## CHAPTER IV ANALYSIS

## A. Scientific Interpretation of Surah al-Insân (76): 2

After the discovery of the microscope and research by scientists, it can be concluded that the fetus is formed with the intermediate male sperm and female ovum in the 19th century, and it was still unclear, until at the beginning of 20th century is finally clear.

Now long before, al-Quran and Sunnah have stated scientifically and accurately that human, indeed, was created from conception of sperm and ovum which called "nuthfah amsyâj," Allah said in surah al-Insân [76] 2:

"Verily We created Man from a drop of mingled sperm, in order to try him: So We gave him (the gifts), of Hearing and Sight." (Al-Insân (76): 2). Hadits is narrated by Imam Muslim:

"أن يهوديًّا مر بالنبي . صلى الله عليه وسلم . وهو يحدث أصحابه فقالت قريش: يا يهودي إن هذا يزعم أنه نبي فقال: لأسألنه عن شيء لا يعلمه إلا نبي فقال: يا محمد مم يخلق الإنسان؟ فقال رسول الله . صلى الله عليه وسلم: يا يهودي من كلٍ يخلق من نطفة الرجل ومن نطفة المرأة. فقال اليهودي: هكذا كان يقول من قبلك" . (أي من الأنبياء).

"That a Jew over the Prophet peace be upon him is happening owners. Then Quraish said: "O Jewish this man claims that he is a prophet." The Jewish then asked: I will ask Him for something that no one knows except the Prophet, Hi Muhammad from what human is created?" The Messenger of Allah upon him: "O Jews from all created man from a sperm and semen of women." Jew said: So they used to say like thus before you." (i.e. the prophets).

The word *al-Insân* for human beings in general without looking at causality is the revelation of the verse. It considered became *Mustatsnâ* 

 $Minhu^{175}$  of the next verse. So, the general word of *al-Insân* can give as a function of absolute clarity *al-Insân* (human being) itself.

*al-Insân* (human) here formed by plural, it does not refer to specific people, as has been mentioned by the previous *Mufassir*. <sup>176</sup>

The use of the word *al-Insân* in al-Qur'an is the visible as an element of humanity that can carry the load of *Taklîf*, holding trials either good or evil, have the intellectual resources, can be dialectician, be in control of trust and etcetera. There are as many as 65 verses, <sup>177</sup>

The human called also in al-Qur'an by using the redaction of *al-Basyar*. That is showing that the human is a creature in the form of material needs to eat, drink and dialectical in their life. <sup>179</sup>

When talking about human beings with various redactions (*al-Ins*, *al-Insân*, *al-Nâs and al-Basyar*) still has a certain meaning base on each context. The meaning of human and the various roles through thematic studies by analyzing *Siyâq al-Kalâm* (the order of a sentence) in the Qur'an paragraph.

"Nuthfah" in Arabic means "very little water" or "a drop of water". This coincides with man's water which contains sperms as part of its components. The sperm or (spermatozoon) is reproduced from the despised lowly water (nuthfah) and looks like a long-tailed fish. <sup>181</sup>

181 this is one of the meanings of *Sulâlah*. Allah the Almighty says;

( الَّذِي أَحْسَنَ كُلَّ شَيْءٍ حَلَقَهُ وَبَداً خَلْقَ الْإِنسَانِ مِن طِينٍ. ثُمُّ جَعَلَ نَسْلَهُ مِن سُلَالَةٍ مِّن مَّاء مَّهِينٍ ) (السجدة: 8-8)

<sup>&</sup>lt;sup>175</sup> Mustatsnâ Minhu is the word excepted from the instrument of exception (Adât Isitsnâ), such as likulli Dâ'in Dawâ'un Illa al-Maut, the word of Dâ'in is as Mustatsnâ Minhu from Adât Istisnâ' Illa

<sup>&</sup>lt;sup>176</sup> Although the most scholars such as al-Alûsî said that in fact the general meaning of the word *Insân* was caused by definite form (*Ta'rif*), which has function to comprehensive human (*li al-Istighrâ'*) it base on the instrument of exception (*Istitsnâ'*). Read more al-Alûsî, *Ruh al-Ma'ânî*, vol. 29, (Maktabah Syamilah, vol. 2), p. 292

<sup>177</sup> M. Fu'ad Abdul Bâqî, al-Mu'jam al-Mufris li al-Fâdh al-Qur'an al-Karîm, p. 119.

