

Research Article**Air Pressure Resource of Heart Energy (Hypothesis Savedji 2)****Mohammad Motamedian**Corresponding author Email: m.motamedian@gmail.com**ABSTRACT:**

Since heart is the most vital organ of the body and no one can live without it. However when we look at it, heart is just a pump, a complicated and important organ that it is only similar to a pump. So the study aimed to investigate air pressure resource of heart energy hypothesis Savedji 2 performed. In fact, most of the scientists' scientific theories are the result of the right or wrong theories of predecessors. From the other hand, accepting the new scientific theories by the thinkers and scientific elite is very hard and difficult and the designer should break this barrier of inattention and rejection and this difficulty is added to his/her difficulties. As it was explained in this thesis, heart gets most of its power from air pressure rather than muscles and heart function has the direct relationship with the air pressure. Of course, representing this theory with limited evidences need much venture and daring. The author mustered courage just to serve human and increase useful and beneficial scientific findings and if he had enough financial resources and lab facilities, he would search and study this topic better, rational and scientifically.

Keywords: Air Pressure, Heart Energy, (Hypothesis Savedji 2)**INTRODUCTION**

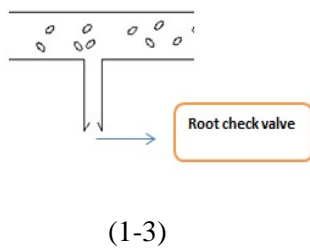
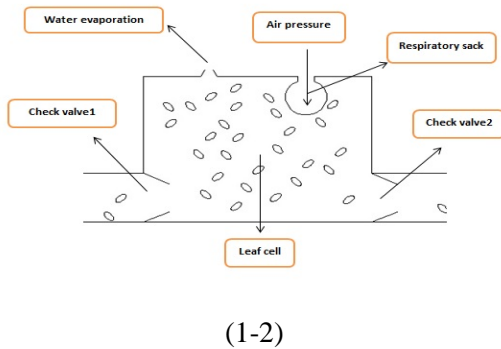
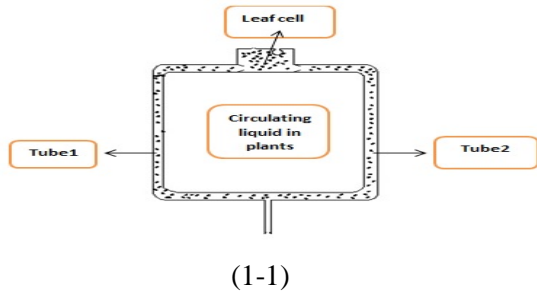
Heart is the most vital organ of the body and no one can live without it. However when we look at it, heart is just a pump, a complicated and important organ that it is only similar to a pump. Almost, all know that heart is a powerful muscle that supplies its energy to pump blood from its powerful myocardium. But, the results of my study indicate that our knowledge about the source supplying the energy of heart is incomplete and heart, this powerful muscle only doesn't supply its energy from its muscles, but it gain the big part from other source. If it was going to provide this energy from the eaten food, the human should spend more expenses to food materials. My studies indicate that the great percent of this energy is gained from other source which we haven't aware of it. The cardiologists' and heart surgeons' lack of accurate knowledge of energy source of muscles can cause the irretrievable life and financial damages for patients because if it is known that providing cardiac energy is through the lungs and insufficiency is the reason of cardiac

disability, this wrong diagnosis results to death or great hurts of patients.

How to start the spark for Hypothesis Savedji 2

In physics course in grade one of high school, the capillary property and surface tension is represented and explains how trees raise water to their tops from trunks and it raised me a question. It was very hard to me to accept water just for the capillary property or surface tension can be raised to the tops of trees beyond 10. M. An inner feeling said me that another factor other than capillary property and surface tension plays important role to raise water from trees trunks, but what was it? Familiarity with air pressure during my studies at high school made me to do an experiment in order to comprehend it better. Creating vacuum into a syringe, I sank it in a bowl filled by water, as water filled in the syringe in fraction time of second, I wondered. I felt the air pressure can be a more important reason to raise water from trees trunks, not the capillary property or surface tension. I thought

