. This is because vegetables are regarded as a necessary, low-cost item in every home for a balanced meal.

Another significant impact is changes in grocery purchasing and nutritional quality, affecting caloric intake and influencing human health and nutrition. Individuals with the lowest incomes (below 1,500,000 L.L.), those with households of more than five, and those without USD income have decreased their consumption of nuts by 25% compared to before the crisis. This is likely due to increased prices for nuts, making them unaffordable for the young Lebanese population. The purchase of vegetable oil by married couples remained stable. Employees in the private sector and those with their own enterprises observed a minor decline in vegetable oil purchases, ranging from 50 to 75%, probably due to the importance of vegetable oil as a domestic cooking component. The purchasing of olive oil has seen a significant decline, with public and private sector employees, as well as unemployed individuals, experiencing a 25% decrease in purchasing due to the high cost. The South's young population also reported a 25% decrease in purchasing due to their own olive tree fields and the ability to produce their own oil. With respect to butter purchasing, the study found that nearly half of married couples did not change their butter purchases, possibly due to the availability of cheaper alternatives like margarine. However, those with the least income reported a decline in butter purchases, with 25–50% of them declining, possibly because they do not view butter as a cheaper fat source alternative. Nevertheless, no studies were found that aligned with these results.

Our findings suggest that married couples continued to purchase teabags and sugar at the same rate. A study carried out in South Africa found that 100% of the population did not change their purchasing patterns for teabags and sugar [25]. Perhaps due to their preference for tea, it is known that it is less expensive than coffee. However, a decrease (25–50%) in purchasing sugar was seen among the unemployed and public sector participants (39.3% and 33.9%, respectively). This is because the Banque du Liban has stopped providing subsidies for sugar, leading to increased sugar prices and a decrease in sugar purchases among them. The same outcomes were observed regarding coffee purchasing among unemployed respondents and public sector employees, with a drop observed from 25–50%. This outcome may be explained by higher coffee costs and strikes during periods of economic crisis.

The economic crisis can affect diet quality [40], leading to inequalities in access to nutritious food due to scarce resources [41]. A high-energy diet produces more energy than a low-energy one, as healthy diets are considered more expensive. A study in Spain found that the economic crisis can lead to weight gain [42], contradicting the current findings. Middle-income individuals' snack and fast-food consumption have decreased by 25% compared to pre-economic times, with BMI levels considered normal at 18.5-24.9 kg/m^2. This decline is attributed to the lack of affordability of snacks and the increased cost of fast food, along with the deteriorating quality and safety of restaurant food. Homemade food consumption has remained relatively stable, with most individuals reporting no changes in their consumption. This contradicts a Spanish study that found snacking increases during a recession, leading to increased obesity levels [43].

Furthermore, a period of downturn shifts lifestyle habits, including smoking, caffeine consumption, and physical activity. Economic crises can both positively and negatively impact lifestyles, according to studies performed in Iceland [23] and the USA [44]. Smoking behaviour has been a topic of conflicting outcomes. Our study found that a minority of respondents, particularly those aged 18–25, shifted towards smoking, similar to Spain [47]. Besides, public sector workers also started to smoke less due to increased cigarette prices, which is comparable to a study conducted in Greece [45]. However, those with less education and income started smoking more, similar to research carried out in the Netherlands [46] and Spain [30]. During the recession, these groups weremost exposed to stress. Caffeine consumption remained constant in over half of the young population, with most quitting occurring in individuals over 36 years and middle-aged individuals (26–35 years). This may be due to anxiety during stressful times due to managing additional obligations to maintain basic needs. In South Lebanon, only a small percentage of the young population decreased their caffeine consumption, possibly due to their preference for it during free time. Regarding physical activity, it was anticipated that residents would exercise more, especially walking and cycling, due to the fuel crisis that hit Lebanon. However, this was not the case for all socio-demographic groups. The crisis, which served as a persistent stressor, may have played a separate, supplementary function in encouraging physical activity among the young population. Data suggest that

27.4% of individuals aged 18–25 participated in physical activity 2-4 days per week due to being more active and walking instead of using cars due to the fuel crisis. Additionally, 62% of the young population with a private business participated in physical activity 2-4 days per week, as they could earn US dollars and register at gyms. These findings align with data from Spain [30]. Additionally, participants in the public sector with the least income or who were unemployed did not engage in physical activity, possibly due to a loss of interest in their surroundings due to the new circumstances they had to adapt to. This contrasts with the results in Greece, where low-income individuals participated in moderate physical activity due to increased fuel prices [46].

