



INNOVATION ENTERPRISE „IMPULS”

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THE COMPREHENSIVE SYSTEM OF PROPHYLAXIS & TREATMENT OF PEOPLE WITH DIABETES AND RELATED COMPLICATIONS

I. DIABETES - BASIC INFORMATION¹

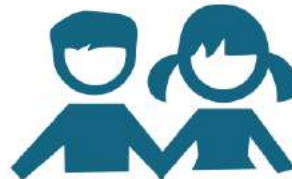
1 in 11 adults have diabetes (415 million)



12% of global health expenditure is spent on diabetes (\$673 billion)



542,000 children have type 1 diabetes



46.5% of adults with diabetes are undiagnosed



By 2040, **1 adult in 10** (642 million) will have diabetes



Three quarters of people with diabetes live in low and middle income countries



IT'S A BIG CHALLENGE FOR OUR CIVILIZATION IN THE XXI CENTURY

¹ IDF DIABETES ATLAS – 7TH EDITION

Diabetes mellitus (DM), commonly referred to as diabetes, is a group of metabolic diseases in which there are high blood sugar levels over a prolonged period.

- *Type 1 DM results from the pancreas's failure to produce enough insulin. This form was previously referred to as "insulin-dependent diabetes mellitus" (IDDM) or "juvenile diabetes". The cause is unknown.*
- *Type 2 DM begins with insulin resistance, a condition in which cells fail to respond to insulin properly. As the disease progresses a lack of insulin may also develop. This form was previously referred to as "non insulin-dependent diabetes mellitus" (NIDDM) or "adult-onset diabetes".*
- *Gestational diabetes, is the third main form and occurs when pregnant women without a previous history of diabetes develop high blood-sugar levels²*

Diabetes mellitus type 2 is a long term metabolic disorder that is characterized by high blood sugar, insulin resistance, and relative lack of insulin. Common symptoms include increased thirst, frequent urination, and unexplained weight loss. Symptoms may also include increased hunger, feeling tired, and wounds that do not heal. Often symptoms go on slowly. Long-term complications from high blood sugar include heart disease, strokes, diabetic retinopathy which can result in blindness, kidney failure, and poor blood flow in the limbs which may lead to amputations. The sudden onset of hyperosmolar hyperglycemic state may occur; however, ketoacidosis is uncommon.

Type 2 diabetes is primarily due to obesity and not enough exercise among people who are genetically predisposed. It makes up about 90% of cases of diabetes, with the other 10% due primarily to diabetes mellitus type 1 and gestational diabetes. In diabetes mellitus type 1 there is an absolute lack of insulin due to breakdown of islet cells in the pancreas. Diagnosis of diabetes is by blood tests such as fasting plasma glucose, oral glucose tolerance test, or A1C.

Type 2 diabetes is partly preventable by staying a normalweight, exercising regularly, and eating properly. Treatment involves exercise and dietary changes. If bloodsugar levels are not adequately lowered, the medication metformin is typically recommended. Many people may eventually also require insulin injections. Rates of type 2 diabetes have increased markedly since 1960 in parallel with obesity. As in 2013 there were approximately 368 million people diagnosed with the disease compared to around 30 million in 1985. Typically it begins in middle or older age.

2 https://en.wikipedia.org/wiki/Diabetes_mellitus

The classic symptoms of diabetes are polyuria (frequent urination), polydipsia (increased thirst), polyphagia (increased hunger), and weight loss. Other symptoms that are commonly present at diagnosis include a history of blurred vision, itchiness, peripheral neuropathy, recurrent vaginal infections, and fatigue. Many people, however, have no symptoms during the first few years. People with type 2 diabetes mellitus may rarely present with hyperosmolar hyperglycemic state (a condition of very high blood sugar associated with a decreased level of consciousness and low blood pressure).