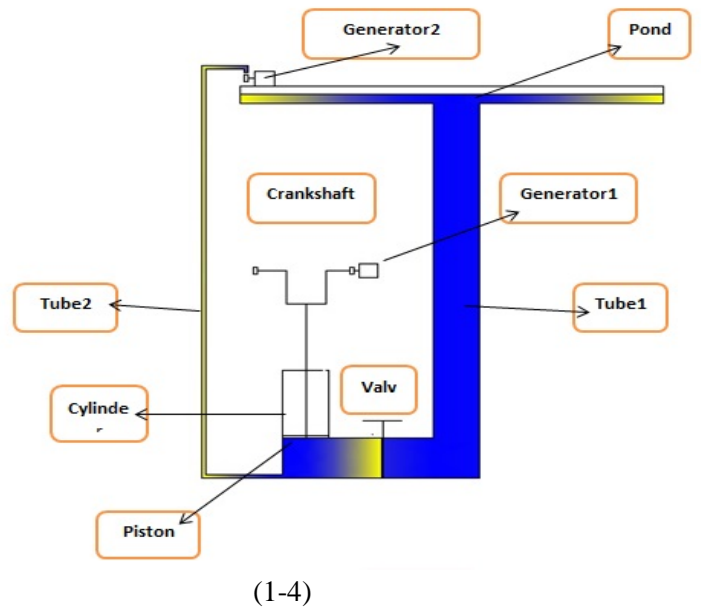
for a while how water raises from trunk and then I designed the following figures.



The Reason of Raising Water and Mineral Materials from Plants Trunk from Hypothesis Savedji 2 Point of View

As it is observed in figure, evaporating water and making vacuum in leaf cell, water and mineral materials enter into the leaf cell through tube 2. Entering water in to leaf cell through tube 2, atmosphere which is opposite to vacuum receives some water from root and some from returning the leaf cell. The respiratory cell in addition to exchange oxygen and carbon dioxide, it transfers the air pressure into the liquid into the leaf without entering air into the leaf. Typical transferring air pressure into the liquid on leaf surface will be stated in the next chapters in lungs discussion. Air pressure only enter in leaf cell and tube one and the check valve 1 doesn't let transfer this pressure to tube 2. Pressure in tube one and creating vacuum in leaf results in flowing water in trees trunk. In order to get stronger evidences to prove this hypothesis, my inner feeling said me the heart of living creatures too provide their power from air pressure, but

how? I didn't think about capillary property more than this, because it seemed that the evidences proving the function of heart is more available. My mind was wondering and I searched deeply every point to perhaps find a rational reason and defensible evidence. Then I proposed " Engine Savedji One" could convert earth gravity into energy. After designing, I found out this fact that this is earth gravity that through giving weight to the gathered mass from water or air causes these materials through creating pressure results in generating energy from gravity. Engine Savedji 1 (figure 1-4)

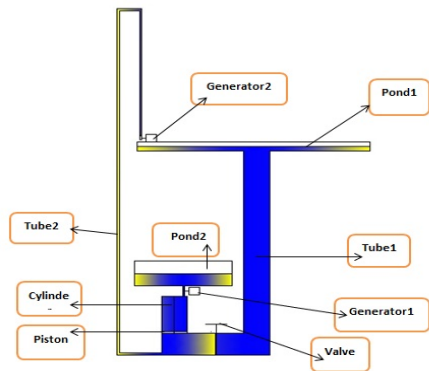


Function of Engine Savedji 1

As it is observed in figure 1-1, engine Savedji one is constituted from one cylinder, a piston, crankshaft, a valve and two tubes are filled with liquid. Turning on the liquid valve in tube one causes to enter a pressure equal to 20000kg force on piston surface and drive it back forcefully till crankshaft rotates 180 degree and when piston reaches to cylinder bottom, the sensor gives order to turn off the valve and through removing the pressure of liquid of tube one, the pressure is removed from under piston surface because of turning off the valve. Piston weight is equal to 5000kg is pulled down by earth gravity and poured the inner liquid of cylinder through tube 2 that its liquid weight is 100kg into the pond intensely and the liquid is returned again into pond . During this process the generator one and two generate electricity. Here, I could design a converter through water pressure resulted of

earth gravity that convert gravity energy to kinetic energy, but not in cardiac it was so, there were no piston and crankshaft in heart. My effort to explain the function of cardiac through this energy generator machine had no result. I attempted to remove the piston and shaft from engine Savedji through changing my design and finally I designed engine Savdji 2 with removing shaft as is showed in figure 1-5.

