ClinicSearch

International Journal of Clinical Case Reports

Richmond R Gomes*

Open Access Review Article

Al-Siam al-Tibbi (Medical Fasting) and al-Siam al-Diyniu (Religious Fasting): Role in Medical and Religious Practices

Iqbal Akhtar Khan *

Independent Scholar Lahore 54792 Pakistan

*Corresponding Author: Iqbal Akhtar Khan, Independent Scholar Lahore 54792 Pakistan

Received date: September 12, 2023; Accepted date: September 27, 2023; Published date: October 10, 2023.

Citation: Iqbal Akhtar Khan (2023) Al-siam al-tibbi (medical fasting) and al-siam al-diyniu (religious fasting): Role in medical and religious practices. *International Journal of Clinical Case Reports*, 2(5); **DOI:**10.31579/2834-8389/008

Copyright: © 2023 Iqbal Akhtar Khan, This is an open-access article distributed under the terms of The Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract:

The Fasting, since pre-history, has been a part of human custom across the globe for health, ritualistic, mental and spiritual rejuvenation. Many of the notable physicians of ancient times recommended it as an integral component of curative and preventive strategies. Recent work on the usefulness of fasting has revealed that it is, undoubtedly, the most effective biological method of treatment. In addition to its significant role in the management of certain chronic diseases, it can arguably be suggested as a complementary therapy to immunization, to boost up immunity.

Intermittent fasting (IF), the history of which is traced to Gautama Buddha, is an umbrella term for various eating patterns or cycles that switches between fasting and eating on a regular schedule. In addition to its use in clinical practice, IF is also used in certain religious practices with significant beneficial effects on health, notably a month long period of Ramadan: fasting from "dawn to dusk,". The resultant "metabolic switching " protects bodily organs against chronic diseases like type 2 diabetes, heart disease, age-related neurodegenerative disorders, even inflammatory bowel disease and many cancers.

The fasting, an ancient ritual of worship, disciplines the body and soul and has existed in various forms in almost all religions. The practice is mentioned in the Bible, in both the Old and New Testament, the Qur'an, the Mahabharata, and the Upanishads. It is much more than usually thought abstinence from food and drinks. The fasting, created by divine wisdom, is an effective tool in setting boundaries for self-restraint. It aims at compliance with the divine command while keeping away from His prohibitions, developing self-discipline, forbearance, and righteousness. It should not be practiced just "going hungry" or a "dieting program". It needs to be accompanied by repentance, supplicant prayers and developing sense of empathy for those under-privileged.

Key words: medical fasting; religious fasting; intermittent fasting; spiritual cleansing

Introduction

Fasting is defined as complete voluntary abstinence from taking any kind of food (and drinks) for a specified duration. Since pre-history, it has been a part of human custom, across the globe, for health, ritualistic, mental and spiritual rejuvenation. Fasting for special purposes or before or during special sacred times remains a characteristic of major religions of the world. The tradition has been well described in the Bible, the Quran, the Mahabharata, and the Upanishads. [2]

It was among the fundamental religious doctrine, amongst the ancient Egyptians, who used to fast for 30 days a year. The objective was to train the human spirit to exercise self restraint, by controlling the desire for food, drink and sex, for a specified duration. The objective of fasting in the Hellenistic mystery religions

(e.g., the healing cult of the god Asclepius) of Ancient Greece (323 BC)—33 BC), was to receive blessings, through prophecies and dreams, by

approaching the deities. Amongst the pre-Columbian Peruvian inhabitants, the fasting was one of the requirements for penance after an individual had confessed sins before a holy man.

Jeûne genevois (Geneva Fasting) is an example of special fasting. The people of Geneva traditionally fast on the first Thursday after the Sunday in September every year. The first fast was observed in October 1567, following the repression of Protestants from Lyon. Since 1640, it has become an annual practice, as a moral and religious act, expressing humility and solidarity with the poorest members of society. [3]

Medical Fasting

Although the history of fasting, as one of the oldest therapy in medicine, dates back to pre-history, it has been mentioned in almost all spots of globe, cultures and religious beliefs. Many of the notable physicians of

ancient times recommended it, as an integral component of curative and preventive strategies. Whereas Guelpa and Marie, in 1911, formally documented the effectiveness of fasting in the treatment of epilepsy [4], the ancient Greek physicians had already made a note that periods of fasting resulted in reduction of frequency and severity of seizures in epileptics [5].

