

الخنزير ..
وأسباب تحريمه

P O R K
POSSIBLE REASONS
FOR ITS PROHIBITION

by

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This booklet is printed on behalf of the late Al. Haj Abd. EL RAHMAN AHMAD ZAKI. May Allah bless his soul and the souls of all other Muslims. Ameen.

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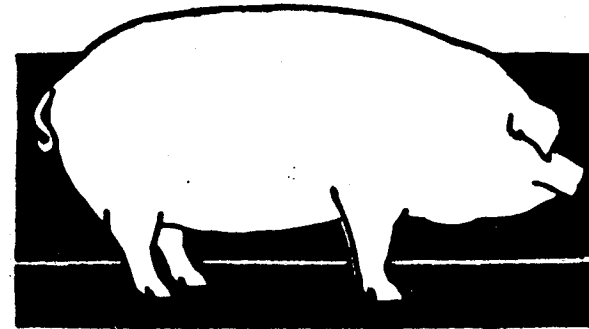
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“Of their flesh shall ye not eat.” — *Lev. 11:8*

Table of Contents

● Dedication	3
I. Introduction	4
II. Prohibition	6
III. General Reasons for Prohibition	8
IV. Flesh or Total Animal	9
V. Pork versus other Animal's Meat	10
VI. Historical Evidence	11
VII. Chemical Evidence	12
VIII. Microbial Evidence	15
IX. Religious Evidence	18
X. Behavioral Evidence	20
XI. Fallacies and Facts	23
XII. From His Tail To His Snout	25
● References	26
● About the Author	28
● Publications by the Author	29

Dedication

This pamphlet is dedicated for the love of Allah Almighty (swt), and for his last and final Messenger to Mankind, Prophet Muhammad (Pbuh).

We pray that Allah accepts our humble efforts and forgives us for our short comings. Ameen.

I. INTRODUCTION

It is known that Islam prohibits eating of the flesh of swine as it is a sin and impiety to do so. To the practicing Muslim the fact that the reason for its being prohibited has not been specified other than this, does not mean that one is allowed to make it lawful, nor does one have the right to say that he knows with certainty the exact reason(s) why it is forbidden. However, Muslims are encouraged to investigate by scientific means the advantages and disadvantages, as well as the wisdom of such prohibition.

There are many food items on the market which contain pork or its byproducts. This has caused much difficulty for the practicing Muslim living in a non-Muslim society to adjust himself and at the same time to satisfy his religious commitment. There are many facts and fallacies in the society about eating pork. Some people may claim the wrong reasons for its prohibition in Islam while others ignorantly may pass verdicts "*FATWA*" for eating foods containing pork or its byproducts.

For these and other reasons the author feels it incumbent to write an article about "Pork: Possible Reasons for its Prohibition." The author brings to the reader's attention some of the basic scientific findings in the field of biochemistry, microbiology, public health, religion, history, behavior, etc. In so doing, it is left to the reader to deduce the significance of its prohibition and to act accordingly.

Such an article is of great benefit to the non-Muslims, and especially the Jews in helping them to appreciate the significance of the prohibition of pork in Islam. This article is also intended to inform the industries that are exporting to the Muslim countries meat products and other foods containing animal shortenings and especially lard. Furthermore, the article is of great help to hospitals, restaurants, airlines, hotels and to individual families. Last, but not least, this article is intended to inform the Muslims in North America and those in their home countries

about the significance of the wisdom of the prohibition of pork in the Qur'an and tradition of Muhammad (pbuh).

Through sincere search and scientific findings we hope some of the wisdom of Allah is known to us. We pray Allah to help us to bring a better way of life among all people in the world.

II. PROHIBITION

The prohibition of pork in Islam may be found directly in the Qur'an. This prohibition has been mentioned in four chapters, namely, chapter 2: Surah "The Cow;" Chapter 5: Surah "The Table Spread;" Chapter 6: Surah "Cattle;" and Chapter 16: Surah "The Bee."

In Surah "Cow" (Al-Baqarah) related to the prohibition of eating pork, Allah Says:

إِنَّمَا حَرَّمَ عَلَيْكُمُ الْمَيْتَةَ وَالدَّمَ وَحُمَّ الْخِنْزِيرِ وَمَا أَهَلَ بِهِ لِغَيْرِ اللَّهِ فَمَنْ اضْطُرَّ غَيْرَ بَاغٍ وَلَا عَادٍ فَلَا إِثْمَ عَلَيْهِ إِنَّ اللَّهَ غَفُورٌ رَحِيمٌ ۝

"He has only forbidden you dead meat, and blood, and the FLESH OF SWINE and that on which any other name hath been invoked besides that of God. But if one is forced by necessity, without wilful disobedience, nor transgressing due limits, — then is he guiltless. For God is oft-forgiving most merciful." (2:173)

In Surah "The Table Spread" (Al-Ma'idah) Allah says:

حُرِّمَتْ عَلَيْكُمُ الْمَيْتَةُ وَالدَّمُ وَحُمُّ الْخِنْزِيرِ وَمَا أَهَلَ لِغَيْرِ اللَّهِ بِهِ وَالْمُنْخَنِقَةُ وَالْمَوْقُوذَةُ وَالْمُتَرَدِّيَةُ وَالتَّيْنِيحَةُ وَمَا أَكَلَ السَّبُعُ إِلَّا مَا ذَكَّيْتُمْ وَمَا ذُبِحَ عَلَى النُّصُبِ وَأَنْ تَسْتَقْسِمُوا بِالْأَزْلَامِ ذَلِكُمْ فِسْقٌ ۝

"Forbidden to you (for food) are: dead meat, blood, the FLESH OF SWINE and that on which hath been invoked the name of other than God; that which hath been killed by strangling or by violent blow, or by a headlong fall, or by being gored to death; that which hath been (partly) eaten by a wild animal; unless ye are able to slaughter it (in due form): that which is sacrificed on stone (altars); (forbidden) also is the division of meat by raffling with arrows: that is impiety." (5:3)

