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# Science & Religion in the service of Humanity


Editor-in-Chief
Ade P. Dopamu

Editors
Olu Obafemi
F. A. Oladele
O. B. Oloyede
Sylvia O. Malomo
R. W. Omotoye
R. A. Olaoye




16

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Revd. Dr. C.O. Ogunkunle
Sign .....
Date .....

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The Metanexus Institute on Science and Religion, Philadelphia, USA, gave me a Local Societies Initiative (LSI) Award in 2003 to organize activities on Science and Religion dialogue at the University of Ilorin, Ilorin, Nigeria. We had seminars, lectures, conferences, debates and roundtables. In October, 2004, the Local Societies Initiative (LSI), University of Ilorin, in collaboration with the Nigerian Association for the Study and Teaching of Religion and the Natural Sciences (NASTRENS), held a science and religion conference titled: SCIENCE AND RELIGION IN THE SERVICE OF HUMANITY. This book is the outcome of this conference.

To Metanexus this book owes a great deal. The award it made to me was of the greatest importance to our development in the area of science and religion interface. I hope that those of Metanexus Institute will feel that in the publication of this book their trust is in some modest measure justified.

The second institution is the University of Ilorin. It was clear from the onset that our LSI was going to succeed because the Administration provided us with generous financial assistance and excellent physical facilities. We held our meetings, seminars, roundtables and paper presentations at the African Centre for Religion and the Sciences (ACRS) which was given to LSI by the University of Ilorin Administration and befittingly furnished for our use.

There are those who have had the most indispensable and direct instrumental roles in getting this book into publishable shape and form. We are profoundly appreciative of the rock-solid support from the Vice-Chancellor, Professor Shamsudeen O. O. Amali. His encouragement has made it possible for the University to host the conference and to also make University facilities available. Special thanks go to the Deputy Vice-Chancellor (Academic), Professor Is'haq Ọlanrewaju Oloyede, for participating actively in the science and religion activities. I also thank all the Principal Officers of the University of Ilorin, Professor Luke Ẹdungbọla (DVC, Administration), Olufunkẹ O. Oyeyẹmi (Registrar),

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A word of thanks to the editors of this book who have put together what once was a virtual collection of conference papers into the new perspectives of this volume. I am particularly indebted to Professor Olu Ọbafẹmi who suffered the tricks of information technology and had to write the preface twice when the first draft could not be retrieved from the computer.

I owe a great debt to all my students at the University of Ilorin. They have continually provoked me to strive for forcefulness and kept alive my zest for research and publication. More importantly, my students attended all seminars and LSI conferences and made constructive contributions to our discussions.

I am particularly indebted to Dr. Sunnie Ododo for valuable help at various stages. He did not only typeset the manuscript; he also paid special attention to the correctness of the whole work. Indeed, his scrutiny of almost the whole manuscript has been invaluable.

Finally, I am very grateful to all my colleagues in Nigerian Institutions for their kind words in appreciating my humble contributions to scholarship. It is my desire to encourage them to greater heights.

**Professor Ade P. Dọpamu**
Editor – in – Chief
Chairman of LSI and NASTRENS
Director of African Centre for Religion and the Sciences (ACRS)

# SCIENCE AND RELIGION IN THE SERVICE OF HUMANITY: A PREFACE

OLU OBAFEMI

The inter-textual and multi-disciplinary interconnection of human knowledge has been long established by prominent scholars of various disciplines, thus providing the death-knell of narrow, exclusivist notion of scholarship, bursting the borders of knowledge and opening the floodgates through which disciplines can rigorously engage themselves. If knowledge—either of the scientific forte or of the humanistic category — is meant to serve mankind in her infinite search for total self-apprehension and that of its cosmos—then it does itself great injury if it forecloses itself in the chitin of specific, inviolable disciplines. This book is a critical outcome of a three-day, all-inclusive Conference of Science and Religion, organized by the now famous The Local Societies Initiative (LSI) at the University of Ilorin in October 2004. It is also a re-affirmation of the inextricability of science from religion as they provide service to humanity. The ontology and spirituality of Religion and the empiricism and materiality of Science have been exposed in this Conference to be a product of needless compartmentalization of human knowledge.