The root meaning of *al-basyar* is an appearance from something beauty and good. In the same root word arise the word of *al-basyarah*, which means skin. Therefore, human was called by the name of al-basyar because of their skin is apparent clearly and be different with the animal's. See more Quraisy Shihâb, *Wawasan Al-Qur'an*; *Tafsir Maudhu'i Atas Berbagai Persoalan Umat*, p. 278

<sup>&</sup>lt;sup>179</sup> Bint al-Syâthi', Maqâl fi al-Insân Dirasah Qur'âniyyah, p. 11

<sup>&</sup>lt;sup>180</sup> *Ibid*, p. 11.

The term *nuthfah*, as it was explained by Prophet Muhammad himself, peace and blessings be upon him, from his faith, when he was asked about creation of children by one of Jews: "O, Jew, it is created from both; from a man *nuthfah* and from a woman *nuthfah*." To explain this hadits, it is clear from the answer of Prophet Muhammad, peace and blessings be upon him, that *nuthfah* is the part by which the man shares in creation of a child and also nuthfah is the part by which the woman shares in this creation.

Now, after science have proven that creation is through fusion of a part from the man (that is the sperm) and a part from the woman (that is the ovum), Isn't this the man nuthfah and the woman nuthfah given in the previous hadits without any contradiction? Thus, it is clear that, the term nuthfah is applicable to either the sperm or the ovum respectively. More supporting evidence from al-Qur'ân: "And made his progeny from a quintessence of the nature of a fluid despised" (Surah Al-Sajdah (32): Ayah 8), this verse means that the progeny of Adam are created from an extract, that means the best of that fluid. Thus, al-Qur'ân reported that only the best of the little weak fluid is used for creation of man. Isn't this mean that this fluid contains the primary elements required to create man? Although the sperm and ovum are not mentioned in al-Qur'ân, aren't them the primary elements required for man creation, that are extracted from this fluid?

Despite al-Qur'ân does not mention in the previous, to whom belongs this fluid, it could be understood that this fluid originates from both sexes, not only one of them, from another verse of Qur'an: "O mankind! We created you from a single (pair) of a male and a female..." (Surah Al-Hujurât (49): Ayah 13), this verse mean that Allah Have created mankind from both sexes, the male and female, thus no one can say that al-Qur'ân report that creation is from male only, simply verses of al-Qur'ân explain each other.

Clarifying the role of the *nuthfah* in creation, He the Almighty says;

<sup>&</sup>quot;He it is Who created all things in the best way and began the creation of man from clay, and made his progeny from an extract of despised fluid (Sulâlah)" (32: 7-8)

The other meaning of *Sulâlah* is "extract", means the essential or best part of something. By either implication, it means "part of a whole" indicating that the origin of creation is from only part of man's fluid and not all of it (which contains many components as shown above).

<sup>&</sup>lt;sup>182</sup> This hadits was narrated in Musnad Ahmad, volume I, p. 465.

"Now let man but think from what he is created, He is created from a drop emitted" (Al-Thâriq (86): 5-6) and also says;

"He has created man from a sperm-drop; and behold this same (man) becomes an open disputer" (An-Nahl (16): 4).

