

A Review of The Notion of Healthy Eating Practices in Islam For a Healthy Lifestyle

Fathima Begum Syed Mohideen¹, Mohamad Syahir bin Ramli²,
Norhasnira Ibrahim^{3*}

^{1,2} Fakulti Perubatan dan Sains Kesihatan (FPSK), Universiti Sains Islam Malaysia,
71800 Nilai, Negeri Sembilan, Malaysia.

³ Fakulti Pengajian Quran dan Sunnah (FPQS), Universiti Sains Islam Malaysia, 71800
Nilai, Negeri Sembilan, Malaysia.

*Corresponding Author: norhasnira@usim.edu.my

Abstract

The number of obesity and diseases related to obesity increases globally, which impose a burden on healthcare costs. The first line to prevent these is by practicing a healthy lifestyle, particularly healthy eating practices from the early years. This review focuses on eating practices based on Holy Quran and Hadith recommendation. Muslim scholars view based on the Holy Quran and Hadith recommendation were also referred to. This review highlights the healthy eating practices by Rasulullah PBUH and enlighten the importance of halalan tayyiban foods. The electronic databases used were Google Scholar, Medline and PUBMED. Related books, journals, and articles were also reviewed. Healthy eating should begin from the first day of human life, that is, through breastfeeding. Healthy eating practices by Rasulullah PBUH through prophetic foods and the scientific benefits have significant human value. Proper techniques like moderation in oral intake, masticating food well, eating fruit before a meal and consuming vegetable oil like olive oil are techniques practised by Rasulullah PBUH. Fasting, as a scientifically promoted method for a healthier life was practiced much earlier by Rasulullah PBUH. This review likewise describes the halalan tayyiban foods, which are an essential part of daily eating practices.

Keywords: Review, Healthy Eating Practices, Healthy Lifestyle, Islam, Halalan Tayyiban

1.0 Introduction

Healthy eating practices play a vital role in maintaining nutrition and health. However, excessive eating leads to obesity and Non-Communicable Diseases (NCD). Islam guides the Muslims in life, including eating, as this preserves the body and soul for ‘*ibadah*’. For Muslims who strive into incorporating this guideline given by Allah s.w.t., their whole day will be a form of remembrance of God, making them spiritually satisfied (Mohammad Naim Khalid S, Mansoor Sediqi S., 2018). Islam gives out recommendations and guidelines on the type of food, quantity to eat and method of eating. The choices of food to eat and behaviour are crucial determinants of health (Provencher V, Jacob R., 2016). Ibn Sina (Avicenna) mentioned that a clinician ought to know the cause of disease and knowledge on health to treat a patient (W.W. Francis, 1931).

However, some causes of diseases are hidden and unreported. This can be due to lifestyle, most notably due to eating habits, which can be a norm for an individual. Sadly, not many people are aware of the recommendations from the Quran and Hadith. Some may not be aware that this starts from as early as they were born. Hence, through this review, some healthy eating practices in Islam are highlighted, including eating

Manuscript Received Date: 09/08/22

Manuscript Acceptance Date: 010/11/22

Manuscript Published Date: 30/11/22

©The Author(s) (2022). Published by USIM Press on behalf of the Universiti Sains Islam Malaysia. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact penerbit@usim.edu.my

doi:<https://doi.org/10.33102/uij.vol34no3.480>

practices that can be implanted in adults and children. This implementation is essential for adult as primary prevention of diseases and in achieving spiritual satisfaction. As for children, this develops healthy eating habits and leads to healthy lifestyle practices that prevent obesity. It is reported that childhood obesity in Malaysia has risen from 11.9% in 2015 to 14.8% in 2019. This rate increased dramatically (Hui Chin Koo, 2020). This will also help children to practice what the religion has preached. Therefore, these recommendations about nutrition in Islamic teachings, which begin as early as humans are born, need to be informed and emphasized to the community. This review will identify the age to start healthy eating practices as mentioned in the Holy Quran, highlight the healthy eating practices by Rasulullah PBUH, and enlighten the importance of *halalan tayyiban* food. This review is expected to achieve the key aim of disseminating knowledge on healthy eating from the perspective of Islam. This is an integral part of Aqli and Naqli that is anticipated to benefit the community.

2.0 Material and Methods

The literature review was done based on the Holy Quran and the Hadiths. The electronic databases used were Google Scholar, Medline and PUBMED. Other related books, journals, and articles were also read based on a search regarding the topics associated with their relevance. Several references in the papers and journals were further extracted from the past 15 years and searched to provide reliable sources.

3.0 Discussions

The Beginning of Healthy Eating

Healthy eating or oral intake begins from birth. For newborns in Islam, similar to the field of medicine, breastmilk is given as soon as birth (Csont GL et al, 2014). In the Holy Quran, it is recommended for the mother to breastfeed their child for two years if it is possible for them. Moreover, it is the right of every newborn infant to be breastfed. Therefore, Islamic law considers breastfeeding as one of the fundamental human rights (Bensaid B., 2021).

﴿ وَالْوَالِدَاتُ يُرْضِعْنَ أَوْلَادَهُنَّ حَوْلَيْنِ كَامِلَيْنِ لِمَنْ أَرَادَ أَنْ يُبْرِئَ الرِّضَاعَةَ وَعَلَى الْمَوْلُودِ لَهُ رِزْقُهُنَّ وَكِسْوَتُهُنَّ بِالْمَعْرُوفِ لَا تُكَلَّفُ نَفْسٌ إِلَّا وُسْعَهَا لَا تُضَارَّ وَلَا تُولَدُ بِوَلَدِهَا وَلَا مَوْلُودٌ لَهُ بِوَلَدِهِ وَعَلَى الْوَارِثِ مِثْلُ ذَلِكَ فَإِنْ أَرَادَا فِصَالًا عَنْ تَرَاضٍ مِنْهُمَا وَتَشَاوُرٍ فَلَا جُنَاحَ عَلَيْهِمَا وَإِنْ أَرَدْتُمْ أَنْ تَسْتَزِضِعُوا أَوْلَادَكُمْ فَلَا جُنَاحَ عَلَيْكُمْ إِذَا سَلَّمْتُمْ مَا آتَيْتُمْ بِالْمَعْرُوفِ وَاتَّقُوا اللَّهَ وَاعْلَمُوا أَنَّ اللَّهَ بِمَا تَعْمَلُونَ بَصِيرٌ ﴾

Meaning: Mothers may breastfeed their children two complete years for whoever wishes to complete the nursing [period]. Upon the father are the mothers' provision and their clothing according to what is acceptable. No person is charged with more than his capacity. No mother should be harmed through her child and no father through his child. And upon the [father's] heir is [a duty] like that [of the father]. And if they both desire to wean through mutual consent from both and consultation, there is no blame upon either of them. And if you wish to have your children nursed by a substitute, there is no blame upon you as long as you give payment according to what is acceptable. And fear Allah and know that Allah sees what you do. (Al-Baqarah 2: 233)

Based on this Quranic verse, breastfeeding a child is the responsibilities of both parents. The father is obliged to provide for the mother's needs throughout the process of breastfeeding (Ibn Kathir, 1999). The mother must breastfeed her child with *al-laba'*, the first form of milk produced soon after birth (Al-Zuhaili, 2011). In medicine, breast milk's early component is the colostrum, which has numerous benefits (Ballard O, Morrow AL., 2013). While in the uterus, the fetus is nourished via maternal blood through the placenta. Upon birth, feeding is abruptly, to nourish the infant via breast milk. Therefore, the neonate is placed with the mother. The World Health Organization recommends infant breastfeeding as soon as they are born (World Health Organization, 2022).