Three major papers—a Keynote and two comparative Lead—supply the focus, locus and tone which all the other thirty-one papers rigorously engaged, with a surfeit of intellectual appetite, thus making this book an organically well-knotted and engaging document of the various ways in which human knowledge is presented as indivisible and inextricable. The Keynote paper is as expected, a furnishment of the abiding concepts and tools of the Conference theme. It sought to centralize God in human existence and endeavours, which include Science and Religion. In serving God, Man serves himself, locates himself within the universe and cosmos and seeks knowledge of himself, his environment and ultimately God, who makes that pre-existent knowledge feasible. Emeritus Professor Oyawoye links religion to

space—in that the religion one practices is a factor of one's cultural environment; an Irish will be a catholic, a Serbian an orthodox Christian, a Chinese will be Hindu while a Turkish will be a Muslim. These are probable absolutes that will certainly generate disputations—for which scholarship is notorious.

What will be less contentious is the link he draws between science and religion which became veritable tool and gift of God to man in his God-designated role as vicegerent. Having created matter and energy and their properties, God gave man the knowledge (grey matter) and intuitiveness, both to quest after, to find and to unravel nature's mysteries. This is the domain of science. Its endowment by God is the sphere of religion; of metaphysical and ineffable spirituality. Oyawoye's conclusion is thus an inviolable linkage between Science and Religion, which are man-centred.

Flowing or/and extending, albeit unwittingly, from this conclusion, two papers of the same title, vide, ***Science Goes Better With God***, take alternative perspectives of the centrality of God in the growth and essence of Science. Emeritus Professor Adeoye Adeniyi takes the matter from the Christian perspective while Professor O.B. Oloyede examines the issue from the Islamic standpoint. Adeniyi offers informing, working definitions of Religion and Science as 'forces' that man requires to serve himself. Religion, is proposed as 'an awakened sense of a **higher unseen controlling power,** which transcends man and which serve as a **controlling influence** over man, meeting the non-physical needs of man and expressed within the 'non-physical realm.' Science is defined as knowledge that is ensured through 'observation and experiment, critically tested, systematized and brought under general principles'. Its inclination toward enquiry, inquisitiveness and scepticism inclines it toward atheism-which is antithetical to the unalterable inclination of faith and religion. It is with the help of religion that mysteries of creation are clarified for science—for example that through religion we know that the Big Bang was authored by God. The Bible comes in copiously in this paper to ascertain the composite nature of man—as both a physical (matter) and a spiritual (ineffable) product of God.

In a similar frame, and complementary to the God-centric nature of Science and Religion in serving mankind, O.B.Oloyode's paper proffers astronomical evidences to argue the plurality of the universe as iconized in the Qur'an, drawing generously from germane verses in the

Qur'an. For instance, and contrary to the claims of discovery of the stages of Zygote and the DNA, celestial bodies had been revealed to the Prophet Muhammed over a thousand years before modern science evolved. With spiritual clarity, therefore, science will acknowledge the authorship of knowledge and life as attributes of Allah.

From these tripartite discourse—the inseparable mutuality of science, religion and man as God's agent, the various themes that emerge from the papers become organic, multi-perspectival and affirmative of the value of multi-disciplinarity of human knowledge. The cognate themes and perspectives that flow from the essays include Medicine, Science, Technology, Sociology, Communication, Law, Morality, Religion and Agriculture. They all offer concepts, notions, facts and figures which buttress the central argument of the inter-relationship of knowledge and their application to the total apprehension of humanity—from the key religions of the world, diverse languages, anthropologies, ethnic nationalities—from comparatist slants of scholarship. We shall only exemplify these themes in the rest of this brief **Preface**, so as not engage in a boring and tedious discourse such that is capable of 'killing' the reader's appetite, rather than whet it.

