A Hadith Study of the Effects of “Forty Days of Not Eating Meat” on Mental Health

Rasul Mohamad-Jafari (The Corresponding Author)
Associate professor , Department of Qur’an and Hadith Sciences, Shahed University, Iran
r.jafari@shahed.ac.ir
Ali Hasannia
Assistant professor Department of Qur’an and Hadith Sciences, Shahed University, Iran
a.hasannia@shahed.ac.ir
Tahere Zarei-taher
Master of Microbial Biotechnology, Shahed University, Iran
tzareitaher@yahoo.com
Seyede-monire Hoseini
Master of Quran and Hadith Sciences, Shahed University, Iran
s.meshkat.h@gmail.com

دراسة حديثة لأثر (أربعين يوماً عن عدم أكل اللحوم) على الصحة النفسية

رسول محمد جعفري (الكاتب المسؤول)
أستاذ مشارك ، قسم علوم القرآن والحديث ، جامعة شاهد ، طهران ، إيران
علي حسن نيا
أستاذ مساعد ، قسم علوم القرآن والحديث ، جامعة شاهد ، طهران ، إيران
طاهره زارعي طاه
ماجستير في التكنولوجيا الحيوية الميكروبية ، جامعة شاهد ، طهران ، إيران
سيدة منيره حسيني
ماجستير في علوم القرآن والحديث ، جامعة شاهد ، طهران ، ايران

الملخص:-

هناك بعض النصائح الدينية عن التغذية السليمة لما لها من دور مهم في الصحة الجسدية والعقلية منها عدة روايات تتحدث عن تأثير عدم تناول اللحوم لمدة أربعين يوماً على سوء السلوك. تدرس هذه الورقة الوصفية التحليلية علميًا الروايات التي تتناول تأثير أربعين يومًا من عدم تناول اللحوم على الصحة النفسية. تظهر النتائج أن: ١- اللحوم تحتوي على البروتينات والدهون والأحماض الدهنية والفيتامينات والمعادن. تلعب هذه المعادن دورًا أساسيًا في النظام الغذائي وهي حيوية لوظيفة العديد من الأعضاء ، وخاصة الجهاز العصبي. سيؤدي نقصها إلى الاكتئاب والقلق والضعف والعدوانية والخمول ومرض الزهايمر. ٢-سوء السلوك لا يعني بالضرورة العدوان والغضب ، بل أن اللحم يحتوي على مواد وعناصر إذا تركت قد تعطل عمل الجهاز العصبي والعقلي. ٣ - تشير الأدلة القرآنية والأحاديثية بالتحديد إلى الرقم "أربعين" بسبب تأثير هذا العدد من الأيام. تناقش النتائج التجريبية بشكل عام تأثير عدم تناول اللحوم على عمل الجهاز العصبي والعقلي ، لكن حقيقة أنه وفقًا للروايات ، فإن عدم تناول اللحوم لمدة أربعين يومًا يسبب مثل هذا الاضطراب يتطلب دراسة معملية أخرى.

الكلمات المفتاحية: روايات أربعين يوماً عن عدم أكل اللحوم، سوء سلوك، خلل في الجهاز العصبي، صحة نفسية.

Abstract:-

There are some religious advices on proper nutrition due to its important role in physical and mental health, including several narrations that speak of the effect of not eating meat for forty days on misbehavior. This descriptive-analytical paper scientifically studies the narrations deal with the effect of forty days of not eating meat on mental health. Findings show that: 1-Meat contains proteins, fats and fatty acids, vitamins and minerals. These minerals play an essential role in the diet and are vital for the function of many organs, especially the nervous system. Lack of them will lead to depression, anxiety, weakness, aggression, lethargy and Alzheimer's disease. 2-Misbehavior does not necessarily mean aggression and anger, but rather that the meat contains substances and elements that, if left out, may disrupt the functioning of the nervous and mental systems. 3-According to the Qur'anic and hadith evidences, they specifically refer to the number "forty"- due to the effect of this number of days. Experimental findings generally discuss the effect of not eating meat on the functioning of the nervous and mental systems, but the fact that according to the narrations, not eating meat for forty days causes such a disorder requires another laboratory study.

Key words: Narrations of forty days of not eating meat, misbehavior, nervous system dysfunction, mental health.

1. Introduction

There are many recommendations for proper nutrition in religious teachings. One of the principles of these recommendations is a narration (hadith) about human health that was narrated from Imam Sadegh (AS): "Any food that God declares unlawful or lawful, is due to its effect on the stability and health of the human body" (Kulaini 1986, 6:242). Since body is connected with mind, this effect will undoubtedly be done in the human psyche as well. So the findings of some studies show that the alternative nutrition healthy is associated with a reduction in depression and anxiety (Hajishafiee et al. 2017, 46-58).

