

# **RESEARCH ARTICLE**

## THE DEPENDENCE OF SOME PARAMETERS OF FULL 9 STEPPED CYCLE OF PROTON CONDUCTANCE FROM QUANTITY OF HYDROGEN, CARBON, OXYGEN ATOMS IN DONATOR MOLECULES.

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#### Key words:-

The full 9 stepped cycle of proton conductance, quantity of hydrogen,carbon,oxygen atoms in donator molecules.

### Abstract

The quantity of the released  $CO_2$  in the 2-th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close correlation with  $C_x$  (carbon atom) contained in the donator molecules as  $C_xH_yO_z$ .

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The quantity of the released CO<sub>2</sub> in the 2- th stage of the full 9 stepped cycle of proton conductance inside human body would be more increased in case of oxidation of fatty acid molecules as  $C_{16}H_{32}O_2$  in comparision to oxidation of glucose molecules as  $C_6H_{12}O_6$ , elevation of this parameter observed in case of prevailing of mkhris coding of Tibetan Traditional Medicine.

The quantity of the  $O_2$  participated in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body, which are utilized for the formation of metabolic water in the mitochondrian matrix as oxidation of proton by molecular oxygens i.e, protonatized by matrix proton is existed in **in close correlation** with the quantity of  $C_xH_y$  in reverse dependence with the quantity  $O_z$  contained in the donator molecules as  $C_xH_yO_z$ .

The quantity of the  $O_2$  participated in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body utilized for the formation of metabolic water in the mitochondrian matrix as oxidation of proton by molecular oxygens i.e, protonatized by matrix proton is existed in close dependence with the quantity of  $C_xH_y$  in reverse dependence with the quantity  $O_z$  contained in the donator molecules as  $C_xH_yO_z$ , the intensity of these processes would be more increased in case of oxidation of fatty acid molecules as  $C_{16}H_{32}O_2$  in comparision to oxidation of glucose molecules as  $C_6H_{12}O_6$ , elevation of this parameter observed in case of prevailing of mkhris coding of Tibetan Traditional Medicine.

The ratio of quantity of the released  $CO_2$  in the 2- th stage of the full 9 stepped cycle of proton conductance and the quantity of the  $O_2$ participated in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body decreased in case of oxidation of fatty acid molecules as  $C_{16}H_{32}O_2$  in comparison to oxidation of glucose molecules as  $C_6H_{12}O_6$ , which shows that  $H_{32}$  contained in the molecules of  $C_{16}H_{32}O_2$  serves the reason of elevating of VO<sub>2</sub> and decreasing of CO<sub>2</sub> within of VCO<sub>2</sub>/VO<sub>2</sub> formula, such situation have been observed in case of prevailing of mkhris coding of Tibetan Traditional Medicine.

The quantity of the metabolic  $H_2O$  formed by oxidation of proton by molecular oxygens and by protonation of molecular oxygen by matrix proton in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close dependence with the quantity of  $H_y$  contained in the donator molecules as  $C_xH_yO_z$ . The quantity of the CO<sub>2</sub> entered from all cells and exhalated from body through alveoli (the release carbon dioxide during exhalation) in the 9- th stage of the full 9 stepped cycle of proton conductance inside human body is equal to  $C_x$  (carbon atom) existed in the donator

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molecules as C<sub>x</sub>H<sub>y</sub>O<sub>z</sub>

#### **Introduction:-**

Two ways that conserve energy in the form of ATP (Nick Lane, and William F.Martin, 2012) as chemiosmotic coupling via membrane - integral ATP synthases and substrate - level phosphorylations of all forms of living systemsis should be closely connected with the quantity of hydrogen, carbon atoms in donator molecules and the membrane - redox potential, a three state line system dependent -full 9 stepped cycle of proton conductance inside human body (M.Ambaga,2015), also with respiratory quotient.