Function of Engine Savedji 2



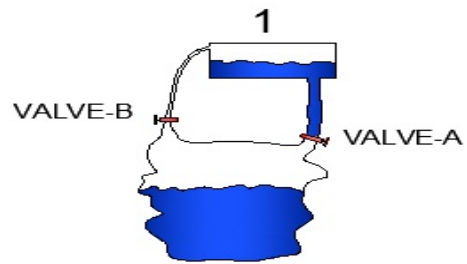
(1-5)

The crankshaft is omitted in engine Savedji 2 and instead of it the liquid is poured above piston in order to when the piston raise, the liquid exit with the pressure from the tube placed above it and enter in pond two. A turbine is placed at exit route of the liquid to be able to start generator number one. Liquid after moving the turbine enters in pond one. Turning on the valve in this device, the pressure about 20000kg is entered to beneath surface of the piston and drives it back and the fluid above piston moves 4000kg weight and through passing the turbine and turning it causes to generate energy. When piston reaches to cylinder bottom, the sensor gives order to shut down the valve. When the valve is closed, the piston weight equals to 1000kg dominate on 200kg weight of fluid column in the tube 2 and about 3900kg fluid is poured on generator two from height 100m and generate energy. When the fluid is coming down from pond 2, the generator 1 again generates energy too. Savedji engine two could convert the gravity force to energy through other shape but this engine couldn't explain the function of heart through air pressure. Because by reevaluating of heart function, I couldn't find the adequate relation between it and engine Savedji 2, I was disappointed. Studying and thinking about heart

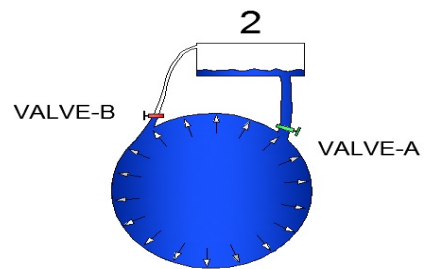
and as I couldn't find rational justification for heart function by this way for some years made me tired, I had accepted that the only factor of heart beating is its muscles and no other forces have role in pumping blood from heart.

Function of Engine Savedji 3

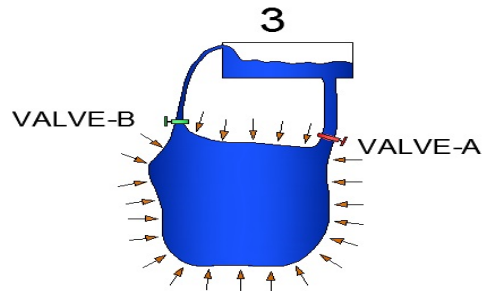
Some months later, designing engine Savedji 3 came in my mind, as it showed in following figures.



(1-6)



(1-7)



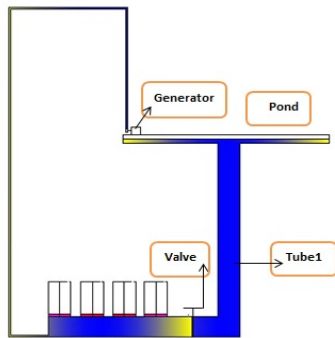
(1-8)

In this energy generator, there is no crankshaft and piston and the engine works entirely with tensional muscles. As it is observed in the first situation, the engine has balloon like shape and is without fluid pressure and both valves A and B are shutdown. In situation 2, the valve A is turned on to enter fluid with pressure. Imagine the liquid column of big tube A enters pressure equal to 1000kg on balloon walls and store its power on its walls. Now in third situation, valve A is shutdown and valve B is turned on, fluid in small tube has 200kg weight, but the stored

pressure in tensional body of balloon has power equal to 1000kg. As it is seen in third situation, the fluid is entered in pond with pressure and the fluid into the balloon is discharged and returned to the first situation again.

How to Transfer Air Pressure in Blood

One day without paying attention to heart and lungs, I thought that how can increase the efficiency of energy generation in engine Savedji 2? I thought to place four cylinders instead of one cylinder in this engine with an inlet valve and replace pistons with weight 1000kg by the pistons with 6000kg (figure 1-9).