In Surah "The Cattle" (Al-An'am) Allah says:

قُلْ لَا آجِدُ فِي مَا أُوْحِيَ إِلَيَّ مُحَرَّمًا عَلَى طَاعِمٍ يَطْعَمُهُ إِلَّا أَنْ يَكُونَ مَيْتَةً أَوْ دَمًا مَسْفُوحًا أَوْ لَحْمَ خِنْزِيرٍ فَإِنَّهُ رِجْسٌ أَوْ فِسْقًا أُهْلًا لِغَيْرِ اللَّهِ بِهِ فَمَنْ اضْطُرَّ غَيْرَ بَاغٍ وَلَا عَادٍ فَإِنَّ رَبَّكَ غَفُورٌ رَحِيمٌ ۝

"Say: I find not in the Message received by me by inspiration any meat forbidden to be eaten by one who wishes to eat of it, unless it be dead meat, or blood poured forth, or the FLESH OF SWINE, for it is an abomination, — or what is impious, (meat) on which a name has been invoked, other than God's. But even so, if a person is forced by necessity without wilful disobedience, nor transgressing due limits, — your Lord is Oft-Forgiving, Most Merciful." (6:145)

In Surah "The Bee" (Al-Nahl), Allah says:

إِنَّمَا حَرَّمَ عَلَيْكُمُ الْمَيْتَةَ وَالدَّمَ وَحُمُّ الْخِنْزِيرِ وَمَا أَهَلَ لِغَيْرِ اللَّهِ بِهِ فَمَنْ اضْطُرَّ غَيْرَ بَاغٍ وَلَا عَادٍ فَإِنَّ اللَّهَ غَفُورٌ رَحِيمٌ ۝

"He has forbidden you dead meat, and blood, and the FLESH OF SWINE, and any (food) over which the name of other than God has been invoked. But if one is forced by necessity without wilful disobedience, nor transgressing due limits, — then God is Oft-Forgiving, Most Merciful." (16:115)

From these four verses one can say that pork is totally prohibited in Islam to Muslims and non-Muslims as well. In Chapter 6, it is clear that the prohibition is to everyone. In this regard Allah says:

قُلْ لَا آجِدُ فِي مَا أُوْحِيَ إِلَيَّ مُحَرَّمًا عَلَى طَاعِمٍ يَطْعَمُهُ إِلَّا أَنْ يَكُونَ مَيْتَةً أَوْ دَمًا مَسْفُوحًا

"... forbidden to be eaten by ONE who wishes to eat it, . . . (6:145)

This verse is related to the prohibition not only to the Muslims, but to every human being.

III. GENERAL REASONS FOR PROHIBITION

The exact reason(s) and the real wisdom why the flesh of pork is prohibited is known only to Allah Almighty. The knowledgeable believing Muslims say:

وَالَّذِينَ يَتَّبِعُونَ فِي الْعِلْمِ يَتَّبِعُونَ أَمْرًا مِنْ رَبِّنَا وَمَا يَذَّكَّرُ إِلَّا أُولُو الْأَلْبَابِ

“We believe in the Book, the whole of it is from our Lord. . . .” (3:7)

However, a Muslim is encouraged to look into the reasons for its prohibition. It is the habit of the Qur’an in every aspect of life to encourage the Muslim to think, to ponder, to remember, to reflect, to find out, to search and to do something good about it.

In the Qur’an it is mentioned that Allah prohibits eating the flesh of swine, because it is a *SIN* and an *IMPIETY* (*Rijss*). This word *Rijss* (abomination) has been mentioned ten (10) times in the Qur’an in different contexts. Some are directly related to pork, alcohol, raffle, gambling, idols, while others are indirectly related to human manners.

In Surah “The Table Spread” (Al-Ma’idah), Allah says:

يَا أَيُّهَا الَّذِينَ آمَنُوا إِنَّمَا الْخَمْرُ وَالْبَيْبِرُ وَالْأَنْصَابُ وَالْأَزْلَامُ رِجْسٌ مِنْ عَمَلِ الشَّيْطَانِ فَاجْتَنِبُوهُ لَعَلَّكُمْ تُفْلِحُونَ ○ إِنَّمَا يُرِيدُ الشَّيْطَانُ أَنْ يُوقِعَ بَيْنَكُمُ الْعَدَاوَةَ وَالْبَغْضَاءَ فِي الْخَمْرِ وَالْبَيْبِرِ وَيُصَدِّكُمْ عَنْ ذِكْرِ اللَّهِ وَعَنِ الصَّلَاةِ فَهَلْ أَنْتُمْ مُنْتَهُونَ ○

“O ye who believe! Intoxicants and gambling, (dedication of) stones, and (divination by) arrows, are an abomination, — of Satan’s handiwork: Eschew such (abomination), that ye may prosper. Satan’s plan is (but) to excite enmity and hatred between you, with intoxicants

and gambling, and hinder you from the remembrance of God, and from prayer: will ye not then abstain?” (5:90-91)

In Surah Al-An’am (The Cattles), Allah says:

فَمَنْ يُرِدِ اللَّهُ أَنْ يَهْدِيَهُ يَشْرَحْ صَدْرَهُ لِلْإِسْلَامِ وَمَنْ يُرِدْ أَنْ يُضِلَّهُ يَجْعَلْ صَدْرَهُ ضَيِّقًا حَرَجًا كَأَنَّمَا يَصْعَدُ فِي السَّمَاءِ كَذَلِكَ يَجْعَلُ اللَّهُ الرِّجْسَ عَلَى الَّذِينَ لَا يُؤْمِنُونَ ○