The Quran tells us also that the essence of man is not the whole semen, but only a small part of it. This is explained in the Quran:

"Does man think that he will be left uncontrolled, (without purpose)? Was he not a drop of sperm emitted (in lowly form)?" (al-Qiyâmah: (75): 36-37)

As we have seen from verse above, the Quran informs us that man is made not from the entire semen, but only a small part of it. That the particular emphasis in this statement announces a fact only discovered by modern science is evidence that the statement is divine in origin. The divine statement also reiterates that man's characteristics are determined and decreed in the *nuthfah* stage, as Allah says:

"Woe to man! What hath made him reject Allah. From what stuff hath He created him? From a sperm-drop: He hath created him, and then mouldeth him in due proportions." ('Abasa (80): 17-19)

And Allah says:

"Verily We created Man from a drop of mingled sperm, in order to try him: So We gave him (the gifts), of Hearing and Sight." (Al-Insân (76): 2).

The mingled *nuthfah* in this verse reveals the Quran miraculous nature. *Nuthfah*, in Arabic, is a single small drop of water, but it was described here as (*amsyâj*), which means its structure consists of combined mixtures. This fits with the scientific finding, as the zygote is shaped as a drop, and is simultaneously a mixture of male fluid chromosomes and female ovum chromosomes. <sup>183</sup>

Has anyone ever thought, before the Quran was revealed, that man's *nuthfah*, when ejected, is responsible for determining if the embryo will be male or female? Has this ever occurred to one's mind? The Quran says;

"That He created the pairs, male and female, from a fluid-drop sperm as it is emitted." (Al-Najm (53): 45-46)

Confirming that man's gender as male or female is determined when the sperm drop is emitted. Who told the Prophet Mohammed that the sperm (nuthfah) with one of its types (Y) or (X) is responsible for determining the sex of the embryo? This was not discovered except after the invention of microscopes in the past century, when it was possible then to know that the embryo being a male or female is only determined by the sperm (nuthfah), rather than the ovum. In other words, we were in the beginning of the 20<sup>th</sup> century and the whole of mankind were not aware that the nuthfah decrees if the embryo is male or female. While the Quran, which was revealed 14 centuries ago, has stated this fact in a very clear manner.

<sup>&</sup>lt;sup>183</sup> Dr. Zaghlul An-Najjar, *Pembuktian Sains dalam Sunnah*, vol. 2, p 14; See also, M. Quraish Shihab, *Tafsir al-Mishbah*, vol 14, p 653.

Transformation process from *nuthfah* to 'alaqah takes more than 10 days till the zygote clings to the placenta. Therefore, the Quranic statement uses the conjunction article (*tsumma*) in Arabic, indicating sequence of events with time delay and not using (*fa*) which also means "then" but indicates rapid progression without any delay. Quran states:

"Then We made the sperm into a clot of congealed blood" (23:14).
'Alaqah, in Arabic, has several meanings: 185

- 1) Clotted or coagulated blood.
- 2) A thing attached or clings to something else.
- 3) A leech that lives in ponds and sucks the blood of other creatures.

A quick transformation then occurs from 'alaqah to mudghah within two days (day 24 to day 25). Therefore, the Quran describes this rapid change with the use of the conjunctive article (fa) (i.e., then) in Arabic, to indicate rapid progression of transformation:

"then of that clot We made a (foetus) lump" (al-Mu`minûn (23): 14).

So, even the use of different conjunctive articles has miraculous indications, reflecting the difference in embryonic stages.

Thus, the stage of 'alaqah is the second stage of embryonic stages, and is mentioned in the Quran in several verses. He the Almighty says;

<sup>184</sup> In this stage 'alaqah clings at the edge of uterus (rahîm), this stage called implantation. In the al-Quran, its called harts (حرث), till 'alaqah exactly implanted at edge of rahîm. Dr. Zaghlul An-Najjâr, Pembuktian Sains dalam Sunnah vol. 2, p. 15.

<sup>185</sup> See Ibnu Manshûr, *Lisan al-Arab*, Beirut: Dar al-Turâts al-Arabî, 1992. vol. 5, p. 993; see also, Hans Wehr, *A Dictionary of Modern Written Arabic*, Beirut: Librairie du Liban, 1980. p. 634.