Some Muslims have a misconception that their child will have inadequate nutrition if fed with colostrum only. Hence, they feed their child with honey or water (Zahan R et al., 2020). This is a cultural practice and not a practice recommended by the religion. Therefore, this misconception needs to be corrected as honey and

A Review of The Notion of Healthy Eating Practices in Islam For a Healthy Lifestyle

water given as supplementation has a risk of exposing their child to botulism, poor weight gain and electrolyte imbalance that can risk their child's life (Wojtacka J et al., 2017). Therefore, if a proper explanation on breastfeeding to infants as recommended in Islam is given to parents, infant morbidity and mortality can be prevented. The child will be introduced to solid food around six months of age to support growth, while still breastfeeding. This process is called weaning. During weaning, a child begins to accept increased amount and types of solid feedings but is still being breastfed on demand (Akpor O et.al, 2019). The process of weaning is mentioned in Surah Al-Ahqaf, 46:15.

﴿وَوَصَّيْنَا الْإِنْسَانَ بِوَالِدَيْهِ إِحْسَانًا حَمَلَتْهُ أُمُّهُ كُرْهًا وَوَضَعَتْهُ كُرْهًا وَحَمَلُهُ وَفِصَالُهُ ثَلَاثُونَ شَهْرًا حَتَّىٰ إِذَا بَلَغَ أَشُدَّهُ وَبَلَغَ أَرْبَعِينَ سَنَةً قَالَ رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ الَّتِي أَنْعَمْتَ عَلَيَّ وَعَلَىٰ وَالِدَيَّ وَأَنْ أَعْمَلَ صَالِحًا تَرْضَاهُ وَأَصْلِحْ لِي فِي ذُرِّيَّتِي إِنِّي تُبْتُ إِلَيْكَ وَإِيَّكَ مِنَ الْمُسْلِمِينَ﴾

Meaning: “And We have enjoined upon man, to his parents, good treatment. His mother carried him with hardship and gave birth to him with hardship, and his gestation and weaning [period] are thirty months. [He grows] until, when he reaches maturity and reaches [the age of] forty years, he says, “My Lord, enable me to be grateful for Your favour which You have bestowed upon me and upon my parents and to work the righteousness of which You will approve and make righteous for me my offspring. Indeed, I have repented to You, and indeed, I am one of the Muslims.”

(Surah Al-Ahqaf 46:15)

Weaning is a necessary step in medicine, for a child to achieve normal growth. Weaning regulates a child's behaviour regarding food consumption and nutrition intake. Diet during weaning seems to have a programming effect on food behaviour and health outcomes later in life. This is because, as the parent introduced the diet to the child, the child will be programmed for the taste introduced during weaning. The child might prefer a similar taste of diet later in life. Thus, the taste experienced early in life affects the food preferences later in life and the food-related behaviour throughout life (Scaglioni S. et al, 2018). Therefore, healthy eating begins from breastfeeding as soon as a child is born, weaning, and eventually to an adult diet.

Healthy Eating Practices by Rasulallah PBUH and in Holy Quran.

The discussion of the practice of healthy eating by Rasulallah PBUH and in the Holy Quran next is about the choices of food. The two prophetic foods discussed are dates and barley. This manuscript provides information on the review of the scientific benefits of dates and barley.

a. Prophetic Foods and Their Scientific Benefits

In Islam, Muslims are recommended to pay great attention to their eating practices, particularly in the content of the food, to obtain a pure heart and clear mind. This also inspires the soul and assist towards a clean, healthy body. Rasulallah PBUH as the best human had shown many examples of practices to be followed for good health both physically and mentally. Rasulallah PBUH emphasized the food mentioned in the Holy Quran (Tarighat-Esfanjani A. et al., 2016). These foods are called the ‘Prophetic Food’, such as barley, honey, dates, goat's milk, and others mentioned in the Holy Quran. There are studies done to prove the benefits of these ‘Prophetic Foods’ (Siti Munirah Abdul Basir et al., 2016). This demonstrates that the recommendation by Rasulallah PBUH is valid and beneficial to the community.

i) Dates

The most famous ‘Prophetic Food’ is the dates, which comes from a plant belonging to the genus *Phoenix*. The Arabic word “*nakhl*” refers to the date-palm tree (Tamizi, S. M. et al., 2014), “*rutab*” refers to ripe dates and “*tamr*” means dried dates (Al-Raghib al-Asfahani, n.d.). Ibn Sina, in his writing, mentioned that dates are nutritious fruit (Ibn Sina, A.A.H., 1999). Scientific review shows the nutritional contents of dates, and even the seeds have numerous benefits (Al-Farsi MA, Lee CY., 2008). Dates also improve the stomach's function for digestion, as described by Ibn Qayyim (Ibn Qayyim al-Jauziyyah, n.d.). Science proves that when food is taken on an empty stomach, it has more contact with gastric secretions, thus absorbed faster to nourish the human body (MacFarlane NG., 2018). Rasulallah PBUH encouraged us to eat dates every morning (Ibn

Qayyim al-Jauziyyah, n.d.). and upon breaking of fast (Muslim, 2000). In science, at these two times, the stomach is empty as there is no food intake. Hence, the absorption of the nutrition from dates should be maximized into the human body (MacFarlane NG., 2018). This fact was known earlier by Rasulullah PBUH. The hadiths below show the importance of eating dates:

عامر بن سعد عن أبيه قال، قال رسول الله صلى الله عليه وسلم "من تصبح كل يوم سبع تمرات عجوة لم يضره في ذلك اليوم سم ولا سحر".

Meaning: Narrated Sa'ad: Rasulullah said: "Whoever has seven 'ajwah dates for breakfast will not suffer any poison or sorcery for the whole day". (Al-Bukhari, hadith number: 5445, Muslim: 2047, Abu Daud: 3876)

عن أنس بن مالك قال كان النبي صلى الله عليه وسلم يفطر قبل أن يصلي على رطبات فإن لم تكن رطبات فتمرات فإن لم تكن تمرات حسا حسوات من ماء.

Meaning: Anas bin Malik reported: Rasulullah PBUH would break his fast with fresh dates before performing prayer. If there were no fresh date fruits, he would break the fast with dried dates, and if there were no dried dates, he would take a few sips of water. (Al-Tirmidhi, hadith number: 696, Abu Daud: 2356, Ibn Majah: 75)

Rasulullah PBUH had also consumed fresh date fruits together with cucumber (Al-Bukhari, 2000). According to al-Suyuti, fresh dates may heat the body, while cucumber has a cooling effect (Abu Dawud, n.d.). This may be the cause why Rasulullah PBUH consumed both fruits together:

عبد الله بن جعفر قال، رأيت النبي صلى الله عليه وسلم يأكل الرطب بالقتاء.