In ancient Egypt, ancient India and ancient Greece the curative and preventive roles of fasting was well recognised as well as for strengthening the spirit. Beego (meaning no eating food for a period), a traditional Chinese practice since the Qin Dynasty (221 BC-207 BC), is a complete water-only fasting. It was originally practiced by Taoists for spiritual purposes but ,later on, extended to both physical and - fitness [6]. Fasting is said to provide rest to digestive organs and stimulate the destruction of metabolic toxins which are known to be the cause of major illnesses. According to Luqman: The Wise Sage (Luqman al- Hakeem) "When the stomach is full, the intellect begins to sleep, Wisdom becomes mute and the parts of the body restrain from acts of righteousness.' Hippocrates (c460-c 370 BC), the Father of Medicine as a Rational Science, believed fasting enabled the body to heal itself. "To eat when you are sick, is to feed your illness" was his motto. Swiss physician Paracelsus (1493-1541 AD) remarked: "The fasting is the greatest remedy, the physician within." To many, the fasting is considered "Nature's Restorer," nature's ancient, universal "remedy" for many ailments. Edward Hooker Dewey (1837-1904 AD)- The pioneer of therapeutic fasting and the inventor of "No Breakfast Plan" believed that "Every disease that afflicts mankind develops from more or less habitual eating in excess of the supply of gastric juices" [7]. Otto Buchinger (1878-1966 AD), well remembered for his work on medical fasting says: "Fasting is, without any doubt, the most effective biological method of treatment... it is the 'operation without surgery'... it is a cure involving exudation, reattunement, redirection, loosening up and purified relaxation". He had successfully treated his infected joint rheumatism by using unconventional medicinal approaches such as fasting. To Joel Fuhrman (1953---), known for advocacy of "micronutrient-rich diet," the job of fasting is to supply the body with the ideal environment to accomplish its work of healing.

Japanese cell biologist Yoshinori Ohsumi (Nobel Laureate 2016), was the pioneer of research on how cells recycle and renew their content, a process called autophagy. Fasting activates autophagy with positive impact on cell renewal, resulting in slowing down the aging process [8] and targeting metabolic conditions, neurodegenerative diseases, cancers and infectious diseases [9]. With the passage of time, medical fasting has gained wider recognition and, at present, many spas and treatment centers, in Europe and North America run medically supervised fasting programs.

Medical fasting could be for diagnostic purpose (blood work-up), procedure (pre-operative), therapeutic (in chronic diseases notably diabetes, dyslipidemia, obesity, rheumatoid arthritis) and preventive (to increase overall vitality, boost-up immunity, detoxification). In the ongoing COVID-19 pandemic, interesting role of fasting has been identified. In an observational cohort from the INSPIRE registry, routine periodic fasting was associated with a lower risk of hospitalization or mortality in patients with COVID-19. Fasting has been suggested to be a complementary therapy to vaccination that could provide immune support. [10].

Intermittent fasting: Induction of Medical and Divine Therapy

Amongst the three main types of fasting; continuous energy restriction(CER), nutrient restriction and seasonal eating. The second one, commonly known as "intermittent fasting (IF)", is gaining more recognition.

The IF is an umbrella term for various eating patterns or cycles that switches between fasting and eating on a regular schedule. Its history is traced to Gautama Buddha who advised it for health benefits. It is not a diet plan but a timing schedule. Whereas many diets focus on what to eat,

the exact locus of IF is when you eat. Common time allocation methods are 16/8 (16 hours fasting, 8 hours free eating), 18/6 (18 hours fasting, 6 hours free eating), and 20/4 (20 hours fasting, 4 hours free eating) [12]. It has much better compliance and tolerance because, unlike Mediterranean diet or continuous caloric restriction, it does not restrict caloric intake during the ad libitum period (as much as often as necessary or as desired). Renowned neuroscientist Prof. Mark Mattson, on the basis of his extensive work on IF, concludes that after hours without food, the body exhausts its sugar stores and starts burning fat, a process referred as "metabolic switching "which can protect bodily organs against chronic diseases like type 2 diabetes, heart disease, age-related neurodegenerative disorders, even inflammatory bowel disease and many cancers" [13]. The IF is the area of interest at various research centers. In one randomized Non-inferiority Trial, at the University of South Australia, on patients with Type 2 Diabetes, IF significantly reduced HbA1c and improved glycemic control [14].In a prospective observational trial, on patients with and without type 2 diabetes, IF was found to improve fatty liver index, a proxy for non-alcoholic fatty liver disease (NAFLD), significantly and rapidly [15]