186 Dr. Zaghlul An-Najjâr, *Pembuktian...*, p. 16.

"Was he not a drop of sperm emitted (in lowly form)? Then did he become a leech-like clot; then did (Allah) make and fashion (him) in due proportion. And of him He made two sexes, male and female." (al-Qiyâmah (75): 37-39),

And in a *surah* called *al-'Alaq*, i.e., a leech-like clot, Allah says;

"Created man, out of a (mere) clot of congealed blood" (al-'Alaq (96): 2).

Then, *Mudghah* in Arabic means the material chewed by teeth. This gives an accurate description of the embryonic stage as the embryo shape looks like a chewed material which constantly changes, with the appearance of somites bulges. The differences in these somites look like the "teeth imprints" over bread bite. The embryo turns and rolls in the cavity of the uterus as a piece of chewed material in the mouth.

The stage of *mudghah* comes after the stage of 'alaqah. This coincides with the Holy verse:

"then of that clot We made a (foetus) lump" (23: 14).

The characteristics of *mudghah* is that it elongates and changes shape when chewed. This is exactly what occurs to the embryo in this stage. As we mentioned before, the *mudghah* has an early form before the creation and formation of organs and another form following the formation of organs. The Quranic verse states:

"O mankind! if ye have a doubt about the Resurrection, (consider) that We created you out of dust, then out of sperm, then out of a leech-like clot, then out of a morsel of flesh, partly formed and partly unformed, in order that We may manifest (our power) to you; and We cause whom We will to rest in the wombs for an appointed term," (22: 5).

Thus, there are two types of *mudghah*: formed and unformed. The formed one is the embryo itself which starts forming into different organs with specific functions and the unformed one is the placenta which starts developing in the 5th week (around day 35) of the *mudghah* stage.

The *mudghah* stage ends at the 6<sup>th</sup> week (i.e. 40 days). Imam Muslim narrated in his "Sahih" on the authority of Abdullah Bin Mas'ûd that he said; "Prophet Muhammad, the truthful and trustworthy, told us;

(إن أحدكم يجمع خلقه في بطن أمه أربعين يوما ثم يكون في ذلك علقة مثل ذلك ثم في ذلك مضغة مثل ذلك ثم يرسل الملك فينفخ فيه الروح ويؤمر بأربعة كلمات بكتب رزقه وأجله وعمله وشقي أو سعيد فو الذى لا اله غيره إن أحدكم ليعمل بعمل أهل الجنة حتى ما يكون بينه وبينها إلا ذراع فيسبق عليه الكتاب فيعمل بعمل أهل النار فيدخلها وإن أحدكم ليعمل بعمل أهل النار فيدخلها وإن أحدكم ليعمل بعمل أهل النار حتى ما يكون بينه وبينها إلا ذراع فيسبق عليه الكتاب فيعمل بعمل أهل الخنة فيدخلها)

"The creation of each one of you is composed in the mother's womb in forty days, in that (creation) it turns into such a clot, then in that turns into such a mudghah and then Allah sends an angel and orders him to write four things, i.e., his provision, his age, and whether he will be of the wretched or the blessed (in the Hereafter). Then the soul is breathed into him. And by Allah, a person among you (or a man) may do deeds of the people of the Fire till there is only a cubit or an armbreadth distance between him and the Fire, but then that writing (which Allah has ordered the angel to write) precedes, and he does the deeds of the people of Paradise and enters it; and a man may do the deeds of the people of Paradise till there is only a cubit or two between him and Paradise, and then that writing precedes and he does the deeds of the people of the Fire and enters it." <sup>187</sup>

Then, the term of "izham" (bones), coined by Quran, accurately expresses this stage in the life of the embryo, which includes the external appearance and is considered the most important change in the internal

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<sup>&</sup>lt;sup>187</sup> Imam Muslim, Sahih Muslim, no. 2643, see also, Sahih al-Bukhari, no. 3208.

structure, with its associated new relations among body organs and regularity of embryo shape. This stage is clearly distinguished from the preceding stage of *mudghah* (chewed-like lump of flesh). Allah says;

then we made out of that lump bones and clothed the bones with flesh; then we developed out of it another creature. So blessed be Allah, the best to create! (23: 14).