Due to the great effect of nutrition on physical and mental health, in some verses and hadiths, some foods are recommended and others are forbidden. One of the recommended foods is meat. It is reported from Imam Ali (AS): 'Whenever a Muslim feels weak in his body, he should eat meat with milk; Because God has placed forces and powers in them (Ibn Shu'ba al-Harrani 1983, 58). Imam Reza (AS) narrated from the Prophet (PBUH) that meat is the best food in this World and the Hereafter (Majlesi 1982, 63:58). In some narrations, the emphasis is on not eating meat for forty days and its effect on bad mood. In other narrations, misbehavior was identified as the cause of much sadness (Ibn Abi al-Hadid 1981, 20:326). Much sadness also causes mental health disorders, and this disorder may not only lead to physical illness, but also hinder proper and rational association with others. This paper scientifically studies the narrations deal with the effect of forty days of not eating meat on mental health?

2. Findings

2-1. Hadiths

In authentic hadith collections, there are at least four narrations about not eating meat for forty days and its effect on bad mood:

عَلِيُّ بْنُ إِبْرَاهِيمَ عَنْ أَبِيهِ عَنِ ابْنِ أَبِي عُمَيْرٍ عَنْ هِشَامِ بْنِ سَالِمٍ عَنْ أَبِي عَبْدِ اللَّهِ (ع) قَالَ: «اللَّحْمُ يُنْبِتُ اللَّحْمَ وَ مَنْ تَرَكَ اللَّحْمَ أَرْبَعِينَ يَوْماً سَاءَ خُلُقُهُ وَ مَنْ سَاءَ خُلُقُهُ فَأَذِّنُوا فِي أُذُنِهِ»

A) Imam Sadegh (AS) said: "Meat makes meat; whoever does not eat meat for forty days, his mood will be bad, and whoever has a bad temper, say the call to prayer in his ear." (Kulaini 1986, 6:309)

عَنْهُ أَ بِ يهِ عَن ابْن الْمُغِيرَةِ عَنْ غِيَاثِ بْن إِبْرَاهِيمَ عَنْ أَ بِ ي عَبْدِ اللَّهِ(ع) قَالَ: «اللَّحْمُ مِنَ اللَّحْمِ مَنْ تَرَكَهُ أَرْبَعِينَ يَوْماً سَاءَ خُلُقُهُ كُلُوهُ فَإِنَّهُ يَزِيدُ فِي السَّمْعِ وَ الْبَصَرِ»

B) Imam Sadiq (AS) says: "Meat makes flesh; whoever does not eat meat for forty days, becomes ill. Eat meat that increases hearing and vision."(Barghi 1992, 2:464).

عَنْهُ عَنْ مُحَمَّدِ بْنِ عَلِيٍّ عَن ابْن بَقَّاحٍ عَن الْحَكَمِ بْن أَيْمَنَ أَعْيَنِي أُسَامَةَ عَنْ أَ بِ ي عَبْدِ اللَّهِ ع قَالَ قَالَ رَسُولُ اللَّهِ (ص) عَلَيْكُمْ بِ اللَّحْمِ فَإِنَّ اللَّحْمَ يُنْمِي اللَّحْمَ وَ مَنْ مَضَى لَهُ أَرْبَعُونَ صَبَاحاً لَمْ يَأْكُلْ لَحْماً سَاءَ خُلُقُهُ»

C) Imam Sadegh (AS) quoted from the Prophet (PBUH): "Eat meat; Because meat makes flesh. Whoever does not eat meat for forty days becomes ill. Give meat to the one who has bad mood."(Ibid, 465)

عِدَّةٌ أَصْحَابِ نَا عَنْ أَحْمَدَ بْنِ مُحَمَّدٍ عَنْ أَحْمَدَ بْنِ مُحَمَّدِ بْنِ أَ بِ ي نَصْرٍ عَ ن الْحُسَيْنِ بْنِ خَالِدٍ قَالَ: «قُلْتُ لِأَ بِ ي الْحَسَنِ الرِّضَا ع إِنَّ النَّاسَ يَقُولُونَ إِنَّ مَنْ لَمْ يَأْكُلِ اللَّحْمَ ثَلَاثَةَ أَيَّامٍ سَاءَ خُلُقُهُ فَقَالَ كَذَبُوا وَ لَكِنْ مَنْ لَمْ يَأْكُلِ اللَّحْمَ أَرْبَعِينَ يَوْماً تَغَيَّرَ خُلُقُهُ وَ بَدَنُهُ وَ ذَلِكَ لِانْتِقَالِ النُّطْفَةِ فِي مِقْدَارِ أَرْبَعِينَ يَوْماً»

D) Hussein ibn Khālid said to Imam Reza (AS) that people say 'whoever do not eat meat, his temper would be bad'. Imam (AS) replies: "They are lying. Whoever does not eat meat for forty days, his mood and body will turn bad, and that is due to the transfer of meat's effects to sperm within forty days."(Kulaini 1986, 6:309)

3-1-1. Evaluating the source, sanad and content of the hadiths

In hadith sciences, at the first step before using a narration, it's necessary to confirm its originality from the Infallible Imam (AS). This depends on the evaluation of the source, sanad and content of the narration.

The evaluation of the source means to assess the validity of the sources that have quoted the narrations. These narrations are quoted in two ancient hadith books, namely Kāfī written by Muhammad ibn Ya'qūb al-Kuleinī and al-Mahāsin by Ahmad ibn Muhammad ibn Khalid al-Barqī. Shiite Scholars have consensually claimed the authenticity of these books, and no bibliographer has doubted it.