Economic crises can lead to increased stress and anxiety among individuals, particularly in Lebanese society. Persistent stress can develop into chronic stress [47, 48], and a majority of socio-demographic categories experience high levels of anxiety due to job uncertainty [49]. The study found that all participants aged 26–35 with a Master's degree admitted to having serious anxiety disorders. This age group is more likely to experience high levels of anxiety due to job loss or lack of available jobs after years of hard work and study. Comparable to studies conducted by Gili *et al*. (2012) [50] and Astell-Burt & Feng (2013) [51], our study showed that married individuals in Lebanon experienced little to no anxiety; the most likely explanation is due to their husbands working abroad and providing monthly income in US dollars. During economic downturns, individuals with low salaries are more likely to experience severe anxiety as they adjust to their new circumstances. As well, males were more likely to have extreme levels of anxiety, most likely due to their financial support for their families.

In a study that investigated the correlation between smoking and anxiety levels, it was shown that smoking affects stress levels [52]. Higher anxiety levels were seen in respondents who smoked less. As well, 56.4% of participants who started smoking more and 100% of those who started smoking did not experience anxiety. Thus, one plausible explanation for this result might indicate that the respondent began smoking as a way to vent the stress caused by the crisis. Further, the COVID-19 pandemic has exacerbated public health crises, causing mental health issues like anxiety and stress, resulting in changes in behavioural practices. For example, alcohol consumption rose during the epidemic, indicating changes in health-related behaviours [53, 54]. Our study, conducted after the COVID-19 pandemic, underscores the significant impact of the pandemic on mental health, behavioural habits, and health-related practice, emphasizing the importance of focused interventions to address these issues.

It’s worth mentioning that this study's exclusive emphasis on the young Lebanese population, aged 18 to 25, means that it may not be entirely representative of the country's population overall. This is an important limitation of the research.

CONCLUSION

The economic crisis in Lebanon has had a considerable influence on the young population's eating habits and lifestyle, resulting in a shift towards less nutritious, more affordable food alternatives and a priority of fundamental requirements over discretionary expenditure. The study demonstrates that the economic crisis cannot be entirely viewed positively or negatively in terms of dietary behaviour. Additionally, the consequences have been exacerbated by the stress and anxiety associated with the downturn. Policymakers and stakeholders must address these concerns and work towards long-term solutions to improve the well-being of the young Lebanese population.

AUTHORS’ CONTRIBUTION

All authors designed the study, analyzed and interpreted the data, and drafted the manuscript with equal contributions at all levels. The authors have accepted responsibility for the entire content of this manuscript and have approved its submission.

LIST OF ABBREVIATIONS

WHO	=	World Health Organization
FAO	=	The Food and Agriculture Organization
SPSS	=	Statistical Package for Social Services
USD	=	United States Dollar
L.L.	=	Lebanese Lira
US	=	United State

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study was reviewed and approved by the Lebanese International University Institutional Review Board (IRB) ethical committee, Lebanon (Reference LIUIRB-220201-IS-113).

HUMAN AND ANIMAL RIGHTS

The study involved only human subjects, with no involvement of animals. All participants provided informed consent through a questionnaire, which included a consent form that ensured confidentiality, anonymity, and voluntary participation.

CONSENT FOR PUBLICATION

Informed consent was obtained from participants to participate in the study.

STANDARDS OF REPORTING

STROBE guidelines were followed.

AVAILABILITY OF DATA AND MATERIALS

The data and supportive information will be available by the corresponding author [I.S] upon request.

FUNDING

This research was funded by the Lebanese International University (LIU), Lebanon.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

ACKNOWLEDGEMENTS

The authors express their gratitude to Lebanese International University for their cooperation and to the voluntary participants who participated in the investigation.

REFERENCES

[1] Health impact assessment. 2020. Available from: https://www.who.int/health-topics/health-impact-assessment

[2] Foscolou A, Tyrovolas S, Soulis G, *et al*. The impact of the financial crisis on lifestyle health determinants among older adults living in the Mediterranean Region: The Multinational MEDIS Study (2005-2015). J Prev Med Public Health 2017; 50(1): 1-9. http://dx.doi.org/10.3961/jpmph.16.101 PMID: 28173690

[3] Ferrell OC, Hartline MD. Marketing Strategy. (4th.), Thomson/South-Western 2008.