With the background that the problems of adherence to energy restriction in humans are well known, a randomized controlled trial was designed to compare the feasibility and effectiveness of IF with CER for weight loss, insulin sensitivity and other metabolic disease risk marker, on premenopausal women, observed over a period of 6 months. Both IF and CER were equally effective with regard to weight loss, insulin sensitivity and other health biomarkers [16]. IF may safely be offered as an alternative equivalent to CER for weight loss and reducing disease risk.

In addition to its use in clinical practice, IF is also used in certain religious practices, notably a month-long period of Ramadan [17]. With fasting from "dawn to dusk," it can last 11-18 hours/day, depending on the geographic location and season of the year during which the Muslims abstain from ingesting food and liquids, making their intake exclusively nocturnal.

Whereas the Ramadan fast is a form of IF practiced by millions of adult Muslims globally for a whole month [18], its common consequences are reduction in body weight, relative fat mass (FM) and resting basal metabolic rate (BMR) [17, 19]. Moreover, the IF, related caloric restriction decreases total cholesterol, low-density lipoprotein (LDL) and fasting plasma glucose (FPG) levels [20]. Of note, the catabolic state, which is related to protein loss, was not triggered during Ramadan IF, in an Indonesian study [20].

In a before-after study paired sample T-test illustrated a significant decrease in Insulin-like growth factor-1 (IGF-1) and interleukin-2 (IL-2) levels after Ramadan fasting compared to before Ramadan.The concentration of total cholesterol (TC), total glycerides (TG), low density lipoprotein cholesterol (LDL-C) levels underwent significant decreases over the period of the study. However, there was no significant change in high-density lipoprotein cholesterol (HDL-C) levels [21].

In a Jordanian study, conducted on healthy subjects fasting in Ramadan, the results indicated that IF attenuates inflammatory status of the body by suppressing proinflammatory cytokine expression and decreasing body fat and circulating levels of leukocytes [22.].

Like the Salah (Prayers) and Zakat (Divinely Prescribed Just Economic Order), the Saum (fast, self-restraint) is also an ancient ritual of worship. It trains and disciplines the soul and has existed in various forms in almost all the religions. The Arabic word "Saum" literally means "to abstain from something" and "to give up something". Whereas creating an ideal society requires discipline and self-restraint among the individuals, the verse means that you may comply with commands of Almighty , by attaining piety and fearfulness, and keep away from His prohibitions.

According to the Holy Bible (Genesis 2:16-17) and the Holy Quran {2:35}, our ancestor Prophet Adam and his wife, while in paradise, were commanded to refrain from eating the fruit of a particular tree but

permitted to eat from the rest. As inferred by the Pope Shenouda III of Alexandria, in his book "The Spirituality of Fasting", certain limits were set for the human body beyond which it should not go [1-Pope]. Thus, from very beginning, man has had to control his inclination towards certain things. The divine command could be interpreted, as setting boundaries for self restraint. It needs to be understood that the doctrine of fasting does not mean merely abstinence from food and drink; it is much more than that. Two Reported Sayings of the Last Messenger:

"Verily, fasting is not only from eating and drinking. Rather, fasting is from vanity and obscenity. If someone abuses you or acts foolish against you, then say: Indeed, I am fasting." (#3561:Ṣaḥīḥ Ibn Ḥibbān)

And "Whoever does not give up false statements (i.e., telling lies), and evil deeds, and speaking bad words to others, Allah is not in need of his (fasting) leaving his food and drink." (# 6057 Sahih al-Bokhari)

exemplify such boundaries. In fact, the fasting, created by divine wisdom, is not only a part of worship but effectively instrumental in developing self-discipline.

The Quranic verse referred above {2:183} makes it clear that the purpose of fasting is attainment of "Taqwa", which means "forbearance, fear and abstinence". This comprehensive word incorporates compliance with the commands of God Almighty and keeping away from His prohibitions. The worldly religions believe that the fasting is a shield that safeguards against bad deeds and forbidden acts and cultivates personal discipline and spiritual energy.