The evaluation of sanad means to examine and evaluate the chains of transmitters of narrations, which are based on the two sciences of "Rijāl al-Hadith" and "Dirāyat al-Hadith"; The former speaks of the authenticity and credibility of the narrators and the latter discusses the connection or non-connection of the sanad to the Imam (AS). If the authenticity of the narrators and the connection of the chain of transmitters to the Imam (AS) are proved, the sanad will be correct (sahīh), and if not, the sanad will be doomed to weakness. Examining the sanads of the four narrations, we will prove that all of them are correct and valid, except for the third narration, one of whose narrators, i.e. Muhammad ibn Ali ibn Ibrahim reputed as Abu Samīnah, has been introduced as unreliable. (Najāshī 1986, 11:333). However, the validity of the sanads of the other three narrations compensates the weakness of the sanad of the third one. Therefore, all sanads will be reliable.

The validity of a sanad cannot judge the correctness of the content of a narration, just as the weakness of a sanad alone cannot be used to deny the inaccuracy of the content of a narration. So sanad evaluation and content analysis are complementary and can be judged accordingly. The Qur'an is the most important criterion for the content of narrations. According to many narrations, before using the content of any narration, it should be compared with the Qur'an. If it does not contradict the verses, it is acceptable (Kulaini 1986, 1:96). Allameh Tabātabā'ī writes in Al-Mīzān: "What is important for the researcher in the field of non-jurisprudential narrations is to seek the agreement of the narrations with the Qur'anic verses; If they agree, this is a criterion for their validity, in which case correct sanads will adorn them as well. If they do not agree, they have no value or credibility." (Tabatabai 1995, 9:212)

Many verses speak of poultry, cattle, and fish as food, including:

1- Poultry meat: In the verse of Surah Al-Baqarah: 57, while spoking His grace for the children of Israel in sending food, God referred to two foods, one of which is meat:

" وَ ظَلَّلْنا عَلَيْكُمُ الْغَمامَ وَ أَنْزَلْنا عَلَيْكُمُ الْمَنَّ وَ السَّلْوى كُلُوا مِنْ طَيِّباتِ ما رَزَقْناكُمْ."

"And We gave you the shade of clouds and sent down to you Manna and quails, saying:" Eat of the good things We have provided for you."

Various meanings have been mentioned for "mann": the most common idea is "Mangosteen" (secretions and leachates of leaves and stems of "Kharshotor" plant)(Javadi Amoli 2009, 4: 528). Commentators mostly refer "salwā" to a bird that is bigger than sparrow and smaller than pigeon (Ibid, 530). This bird used to come from surrounding lands in abundance to the land of Israelites and then they used its meat (Makarem Shirazi 1995, 1: 264). The protein content of fresh meat, such as "salwā", is superior to the protein content of legumes, because the former is very easy to digest and absorb, while the gastrointestinal tract will have a tedious activity to absorb the latter (Ibid, 280). In Surah Al-Wāqi'ah, God states that one of the foods of the people of Paradise is the meat of birds: "And the flesh of fowls, any that they may desire" (Al-Wāqi'ah: 21). Since among the types of meat, the meat of birds is superior, so the verse emphasizes it (Makarem Shirazi 1995, 23: 214).

2- The meat of cattle:

"يا أَيُّهَا الَّذِينَ آمَنُوا أَوْفُوا بِالْعُقُودِ أُحِلَّتْ لَكُمْ بَهِيمَةُ الْأَنْعامِ إِلاَّ ما يُتْلى عَلَيْكُمْ"

"O ye who believe! fulfill) all (obligations. Lawful unto you) for food (are all beasts of cattle" (Mā'idah: 1)

All animals that do not have speech are referred to as "bahīmah", because their sound is ambiguous. The word is usually used only for the cattle and does not include predators and birds. Since the "embryo" of animals also has a kind of ambiguity, it is also called "bahīmah". Therefore, the lawfulness of the "bahīmah animals" either means the lawfulness of all cattle – unless what is mentioned in the following verses - or it means the lawfulness of embryos that are in the wombs of lawful animals, i.e. those that have been created and their hair and skin have been completed (Makarem Shirazi 1995, 4: 247). This verse, therefore, is also one of those that introduce the meat of animals as food.

Prophet Ibrahim (AS) provided beef for his guests:

"وَ لَقَدْ جاءَتْ رُسُلُنا إِبْراهِيمَ بِالْبُشْرى قالُوا سَلاماً قالَ سَلامٌ فَما لَبِثَ أَنْ جاءَ بِعِجْلٍ حَنِيذٍ."

"There came Our Messengers to Abraham with glad tidings. They said," Peace!" He answered," Peace!" and hastened to entertain them with a roasted calf." (Hūd: 69)

In this verse, the word "'ijl" means a calf, and the word "hanīdh" is a calf whose meat is grilled with fried stone (Tabatabai 1995, 10:476).

