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Mini Review

The use of Human Intestine to Deliver Recombinant Proteins which Macroorganism Needs

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Abstract

The Author has performed the partial body fat removal in the volunteer who has tendency to increase the body weight. The Author investigated the problem of food fat digestion on rabbits and successfully used it for the design and use of the proprietary fat removal column. The observations of the fat transport in the rabbit blood had brought the Author to understanding that the intestine is a wide and open gate for the recombinant proteins, if inhabit the intestine with the genetically engineered members of the normal human intestinal; microflora. It is paramount to do the genetic engineering of the component of the human normal intestinal microflora for about 200 hours, not longer, as otherwise long cultivated in vitro the engineered microorganisms do not adhere to the intestinal cells of the host thus making the whole procedure the waste of the very well paid time (patient/ health insurance pays). The Author has designed the procedure to cure the Diabetes II and anemia in another volunteer. The success determined the need for the look in the future, when the overcrowded Earth population might start relocating to other planets: vaccines for the relocating people.

Keywords: l-arginine, omega-3 polyunsaturated fatty acids, cerebral ischemia

Introduction

Herein the Author has studied the food fat transport in the rabbit organism and made crucial decisions on the therapeutic use of the intestinal tract to deliver the recombinant proteins to the human body. This is the description of new method to deliver the recombinant proteins to the body of the patient.

By the year 2050 the Earth population will reach 15 billion people due to success of vaccines and antibiotics reducing mortality rates. One of the major laws of biology: if successful population does not have any factors reducing its amount, then the population kills itself by poisoning the environment and exhaustion of nutritional resources. That would bring the essential necessity to look for another planet in the Universe capable of supporting life of human beings to relocate the portion of the human population there. Advanced knowledge in some investors brought attempts to develop initially flights over the Solar system and then go to extraterrestrial travel over the Universe to look for that planet similar to Earth by atmosphere composition and the presence of fresh water. New planet similar to Earth might have pathogens dangerous for humans which never had contact with them. To ensure the proper vaccines will be delivered right to the blood stream of initially the flight crew members and then to the relocating people Dr. Tyurin has invented method of intestinal vaccination proven to work for a variety of recombinant proteins which will include new vaccines [17-20].

The competitors of the Author include 1)economical production of recombinant proteins in plants (any foreign protein causes the immune reaction at protein delivery to human body) [1], 2)cell penetrating peptides (CPPs) can be tethered to the protein of interest[2–4] to trigger endocytosis-mediated uptake when they interact with the cell membrane [5–7], 3)live attenuated Salmonella strains have been extensively explored as oral delivery systems for recombinant vaccine antigens and effector proteins with immunoadjuvant and immunomodulatory potential [8], 4)the use of genetically engineered myoblasts as a recombinant protein delivery system, stable transfectants of the murine C_2C_{12} myoblast cell line were produced that synthesize and secrete high levels of human growth hormone (hGH) in vitro [9], the use of carrier systems to deliver rhBMP-2 and rhBMP-7 to sites of bone tissue regeneration and repair [10], 5)the use of silk proteins which are biodegradable and biocompatible, and can also be tailored to contain additional features via genetic engineering, suggesting utility for gene delivery [11], and 6)batch electroporation as a delivery tool for single polypeptides and multi-subunit protein assemblies of the kinetochore, a spatially confined and well-studied subcellular structure [12]. None of said methods include the use of human intestine and the genetic manipulations with the strains of normal human intestinal microflora to make them express the recombinant proteins for the REGULATED delivery of said recombinant proteins to the bloodstream of the intestinal microflora host.

So, the Author has developed a new method of the recombinant proteins delivery into the host macroorganism. With this method it was tempting for the Author to use the new developed method of the recombinant proteins delivery on the volunteers who needed well qualified help of the Medical Doctor. Also, the development of said method had the observations of the electron microscopy of the ingested food intake, which helped the Author to

offer to the volunteer in need the method of the body weight reduction due to the corrections of the body fat content (Figure. 1 and Figure. 2):