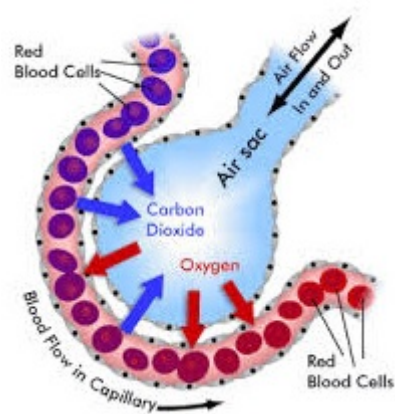
(1-9)

I thought that through turning on the inlet valve, a pressure par 20000kg is entered on the surface of each piston and may it increases the fluid pressure of each piston, but with a little thinking I realized that it wasn't feasible because the total weight of pistons was more than the fluid pressures. Thus the fluid pressure isn't able to lift the pistons because the pistons weight is divided by the fluid surface and entered a pressure equal to 24000kg on fluid surface. Thus the pistons weight repels the column pressure of pipe one which is 20000kg. I aim at getting more energy from this energy generator through adding the cylinders, but it didn't work well. Then I thought that it is better to use 1500 cylinders instead of four cylinders, but this time using the light weight 10kg instead of heavy weights 6000kg in pistons. The total weight was 15000kg. Now through turning on the inlet valve, a pressure par 20000kg of fluid into the pipe one predominates on weight 15000 of pistons and a volume equal to 4000kg of fluid is in each cylinder. Turning off the valve, a liquid about 6 million kilogram is poured on the generator from height 100m and generates energy. It means that through once

consumption energy for turning on and off the inlet valve, a great amount of gravity is converted to energy. Through designing this engine, the engine Savedji 4 was designed.

Engine Savedji 4 a Guidance for Justifying the Lungs Function

Some days after designing the engine, I watched a movie about lungs. It was said that the oxygen enters in blood vessels of lungs through millions alveolus. The word millions of alveolus and 1500 cylinders made me think that maybe it is possible to find a relation between engine Savedji 4 and lungs function. In engine Savedji 4, each one of pistons without mixing with fluid transfer their weight pressure on fluid surface, is it possible to be a piston in Would alveolar that the air pressure through pushing it down results in transferring air pressure on blood fluid surface? Having cylinder and piston in would alveolar sounds ridiculous, but my evaluations indicated that these can be feasible. I had seen the images of Would alveolar for some times, but this time my sight was from engine Savedji 4 angle. I started to search in internet and reviewed the different images of lungs would alveolar. It was the various images of Would alveolar and the way of exchanging gases, but one image among the images attracted my attention (figure 1-10)



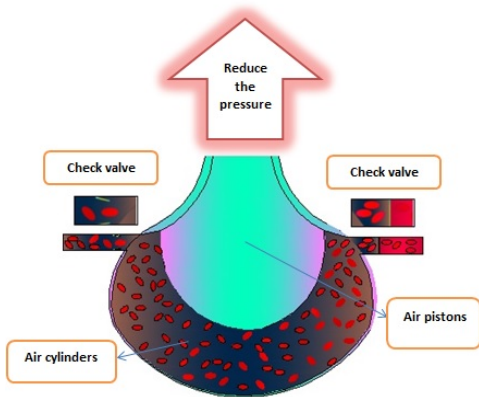
(1-10)

Yes, the Would alveolar could work the same as a cylinder and piston. Exactly the same as pistons of engine Savedji 4 that transfers its weight pressure without mixing with fluid, the air pressure here without touching the blood enters its pressure in it. Now in order to reader's better perception, the improved figure of the Alveolus in figure 1-11 is showed to explain the

lungs function base on my idea , however the explanation is also feasible in figure 1-10.

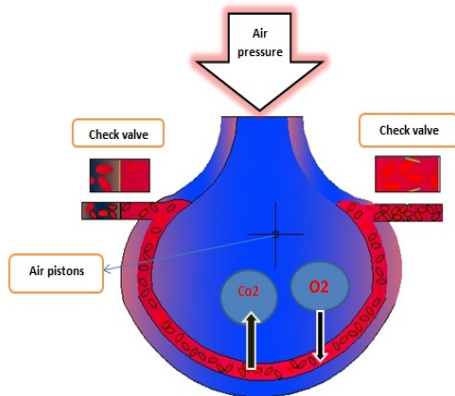
First Function of Lungs from Point of View of Hypothesis Savedji2

When the wide and big screen of diaphragm moves toward up it pressurize the blood in vein and artery of lungs and the blood into the lungs arteries moves toward left ventricle and atrium with pressure and provides heart energy in inhalation time. On the other hand, it enters the vein blood into the cylinders surrounded air piston. The air into the air piston with the pressure on the lungs cylinders resulted from low oxygen blood comes out of air piston in figure1-11.