3- Fish meat: In two verses, God mentions the fish meat:

a) "وَ هُوَ الَّذِي سَخَّرَ الْبَحْرَ لِتَأْكُلُوا مِنْهُ لَحْماً طَرِيًّا" "It is He Who has made the sea subject, that ye may eat thereof flesh that is fresh and tender" (Nahl: 14),

b) "وَ ما يَسْتَوِي الْبَحْرانِ هذا عَذْبٌ فُراتٌ سائِغٌ شَرابُهُ وَ هذا مِلْحٌ أُجاجٌ وَ مِنْ كُلٍّ تَأْكُلُونَ لَحْماً طَرِيًّا": "Nor are the two seas alike, - - the one palatable, sweet, and pleasant to drink, and the other, salt and bitter. Yet from each) kind of water (do ye eat flesh fresh and tender" (Fātir: 12). The Qur'an relies on "lahm tarī" (fresh meat) to refer meaningfully to the benefits of feeding by such meats against the harms of old and canned meats and the like (Makarem Shirazi 1995, 18:206).

Therefore, according to the Qur'an, using meat is approved and this recommendation is understood from all the verses, because firstly, one of the two foods revealed to the children of Israel was meat, and secondly, Prophet Ibrahim (AS) roasts calf to host his guests, and thirdly, one of the Paradise's food is meat. So the narrations do not contradict the Qur'an. However, the Qur'an do not say about the effect of abstaining from meat in the mood. It is due to the nature of the Qur'an, which refers only to the principles and generalities of Islamic teachings, and the sub-principles and details are mentioned in the narrations. Since the narrations do not contradict the generalities of the Qur'an and the authenticity of the source and sanad of the narrations are proved, in the following the effect of meat on mood is studied scientifically.

2-2. Scientific study of the effect of meat on mood

The reason for the effect of meat on mood can be obtained from the properties mentioned for meat in experimental research. The following detailed studies and researches on meat have shown that meat contains proteins, vitamins, etc., which have a direct role in the health of body, mind, soul and spirit of human beings. They are also effective in negative and positive fluctuations of human mood.

2-2-1. Protein in meat and its effect on mood

Protein of meat is higher than vegetable's, because meat protein has a large amount of essential amino acids that the body needs. There is also a lot of animal fat in their meat tissue, which is an important source of energy for the body. Meat is a rich source of a variety of B vitamins, some of which are lost by heat. Minerals in meat are one of the factors affecting the nutritional value of meat, which are also seen in the form of organic compounds and minerals such as iron, zinc, sodium, chlorine, magnesium, etc. Lean red meat is an excellent source of high biological value protein, vitamin B12, niacin, vitamin B6, iron, zinc and phosphorus, a source of long-chain omega-3 unsaturated fats, riboflavin, pantothenic acid, selenium, and possibly vitamin D. (Wyness 2016, 227-232; Williams 2007, 113-119).

Raw red muscle meat contains about 20-25 grams of protein per 100 grams. Cooked red meat contains 28-30 grams per 100 grams, because during cooking the amount of water decreases and the nutrients become more concentrated. Moreover, each amino acid in the body performs specific functions. Thus eating meat to meet the needs of the body's organs, including the nervous system and the effect on mood, is necessary (Bhutta 1999, 1646-1656).

Protein in meat provides many essential amino acids, such as lysine, threonine, methionine, phenylalanine, tryptophan, leucine, isoleucine and valine. Amino acids are not restrictive. The amino acid (glutamic acid/glutamine) is present in meat with the highest amount (16.5%), followed by arginine, alanine and aspartic acid respectively. Valine is one of the three amino acids. Valine helps stimulate muscle growth and regeneration and is involved in energy production. Deficiency of this amino acid also reduces energy and lethargy and apparent weakness. Phenylalanine is a precursor to the neurotransmitter receptor, tyrosine, dopamine, epinephrine, and norepinephrine, which play key roles in the nervous system. This amino acid also plays an important role in the structure and function of proteins and enzymes as well as the production of other amino acids. Tryptophan is needed to maintain nitrogen balance in the body as well as make serotonin. Serotonin is a neurotransmitter that regulates appetite, sleep and mood. Threonine is found in the brain, central nervous system and muscles. Lysine plays an important role in the synthesis of proteins, hormones, enzymes as well as calcium absorption. It also participates in the normal distribution of energy,

improving the function of the immune system and the production of collagen and elastin (Schaafsma 2000, 130:1865-1867; Fuchs et al. 2005, 168-180; McDonald 1990. 41-70).

2-2-2. Fats and fatty acids in meat and their effect on mood

In beef and veal, about half of the saturated fatty acids are palmitic and about one-third are stearic. Polyunsaturated fatty acids (PUFAs) make up 11% to 29% of the total fatty acids in meat. Because the lawful animals eat green plants and their grains, their meat contains a rich source of omega-3 (Sinclair 1987, 39:228-231; Marmer 1984, 109-121).

A recent diet recommends adequate daily intake of long-chain omega-3 fats, 160 mg for men and 90 mg for women. The amount of omega-3 in mutton per meal (60 g) is 30 mg, which can be a good source of omega-3. There is evidence that omega-3 fatty acids are involved in mental health. These include that they may rarely be helpful, such as adding omega-3s to treat depression associated with bipolar disorder. Epidemiological studies suggest that omega-3 intake may reduce a risk of insanity. Omega-3s are also recommended for people with depression (National Health and Medical Research Council 2006; Howe et al. 2006, 47-53; Simopoulos, 2002, 495-505; Czyż et al. 2016, 816-831; Mazza et al. 2007, 12-26.).