According to Nick Lane, and William F. Martin (2012) for any amount of RNA-like bases to form spontaneously via prebiotic chemistry to double in mass through replication, and early biochemistry required much more carbon and energy flux than modern cells, but no doubt that all these processes would be properly functioned in case of evolution dependent forming of the full 9 stepped cycle of proton conductance inside human body (M.Ambaga, 2015) with participation of hydrogen, carbon, oxygen atoms in donator molecules.

ATP synthase was a product of long selection during the early phases of evolution, it is as universal as the ribosome, and it displays the same deep phylogenetic split between archaea and bacteria (Mulkidjanian et al., 2007), harnessing energy as ion gradients across membranes is as universal as the genetic code (Nick Lane, and William F.Martin 2012).

In this connection should be said that without of hydrogen, carbon, oxygen atoms in donator molecules, the phylogenetic significance of full 9 stepped cycle of proton conductance, ATP synthase as the ribosome and proton gradients across membranes as the genetic code would be lost.

Beside, all these regulations have been needed the normal maintainance of the full 9 stepped cycle of proton conductance inside human body (M.Ambaga, 2015) with involvement of hydrogen, carbon, oxygen atoms in donator molecules.

But until recently now no any literature findings, relating to the dependence of some parameters of full 9 stepped cycle of proton conductance from quantity of hydrogen, carbon, oxygen atoms in donator molecules and respiratory quotient.



Figure 1:- Full 9 stepped cycle of proton conductance inside human body

## **Results and Conclusion.-**

Respiratory quotient a ratio indicating the relation of the volume carbon dioxide given off in respiration to that of the oxygen consumed.

In case of oxidation of glucose molecules:  $6O_2 + C_6H_{12}O_6 => 6 CO_2 + 6 H_2O + 38 ATP$ .

RER (respiratory quotient) =  $VCO_2/VO_2 = 6 CO_2/6 O_2 = 1.0$ 

In case of oxidation of fatty acid molecules: 23  $O_2 + C_{16}H_{32}O_2 => 16 CO_2 + 16 H_2O + 129 ATP$ , RER (respiratory quotient) =  $VCO_2/VO_2 = 16 CO_2/23 O_2 = 0.7$ 

We can see more interesting relationship between the  $C_xH_yO_z + (x + y/4 - z/2) O_2 \rightarrow x CO_2 + (y/2) H_2O$  formula) and RER (respiratory quotient) =  $VCO_2/VO_2 = 6 CO_2/6 O_2 = 1.0$  in case of glucose molecules, RER (respiratory quotient) =  $VCO_2/VO_2 = 16 CO_2/23 O_2 = 0.7$  in case of fatty acid molecules in the light of the full 9 stepped cycle of proton conductance inside human body.

The quantity of the released  $CO_2$  in the 2- th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close correlation with  $C_x$ 

(carbon atom) existed in the donator molecules as  $C_xH_yO_z$ .

The quantity of the released  $CO_2$  in the 2-th stage of the full 9 stepped cycle of proton conductance inside human body would be more increased in case of oxidation of fatty acid molecules as  $C_{16}H_{32}O_2$  in comparison to oxidation of glucose molecules as  $C_6H_{12}O_6$ , elevation of this parameter observed in case of prevailing of mkhris coding of Tibetan Traditional Medicine.

The quantity of the  $O_2$  participated in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body, utilized for the formation of metabolic water in the mitochondrian matrix as oxidation of proton by molecular oxygens i.e, protonatized by matrix proton is existed in close dependence with the quantity of  $C_xH_y$ , in reverse dependence with the quantity  $O_z$  contained in the donator molecules as  $C_xH_yO_z$ .