Meaning: Narrated Abdullah bin Ja'far: I saw the Prophet PBUH eat fresh ripe dates with cucumber. (Al-Bukhari, hadith number: 5447, Muslim: 2043, Abu Daud: 3835)

Allah s.w.t. ordered Maryam, mother of Prophet Isa a.s. to consume dates during labour as stated in Surah Maryam, 19 verse 2:

﴿وَهَزَىٰ إِلَيْكَ بِجِدْعِ النَّخْلَةِ تَسْقُطُ عَلَيْكَ رَطْبًا حَلِيمًا﴾

Meaning: "And shake toward you the trunk of the palm tree; it will drop upon you ripe, fresh dates." (Surah Maryam 19:25)

This is consistent with dates benefit as proven scientifically (Al-Farsi MA, Lee CY., 2008). Summary of the other benefits of dates to human health:

Author	Year	Conclusion
Taavoni, S., Fathi, L., Ekbatani, N. N., & Haghani, H.	2018	The use of palm syrup lowers the pain intensity during labour.
Mohammadierad, R., Alizadeh-Charandabi, S., Mirghafourvand, M., & Fazil, F.	2018	Oral syrup of saffron with date juice can reduce the pain intensity and anxious especially during labour.
Al-Hisnawi, A. A.	2017	Antimicrobial activities exhibited by both date and pomegranate.
Sheikh, B. Y., Sarker, M. M. R., Kamarudin, M. N. A., & Ismail, A.	2017	Date contains b-D-glucans, contributing to antitumor activity.

ii) Barley

Barley is the fourth most important cereal crop in the world, preceded by wheat, maize, and rice (Sakellariou M, Mylona P V., 2020). These blessing grains are cultivated cereals as stated in The Holy Quran:

﴿وَهُوَ الَّذِي أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ خَضِرًا نُخْرِجُ مِنْهُ حَبًّا مُتَرَاكِبًا وَمِنَ النَّخْلِ مِنَ طَلْعِهَا قِنْوَانٌ دَانِيَةٌ وَجَنَّاتٍ مِنْ أَعْنَابٍ وَالزَّيْتُونَ وَالرُّمَّانَ مُشْتَبِهًا وَغَيْرَ مُتَشَابِهٍ انظُرُوا إِلَى ثَمَرِهِ إِذَا أَثْمَرَ وَيَنْعِهِ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يُؤْمِنُونَ﴾

Meaning: “And it is He who sends down water from the sky and brings forth with it every kind of growing thing. Then from it, We bring forth green stalks from which We produce the grain. And from the palm tree, from the spathe of it, low hanging clusters of dates, and gardens of grapes, olives, and pomegranates, similar and dissimilar. Look at its fruit as it fructifies and ripens. Indeed, there are signs in that for a people who have faith”.

(Surah al-An’am 6:99)

Based on scientific research, barley is considered to be a beneficial grain. It is easily digestible, prevents many diseases like chronic heart disease, improves blood pressure, and prevents colon cancer and gallstones if consumed regularly (Idehen E, Tang Y, Sang S., 2017). It is the best diet for patients or those feeling weak. Rasulallah PBUH liked barley and used it in various forms. Barley bread and “*al-talbinah*” are porridge made from barley flour formed by adding honey or milk (Al-Bukhari, 2000). A’isyah, the wife of Rasulallah PBUH during a bereavement in her family, recommended “*al-talbinah*” for the person that grieved over a dead person. It is also suitable for the sick.

وكانت تقول إني سمعت رسول الله صلى الله عليه وسلم يقول: "إن التلبية تحم فؤاد المريض، وتذهب ببعض الحزن"

Translation: ‘Aisyah used to say: “I heard Rasulallah PBUH saying: “*al-Talbinah* strengthens the heart of the patient and relieve some of the sad person’s sorrow and grief.” (Al-Bukhari hadith number: 5689, Muslim: 2216)

Ibn Qayyim states that barley water helps against coughing and throat roughness, relieves the irritant excess excrement, produces more urine, cleanses the stomach, quenches thirst, and extinguishes heat (Ibn Qayyim al-Jawziyyah, n.d.). Ibn Sina recommended drinking barley water while having a fever. Travellers to extremely hot regions are also suggested to take barley (Ibn Sina, 1999). Evidence shows that barley can boost the immune system (Zeng Y, 2020), implying that it is good food for human. A high fibre food with essential minerals, vitamins, and phytochemicals keeps us energetic the whole day (Idehen E. et al, 2017).

The medicinal uses of barley have been summarized below:

Treatment	Reference
Anti-cough	Apples, dried figs, and pears mixed with the H. Vukgare seeds. De Natale A, Pollio A. Plants species in the folk medicine of Montecorvino Rovella (inland Campania, Italy). Journal of ethnopharmacology. 2007 Jan 19;109(2):295-303.
Fever	Barley acts as an anti-inflammatory and soothing agent. Marwat S, Hashimi M, Khan K. Barley (<i>Hordeum vulgare</i> L.) A prophetic food mentioned in a hadith and its ethnobotanical importance. American-Eurasian J Agric Environ Sci. 2012;12(7):835-41.

Urinary Tract Infection	The dried fruit is used in Argentina as a treatment for UTI	Marwat S, Hashimi M, Khan K. Barley (<i>Hordeum vulgare</i> L.) A prophetic food mentioned in Ahadith and its ethnobotanical importance. <i>American-Eurasian J Agric Environ Sci.</i> 2012;12(7):835-41.
Weight loss	Barley is used to promote weight loss	WebMD, Barley Overview Information. Available at: https://www.webmd.com/vitamins/ai/ingredientmono-799/barley . Retrieved on December 29, 2019.

Rasulullah PBUH also eats bread called “*al-sya'ir*” made up of wheat. This is another type of grain, but it is not as popular as barley.

b. Techniques of Eating by Rasulullah PBUH

The important methods of eating technique that was practiced by Rasulullah PBUH are eating in moderation, masticating food well, eating fruit before a meal, consumption of vegetable oil, olive oil.

i) Eating in Moderation

In Islam, Muslims are ordered by Allah s.w.t, the Almighty to balance in both food and drink. Muslims are advised not to take food in excessive amount. As Allah s.w.t. mentions in the Holy Quran:

﴿يَا بَنِي آدَمَ خُذُوا زِينَتَكُمْ عِنْدَ كُلِّ مَسْجِدٍ وَكُلُوا وَاشْرَبُوا وَلَا تُسْرِفُوا إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ﴾

Translation: “Children of Adam! Dress properly whenever you are at worship. Eat and drink, but do not waste. Surely Allah does not like those who go to excess”. (Surah al-A'raf 7:31)

As a method of preventing disease and sickness, Rasulullah PBUH emphasized the habit of eating in moderation. Narrated by Nafi': Ibn Umar never used to eat unless a poor man was called to eat with him. This means he shares his food and takes it in a small portion as suggested medically (Al-Bukhari, 2000) in another hadith:

قال رسول الله صلى الله عليه وسلم: "يأكل المسلم في معي واحد، والكافر يأكل في سبعة أمعاء".