By far the most explored discipline is Medicine—seen from both Islamic, Christian and Afrel dimensions; engaged from Western and African perspectives and from ethnic nationality angles. For example, Bade Ajayi's essay titled **The Human Skull Derived from Ifa Corpus,** Olaoye's paper **An Analytical Study of the Concept of Sickness in Modern Science and Traditional Faith,** Babalola's **Interaction Between Science and Religion Among the Yoruba...: A Therapeutic Appraisal,** Oguntola- Laguda's article on a **Philosophical Appraisal of Small Pox in Yoruba Traditional Belief**—all offer quite exciting expose on the curative and therapeutic potency of traditional Yoruba medicine, once vilified as fetishist by orthodox, Western medical science. Olaoye's paper offers an illuminating differentiating paradigm in the methods, processes and causative dimensions of sickness between modern medical practice and traditional medicine, which he curiously defines as traditional Yoruba faith rather than medicine. The supernatural streak in Yoruba medical belief is remarkably absent in orthodox medical perception. Through the configuration and permutations of Ifa Corpus and verses, Ajayi and Sanni propose that the Human skeleton is fabricated from Ifa literature and the Yoruba divinity in charge of knowledge. This

will make curious reading for medical scientist. From the Urhobo perception, Ubrurhe in his paper titled **Life and Healing Process in Urhobo Traditional Medicine,** relates how African belief system and concept of life set the Afro-cosmic notion of health, therapeutics, the restoration and preservation of life departs from medical scientific perception of same.

The other medicine-focused entries here examine medicine from the perspective of Christianity and Islam. They are: Agboola's paper, **An Appraisal of the Principles and Practice of Personal Hygiene in Islam,** Adeniyi M.O's essay on **Science and Qur'an in Human Reproduction,** Adegoke's paper on **A Re-evaluation of the Relationship between Islam and Natural Science** engage the Islamic perspective of medical arts. Specifically, Adgoke finds a common, harmonious ground between the Qur'an and medical science with specific reference to human reproduction. The Qur'an, he argues, attests to the claim of modern science on the basic elements and processes of reproduction; genetic transfer, endocrine regulation of genital tracts, ovulation, spermatogenesis, fertilization and the process of zygote transforming into an adult organism. From the Christian parlance, Professor Ogunbode's thin article is a solo, but critical entry. The essay, titled **Spiritual Healing and Science: A Christian Perspective,** examines the various types of sickness, needing healing, to justify the relevance of spiritual healing in the scientific and technological age. He opines that such sicknesses that are spiritual, emotional, demonic in nature, require extra-physical and extra-pharmacological attention that is obtainable through faith, praying, fasting, propitiation and atonement—which are essentially spiritual in nature. Edewor's rather generic and interesting paper, **The Influence of Religion on Contraception and Fertility** discusses the various social and religious perceptions and approaches to the question of abortion, contraception and fertility across the world.

The subject of Religion preoccupies the next segment of discourse. These are broken into Islamic, Christian and Traditional African religions-- their inter-relationships with empirical knowledge of science and their humanizing dimensions for man in society. The essays exploring the Christian religion include Akande's **Interactions Between Science and Religion: A Biblical Perspective,** Adamolekun's **Religion in the Service of Humanity: A Case Study of the Early Christian**

**Ministry to the Widow,** Ogunkunle's **An Exegetical Study of Leviticus and its Relevance to Health,** Oladele's **Scientific and Biblical Evidence of God in the World Around Us,** and Oguntoyinbo's essay on **The Impact of Jesus' Teaching on Humanity.** All of them mediate the role that Christianity plays in the cultivation of human civilization and the humane value of spirituality as a branch of human knowledge. Central to these preoccupations is Oladele's proposition, through a copious recourse to the Bible, that Man in his basic three-pronged persuasions—as Atheist, Agnostic and as a Theist—is the ineluctable presence of God in human existence, irrespective of our religious bents. He deploys the principle of cause and effect to argue his case, as biblically enunciated.