“And whomsoever it is Allah’s will to guide, He expandeth his bosom unto the Surrender, and whomsoever it is His will to send astray, He maketh his bosom close and narrow as if he were engaged in sheer ascent. Thus Allah layeth ignominy upon those who believe not.” (6:125)

In Surah Al-Tawbah (Repentance), Allah says:

سَيَخْلِفُونَ بِاللَّهِ لَكُمْ إِذَا انْقَلَبْتُمْ إِلَيْهِمْ لِتَعْرِضُوا عَنْهُمْ وَأَعْرِضُوا عَنْهُمْ إِيَّاهُمْ رِجْسٌ وَمَا لَهُمْ جَهَنَّمَ جَزَاءً بِمَا كَانُوا يَكْسِبُونَ ○

“They will swear by Allah unto you, when ye return unto them, that ye may let them be. Let them be, for lo! they are *UNCLEAN* (*Rijss*), and their abode is hell as the reward for what they used to earn.” (9:95)

One may also read in the Qur’an (7:70), (9:96), (10:100), (22:30) and (33:33).

This word *Rijss*, therefore, has been explained as meaning “filthy” and “dirty”. These terms will be further elaborated later in this article. As far as the specific reasons are concerned, one has to report the scientific findings as well.

IV. FLESH OR TOTAL ANIMAL

Is the prohibition of pork restricted to the flesh of the swine or does it include all parts of the animal? To answer this question one has to deduce the answer directly from the Qur’an. Although it is reported that the flesh of the swine is prohibited, this does *not* mean the exclusion of the totality of the animal. In the Arabic language the word “flesh” includes the totality of the “edible” portion of the animal. Examples of this are many, among which are the following:

(1) In Surah "Cow" (Al-Baqarah), Allah says:

وَانظُرْ إِلَىٰ جَنَاحِكِ ۖ لِتَجْعَلَ آيَةً لِلنَّاسِ ۖ وَانظُرْ إِلَىٰ الْعِظَامِ كَيْفَ نُنشِئُهَا
نُشْرًا نَكْسُوهَا لَحْمًا ۗ

"... Look further at the bones, how we bring them together and clothe them with FLESH" (2:259)

(2) In Surah "The Bee" (Al-Nahl) Allah says:

وَهُوَ الَّذِي سَخَّرَ الْبَحْرَ لِتَأْكُلُوا مِنْهُ لَحْمًا طَرِيًّا

"It is He who made the sea subject, that you may eat thereof FLESH that is fresh and tender. . . ." (16:14)

(3) In chapter 23, "The Believers," verse 14, Allah says:

فَخَلَقْنَا الْمَضْغَةَ عِظْمًا فَكَسَوْنَا الْعِظْمَ لَحْمًا

"... Then We made out of that hump bones and clothes the bones with FLESH" (23:14)

It is then obvious that the word "flesh" does not mean only the meat, but it includes the fat as well. Therefore, the totality of the "edible" portions of the pig should be prohibited to be eaten. It is also understood that fat is incorporated into the meat and it is not separated from it in most parts of the animal. This means that every "edible" organ, system or tissue in pig is prohibited whether it is rich or poor in proteins, carbohydrates, fats, vitamins, minerals, etc.

V. PORK VERSUS OTHER ANIMALS' MEAT

The question is asked regularly why is pork the only animal to be prohibited while the flesh of other animals is not? The answer to that would be: pork is not the only animal which is prohibited but the flesh of all carnivorous animals, as well as that of human being, is not allowed to be eaten. The meat of the cat, dog, rat, mouse, tiger, fox, lion, eagle, falcon, hawk, & etc. is prohibited, while the flesh of herbivorous animals is allowed to be eaten, i.e., sheep, cow, camel, deer, gazelle, goat, chicken, duck, goose, rabbit, bird, etc.

It seems there is a wisdom in prohibiting the flesh of carnivorous animals. Part of such wisdom will be mentioned later.

VI. HISTORICAL EVIDENCE

It is known that some of the children of Israel regularly disobeyed Allah and as a result, were cursed. Some of them stagnated spiritually and mentally and hence became idol-worshippers; others lost their mission in life as human beings and became entertainers (if such a term is to be used) like monkeys, apes and chimpanzies, and still others became filthy of mind and body, gluttonous eaters of carnivorous animals, and lived totally a corrupted life as swines. This has been affirmed by the Bible, "Matthew" 8:28-32, where the devil is being sent into swine. In the Qur'an, surah 5, "Table Spread," Verse 60, Allah says:

قُلْ هَلْ أُنَبِّئُكُمْ بِشَرِّ مِمَّنْ ذَٰلِكَ مَثُوبَةٌ عِنْدَ اللَّهِ ۖ مَنْ لَعَنَهُ اللَّهُ وَغَضِبَ عَلَيْهِ وَجَعَلَ مِنْهُمْ الْفُورَةَ وَالْخَنَازِيرَ وَعَبَدَ الطَّاغُوتَ ۗ أُولَٰئِكَ شَرٌّ مَكَانًا وَأَضَلُّ عَن سَوَاءِ السَّبِيلِ ۝

"Say: Shall I point out to you something much worse than this, (as judged) by the treatment it received from God? Those who incurred the curse of God and His wrath, those of whom some He transformed into APES and SWINE, those who worshipped evil; these are (many times) worse in rank, and far more astray from the even path!" (5:60)

It has been mentioned by Abdullah Yusuf Ali that *perhaps* both apes and swine are allegorical: those who falsified God's scriptures became lawless *like* apes, and those who succumbed to filth, gluttony, or gross living, became *like* swine. The Arabic word is very simple and straightforward where Allah says that He transformed or turned some of them into apes, swine and idol-worshippers.