Type 2 diabetes is typically a chronic disease associated with a ten-year-shorter life expectancy. This is partly due to a number of complications associated with diabetes, which include: two to four times bigger risk of cardiovascular disease including ischemic heart disease and stroke; a 20-fold increase in lower limb amputations, and increased rates of hospitalizations. In the developed world and increasingly elsewhere, type 2 diabetes is the largest cause of nontraumatic blindness and kidney failure. It has also been associated with an increased risk of cognitive dysfunction and dementia through disease processes such as Alzheimer's disease and vascular dementia. Other complications include acanthosis nigricans, sexual dysfunction, and frequent infections.³

***Diabetic foot ulcer (DFU)** is considered to be one of the most common and costly diabetic complications. It is suggested that the lifelong incidence of foot ulcer for diabetic patients may reach 25%. The prevalence of DFUs varies between 1.5% and 10% in different populations. According to the International Working Group on the Diabetic Foot, patients with DFU consume 12% to 15% of the health care resources for diabetes. In a developing country, this figure is expected to be even higher, up to 40%. The World Health Organization estimated this proportion to be around 15% to 25%.⁴*

3 https://en.wikipedia.org/wiki/Diabetes_mellitus_type_2

4 VALUE IN HEALTH REGIONAL ISSUES 7C (2015) 80 – 86

II. DIABETES IN THE WORLD

COUNTRY	POPULATION	DIABETICS	DIABETICS WITH LOWER-EXTREMITY AMPUTATION	HEMODIALYZED PERSONS
PR CHINA 	1 360 720 000	> 92 400 000 ⁵	> 1 000 000	289 000 ⁶
INDIA 	1 236 344 631	> 62 000 000 ⁷	> 600 000	100 000 ⁸
BRAZIL 	207 848 000	> 7 000 000 ⁹	> 150 000 ¹⁰	110 000 ¹¹
RUSSIA 	144,192,450	> 12 000 000 ¹²	> 96 000	11 394 ¹³
USA 	323,416,292	> 29 000 000	> 75 000 ¹⁴	350 000 ¹⁵
POLAND 	38 483 957	> 2 500 000 ¹⁶	(> 14 000 per year)	25 000

5 Int J Clin Exp Med 2015;8(3):3785-3792

6 ESRD Patients in 2012 A Global Perspective

7 https://en.wikipedia.org/wiki/Epidemiology_of_diabetes_mellitus

8 <http://health.economicstimes.indiatimes.com/health-files/dialysis-in-india-today-and-tomorrow/1233>

9 Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy 2015;8 17–28

10 Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy 2015;8 17–28

11 ESRD Patients in 2012 A Global Perspective

12 <http://www.idf.org/membership/eur/russia>

13 <http://www.ishib.org/journal/19-1s1/ethn-19-01s1-18.pdf>

14 Diabetes and Lower Extremity Amputations by NLLIC Staff (Revised 2008)

15 <http://www.niddk.nih.gov/health-information/health-statistics/Pages/kidney-disease-statistics-united-states.aspx>

16 <http://deomed.pl/pobieranie/Jak-oddalic-grozbe-amputacji-konczyn-dolnych-i-stop-w-cukrzycy.pdf>

III. MULTIFACTORIAL SYSTEM FOR PREVENTION/ TREATMENT OF PATIENTS WITH DIABETIC FOOT ULCERATION AND WITH OTHER HARD-TO-HEAL WOUNDS



Diabetic foot ulceration is the leading cause of non-traumatic lower limb loss and is characterized by infections, ulcers (wounds), destruction of deep tissue with the presence of neuropathy and ischemia of varying degrees of progression.

Given these symptoms, we offer a comprehensive approach to the treatment of ailments affecting the diabetic foot. This will involve interaction diabetic's foot with six factors:

- **magnetic field,**
- **subatmospheric pressure,**
- **hyperbaric oxygen,**
- **infrared radiation,**
- **ozone,**
- **plant extracts**

The magnetic field has properties conducive to reducing neuropathic pain, diabetic wound healing, angiogenesis and enhances the antimicrobial action. Patient's foot will be subjected to the temporary impact of the static magnetic field.