Meaning: “A believer eats in one intestine (is satisfied with a little food), and a kafir (unbeliever) eats in seven intestines (eats much food).” (Al-Bukhari hadith number: 5393, Muslim: 2060, Ibn Majah: 3257)

Meanwhile, another hadith narrated from Miqdam bin Madikarib (Al-Tirmidhi, 1975) guides on food portion:

سمعت رسول الله صلى الله عليه وسلم يقول: "ما ملأ آدمي وعاء شرا من بطن حسب آدمي لقيمات يقمن صلبه فإن غلبت الأدمي نفسه فثلث للطعام وثلث للشراب وثلث للنفس"

Meaning: “A human fills no worse vessel than his stomach. It is sufficient for a human to eat a few bites to keep his spine straight. But if he insists, one third should be reserved for his food, another third for his drink and the last third for his breathing”. (Al-Tirmidhi hadith number: 2380, Ibn Majah: 3340)

Therefore, Imam al-Ghazali advised Muslims to eat when hungry and stop eating before feeling stomach fullness to maintain health (Al-Ghazali, 2011). Similarly, Ibnu Sina announced not to fill stomach despite a good appetite so that the consumed food digests easily, which prevents impairment in digestion (Ibn Sina, 1999). Meanwhile, al-Suyuti suggested human not have a meal until the one before it has been digested, because eating a second meal without fully digesting the first is harmful (Al-Suyuti, 2002). In medicine,

A Review of The Notion of Healthy Eating Practices in Islam For a Healthy Lifestyle

overeating causes obesity, leading to many other diseases. One of which is the early complication of obesity, the gastroesophageal reflux disease (GERD). GERD is a risk factor for esophageal cancer (Razzoli M. et al., 2017). Thus, the suggestion of Muslim scholars has a benefit for human health.

ii) Masticating Food Well

There is a claim that a Muslim need to chew 40 times when eating. But no hadith supported the claim. However, according to Imam al-Nawawi, although no hadith supported chewing 40 times, it is a good practice as it is a polite act, especially when eating with others (Al-Nawawi, 1996). Ibn Qayyim mentioned chewing well prevents sickness (other than death). He advised those unable to chew appropriately not to eat hard food as the stomach will not digest the food well (Ibn Qayyim al-Jawziyyah, n.d.). This process of chewing food is called mastication, the medical term that is vital for adequate nutrition (Le Révérend BJD. Et al., 2014). Mastication also prevents choking, which can lead to sudden death (Asha T.H.E, Ader L.E., 2019).

Masticating decreases the size of food and mixes food well with saliva to prepare for gastric digestion and nutrition absorption (Krop EM. Et al., 2018). Scientifically, masticating 40 times reduces the blood sugar level after a meal (Shirali A. et al. 2019). For those without diabetes mellitus type 2, masticating slowly has a direct association with the prevention of diabetes mellitus (Yamazaki T. et al. 2013). Those diagnosed with diabetes mellitus type 2 are encouraged to reduce their mastication speed to control their blood sugar level and risk of obesity, which is associated with cardiovascular risk (Hurst Y, Fukuda H., 2018). From studies, mastication affects appetite and weight gain. In a study, 55g of almonds chewed at 10, 25, and 40 times found that masticating the almonds 40 times suppressed hunger the most compared to 19 and 25 times. Masticating food 40 times suppressed hunger for the next 1 hour and 30 minutes. This gives a sense of fullness for the next 1 hour (Cassady BA. Et al., 2009). This shows that masticating food well is essential to prevent obesity.

Author	Year	Content
Yamazaki, T., Yamori, M., Asai, K., Nakano-Araki, I., Yamaguchi, A., Takahashi, K., ... & Inagaki, N.	2013	Higher masticatory performance and slow oral intake prevent the occurrence of diabetes.
Ohkuma, T., Hirakawa, Y., Nakamura, U., Kiyohara, Y., Kitazono, T., & Ninomiya, T	2015	Eating at high velocity is directly associated with excess body weight.
Hirano, Y., & Onozuka, M.	2015	Chewing causing increment in attention and improve mood to relieve stress.

iii) Eating Fruit Before a Meal

Chronologically, as stated in verses 20 to 21 in surah al-Waqi'ah, eating fruits before consuming a meal is recommended.

﴿وَفَاكِهَةٍ مِّمَّا يَتَخَيَّرُونَ وَلَحْمِ طَيْرٍ مِّمَّا يَشْتَهُونَ﴾

Translation: "And fruit of what they select. And the meat of fowl. From whatever they desire."

Among the pearls of wisdom on why fruits are first mentioned in this verse was stated by Syeikh Wahbah al-Zuhaili, such that it travels down faster (to the stomach) and efficiently digested. The human body will be better prepared to accept food, since the gastric juice is secreted upon food (fruit) arrival to the stomach (Al-Zuhaili, 1998). According to Imam al-Ghazali in his *Ihya' Ulum al-Din*, he stated that "The encouraging order of eating is first to eat the fruits for it is in line with the field of medicine. Furthermore, it (fruit) is faster to be digested. Thus, it is better first to eat fruits, so that it will be at the bottom of the stomach (compared to other food)" (Al-Ghazali, 2011). Similarly, Imam al-Nawawi stated that it is preferable to serve fruits over bread, meat, and other food (Al-Nawawi, 1996). However, no hadith proves that Rasulullah PBUH suggested starting our meal with fruits except for a hadith in *Sahih Muslim*. It narrates that Rasulullah PBUH went out at night

with Abu Bakr, and Umar. They went to Abu Haitham's house, and Abu Haitham fed them dates first (Muslim, 2000).

Clinical study shows that eating fruit before a meal has a significant effect on an individual's satiety. GLP-1 is a hormone produced in the human gut following food ingestion that delays gastric emptying. This suppresses appetite, which then aids in regulating an individual's weight. The practice of fruit consumption before a meal is also associated with a reduction of subsequent energy intake. By reducing energy intake, prevents obesity (Hakim BNA. et al., 2019).

Author	Year	Content
Kant, A. K., & Graubard, B. I.	2005	A diet with high energy density food (low fruits and vegetables) causes higher BMI in the US.
Ledikwe, J. H., Blanck, H. M., Kettel Khan, L., Serdula, M. K., Seymour, J. D., Tohill, B. C., & Rolls, B. J.	2006	A diet with low energy density is encouraged by adding on fruits and vegetable. This kind of diet proves the importance of fruit and vegetable consumption for weight management

iv) Consumption of Vegetable Oil, Olive Oil

The Holy Quran also mentioned the use of vegetable oil for food:

﴿وَشَجَرَةً تَخْرُجُ مِنْ طُورِ سَيْنَاءَ تَنْبُتُ بِالذُّهْنِ وَصَبْغٍ لِلآكِلِينَ﴾

Meaning: "And [We brought forth] a tree issuing from Mount Sinai which produces oil and food for those who eat" (Surah Al-Mu'minun 23:20)

Imam al-Tirmidhi and Ibn Majah narrated that 'Umar ibn al-Khattab stated from Rasulullah PBUH that (26,27):

"كلوا الزيت وادهنوا به فإنه من شجرة مباركة"

"Eat of its oil and use it (the olive), for indeed it is from a blessed tree". (Al-Tirmidhi hadith number: 1851, Ibn Majah: 3319)

Ibn Qayyim stated that the best type of olive oil is that squeezed from ripe olives. Ibn Qayyim and Imam al-Suyuti listed many benefits of olive oil. It helps against poisons, acts as a laxative, rids worms, softens the skin, slows the ageing process, strengthens the gingival (Ibn Qayyim al-Jawziyyah, n.d.), gives good bowel movement, soothes pains, and fortifies the hair and the limbs (Al-Suyuti, 2002).