Taurine is a special amino acid. Meat is rich in taurine (100 mg per 110 g in mutton and 77 mg per 100 g in beef)(Purchas et al. 2004. 629-637.). Taurine can be derived from the metabolism of methionine and cysteine. There have been suggestions that it should be considered an essential amino acid during lactation, as well as this amino acid has an important role to protect against oxidative stress (Redmond et al. 1998, 599-608; Bouckenooghe 2006, 728-733).

Choline is a precursor to a number of compounds, including neurotransmitters and membrane phospholipids, which, although the body itself has the ability to make choline, it is a diet necessity. Recommended diets include 550 mg of choline per day for men and 455 mg for women. Meat consumption is recommended to provide this essential factor and deficiency of this factor leads to nervous system disorders and restlessness (National Health and Medical Research Council 2006).

2-2-3. Vitamins in meat and their effect on mood

Red meat is an excellent source of bioavailable vitamin B12. Vitamin B12 of animal-derived foods, such as meat, are the only source of vitamin B12 in the diet, which is an essential nutrient for blood formation and brain and nervous system function. Vitamin B12 or cobalamin is one of the essential vitamins in the body that its deficiency leads to nervous and mental system problems, boredom and fatigue, weakness, depression and anxiety.

Plants do not need vitamin B12 for their metabolic processes and do not produce it. Therefore, this vitamin is obtained through foods of animal origin. People with severe and persistent stress are deficient in vitamin B complex, especially B12. Therefore, eating meat is necessary for the body to prevent a deficiency of this vitamin. A meal of 100 grams of meat can provide more than two-thirds of the daily requirement of this vitamin (B12). 100 grams of red meat can also meet about 25% of the need for riboflavin, niacin, vitamin B6 and pantothenic acid.

Vitamin D levels in meat are very small and difficult to measure, and are often not previously included in food composition data. Because its main source was considered to be sunlight and fish meat. However, a recent meat measure in New Zealand reported 0.10 mg of vitamin D3 per 100 grams of meat, which could provide about 12% of the nutritional needs of older housewives. This vitamin is effective in mental health at different stages of life and prevents depression and negative behavioral changes. Vitamin D deficiency is closely linked to many mental illnesses, from depression to Alzheimer's. Increasing studies are showing an association between this vitamin and depression. Researches have shown that this vitamin can be useful for depressed patients who suffer from severe deficiency. Since life in today's society is apartment living or in places with low sunlight, to prevent depression and mood swings, especially in winter, fish and meat products should be used.

Researches have also proved the effect of this vitamin in the prevention and control of autoimmune neurological diseases. Multiple sclerosis is a degenerative disease of the central nervous system, in which myelin, axons, and oligodendrocytes are destroyed. The course of the disease can be recurrent, relapsing, or progressive. MS

lesions usually occur at different times and in different areas of the nervous system. Vitamin D3 has also been shown to increase the growth and repair of nerve neurons to improve the disease.

One of the B vitamins, also called vitamin B3, is niacin. Niacin has various functions in the body. Low niacin intake is associated with an increased risk of heart disease. Also, because this vitamin is in the category of B vitamins, its deficiency in the body causes nervous problems, i.e. mood swings and boredom (Purchas et al. 2007, 90-98).

2-2-4. Minerals in meat and their effect on mood and temper

Beef and mutton are the richest sources of iron and zinc minerals. These minerals play an essential role in the diet and are vital for the function of many organs, especially the nervous system. Sources of zinc include red meat, seafood, dairy products, nuts, legumes and whole grains. However, zinc is absorbed more than animal meat and protein.

Vegetables are not a good source because they contain phytic acid and other substances that interfere with the absorption of zinc. In addition, about 80% of the zinc in unground grains is removed during milling. The amount of 100 grams of meat in a meal provides at least a quarter of the daily needs of an adult to supply these two minerals. The iron in meat is often the same set of iron that is well absorbed. Meat protein also appears to increase the absorption of iron from meat. Hemoglobin itself is a protein that helps red blood cells carry oxygen throughout the body. On the other hand, the body needs iron to make hemoglobin. Without enough iron, all the organs of the body will suffer. One of the symptoms of iron deficiency in the body is fatigue, lethargy, impatience, apathy and behavior change. In children, iron deficiency also causes cognitive and psychological disorders and causes them to have a bad mood and stubbornness.

Similarly, zinc is absorbed more from animal protein than plant foods. Meat is very rich in zinc, a mineral that is important for the growth and maintenance of the body. The effect of zinc in the treatment of mood disorders, such as depression and anxiety, has been clinically proven in animal models. Zinc also increases the amount of brain-derived neurotrophic factor, which decreases in depressed people. Moreover, low zinc concentrations in the blood

are associated with many of the symptoms of chronic fatigue syndrome, such as depression and difficulty concentrating. One study showed that zinc levels in people with chronic fatigue syndrome were significantly lower than the control group and the severity of symptoms was negatively related to zinc levels in the blood (National Health and Medical Research Council 2006; Biltagi ٢٠٠٩, ٧٤٢-٧٣٧; Osredkar. ٢٠١١, ٠٤٩٥; Tapiero, H., & Tew, K. D. ٢٠٠٣, ٤١١-٣٩٩; Wilson et al ٢٠٠٧, ١٠١٣-١٠٠٣; HOPE ٢٠٠٦, ١٥٧٧-١٥٦٧).