Mechanical action on formation of granulation tissue (new connective tissue) applies **negative pressure** to the wound. Then there will be improved the blood supply and the reduction of swelling. It is also possible draining of wound excretion.

Providing an **increased amount of oxygen** to damaged tissue with increased pressure shall aid

in healing wounds and be toxic to the anaerobic microorganisms

Another factor is the **infrared radiation** that reaches the very cells. This radiation accelerates the healing of wounds, including diabetic ulcers and helps increase microcirculation.

Ozone is intended to support wound healing, treatment of complications of ulcers, reduction in blood sugar levels and it is bactericidal and fungicidal factor. Ozone is a means of directly preventing the formation of diabetic foot syndrome as well as supporting the rehabilitation of a patient afflicted with diabetic foot syndrome, and the patient after amputation of the foot. Ozone has bactericidal, fungicidal and virucidal activity. Thus, the use of ozone in combination with the good penetration into tissue and excellent biocidal effect, particularly with respect to anaerobic bacteria, along with the standard therapy of diabetic foot syndrome will reduce the amount of amputation of lower limbs.

Plant extracts e. g. Chrysanthemum extract contains antibacterial compounds, and raspberry leaf extract has an antimicrobial, astringent and anti-inflammatory activity. The extract will be vapourized in the chamber embracing the foot.

DEVICE FOR DRY OZONE BATHS

Designed in IE „IMPULS” chambers for dry ozone baths are made of ozone-resistant plastic foils. The chamber contains two ventilation valves – inlet valve to which ozone source is connected, outlet valve with ozone destructor and sealing band connected to it.

A whole series of chambers designed to make it possible to choose a chamber of appropriate size accordingly to patients' needs.

Chambers are single-use, do not constitute heavy waste and after disinfection can be further reprocessed



DEVICE FOR WATER OZONE BATHS

Chambers for water ozone baths are very much like these for dry ozone baths. Additionally they are equipped with ozone diffuser and their walls are stiffened. The chambers are single-use like that described above.

Therefore, it seems necessary to start serial production of mini-hyperbaric multifunctional chambers with the highest standards of security which should significantly reduce the number of over one million amputations each year resulting from diabetic foot ulceration. Additionally, the expenses carried for treating the patient and time of patient's inability to work should also decrease. Common use of mini-hyperbaric multifunctional chambers and their further improvement will give way to ozonotherapy and possibility of using its advantages as standard treatment methods of skin infections, bedsores, burns, ulcers and other infections of soft tissues.

IV. TOUCHLESS, AUTOMATIC DEVICE FOR FEET DISINFECTION

“FOOTSTER”

Patients suffering from diabetic foot ulceration are very often handicapped as it concerns their mobility, which significantly hinders or even makes it impossible to carry out hygienic overtures - including thorough feet disinfection which is indispensable for proper treatment. Also, they don't always have the possibility of using someone's help.

Designed and manufactured in IE „IMPULS” automatic, touchless device for feet disinfection provides a mean for carrying out thorough disinfection of feet with no need for bending down, raising legs, or making any other moves that might be difficult or impossible for the patient. The device is easy to operate. After inserting foot into the chamber, a dosing pump automatically starts dosing the disinfectant by spraying it onto a foot. The device is equipped with five dosing nozzles which warrant that the spraying stream covers the whole area of the foot. The amount of a dose (starting from 5 ml) and time after which the action is repeated may be set accordingly to customer's wish. The disinfection may be repeated already after few seconds. Inside the chamber there are no movable parts. The dispenser can be situated on the floor in any convenient place that has the access to power supply.

The dispenser contains 1 litre volume container for disinfecting liquid and a device signalling lack of the liquid in the container.

The dispenser can be situated on the floor in any convenient place that has the access to power supply. The dispenser is powered with 230V power supply. The maximum power uptake is 40W.



HANDSTERIL

Hygienic And Surgical Limb Disinfection Liquid

Diabetes is associated with increased risk of infection and skin diseases. Hence we recommend cheap and effective disinfectant - HANDSTERIL

The product contains almond oil and D-panthenol. It is free of fragrances as well as dyes.