Author	Year	Content
Gavahian, M., Mousavi Khaneghah, A., Lorenzo, J. M., Muneke, P. E., Garcia-Mantrana, I., Collado, M. C., ... & Barba, F. J	2019	Olive oil can have a positive effect on the microbiota of the gut. It can also prevent CVD (due to high level of phenolic compounds and health-promoting carotenoids)
Mazza, E., Fava, A., Ferro, Y., Rotundo, S., Romeo, S., Bosco, D., ... & Montalcini, T.	2018	MedDiet plus extra virgin olive oil (EVOO) improves cognitive function scores compared to MedDiet alone. There is a neuroprotective effect.

A Review of The Notion of Healthy Eating Practices in Islam For a Healthy Lifestyle

Jurado-Ruiz, E., Varela, L. M., Luque, A., Berná, G., Cahuana, G., Martínez-Force, E., ... & Martín, F.	2017	Diet with EVOO has an anti-inflammatory effect on adipose tissue and could repair HFD-induced hepatic injury
Covas, M., Fito, M., & De la Torre, R.	2015	Increasing HDL cholesterol and improving HDL lipoprotein functionality, reducing the oxidative degradation of lipids, decreasing inflammation, improving endothelial function, and decreasing systolic blood pressure.

v) Fasting As a Method of Practice for Healthy Eating

Twice a week, Rasulullah PBUH will perform fasting, especially on Monday and Thursday. During fasting, he will restrain himself from eating, drinking and other activities prohibited by the religion that could affect his fasting. The practise of fasting on Monday and Thursday was recorded in a hadith narrated by A'isyah (Al-Tirmidhi, 1975):

عن عائشة قالت، كان النبي صلى الله عليه وسلم يتحرى صوم الإثنين والخميس.

A'isyah narrated: "The Prophet saw used to fast on Mondays and Thursday." (Al-Tirmidhi hadith number: 745)

Fasting also prevents diseases. Ibn Sina mentioned that fasting is a method of food reduction and is one of the best ways to stay healthy (Ibn Sina, 1999). Ibn Qayyim also agreed with the statement. He described fasting as a spiritual and physical remedy that relieves the muscles and heart (Ibn Qayyim al-Jawziyyah, n.d.). A review done in 2018 acknowledged that fasting increases lifespan. Fasting twice a week for 24 hours significantly increases the black-hooded rat's lifespan (Sen M., 2018). Fasting can burn fat quickly, help control blood glucose levels, boost the body's immune system, improve the excretory, digestive, and respiratory system.

Author	Year	Content
Meng H, Zhu L, Kord-Varkaneh H, Santos HO, Tinsley GM, Fu P.	2020	Fasting improves the total cholesterol level, LDL-C and triglycerides concentrations. But no significant effect on HDL-C.
Mo'ez Al-Islam, E. F., Jahrami, H. A., Obaideen, A. A., & Madkour, M.	2019	This study suggests that fasting protects against increasing inflammatory and oxidative markers. Thus, reducing inflammation and oxidative stress.
Al-Ozairi, E., AlAwadhi, M. M., Al-Ozairi, A., Taghadom, E., & Isamil, K.	2019	The depression symptoms, particularly in people with diabetes, decrease in severity. Better self-care in controlling blood glucose level and reduce the long-term risk of DM by fasting.
Wei, M., Brandhorst, S., Shelehchi, M., Mirzaei, H., Cheng, C. W., Budniak, J., ... & Cohen, P.	2017	BMI, blood pressure, fasting glucose, IFG-1, triglycerides, total and low-density lipoprotein cholesterol, and CRP are beneficially affected by fasting.

vi) The Importance of Halalan Tayyiban Food

In food production or food purchasing, religion plays a significant role (Hussain I, 2016). Nearly all religion had prohibited particular food from being eaten by the devotees (Tieman M, Hassan FH., 2015). Islam commands the Muslims only to take *halal* food and avoid any *haram* food. Allah s.w.t commands are clearly stated in the Holy Quran and hadith. Comprehending the definition of the *halal* word help in understanding the “halal industry” and purchasing and consuming *halal* food. *Halal* originated from the Arabic word, which means ‘permissible’ or lawful under *Syariah* or Islamic law. As mentioned in The Holy Quran, almost everything is *halal*, but several exceptions have been specified to a particular food classified as *haram*.

﴿يَا أَيُّهَا الَّذِينَ آمَنُوا كُلُوا مِن طَيِّبَاتِ مَا رَزَقْنَاكُمْ وَاشْكُرُوا لِلَّهِ إِن كُنتُمْ إِيَّاهُ تَعْبُدُونَ﴾

Meaning: “O you who have believed, eat from the good things which we have provided for you and be grateful to Allah if it is [indeed] Him that you worship.” (al- Baqarah 2:172)

﴿حُرِّمَتْ عَلَيْكُمُ الْمَيْتَةُ وَالِدَمُّ وَالْحَنْزِيرُ وَمَا أُهْلَ لِغَيْرِ اللَّهِ بِهِ وَالْمُنْخَنِقَةُ وَالْمَوْقُوذَةُ وَالْمُتَرَدِّيَةُ وَالنَّطِيحَةُ وَمَا أَكَلَ السَّبُعُ إِلَّا مَا ذَكَّيْتُمْ وَمَا ذُبِحَ عَلَى النُّصُبِ وَأَنْ تَسْتَقْسِمُوا بِالْأَزْلَامِ ذَلِكَ فِسْقٌ...﴾

Meaning: “Prohibited to you are dead animals, blood, the flesh of swine, and that which has been dedicated to other than Allah, and [those animals] killed by strangling or by a violent blow or by a head-long fall or by the goring of horns, and those from which a wild animal has eaten, except what you [can] slaughter [before its death], and those which are sacrificed on stone altars, and [prohibited is] that you seek decision through divining arrows. That is grave disobedience...” (al- Maidah 5:3)

﴿يَسْأَلُونَكَ مَاذَا أُحِلَّ لَهُمْ قُلْ أُحِلَّ لَكُمُ الطَّيِّبَاتُ وَمَا عَلَّمْتُم مِّنَ الْجَوَارِحِ مُكَلِّبِينَ تُعَلِّمُوهُنَّ مِمَّا عَلَّمَكُمُ اللَّهُ فَكُلُوا مِمَّا أَمْسَكْنَ عَلَيْكُمْ وَاذْكُرُوا اسْمَ اللَّهِ عَلَيْهِ وَاتَّقُوا اللَّهَ إِنَّ اللَّهَ سَرِيعُ الْحِسَابِ﴾