The quantity of the  $O_2$  participated in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body utilized for the formation of metabolic water in the mitochondrian matrix as oxidation of proton by molecular oxygens i.e, protonatized by matrix proton is existed in close dependence with the quantity of  $C_xH_y$  in reverse dependence with the quantity  $O_z$  contained in the donator molecules as  $C_xH_yO_z$  would be more increased in case of oxidation of fatty acid molecules as  $C_{16}H_{32}O_2$  in comparision to oxidation of glucose molecules as  $C_6H_{12}O_6$ , elevation of this parameter observed in case of prevailing of mkhris coding of Tibetan Traditional Medicine and it is existed more close relationship between  $H_y$  and  $O_2$  participated in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body.

The ratio of quantity of the released CO<sub>2</sub> in the 2- th stage of the full 9 stepped cycle of proton conductance and the quantity of the O<sub>2</sub> participated in the 7- th stage of the full 9 stepped cycle of proton conductance inside human body decreased in case of oxidation of fatty acid molecules as  $C_{16}H_{32}O_2$  in comparison to oxidation of glucose molecules as  $C_{6}H_{12}O_6$ , which shows that  $H_{32}$  contained in the molecules of  $C_{16}H_{32}O_2$  serves the reason of elevating of VO<sub>2</sub> and decreasing of CO<sub>2</sub> within of VCO<sub>2</sub>/VO<sub>2</sub> formula, such situation observed in case of prevailing of mkhris coding of Tibetan Traditional Medicine.

The quantity of the metabolic  $H_2O$  formed by oxidation of proton by molecular oxygens and by protonation of molecular oxygen by matrix proton in the 7- th stage of the full 9 stepped cycle of proton conductance inside human **is existed in close dependence with** the quantity of  $H_v$  contained in the donator molecules as  $C_xH_vO_z$ .

The quantity of the  $CO_2$  entered from all cells and excalated from body through alveoli (the release carbon dioxide during exhalation) in the 9-th stage of the full 9 stepped cycle of proton conductance inside human body **is existed in close dependence with**  $C_x$  (carbon atom) existed in the donator molecules as  $C_xH_yO_z$ .

The quantity of the diffused protons from mitochondrial matrix of all cells and metabolic water entered to plasma membrane of red blood cells with participation of aquaporin protein channels is existed in close dependence with the quantity of  $H_v$  (hydrogen atom) contained in the donator molecules as  $C_x H_v O_z$ .

The quantity of the diffused protons from mitochondrial matrix of all cells and metabolic water entered to plasma membrane of red blood cells with participation of aquaporin protein channels is existed in close dependence with the quantity of  $H_v$  (hydrogen atom) contained in the donator molecules as  $C_x H_v O_z$ .

The quantity of protons combined with hemoglobin (generation of HbH) which promotes the release of oxygen from hemoglobin, oxygen diffusion to all cells conditioning the release of proton, electron from food substrates in the 9-th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close dependence with the quantity of  $H_y$  (hydrogen atom) contained in the donator molecules as  $C_x H_y O_z$ .

The quantity of oxygen entered from lung, formed the HbO<sub>2</sub> in the 9-th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close dependence with the quantity of  $C_xH_y$  (carbon and hydrogen atoms) **is existed** in reverse dependence with the quantity  $O_z$  contained in the donator molecules as  $C_xH_yO_z$ .

The quantity of protons translocated to intermembrane space of mitochondria without accompanying electron in the 5-th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close dependence with the quantity of  $H_y$  (hydrogen atom) contained in the donator molecules as  $C_xH_yO_z$ .

The quantity of protons participated in the creating of proton gradient in the intermembrane space of mitochondria and following transfer of proton to matrix through ATP synthase in the 6- th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close dependence with the quantity of  $H_y$  (hydrogen atom) contained in the donator molecules as  $C_xH_yO_z$ .

The quantity of protons participated in the creating of proton gradient in the intermembrane space of mitochondria and following transfer of proton to matrix through ATP generation and heat energy formation in the 6- th stage of the full 9 stepped cycle of proton conductance inside human body is existed in close dependence with the quantity of  $H_v$  contained in the donator molecules as  $C_x H_v O_z$ .

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