Ready-to-use product exhibits effectiveness against broad spectrum of microorganisms including bacteria (including *M. tuberculosis*), viruses (including Zika virus) and fungi (including yeasts).

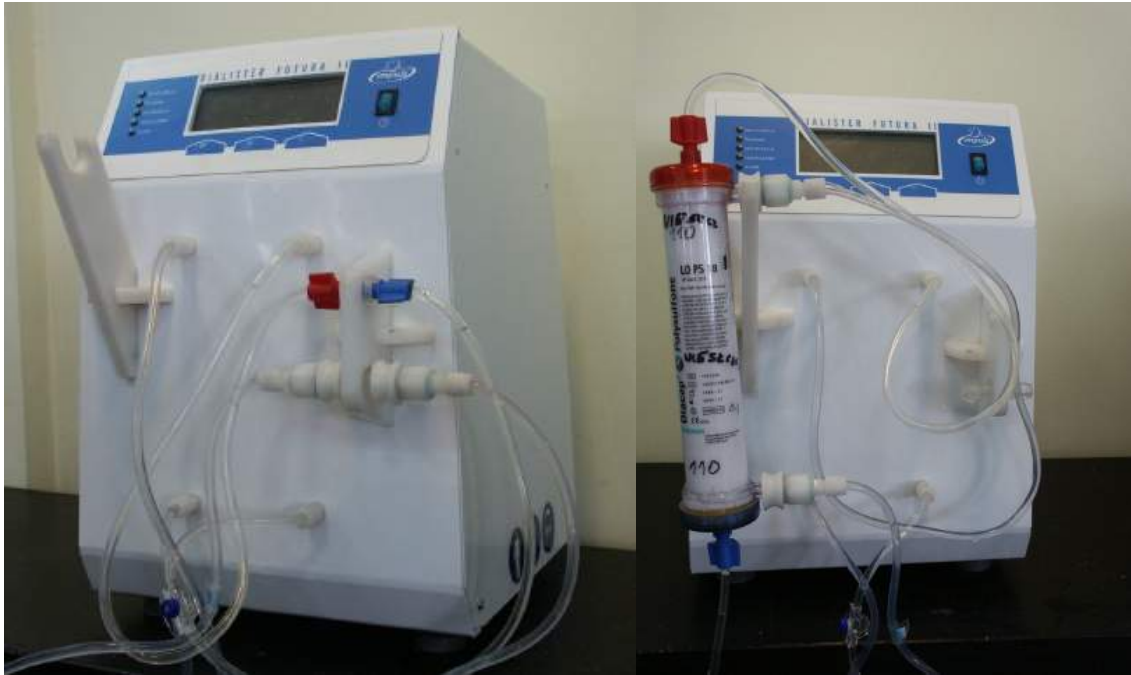
The product exhibits long-lasting action. Standard rub-in technique for hygienic hand disinfection in accordance with EN 1500, and surgical hand disinfection in accordance with EN 12791.



V. THE REUTILIZATION OF CAPILLARY DIALYZERS BY “DIALISTER FUTURA II”

In recent years, the growth rate of dialysis patients in China, India and Brazil remains above 15%, much higher than 3%-5% in Europe and the U.S.

Use of 1 dialyzer capillary is 16 times more expensive than its re-use (wash and sterilize using Steridial Forte).



IE „IMPULS” puts forward a modern, highly efficient system reutilization of capillary dialyzers. The main part of the system is Dialister Futura II - a device for automatically cleaning, disinfecting and rinsing used dialyzers.

The device name symbolizes a new, better future reuse and hemodialysis, based on over twenty years of experience in the field of health care products.

Excellent engineers, modern production process and hundreds of working dialisters are the best warranty of perfect reutilization.

Why reuse capillary dialyzers?

Reuse of dialyzers is the best way to optimize the cost of dialysis without compromising the quality and safety of the patient. Traditionally, after completing dialysis, dialyzer becomes burdensome medical waste.