Meaning: “They ask you, [O Muhammad], what has been made lawful for them. Say, “Lawful for you are [all] good foods and [game caught by] what you have trained of hunting animals which you train as Allah has taught you. So, eat of what they catch for you, and mention the name of Allah upon it, and fear Allah.” Indeed, Allah is swift in account.” (al-Maidah 5:4)

In addition to the *halal* concept, it usually incorporated with the term “*Halalan Tayyiban*”, which embodied the *halal* food with the essence of cleanliness, pure and food of high quality. This is as mentioned in Al-Quran:

﴿أَيُّهَا النَّاسُ كُلُوا مِمَّا فِي الْأَرْضِ حَلَالًا طَيِّبًا وَلَا تَتَّبِعُوا خُطُوَاتِ الشَّيْطَانِ إِنَّهُ لَكُمْ عَدُوٌّ مُّبِينٌ﴾

Meaning: “O mankind eats from whatever is on earth [that is] lawful and good and do not follow the footsteps of Satan. Indeed, he is to you a clear enemy”. (al-Baqarah 2:168)

﴿فَكُلُوا مِمَّا رَزَقَكُمُ اللَّهُ حَلَالًا طَيِّبًا وَاشْكُرُوا نِعْمَتَ اللَّهِ إِن كُنتُمْ إِيَّاهُ تَعْبُدُونَ﴾

Meaning: “Then eat of what Allah has provided for you [which is] lawful and good. And be grateful for the favour of Allah if it is [indeed] Him that you worship”. (al-Nahl 16:114)

Based on these verses, Ibn Kathir described that consuming lawful food should be interpreted as the context of permissible foods from Allah s.w.t, reasonable and acceptable, and not harmful to the human body and mind (Ibn Kathir, 1999). Besides, Muslims must refrain from pork and abstain from alcohol. The importance of *halal* earnings is just as integral to our diet and should never be overlooked. Allah s.w.t. and Rasulullah PBUH prohibited selling alcohol, dead meat, swine, and idols based on hadith narrated by Jabir bin Abdullah (Al-Bukhari, 2000). He reported in the year of the Conquest of Mecca, the people asked Rasulullah

A Review of The Notion of Healthy Eating Practices in Islam For a Healthy Lifestyle

PBUH about the fat of dead animals to use for greasing the boats, varnishing the hides and for lighting purposes, and Rasulullah PBUH said:

فقال: "لا، هو حرام." ثم قال رسول الله صلى الله عليه وسلم عند ذلك: "قاتل الله اليهود، إن الله حرم شحومها جمלוه ثم باعوه فأكلوا ثمنه".

Meaning: "No, it's forbidden". Then Allah's messenger further said: "May Allah curse the Jews, for Allah made the fat of animals illegal for them, yet they melted the fat and sold it and ate its price". (Al-Bukhari hadith number: 2236, Muslim: 1581)

In most Islamic countries, the marketplace is concerned about the *halal* issue, including the *halal* certification and the hygiene practice at the processing premises. In today's market, the *halal* issue is no longer about pork-free only. But the *halal* certification ensures the chain of works that involve *halal* integrity from the farm itself. Whereas the *Tayyiban* food must be free from many forms of emulsifier, gelatine, lecithin, glycerin, and additives such as stabilizers, flavouring, colouring, etc. As people become more health-conscious, the *halalan tayyiban* food industry has also attracted non-Muslims. They are aware and in need of food that is of the highest quality of products. This also happens as the *halal* principles are appeared to be healthy and hygiene cuisine (Krishnan S. et al., 2017).

For Muslims, the principal value of *halalan tayyiban* food is spirituality. This is established when there are positive emotions of the realization of relationship with Allah s.w.t. This combined with the feelings of satisfaction and accomplishment in adhering to the commands of Allah s.w.t. This will then lead to the tranquility of the heart. Consequently, when the Muslims eats the *haram* food, it leads to disturbing emotion. Disturbed emotional wellbeing may initiate the onset of neuropsychiatric disorders (Salim S., 2016). This stress enhances pro-inflammatory cytokine signaling and promotes reactive oxygen, leading to oxidative damage. Stress also has a significant role in developing a disease like cancers (Li P. et al., 2016).

In Islam, Muslims are prohibited from consuming flowing blood, pork, animals that had died before being slaughtered in the Islamic manner, domestic donkeys, all carnivores with fangs and talons, all birds with claws, all reptiles, animals which are commanded to kill like rodents, snakes and scorpions are haram (Al-Raghib al-Asfahani, n.d.). It was narrated by A'isyah (Ibn Majah, n.d.), Ibn 'Abbas (Al-Sijistani, Abu Dawud, n.d.) and Jabir (Al-Tirmidhi, 1975) that Rasulullah PBUH forbid us from eating the animals as below:

عن عائشة، أن رسول الله صلى الله عليه وسلم قال: "الحية فاسقة والعقرب فاسقة والفأرة فاسقة والغراب فاسق".

Meaning: It was narrated from A'isyah that Rasulullah PBUH said: "Snakes are vermin, scorpions are vermin, mice are vermin, and crows are vermin." (Ibn Majah hadith number: 3249)

عن ابن عباس قال نهى رسول الله صلى الله عليه وسلم عن كل ذي ناب من السباع وعن كل ذي مخلب من الطير.

Meaning: Ibn 'Abbas reported that Rasulullah PBUH prohibited the eating of all fanged beasts of prey and all the birds having talons. (Muslim hadith number: 1934, Abu Daud: 3808)

عن جابر قال: حرم رسول الله صلى الله عليه وسلم -يعني يوم خيبر- الحمر الإنسية ولحوم البغال وكل ذي ناب من السباع وذي مخلب من الطير".

Meaning: Narrated Jabir: "On the Day of Khaibar, Rasulullah PBUH prohibited eating domestic donkeys, the meat of mules, every predator that possesses canine teeth, and every bird that possesses talons." (Al-Tirmidhi hadith number: 1478)

The benefits of Allah's s.w.t command to eat only *halal* and *tayyiban* foods can be denoted to the current world pandemic of Coronavirus disease 19 (COVID-19). COVID-19 is caused by SARS-CoV-2, also known as 2019-nCoV (Giri R. et al., 2021). This virus has rapidly spread, mutated to different variants, and caused death throughout the world. The source of origin was *Rhinolophus* bats, which have anti-SARS-CoV antibodies, suggesting that bats are the host for viral replication. This dreadful disease has infected human by eating the infected bats (Shereen MA. et al., 2021).

This can be related to Islam's ruling, which prohibited the consumption of bat. According to Ibn Qudamah, bats are haram to be eaten as categorized under 'dirty' animals (Ibn Qudamah, 1968):

كُلُّ الطَّيْرِ حَلَالٌ إِلَّا الْحَفَّاشَ. وَإِنَّمَا حُرِّمَتْ هَذِهِ؛ لِأَنَّهَا مُسْتَحَبَّةٌ، لَا تَسْتَطِيبُهَا الْعَرَبُ، وَلَا تَأْكُلُهَا

Meaning: "All types of birds are halal (eaten) except bats. And this bat is forbidden because it is considered dirty (disgusting), and the Arab community does not consider it good and does not eat it."