Bone formation is a notable process in this stage, as embryo is transformed from the image of mudghah which has no features of human image to the beginning of the skeleton image in a very short period of no more than few days at the end of the  $6^{th}$  week; therefore, the Quranic verse uses the Arabic conjunctive article (fa) instead of (tsumma) to indicate quick sequence of events.

This skeleton gives the embryo the image of a human being after being clothed with *lahm* (muscles). The two eyes and the two lips then appear, and the head is differentiated from the trunk and the limbs. This is in accordance with the Prophet's saying in "Sahih Muslim";

"When 42 nights have passed over the conception, Allah sends an angel to it, who shapes it (into human form) and makes its ears, eyes, skin, muscles and bones. Then he says; 'O Lord, is it male or female?', and your Lord decides what He wishes and the angel records it." 188

After 42 nights (6 weeks), the embryo begins to take the human image with the appearance of cartilaginous skeleton, then the external genitals begin to appear later on (the 10<sup>th</sup> week). In the 7<sup>th</sup> week the human image gets

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<sup>&</sup>lt;sup>188</sup> Imam Muslim, *Sahih Muslim*, no. 2645.

clearer with the start of the spread of skeleton. This week represents (between 40 and 45 days) the separation line between *mudghah* and human image.

So, it is well proved that the Quran's words are very well fixed and scientifically accurate, as they are composed by Allah Who has perfected everything.

Al-Zubaidî in *Tâj al-'Arus* said: *nuthfah* means dripping, while *amsyâj* is the plural form of *masyîj* which means mixture. *Masyajtu hâdzâ bi hâdzâ* means I mix this with this one. <sup>189</sup>

Interpreting surah al-Insân (76): 2, Ibn Jarîr al-Thâbarî said: "Verily, We made his offspring from the sperm of Adam, i.e. a drop of water from men and women drop of water. Nuthfah is that there is little water in the container while *amsyâj* means mixing of each unit, between the mixing and the mixed. So that meant *masyîj* word (singular form of *amsyâj*) here is *makhlûth*, the mixing of sperm and ovum.

Meanwhile, interpreting verse above, Ibn Katsîr explained: Allah said, telling of human existence that he was after all not considered because of his weakness. Allah then said: *Has there not been over Man a long period of Time, when he was nothing (not even) mentioned?* Furthermore, Allah explained: "Verily We created Man from a drop of mingled sperm (mixture between sperm and ovum).

About diction *min nuthfah amsyâj* Ibn Abbâs explained: It means the male sperm and female ovum when assembled and mixed, then transform from one phase to another phase, from one condition to another condition, from one color to another. The same is expressed by Ikrimah, Mujâhid, Hasan al-Bashri, and al-Rabi' that *amsyâj* is the mixing of sperm male and female ovum. <sup>190</sup>

Explaining the same diction in paragraph above, Sayyid Qutb said in *Fî Dhilâl al-Qur'an*: Maybe this is a sign of the elements forming the sperm cells of men and women after the fertilized ovum (zygote). This mixture can also indicate the existence of derivative properties (Heredity) contained in the

<sup>&</sup>lt;sup>189</sup> Al-Zubaidî, *Tâj al-'Arus*, juz. 3, p. 387. <sup>190</sup> Al-Thabarî, *Jâmi'*..., vol. 12, p. 354-356

sperm that is scientifically referred to as "gene," i.e. units derived element that contains the special qualities as a human species and familial traits in one family. And maybe this is what is meant by sperm, a mixture consisting of a mixture of various properties of descent (Heredity). <sup>191</sup>

Concluded that most commentators, whether classical or contemporary, have agreed that "nuthfah amsyâj" is mixed with sperm from the sperm of male and female ovum.