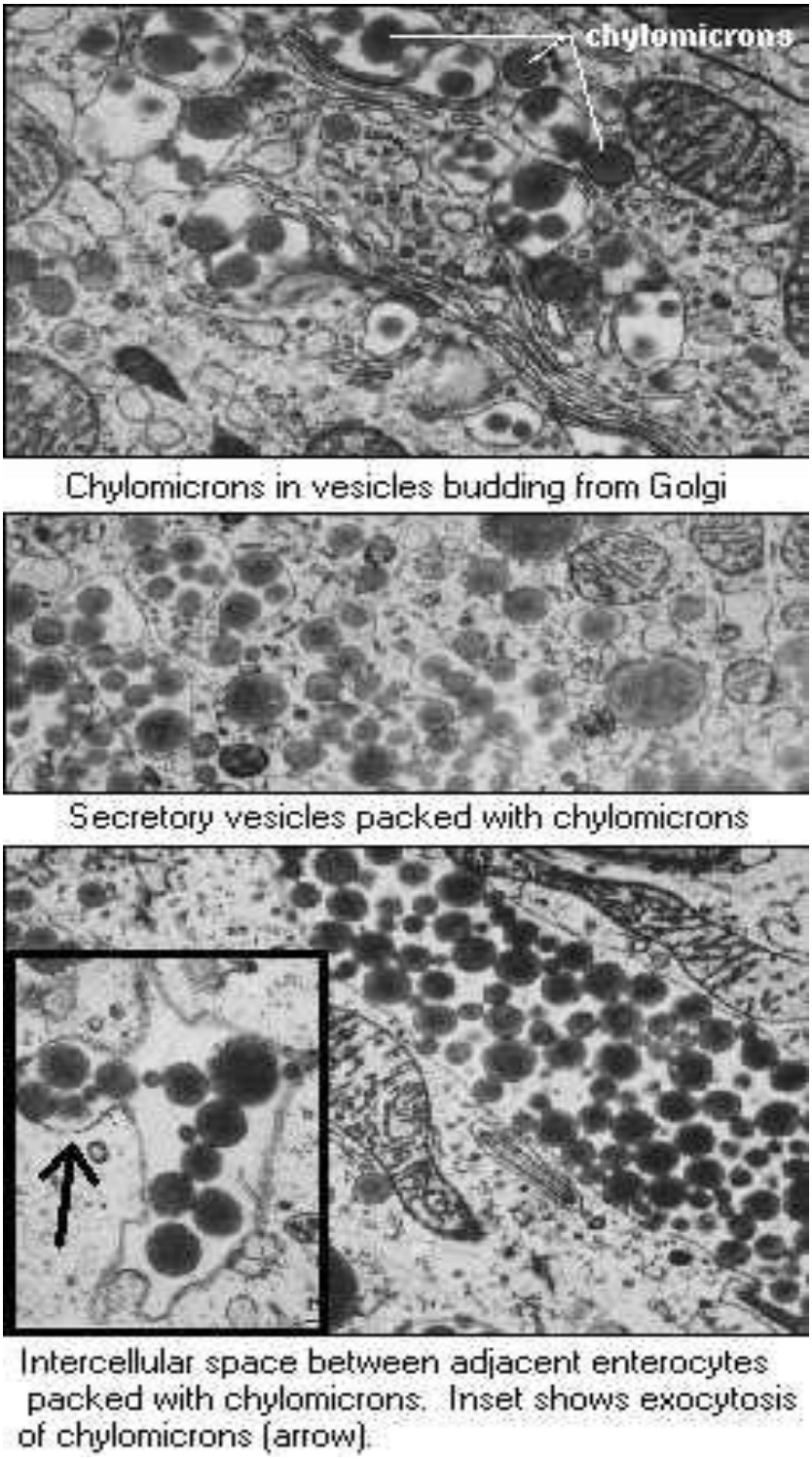

Figure 1: Chylomicrons originated from the food fat.

The serum of the blood coming from the intestine with food is turbid - fat in the food:

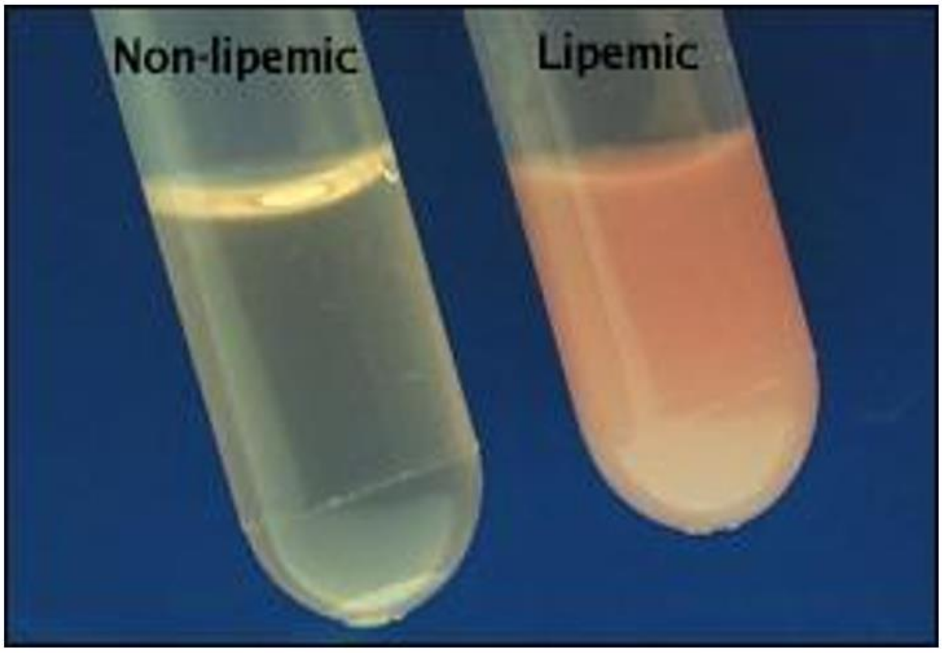

Figure 2: Blood plasma with the chilomicrons from the food fat (on the right part of the image).

Other volunteers needed help with their Diabetes II and anemia, and the Author developed the new method of the recombinant proteins delivery to the marcrooganisms which is completely physiological and might be combined with the regular work activity of said volunteers. The Author has isolated the *Lactobacillus case*i MT896 strain from the feces of the volunteer in the need for treatment of Diabetes II and anemia and engineered said strain to make said strain express in the intestine of said volunteer recombinant human insulin (the recombinant human insulin submission ID to the NCBI is 2442803) and the recombinant human erythropoetin (the sequence of the recombinant human erythropoetin expressed by the intestinal isolate *L. casei* MT896InsulinErythropoetin has been deposited to NCBI (recombinant human erythropoetin submission ID is 2482572). The Diabetes II treatment in another volunteer has been also described [14]. The Author has used his knowledge obtained with the help of rabbits to cure the pepsin secretion deficiency in another volunteer [15]. But the pinnacle of the new delivery method described for the first time by the Author is the protection of the future crews of the extraterrestrial cargo ships intended for the travel to the new planets where the population of Earth will be relocated (vaccination technology) [16].

Therefore, besides his major occupation, namely, expansion of the invented by the Author inexpensive technologies to manufacture Gasoline and Diesel fuel replacements from air CO_2, not from petroleum, the Author faces the future with pride as he has invented the new mechanism of the *in vivo* vaccination of the extraterrestrial crews of the to be created new Spacecrafts for the relocation of the overcrowded Earth population to other suitable planets.

Declarations

Ethical Approval and Consent to Participate. This article does not contain any section, requiring Ethical Approval. The only Author is complied with the Consent to Participate.

Consent to Participate. The Author complied with the consent to publish this article.

Consent to Publish. This original article has not been published anywhere or is under the consideration to publish anywhere else beside this Journal. The Author complied with the Consent to Publish this original article.

Authors Contribution. Dr. Michael V. Tyurin has planned all the experimental work, conducted all the experiments, analyzed the experimental data, wrote this original manuscript, edited ot as appropriate and submitted for this publication the edited original manuscript.

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Competing Interests: The author declares his personal conflict of interests with the law firm in Houston, TX Hirsch and Westheimer, which has destroyed his corporate website http:syngasbiofuelsenergy.com, and with the major petroleum and gasoline/diesel fuel companies in Houston (TX), with the Houston Police (City of Houston) and with the Houston FBI ignoring the Author's concern about his attempted murder committed by SHELL after the Author has presented to SHELL his proprietary technology for gasoline manufacture from the air CO_2, not from petroleum (Tyurin MV, et al. 2019) The attempted murder is of no interest for the corrupt by the major petroleum corporations in Houston, TX Houston FBI. The Author has no intent to file the lawsuit against the Houston FBI at any point, but he is inclined to make this case the public domain. Houston FBI does not follow the established in the USA Federal Laws.

Availability of data and materials: All the data and materials are available if necessary from the Author of this manuscript. The **Authors' information:** The Author is the owner of his mentioned TEXAS businesses Microbial Biocatalyst International, Inc. and Inorgcarbdiesel, Inc. The work has been done at the corporate site with the USPS address P. O. Box 300230, Houston, TX 77230.

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