If the meaning of the Bible is taken into consideration, and one takes the meaning of the verse of the Qur'an as a reality rather than allegory, then one may deduce the fact that swine and apes were *perhaps* human beings who were degraded and brought down into animals. This type of interpretation *may* also reinforce the idea of *evolution*, in the *reverse direction*. It is known in biology that through the process of *Hybridization* and *selection*, evolution is a two-way process, and for this reason the method of selection is to be followed after hybridiza-

tion. This type of two-way traffic is an upward and a downward type of evolution; or else why should the process of selection be used. This biological reality therefore nullifies Darwin's theory when he assumes that evolution is *upward*, one-way process and only in one direction. One may, therefore, ask the question why not the origin of apes was the mankind species itself? If this is true, one may be able to think about the wisdom of prohibition of swine as it was a human being who was degraded to an animal stage. Therefore, it would be unlikely that one has to eat that type of flesh.

VII. CHEMICAL EVIDENCE

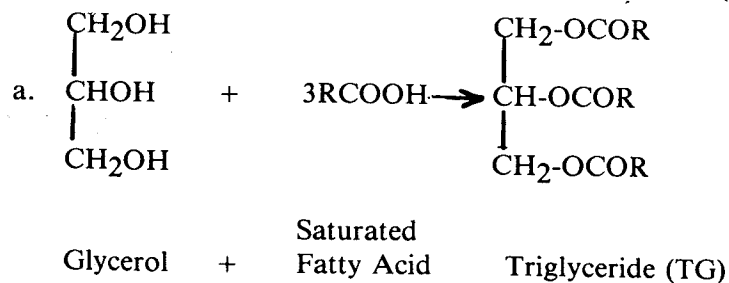
Generally speaking, fats and oils are classified into neutral lipids, phospholipids, sphingolipids, glycolipids, waxes, steroids and the like.

Neutral lipids are composed mainly of a combination of triglycerides (TG), diglycerides (DG), monoglycerides (MG) and free fatty acids (FFA).

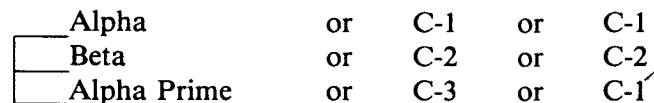
One molecule of triglyceride has three fatty acids esterified to glycerol. These fatty acids could be saturated (S) or unsaturated (U) and they would be randomly found on the three carbon groups of the TG molecule in the following forms: SSS, UUU, SUS, USS, UUS, USU, SSU and SUU.

The following diagrams may elaborate the above statement:

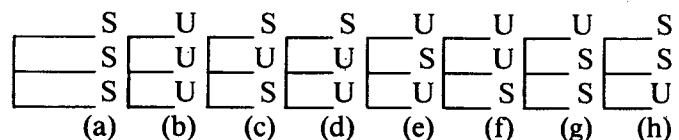
- Free fatty acid: R-COOH
 - Saturated fatty acid: $\text{CH}_3 - (\text{CH}_2)_x - \text{COOH}$
 - Unsaturated fatty acid:
 $\text{CH}_3 - (\text{CH}_2)_x - \text{CH} = \text{CH} - (\text{CH}_2)_x - \text{COOH}$
- Glycerol: $\text{CH}_2\text{OH} - \text{CHOH} - \text{CH}_2\text{OH}$
- Glycerol + Fatty acids (U) and/or (S) \longrightarrow Fat (TG)



- If we represent glycerol with a symbol of E, and (since glycerol is composed of 3 carbon groups), if we designate each carbon as C-1, C-2, and C-3 or as alpha, beta and alpha prime, then we may write glycerol as:

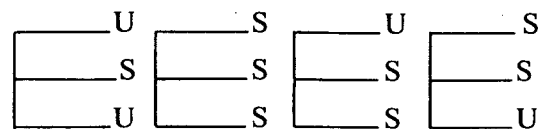


- The different forms of triglycerides (TG) with the fatty acids would then have to be written as follows:

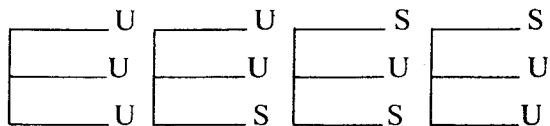


This means that the type of pattern for the distribution of the fatty acids in the TG molecule is unique. It was found that herbivorous (plant eating) animals have high concentration of unsaturated fatty acids (U) on the 2-position of the TG molecule, while the carnivorous (meat eating) animals have high concentration of saturated fatty acids (S) at position-2.

It was found that pancreatic lipase (PL) in the human intestine cannot easily hydrolyze the TG molecules to DG, MG, Glycerol and FFA if the saturated fatty acids (S) are at position-2. This means that the isomers of this type of molecule also cannot be hydrolyzed easily. The following isomers cannot be easily hydrolyzed by the PL.



On the contrary, it was found that PL will easily hydrolyze the TG molecules if the 2-position has unsaturated (U) fatty acids, i.e. the following isomers can be easily hydrolyzed by the PL.



Generally speaking, the digestion of fats follows a particular pattern.

The absorption of fats from the small intestines is by the portal vein if they are composed of glycerol and FFA, or else by the lymphatics (chylomicrons) if they are composed of the TG molecules.

After being absorbed, fats are metabolized in the body.

Experiments were conducted on fats of edible animals as well as on fats of non-edible animals. Some examples of the edible animals are: sheep, cattle, goats, deer, camels, chickens and rabbits. Some of the non-edible animals are cat, dog, rat, mouse etc. It was found that fats of edible animals follow a pattern of unsaturated fatty acid (U) in the 2-position of the TG molecule except PORK, which follows the pattern of saturated fatty acids (S) in the 2-position. It was also found that the fat of non-edible animals belong to the saturated fatty acid (S) in the 2-position.

This means that if a person eats the flesh of herbivorous animals, the fat of the latter will be hydrolyzed in the small intestines by (PL) after being emulsified by bile salts. They will be absorbed, resynthesized as human fat, and be deposited in the adipose tissues as human fat.