Indeed, every ruling of Allah s.w.t. has benefits to human as the creator and the owner knows the best. Meanwhile, Rasulullah PBUH, as the messenger of Allah s.w.t. informs human of the ruling of Allah s.w.t. and the scholars to disseminate the knowledge.

4.0 Conclusion

Islam has provided guidelines for healthy eating practices in the Holy Quran and Hadith. Parents should start their children with healthy eating practices as recommended by Islam from birth. This will impact the health and spirituality of the believers. Some studies have proven the benefits of healthy eating as recommended in Islam. A physician should recommend these dietary practices to Muslim patients. The limitation of this review, however, is that there is insufficient clinical research on Islamic eating practices. Further future research on the recommendation of eating practices by Rasulullah PBUH and the Holy Qur'an will be needed to highlight healthy eating practices such as the sunnah of eating with your hands or sitting in a knee-chest position while eating. These practices likely have health benefits that have not been clinically studied.

Reference

The Main Source of Reference is The Holy Quran and Hadith

- Akpor, O., Oluwadare, T., Taiwo, O., Aladenika, B., & Akpor, O. 2020. Feeding And Weaning Practices Among Mothers Of Under-Five Children In Selected Primary Health Care Centres In Ado-Ekiti, Ekiti, Nigeria. *Potravinarstvo Slovak Journal Of Food Sciences*, 14(October 2019), 42–51. <https://Doi.Org/10.5219/1211>
- Al-Bukhari, M. I. 2000. *Sahih al-Bukhari*. Damascus: Dar al-Fayha'.
- Al-Farsi, M. A., & Lee, C. Y. 2008. Nutritional And Functional Properties Of Dates: A Review. *Critical Reviews In Food Science And Nutrition*, 48(10), 877–887. <https://Doi.Org/10.1080/10408390701724264>
- Al-Ghazali, A. H. M. 2011. *Ihya' Ulum al-Din*. Vol.4. Jeddah: Dar al-Minhaj li al-Nasyr wa al-Tawzi'.
- Al-Nawawi, A. Y. Z. 1996. *Fatawa al-Imam al-Nawawi al-Musamma bi al-Masa'il al-Manthurah*. Ed. 'Ala al-Din bin al-'Attar. Beirut: Dar al-Basya'ir al-Islamiyyah.
- Al-Raghib al-Asfahani, A. Q. nd. *al-Mufradat fi Gharib al-Qur'an*. Beirut: Dar al-Ma'rifah.
- Al-Sijistani, A. D. S. nd. *Sunan Abi Dawud*. Beirut: al-Maktabah al-'Asriyyah.
- Al-Suyuti, J. A. R. 2002. *al-Tib al-Nabawi al-Ma'ruf bi Kitab al-Manhaj al-Sawi wa al-Manhal al-Rawi fi Tib al-Nabawi*. Beirut: Muassasah al-Kutub al-Thaqafiyah.
- Al-Tirmidhi, M. I. 1975. *Sunan al-Tirmidhi*. Egypt: Maktabah wa Matba'ah Mustafa al-Babi al-Halabi.
- Al-Zuhaili, W. M. 2011. *al-Mu'tamad fi al-Fiqh al-Syafi'i*. Vol.4. Damscus: Dar al- Qalam.
- American Heart Association. 2019. *Food Portions*. <https://www.bhf.org.uk/information/support/support/healthy-living/healthy-eating/healthy-eating-toolkit/food-portions>, accessed 20th April 2021.

A Review of The Notion of Healthy Eating Practices in Islam For a Healthy Lifestyle

- Asha, T. H. E., & Ader, L. E. 2019. *Lack of attention to chewing can set people up for dangerous consequences : aspiration or even choking . Screening and intervention can put them on a safer path . November.*
- Ballard, O., & Morrow, A. L. 2013. Human Milk Composition. Nutrients and Bioactive Factors. *Pediatric Clinics of North America*, 60(1), 49–74. <https://doi.org/10.1016/j.pcl.2012.10.002>.
- Bensaid, B. 2021. Breastfeeding as a Fundamental Islamic Human Right. *Journal of Religion and Health*, 60(1), 362–373. <https://doi.org/10.1007/s10943-019-00835-5>.
- Cassady, B. A., Hollis, J. H., Fulford, A. D., Considine, R. V., & Mattes, R. D. 2009. Mastication of almonds: Effects of lipid bioaccessibility, appetite, and hormone response. *American Journal of Clinical Nutrition*, 89(3), 794–800. <https://doi.org/10.3945/ajcn.2008.26669>
- Chang, P., & Friedenber, F. 2014. Obesity and GERD. *Gastroenterology Clinics of North America*, 43(1), 161–173. <https://doi.org/10.1016/j.gtc.2013.11.009>
- Csont GL, Groth S, Hopkins P, Guillet R. 2014. An Evidence-Based Approach to Breastfeeding Neonates at Risk for Hypoglycemia. *JOGNN - J Obstet Gynecol Neonatal Nurs*. 2014;43(1):71–81.
- Giri, R., Bhardwaj, T., Shegane, M., Gehi, B. R., Kumar, P., Gadhawe, K., Oldfield, C. J., & Uversky, V. N. 2021. Understanding COVID-19 via comparative analysis of dark proteomes of SARS-CoV-2, human SARS and bat SARS-like coronaviruses. In *Cellular and Molecular Life Sciences* (Vol. 78, Issue 4). Springer International Publishing. <https://doi.org/10.1007/s00018-020-03603-x>
- Hakim, B. N. A., Yahya, H. M., Shahar, S., Manaf, Z. A., & Damanhuri, H. 2019. Effect of sequence of fruit intake in a meal on satiety. *International Journal of Environmental Research and Public Health*, 16(22). <https://doi.org/10.3390/ijerph16224464>
- Hui Chin Koo 1,2, B. K. P. 1 and R. A. T. 2020. The GReat-Child Trial TM : A Quasi-Experimental Obese Children. *Nutrients*, 1–12.
- Hurst, Y., & Fukuda, H. 2018. Effects of changes in eating speed on obesity in patients with diabetes: A secondary analysis of longitudinal health check-up data. *BMJ Open*, 8(1). <https://doi.org/10.1136/bmjopen-2017-019589>
- Hussain, I., Rahman, S. U., Zaheer, A., & Saleem, S. 2016. Integrating factors influencing consumers' halal products purchase: Application of theory of reasoned action. *Journal of International Food and Agribusiness Marketing*, 28(1), 35–58. <https://doi.org/10.1080/08974438.2015.1006973>
- Ibn Kathir, A. F. I. 1999. *Mukhtasar Tafsir Ibn Kathir*. Ed. al-Sabuni, M. A. Vol.1. Cairo: Dar al-Sabuni.
- Ibn Majah, A. A. M. nd. *Sunan Ibn Majah*. Beirut: Dar Ihya' al-Kutub al-'Arabi.
- Ibn Qayyim al-Jawziyyah, M. A. nd. *al-Tib al-Nabawi*. Beirut: Dar al-Fikr.
- Ibn Qudamah, M.A. 1968. *Al-Mughni li Ibn Qudamah*. Ed. Muhammad, T. Vol.9. Cairo: Maktabah al-Qahirah.
- Ibn Sina, A. A. H. 1999. *Al-Qanun fi al-Tib*. Vol.1. Beirut: Dar al-Kutub al-'Ilmiyyah.
- Idehen, E., Tang, Y., & Sang, S. 2017. Bioactive phytochemicals in barley. *Journal of Food and Drug Analysis*, 25(1), 148–161. <https://doi.org/10.1016/j.jfda.2016.08.002>
- Krishnan, S., Omar, C. M. C., Zahran, I., Syazwan, N., & Alyaa, S. 2017. The Awareness of Gen Z's toward Halal Food Industry. *Management*, 7(1), 44–47. <https://doi.org/10.5923/j.mm.20170701.06>
- Krop, E. M., Hetherington, M. M., Nekitsing, C., Miquel, S., Postelnicu, L., & Sarkar, A. 2018. Influence of oral processing on appetite and food intake – A systematic review and meta-analysis. *Appetite*, 125, 253–269. <https://doi.org/10.1016/j.appet.2018.01.018>
- Le Révérend, B. J. D., Edelson, L. R., & Loret, C. 2014. Anatomical, functional, physiological and behavioural aspects of the development of mastication in early childhood. *British Journal of Nutrition*, 111(3), 403–414. <https://doi.org/10.1017/S0007114513002699>
- Ping Li Jialing Huang, Huina Wu, Cuixia Fu, Yun Li, Jiajia Qiu. 2016. Impact of lifestyle and psychological stress on the development of early onset breast cancer. *Medicine (United States)*, 95(50), e5529. <https://doi.org/10.1097/MD.0000000000005529>
- MacFarlane, N. G. 2018. Digestion and absorption. *Anaesthesia and Intensive Care Medicine*, 19(3), 125–127. <https://doi.org/10.1016/j.mpaic.2018.01.001>
- Mohammad Naim Khalid, S., & Mansoor Sediqi, S. 2018. Improving Nutritional and Food Security Status in Muslim Communities: Integration of Quranic Practices in Development Programs: A Review. *Rig Rishan City*, 3(2), 65–72.
- Muslim. 2000. *Sahih Muslim*. Beirut: Dar al-Ma'rifah.
- Provencher V, Jacob R. 2016. Impact of perceived healthiness of food on food choice and intake. *Curr Obes Reports*. 2016;(1985):65–71.
- Razzoli, M., Pearson, C., Crow, S., & Bartolomucci, A. 2017. Stress, overeating, and obesity: Insights from human studies and preclinical models. *Neuroscience and Biobehavioral Reviews*, 76, 154–162. <https://doi.org/10.1016/j.neubiorev.2017.01.026>