(1-11)

As it is seen in figure 1, when air comes out of the Would alveolar, the bags are shrunk upward and when the Alveolus is discharged, the low oxygen blood comes into alveolus cylinder from venous one-way valve and stored in it. Moving the diaphragm curtain toward down, a vacuum is created between diaphragm curtain and lungs and since the atmosphere is incompatible with the vacuum, air with pressure enters in lung and as result in Would alveolar. (Figure 1-12).

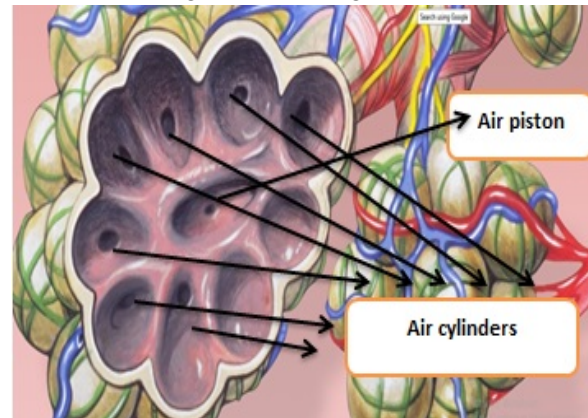


(1-12)

The reason of becoming the lungs big is the Would alveolar that it is better to name them air pistons. By inflating the bags, the gathered blood in air cylinders is transferred quietly and with pressure in the blood vessels which go to the left ventricle and with pressure of air pistons on blood, the atmosphere oxygen from within the air cylinder and from the air pipes surrounded all around the blood cylinder is entered in blood and in contrary, the carbon dioxide from blood is entered in piston and air pipes. With this work, the Would alveolar in addition to transferring the air pressure in blood fluid results in exchanging oxygen and carbon dioxide. Now it can be seen that easily the air pressure can be transferred to blood fluid surface, reaching to this simple answer is the result of author's some months thinking and studying. This explanation is the sample of function that can transfer the pressure to blood. Of course, the explanation of the function of transferring pressure to blood is possible by some other ways that it isn't within the scope of this study. I proved theoretically and scientifically that this is feasible, but I was interested in proving the existence of air pressure in the lungs vessels practically because from my point of view, proving the existence of air pressure in blood can confirm my claim about the source of supplying the heart energy.

Second Function of Lungs from Point of View of Hypothesis Savedji 2

As it is seen in figure, air pistons are placed in the center and air cylinders have surrounded it. After plenty of analyzing, finally I explained the function of lungs as following



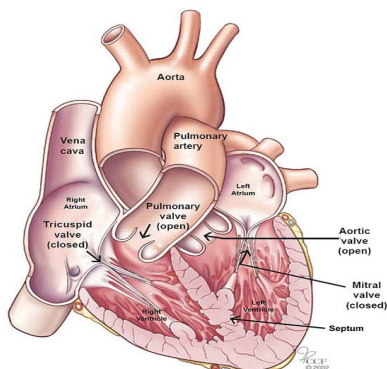
(1-13)

When the wide and big screen of diaphragm moves toward up it pressurize the blood in vein and artery of lungs and the blood into the lungs

arteries moves toward left ventricle and atrium with pressure and provides heart energy in inhalation time. On the other hand, it enters the vein blood into the cylinders surrounded air piston. The air into the air piston with the pressure on the air cylinders resulted from low oxygen blood comes out of air piston. Now blood into the lungs vessels has been reached to its least normal condition and the vessels are depleted from blood. Then when the diaphragm screen moves down, a vacuum is created between diaphragm screen and lungs. Since the atmosphere is opposite to vacuum, from one hand, the blood of right ventricle is driven into the lungs veins and in the other hand, the air with pressure is driven into the air piston and sends the blood into the cylinders extremely toward the empty arteries and left ventricle and make them inflate with pressure in order to be ready for the next stage of respiratory.