On the other hand, PL cannot hydrolyze easily the fat of carnivorous animals. Consequently, the TG molecules of the animals will be emulsified and are absorbed as such without being hydrolyzed. They are then deposited in the adipose tissues of the human body as animal fat and not as human fat. Pork fat, therefore, behaves the same as the fat of the carnivorous animals.

A series of questions have been raised and very few answers may be offered. Being deposited as pork fat in the adipose tissues of people, what will happen to the fat? How is it metabolized? Is pork the source or a cause of heart attack? Is the personality character of the human being affected by the

type of food eaten? And, in this case, is the person's character affected by the flesh of swine?

These and other questions need to be answered, and in the next decade or two scientists may be able to reveal a good amount of information.

Clinical biochemists deduced that cholesterol was a source for heart attack, then started finding out that cholesterol and lipoproteins were both sources of heart attack. Finally, one may see now that they are calculating the concentration of total cholesterol, total triglyceride, as well as the phenotypes of lipoproteins (Type I to V) so that to determine their relation with heart attack.

In the coming few years one may find out that scientists are to determine the type of TG rather than the total concentration of TG. The type of TG is more important than the total concentration. Nutritionists were advising patients to include pork fat in their diet as it has about 67% polyunsaturated fatty acids (PUFA). It is true that pork fat does contain 67% PUFA, but the type of the TG is in the form of USU which means that one third of the total fatty acids on position-two are saturated fatty acids (S) which cannot be hydrolyzed by PL. Even if the PUFA is 67%, one may not be able to make use of them as they are not hydrolyzed. Therefore, the theory of PUFA in mobilizing the precipitated cholesterol from a solid crystal form in the aorta to the esterified form (liquid) in the plasma, is invalid in the case of pork fat and not true at all.

VIII. MICROBIAL EVIDENCE

There are a good number of germs, parasites and bacteria that infest swine and live in its flesh which, when it is eaten, transmit diseases to humanity. Among these parasites are: tapeworms, round worms, hook worms, *faciolopsis buski*, *paragonimus*, *clonorchis senesis* and *erysipelothrix rhnsiphathiae*.

Concerning the worm *Taenia*, there are two species: one infests cattle and is called *Taenia Saginata* and the other infests the hog and is called *Taenia Solium*. There are some differences in

their shape and life cycles, as well as in the damage they cause in the body if the infested meat is eaten. For instance, the *Saginata* stays in the intestine of a human being and completes its life cycle there. Therefore the damage is restricted to the GI tract. Hence, the use of drugs will eliminate the worms and relieve the person from their damage. On the other hand, *Solium* cannot complete its life cycle in the intestines and therefore it passes through the walls of the intestines and goes with the blood stream to all parts of the body.

The following diagrams represent the life cycle of the germs.

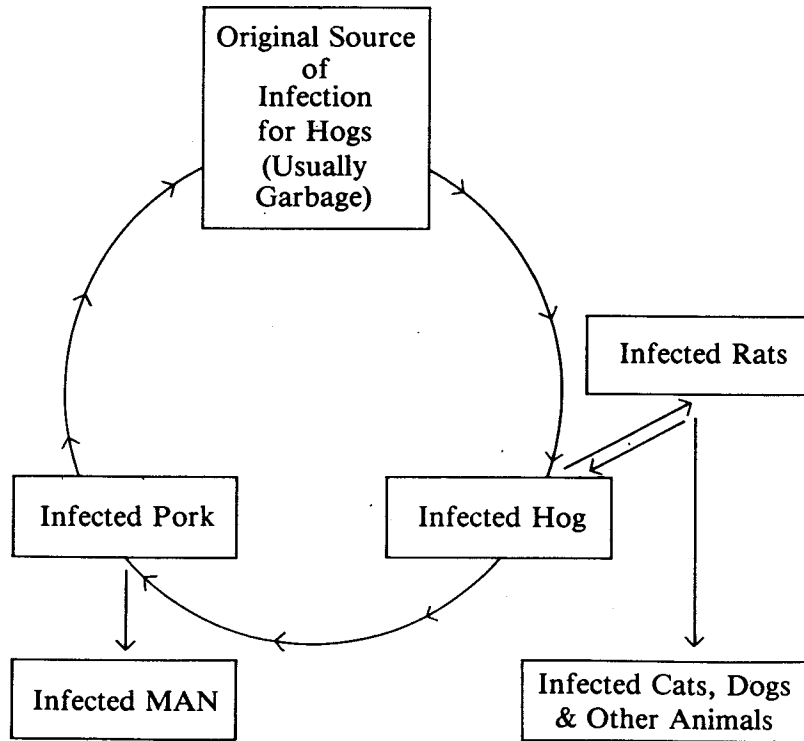


Diagram illustrating the common methods of exposures to trichinosis in the Continental United States. (Original, Faust.)

Stages in the Development of Trichinosis

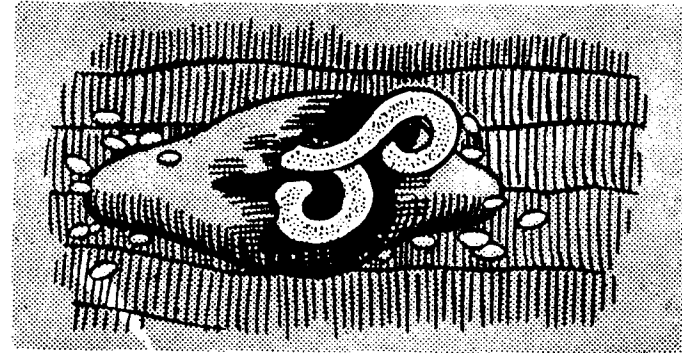


Fig. 1. "The encysted larvae are freed by digestion of the capsules."