2-3. The meaning of "misbehavior in narrations"

Various meanings have been given to misbehavior: 1- It is a description of the soul that leads to its destruction and causes abuse and harassment of the kin and companions (Majlesi 1982, 70:296), 2- A set of moral evils and psychological vices (Ansarian 1991, 177), 3- Bad Morality and temper (Institute of Encyclopedia Alfeqhy Eslami 1991, 4: 546), 4- Bad language and violence (Makarem Shirazi 2004, 3:163).

Narrations prove that misbehavior has two general and specific meanings: in general, it is a set of vicious morals and traits in a person that constantly exposes him to sin and then the owner of this trait does not succeed in repentance: " لِكُلِّ ذَنْبٍ تَوْبَةٌ إِلَّا سُوءَ الْخُلُقِ فَإِنَّ صَاحِبَهُ كُلَّمَا خَرَجَ مِنْ ذَنْبٍ دَخَلَ فِي ذَنْبٍ" (Saduq 1992, 4:355); his/her actions will be destroyed: "وَ إِنَّ سُوءَ الْخُلُقِ لَيُفْسِدُ الْعَمَلَ كَمَا يُفْسِدُ الْخَلُّ الْعَسَلَ" (Kulaini 1986, ٣:321); and he/she will be placed in the Hell: " إِيَّاكُمْ وَ سُوءَ الْخُلُقِ فَإِنَّ سُوءَ الْخُلُقِ فِي النَّارِ لَا مَحَالَةَ" (Majlesi 1982, 10:396). The first and second meanings of misbehavior refer to its general meaning.

In special certain meanings it can be considered in the sense of immorality, bad language and harshness - as stated in the third and fourth meanings. A report indicates to this meaning in which when Sa'd ibn Ma'ādh died, the Prophet (PBUH) buried him with honor and personally and then said: "He was pressured by the grave because he used to have bad temper towards his family" (Saduq 2007, 1:31).

What is said in the narrations of this study about the effect of not eating meat on misbehavior refers to "the special meaning" of misbehavior. For in the scientific study it was found that meat contains proteins, fats and fatty acids, vitamins and minerals, the lack of which leads to depression, anxiety, weakness, aggression, lethargy and impatience. According to the first case study of

narrations, to correct the bad mood of a person, the call to prayer (adhān) in his/her ear has been recommended. It is clear that a person who has a bad mood in the general sense, i.e. a set of vicious traits, will not be corrected by eating meat and saying the call to prayer in his ear. Al-Ghazali mentions a set of good qualities to express good character and bad mood and then writes: "If somebody has all these qualities is adorned with good mood and if somebody does not have any of them has bad mood" (Al-Ghazali 2007, 8:125).

2-4. The effect of not eating meat for forty days on mood and temper

In many hadiths, especially those concerning devotional and moral advice or prohibitions, the number "forty", due to its indication to plurality, mainly has the aspect of encouraging or warning, such as the advice of: reciting the Qur'an forty times, memorizing forty hadiths, praying for forty believers, presenting of forty people at the funeral of a believer and testifying to his goodness and faith, by which the dead will be forgiven, and respecting neighbors' rights up to forty houses on all sides (Musapoor 1983, 1:5613). Two ideas may be proposed here: First, the number forty refers to a period of time that is at least forty days. Second, it specifically refers to the number forty, due to the effect of this number of days. The second idea seems to be correct, especially concerning the above discussed narrations. This is confirmed by the verses in which God speaks to Moses (AS) about the promise of forty nights:

"وَ واعَدْنا مُوسىٰ ثَلاثينَ لَيْلَةً وَ أَتْمَمْناها بِعَشْرٍ فَتَمَّ مِيقاتُ رَبِّهِ أَرْبَعينَ لَيْلَةً."

"We appointed for Moses thirty nights, and completed) the period (with ten) more (: thus was completed the term with his Lord, forty nights." (A'rāf: 142)

Moreover, this number is emphasized in the fourth narration: The narrator reported to Imam Reza (AS) that people said: "whoever does not eat meat for three days, his mood will turn bad." Imam (AS) did not confirm the number and accused those people of lying. He then argued that traces of meat transfer to sperm within forty days.