The exercise of fasting, according to the Book of Hebrews (12:7-11), is to discipline the believers, by God Almighty, for our good, in order that we may share in His Holiness. This discipline produces a harvest of righteousness and peace for those who have been trained by it.

In response to a question "What is the Purpose of Fasting?", The Aish Rabbi Replied "A distinctive feature of Judaism is its philosophy of integrating the spiritual with the physical. We use the physical as a doorway through which we access the spiritual". Haredi Rabbi Eliyahu Kitov (1912-1976), in his book "The Book of Our Heritage", states that "the one who fasts and spends the day idly without repentance, misses the point. That person is emphasizing the fasting, which is secondary, and deemphasizing the repentance which is primary".

Elder Joseph Wirthlin in his presentation "The Law of the Fast" at General Conference April 2001 of The Church of Jesus Christ of Latter-Day Saints said "Without prayer, fasting is not complete fasting; it is simply going hungry". Fasting, coupled with mighty prayer, is powerful. It can fill our minds with the revelations of the Spirit. It can strengthen us against times of temptation." Truly speaking, the fasting always accompanied by a suppliant prayer, serves to express humility before God (Lev 16:31). Such fasting is equivalent to "humiliating one's soul.".

Fasting is not only confined to individuals, but also for whole nations. The most outstanding examples were the one during reign of Queen Esther (Esther4:3,16), in response to call from Ezra, the priest (8:21,23) together with Nehemiah (Nehemiah 9:1) and that of people of Nineveh (Jon 3:5) fasting in lamentation and dressed in sackcloth with ashes on their heads seeking God's mercy. They believed that, through true fasting man can soften God's heart. True fasting is a spiritual act primarily taking place inside the heart. In fact, the fasting, a sacred and idealistic worship is from Him, through Him and to Him.

Practice of Fasting in Various Religions

Zoroastrianism, one of the world's oldest surviving religions, prohibits fasting, because of its belief that such a form of asceticism will not aid in strengthening the faithful in their struggle against evil. The only fast that is traditionally observed is fast from eating meat throughout the month of Bahman. In zoroastrian calendar, the 2nd day of every month and 11th month of every year is dedicated to Bahman Amshapand. [23]

In Hinduism, fasting is not an obligation, but a moral and spiritual act negating the physical demands of body, purpose being purifying the body and soul for spiritual gains. It is a window to escape sins. [24]

The Sanskrit word for fasting is 'Upavasa.' 'Upa' means "near" and 'Vasa' means "to stay". The term meaning "to sit or stay near (the Lord)" and "to keep the Lord close to your heart and mind," is an integral induction of the divine therapy. Fasting is a major advocate of Upavasa which is among all Daivavyapashraya (spiritual) therapies and one among ten Langhana (that which produces lightness of the body) therapies [25]

Fasting during religious festivals is also very common, examples being Maha Shivaratri or the nine days of Navratri (just before Diwali), Ekadasi (the 11th day of the fortnight) and Purnima(full moon). Certain days of the week are also marked for fasting, depending on individual choices and on one's favorite god and goddess. In Northern India, Karwa Chauth (a form of fasting) is undertaken by married women for the well-being, prosperity, and longevity of their husbands. Thursday fasting is also common among the Hindus of that area whereas in West Bengal fast on Ashtami (the eighth day of the festival of Durga Puja) Is well known.

The Buddha Diet is characterized by time-restricted eating, which is at present, a kind of intermittent fasting. The diet emphasizes people focusing on *when* they eat versus *what* they eat. To begin with people, restrict their calories intake by 13 hours a day, reducing it gradually to 9 hours a day.

Fasting in Buddhism is not mandatory for anyone. It is recommended for monk and nuns only, but many Buddhist followers observe fasting [26]. It is an initial stage of self-discipline to acquire self-control. The Buddha held that practicing mindfulness of eating/food could lead to weight loss and better health. In the sutras he states, "when a person is mindful and thus knows moderation in eating, his ailments diminish, he ages gently and he protects his life" (S.I,81-2).