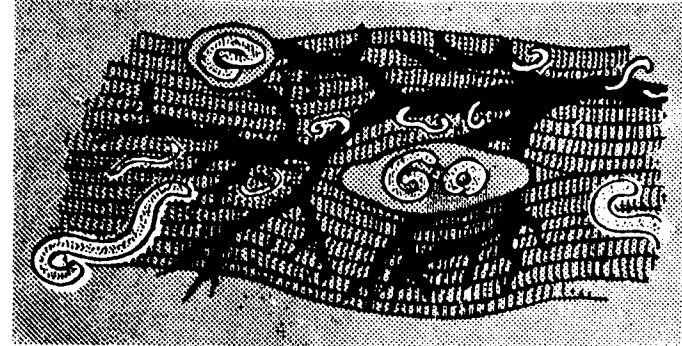


Fig. 2. "Small intestine where adult trichinae are developed. After entering blood stream they invade all parts of the body."

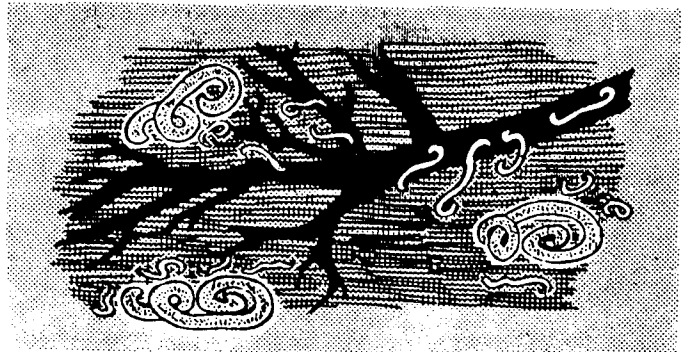


Fig. 3. "Leaving the blood vessels, the trichinae enter muscle tissue where they are encapsulated and set up permanent residence."

These germs settle down in some of the vital organs in the human body as the brain, eyes, heart, lungs, muscles and liver. In order to complete their life cycle they form cysts whose shape and size are of a pea or larger. If it happens that such a cyst or cysts are formed in the brain, they cause damage, cramps, loss of consciousness, hysteria and/or insanity. However, if it happens that these cysts reach the heart, they create high blood pressure and, most likely, heart attack. It would be too late to investigate or to diagnose the disease after the person has the attack. It would also be impossible to have a drug to dissolve the cyst wall after it has been formed in the human body.

Concerning the diseases that are transmitted by eating pork, Rizvi, on page 30 of his booklet on pork says: "In short, the pig, the supreme germ carrier, is the cause of many serious and fatal diseases, among them dysentery, trichinosis, tape worm, round worm, hook worm, jaundice, pneumonia, suffocation, intestinal obstruction, acute pancreatitis, enlargement of the liver, diarrhoea, emaciation, high fever, hindering the growth development in children, typhoid, lameness, heart trouble, abortion, sterility and sudden death."

The diagram on page 19 summarizes the biology, the pathology and symptomatology of the *trichinella spiralis*.

IX. RELIGIOUS EVIDENCE

It seems that all religions of the world prohibit the consumption of pork. Judaism prohibits eating pork; Christianity in general and Islam in particular do prohibit the eating of pork. It is ironic to see the majority of the Christians do eat pork on the assumption that it is lawful for them and that the Bible did not prohibit its consumption.

Searching out the literature, one finds out that Jesus came originally to the Jews and hence logic dictates that Jesus did not nullify the previous scripture but came to verify it, to purify it and to add to it. There is no place in the literature that Jesus himself ate pork in his life time. In "Leviticus," Chapter 11, Verses 7-8, God says about swine: "Though he divide the hoof,

Aphasmid Nematode Parasites of Man

		Biology of <i>Trichinella</i>	Pathology and Symptomatology				
INCUBATION	Hours	Larvae become excysted in stomach	- 4 - 8 - 12 - 16 - 20				
		Young worms become sexually differentiated	- 1-Gastrointestinal symptoms - 2-				
		Young females fertilized	- 3-				
		Female invade intestinal mucosa and begin to larviposit	- 4-Delayed-type intradermal test positive - 5-				
		Larvae begin to pass into lymphatics and blood stream enroute to skeletal muscles	- 6- - 7-Edema of face - 8- - 9-				
		Maximum invasion of muscle fibers	- 10-Fever at maximum (40-41 °C.) - 11-Myositis and "rheumatic" pains - 12- - 13-				
		Decrease in larvipositing	- 14-Eosinophilia initiated - 15-Slide precipitin test positive				
		Larvae in muscles mature but not yet encapsulated	- 16- - 17- - 18- - 19-				
		ACUTE STAGE	Days	Encapsulation under way	- 20-Eosinophilia reaches maximum - 21-Immediate-type intradermal test positive - 22- - 23- - 24-		
				Blood stream practically free of larvae	- 25- - 26-Respiratory symptoms - 27- - 28- - 29-		
				CHRONIC STAGE	Months	Encapsulation practically complete	- 1-Precipitin test positive
						Maximum life of mother worms in intestinal wall	- 2-Fever subsides - 3-Neurotoxic symptoms and possible myocarditis - 4- - 5-
						Calcification of cysts begins	- 6-Slow convalescence - 7- - 8- - 9- - 10-
Calcification of cysts practically complete.	- 11-						
Years	Larvae possibly still viable within calcified capsules					- 1- - 2- - 3- - 4- - 5- - 6-	

Synoptic diagram illustrating (on left) the progressive biological stages of *Trichinella spiralis* and (on right) the parallel clinical picture. (After Cameron, from Faust's *Human Helminthology*.)

and be cloven footed, yet he cheweth not the cud; he is unclean to you. Of their flesh shall ye *not* eat."