*Nuthfah* literally means a drop of liquid. In al-Quran, this word was used with three different connotations but interrelated:

- 1. male *nuthfah*
- 2. female nuthfah
- 3. *nuthfah amsyâj*, the mixing between male *nuthfah* and female *nuthfah*.

Thanthâwi Jauharî in "al-Jawâhir" argued that human is a creature from the sperm, the embryo composed (composed) of gametes, and gametes in humans, only oxygen, hydrogen, carbon, ozone, SO, phosphor, potassium, magnesium, calcium, and iron. These are the genes and the fact that the mixtures of rights, and rights generated by the sperm, the embryo consists of a new human being. In other word, the elements above are able to be explained because of mixture between male sperm and ovum which transform become embryo ('alaqah).

There are four meanings of "amsyâj" in interpretation of surah al-Insân (76) ayah 2:

- (1) Mixture between male *nuthfah* and female *nuthfah*;
- (2) Its about chronological phase, from *nuthfah* to *'alaqah*, from *'alaqah* to *mudghah*, and so on;
- (3) Gene that in the *nuthfah*.
- (4) variety of *nuthfah*; <sup>193</sup>

In interpreting this verse, writer argued that the word *amsyâj* means mixture, precisely is water mixing between sperm and ovum because a strong

<sup>193</sup> Concluded from Ikrimah, Mujâhid, Hasan al-Bashri, and al-Rabi' in Al-Thabarî, *Jâmi*'..., vol. 12, p. 354-356, also Thantâwi Jauharî, *al-Jawâhir*..., p. 320

<sup>&</sup>lt;sup>191</sup> Quraish Shihab,, *Tafsir...*, vol.14, p. 650.

<sup>&</sup>lt;sup>192</sup> Thantâwi Jauharî, *al-Jawâhir*..., p. 320

opinion which was narrated by Imâm Ahmad in his *musnâd* from Abdullah, he said:

"That a Jew over the Prophet peace be upon him is happening owners. Then Quraish said: "O Jewish this man claims that he is a prophet."

The Jewish then asked: I will ask Him for something that no one knows except the Prophet, Hi Muhammad from what human is created?"

The Messenger of Allah upon him: "O Jews from all created man from a male water (male *nuthfah*) and female water (female *nuthfah*)."

Jew said: So they used to say like thus before you." (i.e. the prophets).

## B. Human's Role on Sex Determination

In this case the human is very active role in determining the sex of the fetus, where the sperm of men who have sex chromosomes XY female fertilized ovum that has sex chromosomes XX. If chromosome X males who fertilize the ovum, the resulting child sex are female, and if the male Y chromosome that fertilize the ovum, the resulting sex is Male.

Recent Scientific knowledge have provided a proof to the hadits (a prophet Muhammad talk) in which he gives us a hint about the manner by which one sex prevails. According to this hadits, narrated by Imâm Ahmad:

"... If one dominates the other, then the child will be as dominant, with the permission of Allah, if the male sperm is more dominant than female sperm, it will get the boys, with the permission of Allah. and if the female sperm are more dominant than the male sperm, it will get young girls, with the permission of Allah..."

This Hadits mentions physical methods to obtain the boy or girl, but does not nullify that result only from God.

If we notice the previous fact carefully, it will be clear that prophet Muhammad, Peace and blessings be upon him, gave in a clear cut answer that determination of child sex occurs by participation of both partners, and the coming child acquire the sex of the parent whose (genital) fluid prevails.