According to the Tattvartha Sutra (the earliest, most authoritative, and comprehensive summary of their religion, recognized by all four Jaina traditions), the purpose of fasting is to strengthen and purify the soul by shedding or weakening the karma attached to it. In Jainism the fasting is one of the 12 types of penance, the real fasting being more about relinquishing the desire for taste and attachment to the choice of food. There are many types of fasting in Jainism. One is called Chauvihar Upwas, in which no food or water may be consumed until sunrise the next day. Another is called Tivihar Upwas, in which only boiled water is allowed. Fasting is usually done during Paryushana (the most important holy event of forgiveness) but most Jains also fast at special times such as birthdays and anniversaries.

Sikhism is probably the only major organized world religion that does not promote fasting except for medical reasons. The Sikh Gurus discouraged the devotee from engaging in fasting as it allegedly "brings no spiritual benefit to the person." Therefore, in general, Sikhs do not undertake fasting [28]

Fasting in Judaism is defined as total cessation from all food and drink. A full-day fast begins with sunset in the evening and continues through darkness of the next day [29]. The act of fasting is believed to result in the spiritual transformation of the individual or the community. Whereas the fast is an act of spiritual cleansing, both at individual and community level, it reflects expression of repentance and the hunger for divine forgiveness.

In Judaism there are six days of fasting throughout the year. Yom Kippur (the Day of Atonement) as the "Sabbath of the Sabbaths," is the only fast day which is explicitly stated in the Torah. Fasting as a means of repentance, on this most important day of the Jewish year, is mandatory for every Jewish male above the age of bar mitzvah (13 years) and every Jewish female above the age of bat mitzvah (12 years).

The second major day of fasting is Tisha B'Av, the day in 70 AD on which the Romans destroyed the Holy Temple in Jerusalem and the Jews were exiled from their homeland. The purpose of this fasting is mourning. The remaining four fasts are considered minor. It is customary for a bride and groom to fast on their wedding day before the ceremony as the day represents a personal Yom Kippur. On Rosh Hashanah (Jewish New Year), according to Jewish belief, God makes judgment for each one, and on Yom Kippur, "judgement is sealed". Fasting, always accompanied by a suppliant prayer, serves to express humility before God: fasting (Lev 16:31) is equivalent to "humiliating one's soul" (Lev 16:29).

This passage comes right in the middle of Jesus Christ's teachings on prayer and giving. In this sermon, he uses phrases like: "When you give," "When you pray" and "When you fast." He expects that his audience will give, will pray, and will fast which is neither an option nor an oddity. Fasting is a given.

Fasting, according to the Bible, means to voluntarily reduce or eliminate intake of food for a specific time and purpose. In the biblical context, humans abstain from eating for a whole day (Judge 20:26) and, on being hungered, fed with manna (a unique food unknown to them and their ancestors) (Deuteronomy 8:3). This deprivation is a religious act. Jesus Christ himself fasted during his victory over temptation. For forty wilderness days and nights he was tested by the Devil. He ate nothing during those days, and when the time was up he was hungry. Luke 4:2 (Msg).

The fasting is not a method of dieting, nor it it is simply going hungry. It must be for a specific objective. It must be accompanied by prayers. In fact, fasting is part of a group of spiritual disciplines that, include prayer, mortification of the passions, practicing humility, almsgiving, controlling the tongue, [29]

According to Daniel 9:3 "So I turned to the Lord God and pleaded with him in prayer and petition, in fasting, and in sackcloth and ashes". This is returning to the Lord in an attitude of dependence and total abandonment. Same is the situation described in Judges20:26 when all people humbled before the Lord in extremely distressed situation.

Fasting, one of the pillars of Islam, is a practice of resistance and a spiritual readiness in self-development. It is an obligatory practice during the holy month of Ramadan, from fair (dawn), until maghrib (sunset). The Muslims are prohibited from eating, drinking, smoking, and engaging in sexual activity while fasting. By fasting, a Muslim draws closer to God by abandoning the things they enjoy, such as food and drink. This makes the sincerity of their faith and their devotion to God all the more evident. The Qur'an states that fasting was prescribed for those before them (i.e., the Jews and Christians) and that by fasting a Muslim gains tagwa, which can be described as the care taken by a person to do everything God has commanded and to keep away from everything that He has forbidden. Muslims believe that fasting is more than abstaining from food and drink. It also includes abstaining from any falsehood in speech and action, from any ignorant and indecent speech, and from arguing and fighting, and lustful thoughts. Therefore, fasting helps develop good behavior. Fasting also inculcates a sense of fraternity and solidarity, as Muslims feel and experience what their needy and hungry brothers and sisters feel [2]. However, even the poor, needy, and hungry participate in the fast. Moreover, Ramadan is a month of giving charity and sharing meals to break the fast together. When Imam Sadegh was asked for the philosophy of fasting, the reply was: "Indeed, God obliged fasting to equalize between the poor and the rich". The response to a similar question from Imam Askari was "God has made fasting compulsory so that the rich shall find the pain of hunger, so they have a mercy upon the poor.'