In the narrations about the effect of drinking also the number forty is emphasized more explicitly and its scientific reason is explained in more detail. Hussein Ibn Khalid says: "I said to Imam Reza (AS): 'It

has been narrated to us from the Prophet (PBUH) that whoever drinks wine, his prayers will not be accepted for forty days'. Imam said: 'They have narrated correctly', 'How forty days, neither less nor more?' He asked. Imam (AS) replied: "This is why God destines the creation of man and makes him in a sperm for forty days. Then He turns him into "'ulqah" during the forty days, then into "mudqah" during the forty days. So whenever he drinks wine, its effect remains in his nature for forty days. In addition, everything he eats and drinks remains in his nature for forty days" (Kulaini 1986, ٦:402). Allameh Majlisī said: "This statement indicates that the complete change in the human body and its transformation from one state to another does not occur in less than forty days, and therefore the eradication of the remaining wine from the body does not occur in less than this period" (Majlesi 1982, ٢٢).

3. Discussion

According to this study, which is based on the narrations of Ahl al-Bayt (AS), the leave of eating meat for forty days causes misbehavior. Misbehavior may be defined as depression, anxiety, weakness, aggression, lethargy and impatience. It occurs when somebody leaves eating meat. Because meat contains proteins, fats, fatty acids, vitamins and minerals, the lack of which causes such disorders. These disorders lead to acidity and irritability. Many studies have also shown an association between eating foods containing omega-3 fatty acids with polyunsaturated fats (PUFAs) and depression. According to these studies, regular and frequent consumption of fish, compared to its irregular consumption, reduces the risk of depressive symptoms (Naghavi et al. 2013, ١٥٦-١٤٩).

4. Conclusion

1- According to the authentic narrations, not eating meat for forty days causes a misbehavior and bad mood in human beings. Meat contains proteins, fats, fatty acids, vitamins and minerals. Meat protein contains a large amount of essential amino acids that are necessary for body to meet the needs of the organs, including the nervous system and the effect on mood. Amino acids also cause the production of serotonin that is a neurotransmitter regulating appetite, sleep and mood. The omega-3 fatty acids in meat are good for mental health,

treating depression, and reducing the risk of insanity. Consumption of meat provides choline while deficiency of this factor leads to nervous system disorders and restlessness. Red meat is an excellent source of bioavailable vitamin B12. Vitamin B12 or cobalamin is one of the essential vitamins in the body that its deficiency leads to nervous and mental system problems, boredom and fatigue, weakness, depression and anxiety. Fish meat is a source of vitamin D. This vitamin is widely associated with many mental illnesses, from depression to Alzheimer's. Beef and mutton are the richest sources of iron and zinc minerals. These minerals play an essential role in the diet and are vital for the function of many organs, especially the nervous system. The symptoms of iron deficiency in the body are fatigue, lethargy, impatience, apathy and behavior change. In children, iron deficiency also causes cognitive and psychological disorders and lead them to have a bad mood and stubbornness. The effect of zinc in the treatment of mood disorders, such as depression and anxiety, has also been clinically proven in animal models.

2. Misbehavior does not necessarily mean aggression and anger, but rather that the meat contains substances and elements that, if left out, may disrupt the functioning of the nervous and mental systems. These disorders include depression, anxiety, weakness, aggression, lethargy and Alzheimer's.

3- The fact that in the narrations, not eating meat for forty days causes misbehavior, based on the Qur'anic evidence and other narrations, specifically indicates the number "forty", due to the effect of this number of days. Experimental findings generally discuss the effect of not eating meat on the functioning of the nervous and mental systems, but the issue that according to the narrations, not eating meat for "forty days" causes such a disorder, requires another laboratory study.

References:-

1. Kulaini M. 1986. Al-Kafi. Research by: Ali Akbar Ghaffari and Muhammad Akhundi. 3rd ed. Tehran: Dar Al-Kotob Al-Eslamiyyah.

2. Hajishafiee M, et al. 2017. "Association between Alternative Healthy Eating Index (AHEI) and Depression and Anxiety in Iranian Adults". Neyshabur Univ Med Sci. 4 (4): 46-58.

3. Ibn Shu'ba al-Harrani. 1983. Tuhaf al-'Uqul, 2nd Ed. Qom: Society of Seminary Teachers of Qom.

4. Majlesi MB. 1982. Bihar Al-Anwar, 2nd Ed. Beirut: Dar Al-Ehya Al-Torath Al-Arabi.

5. Ibn Abi al-Hadid al-Mu'tazili, A. 1981. The Commentary of Nahj al-Balaghah. Qom: Maktab Ayatollah Al-Marashi Al-Najafi.

6. Barghi A. 1992. Al Mahasen, 2nd Edition, Qom: Al-Islam Atheist.

7. Najāshī A. 1986. Al-Fehrest. 5th ed. Qom: Islamic Publishing House.

8. Tabatabai MH. 1995. Al-Mizan fi Tafsir al-Quran. 5th ed. Qom: Qom Scientific Board of Educators in Social Islamic Publication Office.

9. Javadi Amoli A. 2009. Tasnim Commentary. Qom: Asra.

10. Makarem Shirazi N. 1995. The Commentary of Nemooneh, 1st Edition, Tehran: Dar al-Kutub al-Islamiya.

11. Wyness, L. 2016. "The role of red meat in the diet: nutrition and health benefits". Proceedings of the Nutrition Society, 75 (3), 227-232.

12. Williams, P. 2007. "Nutritional composition of red meat". Nutrition & Dietetics, 64: 113-119.

13. Bhutta Z. 1999. "Protein: digestibility and availability". In: Encyclopedia of Human Nutrition. M Sadler, J Strain and B. Caballero (Editors). San Diego: Academic Press, p. 1646-1656.