Explaining this hadits, shows that it represents a scientific miracle added to the prophet miracles, first; it clearly describes the color of male fluid of being white and that of female of being yellow. One could say that the color of male fluid is easily seen in males, but, no one knows that female has a fluid. According to science, the female genital fluid that corresponds to male fluid is the fluid carrying ovum when it is ejected from the ovary at time of ovulation; this fluid is yellowish in color. Does any one, at that time, knows any idea about this. As narrated by Imam Ahmad:

وفي مسند أحمد من حديث ابن عباس وفيه قول رسول الله صلى الله عليه وسلم للجماعة من اليهود حين جاؤوه: فأنشدكم بالله الذي لا إله إلا هو الذي أنزل التوراة على موسى هل تعلمون أن ماء الرجل أبيض غليظ وأن ماء المرأة أصفر رقيق، فأيهما علا كان الولد والشبه بإذن الله، إن علا ماء الرجل على ماء المرأة كان ذكرا بإذن الله، وإن علا ماء المرأة على ماء الرجل كان أنثى بإذن الله قالوا: نعم.

The first step in human creation is union between a sperm from male and an ovum from female, the sex of embryo belongs, according to previous hadits, to the prevailing fluid. As it is known now that ovum is one type; containing an X-chromosome, but sperms occur in 2 types, X- chromosome carrying sperm & Y-chromosome carrying sperm. If we make connection with the heredity of the human personality, the consequences are, if chromosome one of the male and female have the disorder (e.g. hemophilia, syndrome, albino, etc.), so then will infect their children.

It was described that sex of embryo is determined according to type of sperm that fertilizes the ovum: if a Y-carrying sperm fertilizes the ovum, a male child is produced & when X-carrying sperm fertilizes the ovum, a female child is produced.

In other wards, male is the one who is responsible for sex determination. The previous hadits determines that participation of both parents is required to determination of sex.

Male fertility depends on sperm quality and quantity, which can be affected by a variety of things. While you may not be able to control all the

factors that could improve your fertility, there are steps you can take to maximize your fertility and make sure your sperm are top performers.

To achieve its goal, sperm must have three things going for it: quantity, quality and motility.

Every month a woman let go of one or two eggs (ova) from the ovary, which was captured by the lobe (fimbriae) and into the Fallopian tubes (by age of women).

However, the effort of both male and female must in line with several factors like so on:

- The Consuming of Food (The Ionic Equilibrium)
- The Timing of Intercourse
- The Center Acid and Base.

In this case, writer argued that the best chance to determine the sex of fetus is the first variables—consuming food—by both of the couple in their life because recent advances in fertilization studies showed that sex determination is an electric phenomenon, the ovum has an electrical polarity cycle with a changing electrical charge (positive, neutral, negative), also Y-carrying sperm has a positive charge & X-carrying sperm has a negative charge.

When the ovum is negatively charged, it unites with Y-carrying sperm with the positive charge and a male child is produced. Otherwise, when the ovum is positively charged, it unites with X-carrying sperm with the negative charge and a female child is produced. Thus, the coming child acquires the sex of the gamete (sperm or ovum) that has a positive charge.

According to basics of electricity, the positive charge is the prevalent or the stronger and this fact is in amazing accordance with the hadits of prophet Muhammad and proves not only the truth of this hadits, but also gives an evidence to his prophethood who had told these facts since 1500 years because in Arabic the term prevail means overcomes or conquers, and it becomes clear that the gamete that has the positive charge overcomes the negative one & the child will have the sex of the prevailing gamete. Thus,

male and female share each other in determination of the sex of the coming offspring in accordance with the prophet's hadits.

Although these scientific facts inform us about the way by which one sex is determined, this does not mean that we become able to have the child we desire. Allah, the Almighty, in the Qur'an said: "To Allah belongs the dominion of the heavens and the earth. He creates what He wills (and plans). He bestows (children) male or female according to His Will (and Plan), Or He bestows both males and females, and He leaves barren whom He will: for He is full of Knowledge and Power (al-Syûrâ`, 42: 49-50).