Traditional religion examined through eschatology and environment in two African ethnic nations—the Yoruba and Edo--preoccupy two essays: Alamu's **Edo Eschatology and the Scientific Cosmos** and **Dopamu Abiola's God, Nature and the Environment in the Yoruba Perspective.** The Edo cyclical worldview, intrinsically woven with the Yoruba, argue the continuous and unbroken life cycle of the living, the dead and the unborn, in which death equates the beginning of transcendence—a commencement of a new mode of existence. In a similar extension of this worldview, Abiola Dopamu avers that the Yoruba world is a temporal and spiritual cosmos.

Essays on the technological perspectives in religion, equating its scientific derivative as applied knowledge is rigorously preceded and contextualized by Prof. Abubakre's fascinating article on **Aspects of Quranic Hints to Science and Technology: A Case Study of Alexander the Great** in which he presents Dhul-Qarnayn in the Qur'an as Alexander the Great. The paper aptly cites the Ethiopic tradition's claim that it was a prophet who built the city of Alexadra. The essence of the paper is to locate the connection of religion, science and technology as well as the rotational capacity of God across times and ages, with self-renewing potentials among his heroic figures in all religions. Other papers of similar ilk are Emiola Nihinlola's paper which critically reflects on Science and religion with reference to genetic engineering—examining its 'therapeutic and eugenic purposes, as folcrumed on the Christian perception of man in the image of God. Abioje's paper is the third paper on Technology. Titled **Magic and Science in Yorubaland: Toward Africa's Technological Development** the essay locates magic in the Yoruba worldview is essentially scientific.

Communication is a thematic concern explored in a few papers in this book. Omotoye's essay, **Communication and the Universality of the Gospel in Yorubaland** examines the various forms and uses of communication devices—from the oral to the technological—in the spread of **Christinity in Yorubaland. While Language, Science and Religion: Three Mutual Factors in the Service of Humanity** discusses the inimitable significance of language as the vehicle of human communication, including scientific and religious engagements, Ojuade deploys dance—a gestural and kinetic form of communication to treat the subject of the place of art in the humanization of the universe. The essence of food in the survival service of mankind is a biblical endowment of man by God as argued by Professor Adesiyun in his essay titled **The Contribution of Science and Religion to the Feeding of Humanity: The Nigerian Experience.**

This book is a veritable compendium of the multi-perspectival nature of knowledge and scholarship, delineated from the inextricable and inter-textual link between science and religion as essential tools—of spiritual and temporal dimensions—for humanity and the enhancement of the human condition. It is a rich and diverse study that explores knowledge in a complex, profound and engaging manner. It is a privilege to read all the essays and write this rather sketchy Preface to it. I do hope that it will be made available to many students and scholars in all disciplines of study and at various levels of knowledge acquisition and disbursement.

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"survival of the fittest" from [illegible] Maltus, who suggested that populations always grow faster than the [illegible] and money for their support, leading to a struggle for survival.[5] Thus, science and art do mingle after all, different aspects of the same life.

In another respect, science is also said to have a magical nature. Indeed, in popular opinion, many of the so-called products of science have their magical sides, to the extent that overwhelming majority of users cannot explain how the effects are caused or achieved. For instance, how does the fax machine transmit a paper message by delivering another

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survival of the fittest" from a book by an Anglican clergyman, Thomas Maltus, who suggested that populations always grow faster than the food and money for their support, leading to a struggle for survival.[5] Thus, science and art do mingle after all, different aspects of the same life.