The system produced by IE „IMPULS” allows full regeneration of the dialyzer, which can be used

again. After use, the dialyzer is automatically cleaned and filled with disinfectant solution Steridial. Before the next use by the same patient, the dialyzer is automatically rinsed and ready to use. Technology reuse is fully validated and safe for patient and staff.

The main features of the device:

- The fully automatic process of cleaning, disinfecting and rinsing
- The use of concentrates without dilution
- The large, backlit LCD screen
- Modern design complements each dialysis
- Menu and features tailored for the customer
- Full patient safety: automatic leak detection and determination of the capacity of dialyzers
- Minimum space requirement
- High-quality materials ensure long life
- Waterproof housing
- The highest level of ergonomics
- Full compatibility with other parts of the system for dialysis companies produced by IE „IMPULS”

DIALISTER FUTURA II - ADDITIONAL INFORMATION

A. Economic benefits that arise from using dialyzers reutilized with the appliance Dialister Futura II.

1. Lowering costs of purchase of dialyzers:

Average price of dialyzer is - 10 \$.

Direct costs of reutilization of dialyzer: (using 18 liters of demineralized water, 60 ml of the concentrate of the disinfectant Steridial Forte, 0,013 kWh of electricity) - about 0,015 \$.

Reutilized dialyzer can be used 20 times by the same patient.

Comparing the cost of dialyzers at 20 dialysis:

- non-reusable $20 \times 10 \$ = 200 \$$
- reusable $1 \times 10 \$ + 19 \times 0,015 \$ = 10,28 \$$

2. Lowering costs of utilization of used dialyzers:

The average weight of a dialyzer after dialysis is 600g.

The weight of dialyzers used in 20 dialysis:

- non-reusable $20 \times 600g = 12000g$
- reusable $1 \times 600g = 600g$

counting that the cost of utilization of medical wastes is 0,4 \$ per kg, the cost of utilization

of dialyzers after 20 dialysis:

- non-reusable 4,80 \$
- reusable 0,24 \$

Total costs of using dialyzers after 20 dialysis:

- non-reusable 204,80 \$
- reusable 10,52 \$

For medium dialysis station – with 30 patients dialyzed 3 times per week, which gives 4680 dialysis annually, annual costs of dialyzers are as follows:

- non-reusable 47 923,20 \$
- reusable 2 461,68 \$

The savings thanks to the usage of repeatedly reutilized dialyzers reach about 45 000 \$ per year (in the case of each medium-size hemodialysis station). These savings also allow to increase the availability of hemodialysis to diabetics.

B. Dialister Futura II has CE mark.

STERIDIAL FORTE

Concentrated, acidic disinfecting preparation

Preparation is dedicated for disinfection of apparatus for haemodialysis, disinfection of capillary dialysers using DIALISTER FURTURA II

FUNCTION AND PROPERTIES

Active compounds of the preparation are peracetic acid and oxygen peroxide.

Preparation shows bactericidal properties (including *Mycobacterium tuberculosis*, fungicidal properties, virucidal (including Zika virus) properties and sporicidal properties.

INSTRUCTION FOR USE

Prepare the working solutions by dissolving proper amount of the liquid in demineralised water. Follow the instructions for use of Steridial Forte, manual of the dialyzer and information placed on a product label. The working solution stored under clean conditions is stable for 12 hours.

STORAGE

Steridial Forte shall be stored in the original packaging in well-ventilated room in temperature range 0-30°C.

PERSISTENCE

12 months since the date of manufacture

PACKAGING

plastic canisters: 5 l, 10 l and 1/5 l, 2/10 l for working solutions preparation.