- Sakellariou, M., & Mylona, P. V. 2020. New Uses for Traditional Crops: The Case of Barley Biofortification. *Agronomy*, 10(12), 1964. <https://doi.org/10.3390/agronomy10121964>
- Salim, S. 2016. Oxidative stress: a potential link between emotional wellbeing and immune response. *Current Opinion in Pharmacology*, 29, 70–76. <https://doi.org/10.1016/j.coph.2016.06.006>
- Scaglioni, S., De Cosmi, V., Ciappolino, V., Parazzini, F., Brambilla, P., & Agostoni, C. 2018. Factors influencing children's eating behaviours. *Nutrients*, 10(6), 1–17. <https://doi.org/10.3390/nu10060706>
- Sen, M. 2018. Fasting As Therapy – a Review. *Malaysian Journal of Medical Research*, 02(04), 48–59. <https://doi.org/10.31674/mjmr.2018.v02i04.007>
- Shereen, M. A., Khan, S., Kazmi, A., Bashir, N., & Siddique, R. 2020. COVID-19 infection: Origin, transmission, and characteristics of human coronaviruses. *Journal of Advanced Research*, 24, 91–98. <https://doi.org/10.1016/j.jare.2020.03.005>
- Shirali, A., Thomas, N. K., Shirali, P. A., Harishchandra, P., Joseph, N., & Rathi, P. 2019. Influence of mastication rate on prandial glycemia among prediabetics: An observation. *Indian Journal of Public Health Research and Development*, 10(12), 14–19. <https://doi.org/10.37506/v10/i12/2019/ijphrd/192186>
- Siti Munirah Abdul Basir, Nor Azwani Mohd Shukri, Radiah Abdul Ghani, Muhammad Ibrahim, Muhammad Muzaffar Ali Khan Khattak, & Muhammad Nor Omar. 2016. Assessment of prophetic foods consumption among lactating mothers: Combining quantitative & qualitative approaches. *International Medical Journal Malaysia*, 17(Specialissue1), 181–185.
- Tamizi, S. M., Sulieman, I., & Ibrahim, H. 2014. The Prophetic Tradition and nutrition: Issues of mixing raisins and dates. *Online Journal of Research*, 1(2), 78–88. <https://doi.org/10.15364/ris14-0102-06>
- Tarighat-Esfanjani, A., & Namazi, N. 2016. Nutritional Concepts and Frequency of Foodstuffs Mentioned in the Holy Quran. *Journal of Religion and Health*, 55(3), 812–819. <https://doi.org/10.1007/s10943-014-9855-x>
- Tieman, M., & Hassan, F. H. 2015. Convergence of food systems: Kosher, Christian and Halal. *British Food Journal*, 117(9), 2313–2327. <https://doi.org/10.1108/BFJ-02-2015-0058>
- Wojtacka, J., Wysok, B., Kabašinskienė, A., Wiszniewska-Łaszczych, A., Gomółka-Pawlicka, M., Sztejn, J., Malakauskas, M., & Migowska-Calik, A. 2017. Prevalence of Clostridium botulinum type A, B, E and F isolated from directly sold honey in Lithuania. *Journal of Agricultural Science and Technology*, 19(2), 335–343.
- World Health Organization (WHO). (2022). *Breastfeeding*. https://www.who.int/health-topics/breastfeeding#tab=tab_1, accessed 20th April 2022.
- W.W. Francis. 1931. The Canon of Avicenna. Vol. 24, CMAJ - *Canadian Medical Association Journal*. 1931. 856–857 .
- Yamazaki, T., Yamori, M., Asai, K., Nakano-Araki, I., Yamaguchi, A., Takahashi, K., Sekine, A., Matsuda, F., Kosugi, S., Nakayama, T., Inagaki, N., & Bessho, K. 2013. Mastication and Risk for Diabetes in a Japanese Population: A Cross-Sectional Study. *PLoS ONE*, 8(6). <https://doi.org/10.1371/journal.pone.0064113>
- Zahan, R., Ferdous, F., Rahman, M. A., Chowdhury, S., Zahan, E., Islam, M. E., & Mamun, M. S. H. 2020. Breast feeding practice among the rural women in selected villages of Dumuria upazilla, Khulna. *Mediscope*, 7(1), 25–30. <https://doi.org/10.3329/mediscope.v7i1.47136>
- Zeng, Y., Pu, X., Du, J., Yang, X., Li, X., Mandal, M. S. N., Yang, T., & Yang, J. 2020. Molecular Mechanism of Functional Ingredients in Barley to Combat Human Chronic Diseases. *Oxidative Medicine and Cellular Longevity*, 2020. <https://doi.org/10.1155/2020/3836172>