In another respect, science is also said to have a magical nature. Indeed, in popular opinion, many of the so-called products of science have their magical sides, to the extent that overwhelming majority of users cannot explain how the effects are caused or achieved. For instance, how does the fax machine transmit a paper message by delivering another

# AN EXEGETICAL STUDY OF LEVITICUS 3: 1-5 AND ITS RELEVANCE TO HEALTH

C.O. OGUNKUNLE

**Introduction**

Religion and science have several basic things in common. Living in good health, for example, is an issue that is well discussed in every religion and culture. The Yoruba have a good concept of good health in their saying:

| | |
|---|---|
| *Ma a kole* | I will build a house |
| *Maa bi'mo* | I will bear children |
| *Maa ra moto ayokele* | I will buy motor cars |
| *Lai si alaafia* | Without peace (**ש ל ו ם**) |
| *Won yen ko sese* | Those things are impossible |
| *Alaafia lo ju* | Peace (**ש ל ו ם**) is the most important |
| *Ilera loro* | Health is wealth |
| *Eni ti o ni alafia* | He who has peace (**ש ל ו ם**) |
| *Olohun gbogbo* | He has everything.[1] |

Incidentally, the main target of medical profession, especially the orthodox medicine is for every man to be in good health. The people in Ancient Israel were instructed to do certain things in their sacrificial system so as to enjoy good health or well being with God and among themselves. Therefore, the focus of this paper is to do an exegetical study of Leviticus 3:1-5 and its relevance to health. The fundamental issue which the paper addresses itself to is the importance of fat, kidneys and liver which were given to God as food in the peace or well-being offering. What was the criteria used for the choice of these three parts of the body among other parts? How did the Israelites understand each of these three

parts of the body and what role do these parts play in human body in relation to good health.?

**Well-being Offering**

The Hebrew word **ז ב ח** is a masculine noun which means sacrifice.[2] It is a general name used for all kinds of sacrifices made to God of Israel (Gen. 46:1; Exod. 10:25; 18:12 and Hos. 3:4) and to other deities (Exod. 34:15; Num. 25:2; Deut. 32:28)[3]. The word **ש ל מ י ם is** connected with **ש ל ו ם, which** means peace, good health and well-being[4]. Therefore, the phrase **ש ל מ י ם ז ב ח** has been given various translations which include "a sacrifice of peace" [5], "a fellowship offering"[6] "a shared offering"[7]; "a communion sacrifice"[8]; "a sacrifice of well being" or "Well being offering"[9] among others. The well being offering is adopted in this paper in the light of our understanding of the word **ש ל מ י ם** that is connected with peace, well-being and prosperity[10].

The well-being offering is one of the five major offerings in the Israelites sacrificial system[11]. Well-being offering was an optional sacrifice which a man could bring when he felt like. Leviticus 7:12-14 gives three possible reasons for offering it, namely: as a confession offering, as a free will offering, or to fulfill a vow[12]. The well-being offering was officially demanded at the feast of Pentecost (Lev. 23:19). The other special occasions when the offering was required include: the sealing of the covenant at Mount Sinai (Exod. 24:5), the covenant renewal (Deut. 27:7), the installation of Saul as the king of Israel (I Sam. 11:15), David's bringing of the Ark of the covenant to Jerusalem (II Sam. 6: 17-18), the dedication of Solomon's Temple (I Kgs. 8:64), cessation of famine or pestilence (II Sam. 11:15), the national spiritual renewal (II Chro. 29:31-36), annual family reunion (I Sam. 20:6), and harvesting of the first fruits (Exod. 22: 29-31; I Sam. 9: 11-13; 22-24. The well-being offering was a festive meal among the Israelites, eaten in or around the sanctuary. Unlike other sacrifices, in well being offering only a few choice portions were burned on the altar and the priest and worshippers together with members of his family and friends shared the rest. F. Duane Linsay says:

> The fellowship offering was a time of rejoicing before the LORD (Deut. 12: 12, 18-19; 27:1; 1 Kgs. 8: 64-65) in which the worshippers, their families, and a Levite from their community (and also pour during the Feast of Weeks, Deut.16: 11) shared a major portion of the sacrificial meal, perhaps as God's token to them of all the benefits of their covenant relationship with Him.[14]