[4] Zavras D, Tsiantou V, Pavi E, Mylona K, Kyriopoulos J. Impact of economic crisis and other demographic and socio-economic factors on self-rated health in Greece. Eur J Public Health 2013; 23(2): 206-10. http://dx.doi.org/10.1093/eurpub/cks143 PMID: 23093716

[5] Haluk Köksal M, Özgül E. The relationship between marketing strategies and performance in an economic crisis. Mark Intell Plann 2007; 25(4): 326-42. http://dx.doi.org/10.1108/02634500710754574

[6] Ang SH, Leong SM, Kotler P. The Asian Apocalypse: Crisis Marketing for Consumers and Businesses. Long Range Plann 2000; 33(1): 97-119. http://dx.doi.org/10.1016/S0024-6301(99)00100-4

[7] Almli VL, Verbeke W, Vanhonacker F, Næs T, Hersleth M. General image and attribute perceptions of traditional food in six European countries. Food Qual Prefer 2011; 22(1): 129-38. http://dx.doi.org/10.1016/j.foodqual.2010.08.008

[8] Ness MR, Ness M, Brennan M, Oughton E, Ritson C, Ruto E. Modelling consumer behavioural intentions towards food with implications for marketing quality low-input and organic food. Food Qual Prefer 2010; 21(1): 100-11. http://dx.doi.org/10.1016/j.foodqual.2009.08.012

[9] Brown E, Dury S, Holdsworth M. Motivations of consumers that use local, organic fruit and vegetable box schemes in Central England and Southern France. Appetite 2009; 53(2): 183-8. http://dx.doi.org/10.1016/j.appet.2009.06.006 PMID: 19540288

[10] Jasiulewisz A. Overcoming the Crisis- Economic and Financial Developments in Asia and Europe. 2012. Available from: http://www.hippocampus.si/ISBN/978-961-6832-32-8/contents.pdf

[11] Harutyunyan L. The impact of the Syrian crisis on Lebanon: geopolitical aspect (The beginning of the conflict). 2023; 12(2): 5-14.

[12] Hoteit M, Al-Atat Y, Joumaa H, *et al*. Exploring the Impact of Crises on Food Security in Lebanon: Results from a National Cross-Sectional Study. Sustainability (Basel) 2021; 13(16): 8753. http://dx.doi.org/10.3390/su13168753

[13] FAO GIEWS Country Brief on Lebanon. 2023. Available from: https://www.fao.org/giews/countrybrief/country.jsp?code=LBN&lang=ar

[14] Kolak M, Bradley M, Block DR, *et al*. Urban foodscape trends: Disparities in healthy food access in Chicago, 2007–2014. Health Place 2018; 52: 231-9. http://dx.doi.org/10.1016/j.healthplace.2018.06.003 PMID: 30015180

[15] Brown M. The Transmission of Banking Crises to Households: Lessons from the 2008-2011 Crises in the ECA Region. World Bank 2013. Available from: http://books.google.ie/books?id=ZA970AEACAAJ&dq=The+transmission+of+banking+crisis+to+households:+lessons+from+the+2008-2011+crises+in+the+Eca+region&hl=&cd=1&source=gbs_api

[16] Hartini TNS, Winkvist A, Lindholm L, Stenlund H, Surjono A, Hakimi M. Energy intake during economic crisis depends on initial wealth and access to rice fields: the case of pregnant Indonesian women. Health Policy 2002; 61(1): 57-71. http://dx.doi.org/10.1016/S0168-8510(01)00210-X PMID: 12173497

[17] Ngwenya E. Changes in Indonesian food consumption patterns and their nutritional implications. School of Economics & Finance University of Tasmania 2014.https://www.academia.edu/3560115/Changes_in_Indonesian_Food_Consumption_Patterns_and_their_Nutritional_Implications

[18] Arroyo P, Loria A, Méndez O. Changes in the household calorie supply during the 1994 economic crisis in Mexico and its implications on the obesity epidemic. Nutr Rev 2004; 62(7 Pt 2): S163-8. http://dx.doi.org/10.1111/j.1753-4887.2004.tb00088.x PMID: 15387484

[19] Karam J, Serhan C, Swaidan E, Serhan M. Comparative study regarding the adherence to the mediterranean diet among older adults living in Lebanon and Syria. Front Nutr 2022; 9: 893963. http://dx.doi.org/10.3389/fnut.2022.893963 PMID: 35677548

[20] Avcin BA, Užmah A, Sarotar BN, Plesnicar BK. The present global financial and economic crisis poses an additional risk factor for mental health problems on the employees. Psychiatr Danub 2011; 23(Suppl 1): S142-8.