Searching more in the Christian literature, one finds out that H.L.Hastings, a noted Bible expositor, says in his book, "Will the Old Book Stand," page 92: "Swine were designed to be scavengers, to eat up filth and abominations; but when they had done their work it was not designed that men should turn around and eat the swine."

It has been mentioned in "Isaiah," 65:2-5 that God says: "I have spread out My hands all the day unto a rebellious people, which walketh in a way that was not good, after their own thoughts; a people that provoketh Me to anger continually to My face; that sacrificeth in gardens, and burneth incense upon altars of brick; . . . which eat swine's flesh and broth of abominable things is in their vessels; which say, stand by Thyself, come not near Me; for I am holier than Thou. These are a smoke in my nose, a fire that burneth all the day."

Rev. C.L.Vories says in his pamphlet "The Hog," page 26: "The Bible so clearly and definitely forbids the eating of pork that all who love the word of God and would follow its teachings can have no question at all as to whether or not they should abstain from feasting on the unclean creature."

According to Islam, Prophet Muhammad (p.b.u.h.) was sent by Allah to purify Christianity and Judaism, to verify the teachings of the churches and the rabbi, and to complement and to complete the teachings of God to mankind. Islam, therefore, has placed an emphatic stress on the prohibition of pork. Anyone who eats it would be committing a sin and an impiety, whether he is a Muslim or not. Read (2:173); (5:3); (6:145); and (16:115).

X. BEHAVIORAL EVIDENCE

The old proverb which states, "Tell me what you eat, I'll tell you what you are," may still hold true to some degree. There is a large number of experiments at molecular basis conducted on children to see the effect(s) of nutrient(s) upon their personality character and behavior. Deprivation of a vitamin, a car-

bohydrate, an amino acid and/or amine has affected the behavior of children. It has been found that breast-feeding, for infants, has instilled in them better humane characteristics than bottle feeding. It was proven that eating the meat of calves that were injected with the hormone diethylstilbesterol (DES) has influenced the character of people, i.e., it has increased homosexuality.

Other experiments were conducted on school-age children to see the effects of malnutrition on their performance, mainly intellectual performance and intersensory integration. It has been found that the mechanism is either a direct influence or an indirect one. However, the effect has resulted in loss of learning time, interference with learning during critical periods of development, motivation and personality changes.

To conclude the previous findings, one would be able to say that the type of food eaten affects the chemistry of the body and hence affects the character and behavior of the individual. The effect could be a result of an individual nutrient, a gross nutrient or a food item.

Looking into the diet of people, one sees that some people are vegetarians (vegans, fruitarians, lacto-vegetarians, ovo-vegetarians, ovo-lacto-vegetarians) and others are meat eaters.

As far as those who don't eat meat (vegetarians), it has been reported that some experiments have been conducted on children in Maryland (USA). They were given daily food of carbohydrates and sweets without animal proteins. The children turned out to be hypersensitive, intolerant, aggressive, not sociable and hyperactive. Their food was then changed to normal diet including animal proteins. They became normal in their life habitat as other children. This may partially explain what goes on in India for those who are strict vegans toward the Muslims there. The sensitiveness, the intolerance and the aggression of some of the vegans toward the Muslims who are beef-eaters.

Among the meat-eaters one may see a group of people who eat the meat of herbivorous animals, while another group eat both types of animals, i.e., herbivorous and carnivorous. The strange thing about the latter group is that they eat pork as the

only animal from the group of carnivorous animals, but do not eat the meat of cats, rats, dogs, mice and the like.

It has been reported by Dr. El-Fangary that many people who eat carnivorous animals tend to be vicious, lack humane attitudes towards other people, are ready to kill others without reason, and some are even known to eat the meat of other people.

Looking further into the behavior of the hog, one may find that it is a unique animal. The boar does not mind seeing his sow mating with another boar in front of him. This habit is unique in that other animals cannot tolerate it. To speak for the boar, one may say that the boar is, in effect, saying, let his sow mate with other boars; and who cares who is mating her as long as they (his sow and the other boars) agree among themselves and they are enjoying sex among themselves. Thus, the sow has the permission to mate with as many boars as she wants and in front of her own boar without any shame of both. In such a situation the sow acts as the worst prostitute while the boar acts with immoralities to allow his female to mate with others even in front of his own eyes and without much concern.

To eat the flesh of such animals may affect the personality character of the individual. We have seen before that the hormone diethylstilbesterol injected into calves, was passed onto humans who ate the meat of the calves and thus increased the ratio of homosexuality in man. Therefore, eating the flesh of the hog may affect the personality character of the individual by increasing immorality, including homosexuality, lesbianism, adultery and prostitution. The free mixing of the sexes that one sees in non-Muslim societies is really a dreadful thing to observe. There is no concept of ethics or morality among many people but their concept is sex enjoyment (without responsibility) and free sex interchange. Pre-marital relationships and the increased rate of illegitimate pregnancies are predominant features in the western societies. The streakers and the degree of publicity they received, as well as the nude societies that have been established, are among the symptoms of the sick societies that have been polluted by the wrong food that they were eating. The degree of rape and the general obsession with sex in western societies, are beyond control. The rate of incidence of

looting, killing, stabbing, shooting, sniping, strangling, robbing, stockpiling of arms, and the like are among the many other evils of the modern societies that cannot be tolerated any more. The WASP society and the incidence of incest are dreadful acts to be thought of in the non-Muslim societies.

If any improvement has to take place in any society, it has to start from the diet so that to be able to change the body chemistry including the central nervous system and the brain, and hence the moral standards of individuals. Moral teachings are to be followed by the society and the family.

XI. FALLACIES AND FACTS

1. Many people think that as long as one cook pork, they will never have the danger of contracting trichinosis. In the USDA leaflet #34, page 8, it is stated that "In a series of 24 cases of trichinosis reported recently, 22 were said to have resulted from 'cooked pork.'