DOCUMENTS:

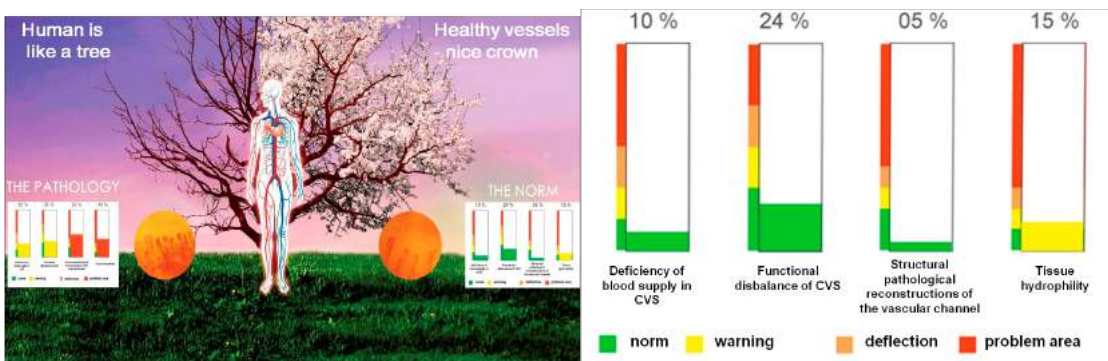
- Compliance with CE certificate no 1434-MDD-31/2016
- Instruction for use
- Safety data sheet



VI. THE RESEARCH OF HUMAN VEINS AND PERSONALIZED TREATMENT OF VENOUS PATHOLOGY

PROBLEM

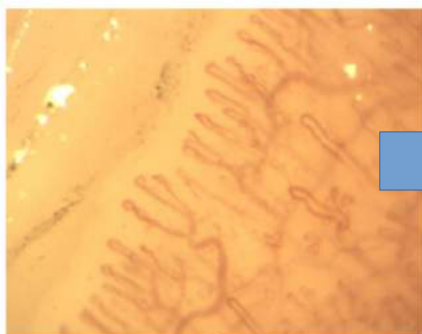
The problem of treatment of veins is in lack of technologies for analysis and monitoring of the state of blood motion inside veins in case of changes of blood rheology or disorder of water balance of blood with the instantaneous forming of blood clots and thromboembolism, which causes episodes of sudden death in practically healthy people.



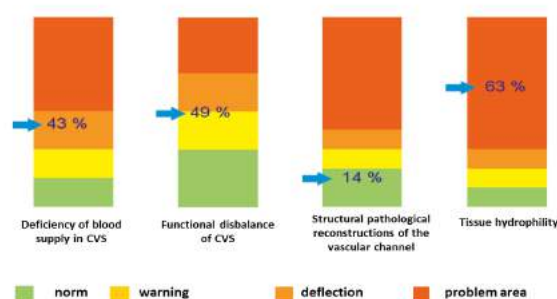
SOLUTION

Our technology for vascular screening and angiomarkers enable the visualization of *in vivo* vascular pathology with bloodless non-invasive method. We can also describe pathogenetic constituent of disorder in blood supply and form the mathematical model of the optimal approach to treatment, on an evidential instrumental base to monitor sanogenic reconstructions in the vascular system during treatment and timely to correct it.

the microcirculatory picture



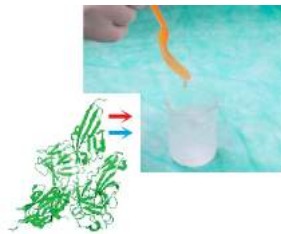
the personalized diagnosis



VII. NOVEL DRESSING CONTAINING FGF1 PROTEIN IMMOBILIZED WITHIN HYDROGEL MATRIX FOR CHRONIC VENOUS LEG ULCERATION



Leg ulcers are a serious health problem that requires intensive treatment, often lasting many years. These are chronic, persistent, painful and difficult healing wounds. This disease is associated with loss of tissue into the epidermis up to part of the dermis. Frequent leg ulcers are caused by diseases of the veins and arteries. The use of conventional gauze dressings is ineffective, costly and inconvenient for patients and medical staff. Gauze dressing does not form a moist healing environment, does not strictly adhere to the wound, causes pain during its removal and often leads to situation that newly formed cells are damaged and torn off.