[21] Bruggink JW, de Goeij MCM, Otten F, Kunst AE. Changes between pre-crisis and crisis period in socioeconomic inequalities in health and stimulant use in Netherlands. Eur J Public Health 2016; 26(5): 772-7. http://dx.doi.org/10.1093/eurpub/ckw016 PMID: 26989124

[22] Lebanon's economic crisis: A tragedy in the making. 2021. Available from: https://www.mei.edu/publications/lebanons-economic-crisis-tragedy-making

[23] Ásgeirsdóttir TL, Corman H, Noonan K, Ólafsdóttir Þ, Reichman NE. Was the economic crisis of 2008 good for Icelanders? Impact on health behaviors. Econ Hum Biol 2014; 13: 1-19. http://dx.doi.org/10.1016/j.ehb.2013.03.005 PMID: 23659821

[24] Başev SE. Effect of economic crisis on food consumption behaviour of British Consumers. 2014. Available from: https://www.semanticscholar.org/paper/Effect-of-economic-crisis-on-food-consumption-of-Ba%C5%9Fev/c13cc063853dd0606510ab56fe5da4b1ab9af6b1

[25] Mkhawani K, Motadi SA, Mabapa NS, Mbhenyane XG, Blaauw R. Effects of rising food prices on household food security on femaleheaded households in Runnymede Village, Mopani District, South Africa. South Afr J Clin Nutr 2016; 29(2): 69-74.

[26] Dave DM, Kelly IR. How does the business cycle affect eating habits? Soc Sci Med 2012; 74(2): 254-62. http://dx.doi.org/10.1016/j.socscimed.2011.10.005 PMID: 22137244

[27] Di Pietro G. Revisiting the impact of macroeconomic conditions on health behaviours. Econ Hum Biol 2018; 28: 173-81. http://dx.doi.org/10.1016/j.ehb.2017.11.001 PMID: 29153871

[28] Wagemakers JJMF, Prynne CJ, Stephen AM, Wadsworth MEJ. Consumption of red or processed meat does not predict risk factors for coronary heart disease; results from a cohort of British adults in 1989 and 1999. Eur J Clin Nutr 2009; 63(3): 303-11. http://dx.doi.org/10.1038/sj.ejcn.1602954 PMID: 18000518

[29] Dimova R, Gang IN, Gbakou MBP, Hoffman D. The Impact of Food and Economic Crises on Diet and Nutrition. J Dev Stud 2014; 50(12): 1687-99. http://dx.doi.org/10.1080/00220388.2014.957274

[30] Bartoll X, Toffolutti V, Malmusi D, Palència L, Borrell C, Suhrcke M. Health and health behaviours before and during the Great Recession, overall and by socioeconomic status, using data from four repeated cross-sectional health surveys in Spain (2001–2012). BMC Public Health 2015; 15(1): 865. http://dx.doi.org/10.1186/s12889-015-2204-5 PMID: 26346197

[31] Alves R, Perelman J. Dietary changes during the Great Recession in Portugal: comparing the 2005/2006 and the 2014 health surveys. Public Health Nutr 2019; 22(11): 1971-8. http://dx.doi.org/10.1017/S136898001800410X PMID: 30898181

[32] Kosicka-Gębska M, Gębski J. Impact of economic crisis on consumer behaviour towards meat. Acta Scientiarum Polonorum Oeconomia 2013; 12(3): 51-9.

[33] Yang R, Raper KC, Pruitt JR. The influence of recession and income strata on consumer demand for protein sources. Appl Econ 2019; 51(42): 4615-28. http://dx.doi.org/10.1080/00036846.2019.1593940

[34] Florkowski WJ. Evidence of household consumption changes associated with the global economic slowdown. Economics and Business Review 2012; 12(3): 42-80. http://dx.doi.org/10.18559/ebr.2012.3.850

[35] Duquenne MN, Vlontzos G. The impact of the Greek crisis on the consumers' behaviour: some initial evidences? Br Food J 2014; 116(6): 890-903. http://dx.doi.org/10.1108/BFJ-11-2012-0279

[36] García-Mayor J, Moreno-Llamas A, De la Cruz-Sánchez E. Inequalities in the long-term impact of the economic recession on preventive healthcare use and health-related lifestyle in Spain (2006–2017). Health Soc Care Community 2021; 29(1): 42-55. http://dx.doi.org/10.1111/hsc.13067 PMID: 32557930

[37] Díaz-Méndez C, García-Espejo I. Social Inequalities in Following Official Guidelines on Healthy Diet During the Period of Economic Crisis in Spain. Int J Health Serv 2019; 49(3): 582-605. http://dx.doi.org/10.1177/0020731419847589 PMID: 31142185