2. Pork fat has high polyunsaturated fatty acids (PUFA) and therefore it has been said that it is good to be used even for those who have heart attack problems. The fact is that: pork fat does have high PUFA; however, these fatty acids are located on 1 and 3 positions of the TG molecules and therefore they cannot be hydrolysed by the PL. They are absorbed as pork fat after being emulsified and deposited as such in the human body.

3. Pork is nutritious and therefore one should continue to eat it as a source of animal protein. The fact is that: it is an animal protein, but as Dr. O.S. Parret says in his booklet "Diseases of Food Animals," "Hog meat is also more difficult to digest than most other kinds." This means that the biological value (BV) is therefore low. Another question would be why not also eat the meat of dogs, cats, rats and the like. The answer would be the same.

4. Pork was prohibited in Arabia for hygienic purposes. Nowadays hogs are raised under more sanitary conditions. The fact is that hog is, by choice, a dirty and filthy animal; it insists on going to garbage areas to feed itself; it follows the cattle and other animals on the farm to eat their droppings and to turn it into pork for the public market. Rev. Vories states in his booklet: "The Hog," "See the brute as he wallows in the mud.

See him in the very height of his glory, on top of manure pile, with his head buried in the dung from which exalted site he gives expression to his joy and satisfaction by his rhythmical grunts." Dr. Marvin Harris, an anthropologist, writes in "The Human Strategy": ".....it will cover its skin with its own urine and feces."

5. Pork was prohibited in Arabia because the latter was a desert and a hot region. This means that people may get diarrhoea and/or GI troubles, while those outside Arabia may eat it without trouble. The fact is that pork has the highest content of fat impregnated with the meat. There is no way to separate the fat from the meat. High fat in foods may cause diarrhoea if the climate is hot, but may cause a disease such as sprue in other areas. It may cause overweight and obesity. It may cause a high level of TG in the plasma, high cholesterol and may lead to cardiovascular diseases.

6. Professor M. Harris from Columbia University tried to give an anthropological answer to the riddle of the pig as to why God told the Jews and the Muslims not to eat pork. He said: "Pigs tasted good but they ate you out of house and home and, if you gave them a chance, used up your water as well. Well, that's my answer to the riddle of why God told the Jews and the Muslims not to eat pork. Anyone have a better idea?"

If this were true, then one has to get rid of his own children as well because they are dependent on their parents. One gives his children all types of foods, water, clothing and other necessities. No one would like to get rid of his children because he spends money on them. If anyone spends money on his animals and feels sorry, then he better eats them to compensate for the loss. However, this is not true for one's own children.

XII. FROM HIS TAIL TO HIS SNOUT

He was made for a scavenger, God says he's unclean,
And what else can we find so filthy and mean?
"Eat not his flesh, nor touch his dead carcass,"
For with sin and disease it surely will mark us.

Oh yes, my dear brother, God's word, it is just,
Still we eat the old greaser, yes, eat him we must;
Yes, the dirtiest of beasts we will not be without,
So we eat the slop eater from his tail to his snout.

We would be better off if we obeyed God's command,
And ate vegetables, fruits, and the grains of the land.
We pray long and loud, we jump and we shout,
Still we eat the old brute from his tail to his snout.

How we sing "Happy Day" and talk of love all divine,
Then like vultures we feast on the dirty old swine.
We might shun many ills and diseases, no doubt,
By discarding the hog from his tail to his snout.

ANONYMOUS

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Ahmad H. Sakr (Saqr) was born in Beirut, Lebanon in 1933 and had his academic education at the American University of Beirut. He got his high school, B.Sc., from the same institute and then taught there at the Department of Food Technology and Nutrition. He got his Ph.D. at the University of Illinois (U.S.A) in 1966. He worked at Elgin State Hospital, Loyola Medical School, Western Illinois University, Slippery Rock State College, and the National College of Chiropractic. He was a professor and Chairman of the Department of Chemistry and Nutrition. He was selected as an outstanding educator in America in 1973 and as a Community Leader and Noteworthy American in 1976 and 1977.

He was granted an honorary citizen of Alabama by the Governor of the State, and received awards from the mayors of Mobile and Prichard of the State of Alabama. Dr. Sakr received the King Faisal Award and the golden key of the City of Mobile, Alabama.

While in Lebanon, he got his Islamic education through tutoring from the present Grand Mufti of Lebanon and a large number of Muslim scholars from Egypt, Syria, Iraq, Algeria and Lebanon. He got interested in scouting, social, civic and field works.

While in America he was a founding member and a president of the Muslim Students' Association of the U.S. and Canada, a member of the Islamic Medical Association, the Association of Muslim Scientists and Engineers, the Association of Muslim Social Scientists, the Federation of Islamic Association of the U.S. and Canada, the Council of Muslim Communities of Canada, the Muslim Community Center of Chicago, the Islamic Foundation of Greater Chicago, and many other Islamic organizations in North America.

He was the Director and U.N. Representative of the Muslim World League and a founding member of the World Council of Mosques in Mecca. Dr. Sakr is an educator, a scholar, a field worker, a scout leader, and a public speaker. He has traveled to about 42 states in the United States and four provinces of Canada, visited a few hundred communities and universities where he gave a series of lectures about Islam, Muslims, Health Sciences, Nutrition, Social Sciences, Politics, and comparative Religions. He appeared on radio and T.V. programs and participated in many panel discussions. Dr. Sakr has visited Trinidad; Jamaica, Mexico, France, Germany, England, Syria, Jordan, Egypt, Libya, Tunisia; Morocco, Ghana, Nigeria, Mauritius, South Africa and Saudi Arabia. He was a visiting Professor and Lecturer at the University of Riyadh, Saudi Arabia, the University of Durban-Westville in South Africa, the University of Mauritius in Mauritius, the University of Libya in Tripoli, Libya and the University of West Indies, Port-of-Spain, Trinidad (W.I.)

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