Fibroblast growth factor 1 (FGF1) is a powerful mitogen exhibiting strong action on numerous different cell types. This protein might be a therapeutic agent, mainly due to its angiogenic, cell migration and tissue-injury repair properties. Our innovative idea is to apply FGF1 immobilized with 2D-hydrogel matrix directly on the damage tissue. **The result - the prototype of bandage with active layer made from hydrogel containing recombinant FGF1, that promotes wound healing process. Bandage shall cover the wound and therefore protect it from various ambient bacteria. The presence of FGF1 will accelerate the healing process by effective stimulation of growth of epithelial cells and fibroblasts and improve tissue regeneration.**



VIII. DIETARY SUPPLEMENTS FOR PATIENTS
WITH TYPE II DIABETES

IE "IMPULS" has founded an experimental plantation of medicinal, specialist plants supporting the treatment of type II diabetes. In this regard, we are going to develop tablets and dragees for people with diabetes type II which will contain extracts of the following plants




APPLICATION OF HERBS AND PLANTS WITH WELL ESTABLISHED ANTI-DIABETES ACTIVITY

1. Characteristic of herbs and plants designed for diabetes treatment

- support in controlling and maintaining a balance of blood sugar level,
- decreasing an absorption rate of glucose, acceleration of glucose metabolism,
- support in insulin secretion and pro-insulin transformation,
- no side effects of action,
- ecofriendly and natural origin.

2. Proposed supplement forms- dra gees and tablets, free of sugar coating, containing safe for diabetes patients auxiliary substances:

- filling substances: microcrystalline cellulose, corn starch,
- enriching substances: herbal and plant extracts.

<p style="text-align: center;">Topinabour bulb (<i>Helianthus tuberosus</i>)</p> <p>Topinabour bulb contains up to 17% inulin - a substance that in the body is converted into fructose, well tolerated by diabetics.</p>	
<p style="text-align: center;">White mulberry leaf (<i>Morus alba</i>)</p> <p>White mulberry leaves contains sugar complex which has a similar effect to antidiabetic drugs.</p>	
<p style="text-align: center;">Cinnamon bark (<i>Cinnamomum Scheffer</i>)</p> <p>Cinnamon extract can be used to reduce blood glucose levels by improving insulin sensitivity and decreasing absorption process of carbohydrates in the small intestine.</p>	

<p style="text-align: center;">Bean fruit (<i>Pericarpium phaseoli</i>)</p> <p>It decreases blood sugar levels, which can be used in the treatment of diabetes, especially in the early stages of the disease. Bean pods can successfully complement other antidiabetic drugs, and eventually lead to lower doses of these drugs.</p>	
<p style="text-align: center;">Bitter melon (<i>Momordica charantia</i>)</p> <p>Fruits of bitter melon contain a compound which is similar to insulin. It contributes to modulating blood sugar level as well as supporting insulin activity.</p>	
<p style="text-align: center;">Cowplant leaves (<i>Gymnema sylvestre</i>)</p> <p>Indian plant formely used to suppressing apetite of sweet food, supports liver cells regeneration thus increasing insulin concentration</p>	
<p style="text-align: center;">Purslane (<i>Portulaca oleracea</i>)</p> <p>Extract improves insulin activity and glucose uptake from blood.</p>	
<p style="text-align: center;">Malabar kino, vijayasar (<i>Pterocarpus marcupium</i>)</p> <p>Normalization of blood glucose level, decreasing cholesterol fraction and triglycerides in blood, liver, kidney and pancreas function improvement; stimulation of heart action and cardiovascular system function, reducing of appetite for sweet food, maintainig of blood glucose on proper level, reducing body mass, anti-virial activity.</p>	
<p style="text-align: center;">Fenugreek (<i>Trigonella foenum-graecum</i>)</p> <p>Glucose tolerance improvement in Type 1 and Type 2 Diabetes patients.</p>	

ALKALISING DRAGEES FOR DIABETICS

1. Application: for patients suffering from diabetic nephropaty, struggling with excessive body acidification.
2. Action: dragees containing multi-ingredient composition are aimed to pH value increasing in organism fluids. Additionally, they are responsible for base-acid balance maintaining what can contribute to overall health improvement.
3. Form: dragees for sucking with fruity and herbal taste.