[38] Smed S, Tetens I, Bøker Lund T, Holm L, Ljungdalh Nielsen A. The consequences of unemployment on diet composition and purchase behaviour: a longitudinal study from Denmark. Public Health Nutr 2018; 21(3): 580-92. http://dx.doi.org/10.1017/S136898001700266X PMID: 29115198

[39] Kotelnikova Z, Radaev V. Recomposition and levelling of consumption expenditures across four economic shocks in Russia, 1994–2014. Int J Consum Stud 2017; 41(4): 439-48. http://dx.doi.org/10.1111/ijcs.12372

[40] Norte A, Sospedra I, Ortíz-Moncada R. Influence of economic crisis on dietary quality and obesity rates. Int J Food Sci Nutr 2019; 70(2): 232-9. http://dx.doi.org/10.1080/09637486.2018.1492523 PMID: 30058397

[41] Stuckler D, Basu S, Suhrcke M, Coutts A, McKee M. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. Lancet 2009; 374(9686): 315-23. http://dx.doi.org/10.1016/S0140-6736(09)61124-7 PMID: 19589588

[42] Rao M, Afshin A, Singh G, Mozaffarian D. Abstract 059: Do Healthier Foods or Diet Patterns Cost More Than Less Healthy Options? A Systematic Review and Meta-Analysis. Circulation 2013; 127 (Suppl. 12). http://dx.doi.org/10.1161/circ.127.suppl_12.A059

[43] Aguilar-Palacio I, Carrera-Lasfuentes P, Rabanaque MJ. Youth unemployment and economic recession in Spain: influence on health and lifestyles in young people (16–24 years old). Int J Public Health 2015; 60(4): 427-35. http://dx.doi.org/10.1007/s00038-015-0668-9 PMID: 25724155

[44] Ruhm CJ. Healthy living in hard times. J Health Econ 2005; 24(2): 341-63. http://dx.doi.org/10.1016/j.jhealeco.2004.09.007 PMID: 15721049

[45] Filippidis FT, Schoretsaniti S, Dimitrakaki C, *et al*. Trends in cardiovascular risk factors in Greece before and during the financial crisis: the impact of social disparities. Eur J Public Health 2014; 24(6): 974-9. http://dx.doi.org/10.1093/eurpub/cku028 PMID: 24614651

[46] Benson FE, Kuipers MAG, Nierkens V, Bruggink JW, Stronks K, Kunst AE. Socioeconomic inequalities in smoking in The Netherlands before and during the Global Financial Crisis: a repeated cross-sectional study. BMC Public Health 2015; 15(1): 469. http://dx.doi.org/10.1186/s12889-015-1782-6 PMID: 25943385

[47] Stress: statistics. Mental Health Foundation. 2018. Available from: https://www.mentalhealth.org.uk/explore-mental-health/statistics/stress-statistics

[48] Anxiety and panic attacks. Mind. 2021. Available from: https://www.mind.org.uk/information-support/types-of-mental-health-problems/anxiety-and-panic-attacks/about-anxiety/

[49] Ng KH, Agius M, Zaman R. The global economic crisis: effects on mental health and what can be done. J R Soc Med 2013; 106(6): 211-4. http://dx.doi.org/10.1177/0141076813481770 PMID: 23761580

[50] Gili M, Roca M, Stuckler D, Basu S, McKee M. 2255 – The mental health risks economic crisis in spain: evidence from primary care centres, 2006 and 2010. Eur Psychiatry 2013; 28: 1. http://dx.doi.org/10.1016/S0924-9338(13)77118-9

[51] Astell-Burt T, Feng X. Health and the 2008 economic recession: evidence from the United Kingdom. PLoS One 2013; 8(2): e56674. http://dx.doi.org/10.1371/journal.pone.0056674 PMID: 23437208

[52] Awad A, Obayan A, Salhab S, Roufayel R, Kadry S. Effect of Smoking on Appetite, Concentration and Stress Level. Glob J Health Sci 2019; 12(1): 139. http://dx.doi.org/10.5539/gjhs.v12n1p139

[53] Peshkovskaya A. Letter to the editor: Other Consequences. COVID-19 and underestimated public health crisis. J Psychiatr Res 2021; 144: 320-2. http://dx.doi.org/10.1016/j.jpsychires.2021.10.038

[54] Peshkovskaya A, Galkin S. Health behavior in Russia during the COVID-19 pandemic. Front Public Health 2023; 11: 1276291. Epub ahead of print http://dx.doi.org/10.3389/fpubh.2023.1276291 PMID: 37849726