**Rite and Procedure of Well-Being Offering and the Importance of Fat, Kidneys, and Liver**

The procedure for the Well-being offering is very similar to that of Burnt offering. The worshipper usually presents his animal to the LORD at the outer court, that is, at the entrance of the Tent of Meeting (Lev. 3:1-2 cf. 1:3; 3: 7-8, 12-15). Next, the worshipper lays his hand on the head of the animal (Lev. 3:2 cf. vv.8, 12) with the purpose of identifying himself with it or transferring his guilt to it. G.J. Wenham suggests that he probably at this point explain why he was offering the sacrifice. For example, thanking God for answering the prayer of his vow being fulfilled[15]. The worshipper thereafter kills the animal himself. The word ש ח ט is a Hebrew verb, which means to kill or slaughter[16]. The word is common to both ancient and modern Hebrew, as well as ancient Ugaritic. Technically, the word, which occurs about 80 times in the Hebrew Bible, is used about 51 times to mean slaying of animal for sacrifice[17]. Sometimes, the word implies the 'slaughtering' of animals for food (I Sam. 14: 32; 34; Isa 22:13). At times the word is used for the 'killing' of people (Judges 12:6; I Kings 18:40; 2 kgs. 10:7,14)[18]. It then becomes the responsibility of the priest to splash the blood of the animal over the altar. Incidentally, Israel had been forbidden by God to eat flesh with blood in it (Gen. 9:4; Lev.17: 10-13; I Sam.14: 32-35).

At this point, unlike burnt offering, only certain portions of the animal namely fat, kidneys and the appendage of liver are burnt as offering to God. Biblically, these three words namely: fat, kidneys and liver are found together in Biblical passages, such as, Exodus 29: 13, 22; Leviticus 3: 3-4, 9, 10,14 and 15. This is to establish close connection one with another. The Hebrew word ח ל ב is a masculine noun which means fat. The word has quite a number of meanings which include: fat of human body which covers the intestines (Judges 3:22); fat of beast

which is either rich for human consumption (food) (Deut. 32:14) or the fat of the animal offered in sacrifice to God (Exod. 23:18; I Sam. 2: 15-16), choicest or best part of products of land (Gen. 45: 18)[19]. It is obvious that the fat in this passage belongs to Yahweh and it is to be burnt onto the LORD. Fat in the Old Testament is synonymous with the best (Gen. 4:4; 45:18; Ps. 81:16). The Israelites were specifically forbidden not to eat the fat of ox or sheep or goat (Leviticus 7: 22-25). Therefore, the worshipper by giving the fat portion was giving the best of the animal to God; that is, the best part of the worshipper's life to God[20]. The fat portion symbolizes the dedication of the worshipper's best and deepest emotions to God.

The second part of the well-being offering that is given to God are the two kidneys. The word כ ל י ת (kidneys) is a feminine noun that appears only in plural (Exod. 29:13) [21]. The word is used in two ways: literally and figuratively. Literally, it is used as a physical organ, that is, the most sensitive and vital part of a man (Psa. 139:13). The word is also used in connection with the offering of the best part of an animal to God (Lev. 3:4, 10, 13; 4:9; 7:4; 9:10, 19)[22]. Figuratively, the kidneys indicate the seat of emotion and affection (Job 19:27; Prov. 23: 16; Psa 16: 7; 73:21) [23]. Kidneys are frequently associated with a person's feeling, his deep thoughts and his conscience (Jer. 11:20; 17:10). Kidneys are often parallel with heart in the Old Testament (Jer.17: 10; 20:12; Ps. 7:9-10; 26:2) [24]. Therefore, the offering of the kidneys symbolizes dedication of the worshipper's best and deepest emotions to God[25].