There are also other days in the Islamic calendar on which fasting is recommended but not compulsory. These include the first and last Thursday of each month, Mondays, 13th, 14th and 15th day of each month, six days after end of Ramadan, first 10 days of Dhul-Hijjah (12th Month of Islamic Calendar).

Conclusion

Fasting, an ancient ritual of worship, disciplines the body and soul and has existed in various forms in all religions. This divine command is an effective tool in setting boundaries for self-restraint. It is much more than usually thought abstinence from edibles; rather "When you fast, your ears, eyes, hair, skin, and all your limbs should also fast." It aims in compliance with the commands of God Almighty while keeping away from His prohibitions, developing self-discipline, forbearance, and righteousness. The fasting created by divine wisdom should not be practiced just "going hungry," rather it should be accompanied by repentance, supplicant prayers and developing sense of empathy for those under-privileged. The commitment in making positive change in the personality and purification of body and soul harmonize the inner and outer spheres of an individual.

"The hidden sweetness in the stomach's emptiness," as one of the oldest therapeutic strategy, is well known to the health carers since pre-history. Later on the fasting was recognized as "the greatest remedy, the physician within," "nature's restorer," "the operation without surgery." With the advancement of our understanding of cell biology, the effective role of fasting through autophagy was highlighted. Most recently, fasting has been suggested to be complementary therapy to immunization, for boosting immunity.

Acknowledgements:

The author expresses great appreciation to Dr. Abdul Wajid Siddiqui for his insightful suggestions and stimulating discussions, throughout the conduct of this study.

Dr. Murad Ahmad Khan deserves special thanks for his constructive critiques for the enhancement of manuscript quality.

Competing Interests:

The author declares that he has no direct and indirect financial, commercial, personal/career affiliation with the article, counting any individually held viewpoint that are relevant to his work, to disclose.

Funding:

The author received no financial support, from any quarter, for the research, authorship, and/or publication of this article.

References

- Botros S M (Translator)- (1997) "The Spirituality of Fasting" by HH Pope Shenouda HH III—Dar El Tebaa El Kawmia Press -Revised Edition
- New World Encyclopedia- Fasting https://www.newworldencyclopedia.org/entry/Fasting downloaded 22 November 2022]
- Jeûne genevois—(2022) Geneva through ageshttps://www.geneve.ch/en/what-geneva/discover-genevadistricts/geneva-through-ages/jeune-genevois - downloaded 22 Novemberl
- Guelpa,G.;Marie,(1911),A.Aluttecontrel'epilepsieparladesinto xicationetparlareductionaltimentaire.Rev. Ther. Med. Chir. 78, 8–13.
- Kim, J.M. (2017) Ketogenic Diet: Old Treatment, New Beginning. Clin. Neurophysiol. Pract. 2, 161–162. [CrossRef]
- 6. Fang Y, Gu Y, Zhao C, et al. (2021) Impact of supervised beego, a traditional Chinese water-only fasting, on thrombosis and haemostasis. BMJ Nutrition, Prevention & Health
- Dewey EH-(1895)"The True Science of Living: The New Gospel of Health, Practical and Physiological"—Norwich Conn,The Henry Bill Publishing Company London,England
- 8. Sedwick C-Yoshinori Ohsumi: (2012) Autophagy from Beginning to End- JCell Biol 197(2):164-165
- 9. Bagherniya M, Butler AE, Barreto GE, Sahebkar A. (2018) The effect of fasting or calorie restriction on autophagy