14. Schaafsma G. 2000, "The Protein Digestibility-Corrected Amino Acid Score". Nutr, 130: 1865-1867.

15. Fuchs, S. A. et al. 2005. "D-amino acids in the central nervous system in health and disease". Molecular Genetics and Metabolism, 85 (3), 168-180.

16. McDonald, J. W., & Johnston, M. V. 1990. "Physiological and pathophysiological roles of excitatory amino acids during central nervous system development". Brain Research Reviews, 15 (1), 41-70.

17. Sinclair A, O'Dea K. 1987. "The lipid levels and fatty acid compositions of the lean portions of Australian beef and lamb". Food Technol Aust, 39: 228-231.

18. Marmer W, Maxwell R, Williams J. 1984. "Effects of dietary regimen and tissue site on bovine fatty acid profiles". Anim Sci, 59: 109-121.

19. National Health and Medical Research Council. 2006. Nutrient Reference Values for Australia and New Zealand including Recommended Dietary Intakes. Canberra: Commonwealth Department of Health and Aging.

20. Howe P, et al. 2006. "Dietary intakes of long-chain omega-3 polyunsaturated fatty acids: contribution of meat sources." Nutrition, 22: 47-53

21. Simopoulos, A. P. 2002. "Omega-3 fatty acids in inflammation and autoimmune diseases." American College of Nutrition, 21 (6), 495-505.

22. Czyż, K. & Bodkowski, R., & Herbinger, G., & Librowski, T. (2016). Omega-3 fatty acids and their role in central nervous system-a review. Current medicinal chemistry, 23 (8), 816-831

23. Mazza, M. Pomponi, M., Janiri, L., Bria, P., Mazza, S. (2007). Omega-3 fatty acids and antioxidants in neurological and psychiatric diseases: an overview. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 31 (1), 12-26.

24. Purchas R, Rutherfurd S, Pearce P et al. 2004. "Concentrations in beef and lamb of taurine, carnosine, coenzyme Q10, and creatine". Meat Sci 66: 629-637.

25. Redmond H. et al. 1998. "Immunonutrition: the role of taurine". Nutr Cancer 14: 599-608.

26. Bouckenooghe T, Remacle C, Reusens B. 2006. "Is taurine a functional nutrient?" Curr Opin Clin Nutr Metab Care 9: 728-733.

27. Purchas R, et al. 2007. "Concentrations of vitamin D3 and 2-hydroxyvitamin D3 in raw and cooked New Zealand beef and lamb". Food Comp Anal 20: 90-98.

28. Biltagi, M. et al. ٢٠٠٩. "Omega-٣ fatty acids, vitamin C and Zn supplementation in asthmatic children: a randomized self-controlled study". Acta Paediatrica ٩٨(٤), ٧٤٢-٧٣٧.

29. Osredkar, J., & Sustar, N. ٢٠١١. "Copper and zinc, biological role and significance of copper/zinc imbalance". Clinic Toxicol S ٣(٢١٦١), ٠٤٩٥.

30. Tapiero, H., & Tew, K. D. ٢٠٠٣. "Trace elements in human physiology and pathology: zinc and metallothioneins". Biomedicine & Pharmacotherapy ٥٧(٩), ٤١١-٣٩٩.

31. Wilson, R. et al. ٢٠٠٧. "Pre-conceptional vitamin/folic acid supplementation ٢٠٠٧: the use of folic acid in combination with a multivitamin supplement for the prevention of neural tube defects and other congenital anomalies". Obstetrics and Gynaecology Canada ٢٩(١٢), ١٠١٣-١٠٠٣.

32. Heart Outcomes Prevention Evaluation (HOPE) ٢ Investigators. ٢٠٠٦. "Homocysteine lowering with folic acid and B vitamins in vascular disease". New England Journal of Medicine, ٣٥٤(١٥), ١٥٧٧-١٥٦٧.

33. Ansarian, Hossein. 1991. Foroughi from Islamic education, 4th ed. Tehran: Mofid.

34. Institute of Encyclopedia Alfeqhy Eslami. 1991. Persian jurisprudence culture, Qom: Publication of Encyclopedia of Islamic Jurisprudence.

35. Makarem Shirazi. Naser. 2004. Ethics in the Qur'an, 1st ed. Qom Imam Ali School.

36. Saduq M. 1992. Man La Yahduruhu al-Faqih, 2nd ed. Qom: Qom Seminary Teachers' Association.

37. Saduq M. 2007. 'Ilal Al-Shara'i'. 1st ed. Qom: Davari Bookstore.

38. Al-Ghazali A. 2007. The Revival of the Religious Sciences. Beirut: Dar al-Kutub al-'Arabiy.

39. Musapoor M. 1983. Encyclopedia of the Islamic World. Tehran: The Islamic Encyclopedia Foundation.

40. Naghavi S, et al. 2013. "A Survey to the Connection between Nutrition and Mental Health of the Staff of a Medical Sciences University". Mil Med ١٥(٢): ١٤٩-١٥٦.