The third and the last part of the Well-being offering that is given to God is the liver. The Hebrew word for liver is כ ב ד[26]. It is the heavy organ of the body that is filled with blood. It weighs about three and a half pounds[27]. The Hebrews considered the liver as a vital organ of the body that if an arrow pierced it, death followed (Prov. 7:23). Thus they have a very high regard for the liver as the center of emotion. They associated the deep emotions of sorrow and joy with the liver (Lam.2:11 cf. Psa. 16:9)[28]. The Well-being offering is concluded in a special way whereby the worshipper together with his friends and family members eat up the rest of the meat in the presence of the LORD. Deuteronomy 12:7 says:

> There, in the presence of the LORD your God, you and your families shall eat and shall rejoice in everything you

have put your hand to, because the LORD your God has blessed you.

Thus in Well being offering, the worshipper recognizes the fact that God has given him life and health. Therefore, he gives himself back to God in penitence and commitment, and in return received back a renewal of physical and spiritual life[29].

**Relevance of Fat, Kidneys and Liver to Health**

Having examined the Biblical and the Israelites understanding of fat, kidneys and liver in their sacrificial system, especially as it relates to wellbeing offering; our focus at this point is to consider the scientific concept of these three important organs and their relevance to health

**Fat**

Fat is a lipid group of chemical compounds found in both animals and plants. Fats are composed of carbon, hydrogen and oxygen. They are one of the three main classes of food essential to the body.[30] Fat occupies a special place in human body. It is a concentrated source of food energy for animals and even plants. Fat is stored under the surface of the skin of most animals, including man. Fat deposit in the body acts as an insulation against the loss of heat. Fat deposit around the eyeballs and other organs of animals serve as cushions against injury.[31] Fat is an important component of cell membranes.[32] Fat is an important energy source in the diet and is a more efficient fuel than either carbohydrates or proteins. Fat can produce about 4,000 calories of energy per pound (9 calories per gram). Carbohydrate and proteins can each produce about 1,800 calories per pound (4 calories per gram)[33]. Dietary fats are divided into two general groups namely: visible fats and invisible fats. The visible fats include: fat in meat, butter and salad oil while the invisible fats include fats in such foods as milk, egg, fish and nuts.[34]

In spite of the special role that fat is playing in human body it should be noted that too much of it is dangerous to health. It has been noted that a high fat intake has been implicated in the causation of cardiovascular disease; cancer (breast, colon, and prostate); obesity; and non-insulin-dependent diabetes.[35] It is on this basis that most scientists

believe that controlling the consumption of fats in the diet can help reduce the risk of developing coronary heart disease. This disease results when deposit of cholesterol, a white waxy substance, build up on the inner walls of the arteries that nourish the heart. The artery walls may eventually become hard, rough, and narrow. In fact, many heart attacks result from a blood clot that blocks a narrowed coronary artery.[36]

As a result of the fact that certain kinds of fats, called saturated fats seem to increase the amount of cholesterol in the blood, many scientists recommend limiting the intake of foods high in cholesterol and saturated fats. Instead they recommend diet high in unsaturated fats and polyunsaturated fats.[37]

Obesity, which is an excessive accumulation of fat in an adipose tissue is a major threat to health. It should be noted that a number of processed convenience foods have a high sugar and fat content and therefore predispose one to dental caries and obesity respectively. Some other diseases, such as appendicitis, cirrhosis of the liver, coronary heart disease, and diabetes can be more difficult to treat if the patient has too much fat in his body.[38]

**Kidneys:**

The kidneys lie below the middle of the back on each side of the spine. The right kidney located under the liver, is a little lower than the left one. The kidneys form a complex pair of organs in the body.[39] They are the excretory organs of the animals. The kidneys' principal role is the elimination of waste material and the regulation of the volume and composition of body fluid. They remove unwanted nitrogenous substance like urea and other ammonium compounds from the blood. They also maintain the osmotic pressure of the blood by controlling the excretion of water and salts. In other words, kidneys in their regulatory role control the amount of water, salts (sodium, potassium, and chloride ions) and acids (hydrogen and hydrogencarbonate ions).[40] The two kidneys perform many vital functions in the body and whenever they fail to do so, poison is built up in the body which eventually leads to death.