The dragees are an interesting alternative to an unpleasant oral implementations of calcium ions in the form of "salt mash"

IX. COSMETICS FOR DIABETICS

The diabetic's skin is usually excessively dry, with a tendency to flaking, often accompanied by itching. Additionally, it is prone to injury, which heal a long time. Fluctuations in blood sugar levels that occur in diabetes, facilitate the development of fungal and bacterial infection around the feet and nails, thus also common among diabetics

Having thought about diabetes IE “IMPULS” is working on the creation of a series of cosmetics for skin care for diabetics, which include:

- Regenerating – moisturizing cream for dry skin of the hands and elbows**
- Moisturizing cream for feet**
- Antifungal and antibacterial cream for feet**
- Body care lotion**

The products contain mild ingredients, urea and emollients that provide adequate hydration and restoration of the damaged lipid barrier of the epidermis. In addition, cosmetics are enriched with natural oil of sea buckthorn, which clearly accelerates injury healing, formation of new, healthy epidermis and reduce scars. In cosmetics, the oil of sea-buckthorn are used in skin which is damaged, dry, flaky, requiring regeneration and irritated.

Products are under dermatological survey involving diabetics.

X. CLEANING AND HYGIENE FOR DIABETICS

Every diabetic patient has skin problems, ie. itching, dry skin, so he should use safe cleaning agents, both household chemistry and personal hygiene.

Having thought about diabetes IE "IMPULS" puts forward:

a) Environmental / natural origin cleaning agents based on biosurfactants, oils/extracts that promote moisturization of the skin and do not cause irritation during use:

- **Dishwashing balm**
- **Universal washing liquid**
- **Window Cleaner**
- **Fabric Softener**
- **Fabric washing liquid**
- **Liquid for cleaning and maintenance of surfaces**

b) Personal hygiene products:

- **Mild body & face wash**

based on urea, D-panthenol and oils / extracts that have moisturizing properties for dry and rough skin. This product does not affect skin natural protective barrier. Furthermore, it regenerates skin structure and reduces itching.

- **Mild soap for feet**

based on urea, d-panthenol, and oils / extracts that have moisturizing properties for dry and rough skin. Soap thoroughly cleans the skin and provides effective antifungal protection. It also soothes, moisturizes the skin and provides a feeling of freshness.

Products are under dermatological survey involving diabetics.

OFFER SUMMARY

Submitted in this elaboration:

- apparatus and medical equipment
- disinfection preparations
- diet supplements for diabetic people

are either produced or technologies of their production are elaborated and ready to start their production

IE „IMPULS” is planning to create a Centre of Prevention and Treatment of Diabetes. The Centre will employ:

- doctors specialists
- physiatrists
- dieticians
- physical education instructors
- engineers and medical equipment technical specialists

The main message of this elaboration is obtaining funds for building and equipment of the Centre.

STATIONARY CENTRE FOR PREVENTION AND TREATMENT OF DIABETES

A two-storey building of dimensions 10m x 60m and a total area of 1800sq metres is anticipated to be built.

The ground floor area will have:

- medical offices
- physiatrists offices and wellness-based therapies
- gyms and gymnastic halls
- lecture rooms
- canteens

During the duration of prevention and rehabilitation convalescence a lot of time will be dedicated to healthy lifestyle lectures. The participants of the convalescence will become acquainted with the latest medical achievements in fighting obesity and diabetes treatment.

During the stay in the Centre type2 diabetics will be served with a fruit and vegetable diet as well as intense physical exercises. It is planned to have the following physical exercises:

- aerobic exercises,
- strength training,
- stretching exercises.

The Stationary Centre of Prevention and Diabetes Treatment is meant to promote:

- proper diet,
- physical activity,
- the latest methods of prevention and treatment of diabetic foot ulceration.



The total cost of purchasing the plot of land (3ha), building and its equipment is estimated to be 12 mln PLN.

**More information:
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