Function of Heart with Air Pressure and Other Reasons

Filling air into pistons, the atmospheric pressure along with oxygen is transferred to blood and blood vessels carry the oxygenated blood to the left atrium with the pressure which is taken from atmosphere. Blood with reaching to atrium and is gathered there and fills the ballooning atrium with pressure results from atmosphere and gets ready for opening mitral valve. Opening mitral valve, blood enters into left ventricle in fraction of second of time and drives back the papillary muscles with hitting to elasticity muscles of myocardium.



(1-14)

By going the papillary muscles back, the entire papillary are pulled and each one does their duty. Papillary attached to mitral valve closes mitral valve and simultaneously with pulling them, the

papillary connected to all around the interventricular septum of ventricles, are pulled and drive left the interventricular septum of ventricles. Closing mitral valve, the air pressure is removed from blood into left ventricle .By removing the pressure, the elasticity muscles of left ventricle that have stored the power of air pressure in themselves send blood in ventricle intensely to ward aorta artery with returning to their place. Blood enter in right atrium after entering to tissues of body and oxygenating through veins. By opening the tricuspid valve , low pressure blood enter right ventricle and by pulling the interventricular septum of ventricles to ward left through papillary of left ventricle, the papillary of right ventricle which their muscle arm bottom are connected to interventricular septum are pulled and tricuspid valve is closed. Closing them, interventricular septum of ventricles returns to its place and carries blood with pressure into lung vein. By breathing out, the low oxygen blood enter in cylinders and with breathing out the blood circulation process continues. One reason that many scientists make mistake about the source of supplying heart energy is palpitation of heart after separating from lungs. It should be notice that living cells of heart muscles that are forced to palpitate with air pressure for million years have this habit in their inner and till they are alive continue their beating. But this dancing like movement isn't able to pump blood and just as habit shake them a little. This movement causes many researchers and scientists don't have any doubt about the source of supplying energy for heart pumping by the muscles.

Inhalation and Exhalation the another Reason to Prove Hypothesis Savedji 2

According to scientists' findings and researches of author, the number of heartbeat at time of inhalation and exhalation varies. Base on the researched the number of heart beat in inhalation is more than in exhalation. Now this question is raised that with which rational reason, heart supplies its energy to pump just from its muscles, in inhalation has more beat than exhalation? Why is it necessary to do that? What is the reason of becoming heartbeat less and more? I haven't found any reason for this so far.

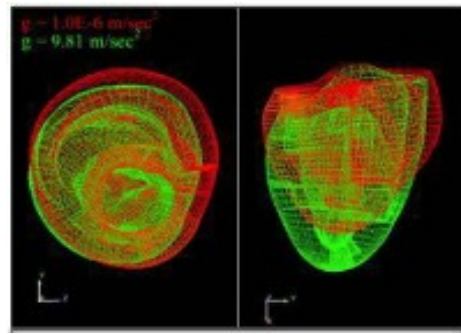
But the author had reached to this result base on his findings before reading it in internet that heart works with air pressure should have different beat at different time of inhalation and exhalation. Because in inhalation when the air pressure enters in blood through pistons, blood enter in heart with more pressure and drives back the cardiac muscles sooner. When the heart muscles go back soon, mitral valve is closed early. Opening and closing heart valves early means more palpitation and by entering the oxygenated blood in vessels of lungs, they are contracted to store enough blood and pressure for heart in exhalation. But the stored blood in lung vessels is less than pressure is taken directly from air pistons. Because atmospheric pressure is removed from pistons and by contracting lung upward by diaphragm curtain, the diaphragm enters pressure to lungs vessels too in order to prevent lowering blood pressure of lung vessels when exhalation. I other word, in inhalation, blood is filled by the stored oxygen in lungs vessels and result in inflating vessels and supplies the required oxygen of heart through helping diaphragm curtain in exhalation. The stored energy in blood vessels can't supply the pressure equal to direct air pressure. Thus heartbeat in inhalation is more than in exhalation and this rational explanation for differing heart palpitation in inhalation and exhalation.

Why Does Heart grow Rounder in Space?

Base on the recent studies, due to effect of microgravity the astronauts' heart takes on a more spherical shape while they are in space. James Thomas from echocardiography group and Robert and Susan Tamish , the scientists of NASA Ultrasound believe that heart in space doesn't work hard and this causes to lose muscle volume and after returning to earth can create serious problems¹.