**Liver**

The liver is the largest and one of the vital organs in man and all animals with backbones.[41] It is a large reddish-brown organ with two lobes. It lies just below the diaphragm to the right side, partly overlapping with the stomach.[42] In man, the liver is the largest grandular organ of the body. It weighs from 3 to 4 pounds (1.4 to 1.8 kilograms).[43] The liver is an extremely complicated organ and has many functions which include the following.[44]

- It screens the food-laden blood from the small intestine and adjusts its composition to suit the body's immediate needs before releasing it into the circulatory system.
- It controls the blood glucose level and keeps it within normal limits by following homeostasis process.
- It converts any excess glucose in the blood that reaches it after a meal to glycogen.
- It releases the required amount of amino acids into the general circulation. When excess amino acids cannot be stored, the liver breaks them down into nitrogen and carbon compounds.
- It converts one non-essential amino acid into another according to the body's needs.
- It manufactures plasma proteins from dietary amino acids.
- It breaks down lipids to produce glucose and other substances needed by the body.
- It makes bile which is stored in the gall bladder and secreted into duodenum, where it aids digestion.
- It stores fat-soluble vitamins and minerals.
- It forms and produces red blood cells
- It converts many toxic and biologically active foreign substances into harmless in active forms.
- It produces heat for the body.
- One of the most important functions of the liver is to form urea, a nitrogen substance derived from proteins in food. Digestion breaks down the protein substances in food and the blood stream carries them to the liver. The liver releases urea into the blood stream, which carries it to the kidneys. The kidneys excrete the urea and it leaves the body as urine.

Indeed, the liver is the most versatile chemical laboratory in the body. Death occurs in 8 to 24 hours after the organ stops functioning.

## Concluding Observations and Recommendations

This paper has been able to identify some vital areas of similarities between Religion and Science, especially as related to good health. Some of the points of interest include:

i. Both Religion and Science are deeply interested in the physical peace and spiritual Well-being of man as demonstrated in Leviticus 3:1-5 and its relevance to health.

ii. Fat, kidneys and liver are not only three important parts of human body, the three are mentioned and discussed together in Biblical passages.

iii. Religiously, fat, kidneys and liver belong to God as noted in the Israelites sacrificial system of the well-being offering. God in His infinite mercy and wisdom asked the people not to eat these parts of the body. This is a demonstration of His omniscience. He knows that eating these parts of the body, especially the fat might be harmful to their health. Moreover, apart from the harmful nature of these parts,[45] it is highly probable that God asked them not to eat them in order to test their obedience.

iv. Scientifically, it has been discovered and established that fat, kidneys and liver are essential parts of the body. However, eating too much of them, especially the saturated fat is very dangerous and harmful to health.

Finally, God wants us to worship and serve Him. But then, it is only when we are alive and in good health that we can do so.[46] Therefore, it is recommended that every individual who desire to be in good health and peace, especially the adult should watch his diet and what goes into his body system.[47]

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44. For detailed see Ramlingan; *Modern Biology for Senior Secondary School* pp. 288, 378-380; and Roger, "Liver" in *The World Book Encyclopedia*, p. 352.
45. Scientifically, for any one to guide against fatness, such a person must avoid eating liver, kidneys, brain cf. John Macleod, Davidson's Principles and Practice of Medicine Fourteen Edition (Oxford: University Printing House), p. 814.
46. The case of Eli, the Priest is a good example. His ineffectiveness, especially towards the end of his ministry was most likely as a result of his overweight that came from too much fat in his body system cf. I Samuel 2-4.
47. It has been established scientifically that too much of certain foods as listed below are dangerous to health, hence they must be avoided:

- Butter and hydrogenated margarines;
- Fatty meat and visible fat on meat;
- Organ meats – liver, kidneys and brain;
- Whole/milk and cream;
- Chocolate, ice cream and cheese;
- Coconut and coconut oil;
- Eggs-should not be more than 2 per week;
- Fried foods; etc. For details, see Macleod, *Davidson's Principles and Practice of Medicine*, p.814.