- induction: a review of the literature. Ageing Res Rev47:183-197
- Horne BD, May HT, Muhlestein JB, et al. Association of periodic fasting with lower severity of COVID-19 outcomes in the SARS-CoV-2 prevaccine era: an observational cohort from the INSPIRE registry.
- 11. BMJ Nutrition, Prevention & Health 2022;0:e000462.
- Dewan eShams— Ganjoor : Moulana :Ghazaliat in "Ghazal" issue 1739
- Malinowski B, Zalewska K, Węsierska A, Sokołowska MM, Socha M, Liczner G, Pawlak-Osińska K, Wiciński M. (2019) Intermittent Fasting in Cardiovascular Disorders-An Overview. Nutrients. 11(3):673.
- Mattson MP, Longo VD, Harvie (2017) M-Impact of intermittent fasting on health and disease processes—Ageing Res Rev. 39: 46–58.
- 15. Carter S, Clifton PM, Keogh JB. (2018) Effect of intermittent compared with continuous energy restricted diet on glycemic control in patients with type 2 diabetes: a randomized noninferiority trial. *JAMA Netw Open.*;1(3):e180756.
- Drinda S, Grundler F, Neumann T, et al. (2019) Effects of periodic fasting on fatty liver index—a prospective observational study. *Nutrients*. 11(11):E2601.
- 17. Harvie MN, Pegington M, Mattson MP, Frystyk J, Dillon B, Evans G, Cuzick J, Jebb SA, Martin B, Cutler RG, Son TG, Maudsley S, Carlson OD, Egan JM, Flyvbjerg A, Howell A. (2011) The effects of intermittent or continuous energy restriction on weight loss and metabolic disease risk markers: a randomized trial in young overweight women. Int J Obes (Lond). 35(5):714-727.
- 18. Salehi M, Neghab M. (2007) Effects of fasting and a medium calorie balanced diet during the holy month Ramadan on weight, BMI and some blood parameters of overweight males. Pak J Biol Sci. 15;10(6):968-971.

- Lesson N, Ali T—Energy Metabolism and Intermittent Fasting: The Ramadan Perspective-Nutrients. 2019 May; 11(5): 1192.
- Hajek P, Myers K, Dhanji AR, West O, McRobbie H. (2012)
 Weight change during and after Ramadan fasting. J Public Health (Oxf). 34(3):377-381.
- Fahrial Syam A, Suryani Sobur C, Abdullah M, Makmun D. (2016) Ramadan Fasting Decreases Body Fat but Not Protein Mass. Int J Endocrinol Metab. 2;14(1):e29687.
- Rahbar AR, Safavi E, Rooholamini M, Jaafari F, Darvishi S, Rahbar A. (2019) Effects of Intermittent Fasting during Ramadan on Insulin-like Growth Factor-1, Interleukin 2, and Lipid Profile in Healthy Muslims. Int J Prev Med. 15;10:17.
- 23. Faris "M'A-I"E, Kacimic S, Al-Kurd RA, Fararjehd MA, Bustanjic YK, Mohammad MK-(2012) Intermittent fasting during Ramadan attenuates proinflammatory cytokines and immune cells in healthy subjects- Nutr Res
- Joshi AS, Varthakavi PK, Bhagwat NM, Chadha MD, Parmar G-Fasts, feasts, and festivals in diabetes: Glycemic management during Parsi rituals- Indian J Endocrinol Metab. 19(5): 680– 682.
- 25. Gangele P, Paliwal M-(2020) Upavasa (fasting) for health & longevity: an overview- CellMed 2(10) /e10:1-5
- Gaikwad ST- Apprehending Concept, Canons and Types of Fasting in Buddhism- Int J Innovative Res Creative Technology- 2017; 2(4): 164-168
- 27. Front Desk—Why do Jains fast? https://frontdesk.co.in/forum/showthread.php?tid=2017-downloaded 22 November 2022]
- Sikhiwiki Why is Guruji against fasting? https://www.sikhiwiki.org/index.php/Fasting -downloaded 22 November 2022]
- 29. Corn K(Editor) –(2006) "Fasting in the Jewish Tradition" in "Fasting and Feasting in Three Traditions: Judaism, Christianity, Islam: Interfaith Conversations" Booklet 1–University of Indianapolis 5-6

Ready to submit your research? Choose ClinicSearch and benefit from:

- > fast, convenient online submission
- > rigorous peer review by experienced research in your field
- > rapid publication on acceptance
- > authors retain copyrights
- unique DOI for all articles
- > immediate, unrestricted online access

At ClinicSearch, research is always in progress.

 $\underline{Learn\ more\ \underline{http://clinicsearchonline.org/journals/international-journal-of-\underline{clinical-case-reports-}}$



© The Author(s) 2022. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated in a credit line to the data.