1

https://www.nasa.gov/mission_pages/station/research/experiments/652.html



(1-15)

As it was noted that humans' heart takes on spherical shape in space and the reason is lower gravity in space. Thus human heart doesn't require to strong pump to flow blood. Why does heart become spherical in space? It is right that the muscles become weaker, but from my point of view this isn't the rational reason. If the heart muscles get weak with the shape they have, what is the reason of becoming heart spherical? Now my hypothesis can explain nicely the reason of heart growing rounder. If heart takes spherical shape in space is for this reason that the air pressure in international station is lower that it at sea level. Thus pulmonary pistons can't bring the adequate pressure on surface of blood fluid and as it was stated previously, when mitral valve opens on the earth, blood with great pressure enters power to bottom of heart and muscular walls. This great power enters in bottom of heart and cardiac muscles results in pulling heart and its muscles. As there is no gravity in space, heart doesn't require energy to overcome the gravity and heart with little pressure can pump blood. It means that air pressure should be in extent that to be able to close mitral valve. When the air pressure is low to drive back the muscles, absolutely , hear takes spherical shape for a long period , but after that astronauts return to earth again in a short time with blood fluid pressure result of atmospheric air pressure, heart is returned to its first shape.

Number of Heartbeat of Animals Varies, the another Evidence

As you know, the number of heartbeat of creatures has a direct relationship with heart being small or big. The babies' hearts beat 140 beat per minute. Woman's heart is smaller compared to men's and women have more heartbeat than men. Why is it so? Why is it

necessary that a woman's heartbeat be more than a man's? Scientists state that the smaller body, the more severe metabolism and heart is forced to beat quicker and the bigger animal, the slower heartbeat. Can this statement be right? Why the body of a woman usually has less activity should have more metabolisms? From my point of view, this statement of scientists isn't right and if right, this is the great metabolism of body obeys the heart rather than heart obeys metabolism.

The Reason of Varying the Speed of Creatures' Heartbeat in Hypothesis Savedji 2

Supplying heart energy by air pressure is the reason of high speed of heartbeat in small creatures. But how this happens? As I stated, when heart myocardium goes back early, it causes to close mitral valve, because mitral valve is closed by papillary attached to papillary muscle. As a result, when heart is small, heart myocardium is stimulated earlier and early stimulating of myocardium means closing mitral valve quickly and elevating heartbeat. It is obvious that in big heart, there are big inlet vessels enter great volume of blood in ventricle and it may this ratio of ventricle entering is the same as the heart volume. Here volume of blood flowing is not considered, but the main reason is myocardium fitness. If the left ventricle length of canary is considered 5.5mm and the length of human's ventricle 7cm, in heart of canary the myocardium will be stimulated thirteen times earlier than human's heart. In other word, mitral valve is closed thirteen times earlier than human's heart. This means that the heartbeat of canary is about thirteen times more than human's. The heart of whale beats seven rates per minutes, if the heartbeat of human is considered seventy beat per minute. It can be concluded that the left ventricle of a whale is about seventy centimeters. Of course, other variables such as air pressure, materials have made heart, papillary arrangement and etc. can change the calculations.

CONCLUSION

In fact, representing the new scientific theory has its special difficulties because the theorist in

the first step has just some limited evidences and proof to prove her/his theory and proving it will require spending time, other scientists' attention and consideration in order to a theory become scientific law or permanent theory or rejected and denied with stronger reasons and evidences after criticizing and complete evaluating. Most of the scientists' scientific theories are the result of the right or wrong theories of predecessors. From the other hand, accepting the new scientific theories by the thinkers and scientific elite is very hard and difficult and the designer should break this barrier of inattention and rejection and this difficulty is added to his/her difficulties. As it was explained in this thesis, heart gets most of its power from air pressure rather than muscles and heart function has the direct relationship with the air pressure. Of course, representing this theory with limited evidences need much venture and daring. The author mustered courage just to serve human and increase useful and beneficial scientific findings and if he had enough financial resources and lab facilities, he would search and study this topic better, rational and scientifically.

However this study aims at proposing a scientific theory and invite thinkers and specialists to pay attention and consider it. I hope the medical specialists, biologists and other researchers with their collaboration, fair criticize and precise favor consider this theory and represent rational and scientific reasons for approving and rejecting it. The author hopes lovely can serve medical science through representing and approving this theory in order to open and create new ways for serving humans and decreasing difficulties of patients with heart diseases.

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