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Ayurvedic and Allopathic Antidiabetic Formulations Avilable in Market

Kajal N Patil, Prajkta S Patil, Trupti D Dudhgaonkar, Shriniwas K Mohite, Chandracanth S Magdum
Rajarambapu College of Pharmacy, Kasegaon, Walwa, Sangali, Maharashtra, India

ABSTRACT

Diabetes is one of the first diseases described with an Egyptian manuscript from c. 1500 BCE mentioning "too great emptying of the urine. Diabetes is one of the hardest diseases to live with." The first described cases are believed to be of type I diabetes. Indian physicians around the same time identified the disease and classified it as *madhumeha* or *honey urine* noting that the urine would attract ants. The term "diabetes" or "to pass through" was first used in 250 BCE by the Greek Apollonius of Memphis. Type I and type II diabetes were identified as separate conditions for the first time by the Indian physicians Sushruta and Charaka in 400-500 CE with type 1 associated with youth and type II with obesity. The term "mellitus" or "from honey" was added by Thomas Willis in the late 1600s to separate the condition from diabetes insipidus which is also associated with frequent urination. The first complete clinical description of diabetes was given by the Ancient Greek physician Aretaeus of Cappadocia (fl. 1st century CE), who also noted the excessive amount of urine which passed through the kidneys." Diabetes mellitus appears to have been a death sentence in the ancient era. Hippocrates makes no mention of it, which may indicate that he felt the disease was incurable. Aretaeus did attempt to treat it but could not give a good prognosis; he commented that "life (with diabetes) is short, disgusting and painful." The disease must have been rare during the time of the Roman empire with Galen commenting that he had only see two cases during his career.[1]

Keywords: Antidiabetic drugs, *Momordica charantia*, *Gymnema sylvestre*, Insulin

I. INTRODUCTION

1. History

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Diabetes:-

A chronic disease – Diabetes is widespread globally ranking as one of the most common chronic disease. Millions of people all over the world suffer from diabetes for years and increasing every year

What is Diabetes?

Glucose is used by our cells for the production of energy, and this takes place only in the presence of a hormone produced in the pancreas called Insulin. In the absence of insulin, glucose cannot be utilized by the tissues. It is accumulated in the blood rise above 180 mg percentage, it starts leaking into urine this is called Diabetes mellitus or Diabetes. The normal range of blood sugar level is 80-110 mg/dl.

Types of Diabetes:

Type I:-
Diabetes was previously called Insulin-dependent diabetes mellitus (DDM) or juvenile onset diabetes. Type I diabetes develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the insulin that regulates blood glucose.

This form of diabetes usually strikes children and young adults, although disease onset can occur at any age. Type I diabetes may account for 5% to 10% of all diagnosed cases of diabetes. Risk factors for type I diabetes may include autoimmune, genetic and environmental factors.

Types II:
Diabetes was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Type II diabetes may account for about 90% to 95% of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce insulin.
Gestational diabetes, African Americans, Hispanic\Latino, Americans, American Indians and some Asian Americans and Native Hawaiians or Other Pacific Islanders are at particularly high risk for type II diabetes. Type II diabetes is increasingly being diagnosed in children and adolescents.

Gestational diabetes is a form of glucose intolerance that is diagnosed in some women during pregnancy. Gestational diabetes occurs more frequently among African Americans, Hispanic/Latino Americans and American Indians. It is also more common among obese women and women with a family history of diabetes.
During pregnancy, gestational diabetes requires treatment to normalize maternal blood glucose levels to avoid complications in the infant. After pregnancy, 5% to 10% of women with gestational diabetes are found to have type II diabetes. Women who have had gestational diabetes have a 20% to 50% chance of developing diabetes in the next 5-10 years.

Other specific types of diabetes result from specific genetic conditions (such as maturity-onset diabetes of youth), surgery, drugs, malnutrition, infections and other illnesses. Such types of diabetes may account for 1% to 5% of all diagnosed cases of diabetes.[2]

II. METHODS AND MATERIAL

CAUSES OF DIABETES:-

Diabetes mellitus occurs when the pancreas doesn't make enough or any of the hormone insulin, or when the insulin produced doesn't work effectively. In diabetes, this causes the level of glucose in the blood to be too high.

In Type I Diabetes the cells in the pancreas that make insulin are destroyed, causing a severe lack of insulin. This is thought to be the result of the body attacking and destroying its own cells in the pancreas-known as an autoimmune reaction.

It's not clear why this happens, but a number of explanations and possible triggers of this reaction have been proposed. These include:

- Infection with a specific virus or bacteria;
- Exposure to food-borne chemical toxins; and
- Exposure as a very young infant to cow's mil where an as yet unidentified component of th triggers the autoimmune reaction in the body.

However, these are only hypotheses and are by r means proven causes.

Type II diabetes is believed to develop when:

- The receptors on cells in the body that normall respond to the action of insulin fail to be stimulate by it-this is known as insulin resistance. In respons to this more insulin may be produced, and this ove production exhausts the insulin-manufacturing cel in the pancreas;
- There is simply insufficient insulin available; and
- The insulin that is available may be abnormal ar therefore doesn't work properly.

The following risk factors increase the chances someone development Type II diabetes:

- Increasing age
- Obesity;
- Physical inactivity.

Rarer causes of diabetes include:-

- Certain medicines;
- Pregnancy (gestational diabetes); and
- Any illness or disease that damages the pancreas ar affects its ability to produce insulin e. pancreatitis.[3]

AYURVEDIC ANTIDIABETIC FORMULATION AVILABLE IN MARKET

Divya Madhunashini Vati

Divya madhunashini vati is very effective Herb medicine to control diabetes naturally. It helps in achieving better control over blood sugar levels and increases insulin secretion from pancreas. Diabetes (madhumeh) reduces vitality of whole body and specially effects nerves and blood vessels. Regular course of madhunashini improves overall health in a diabetic and protects nerves, heart, blood vessels, eyes and kidneys. So take madhunashini herbal medicine regularly to get long and healthy life.

Ingredients of Divya Madhunashini Vati

Each 500 mg tablet contains Herbs:-

- Shilajit - Asphalatum
- Ashwagandha - Withania somnifera
- Gurmaar - Gymnema sylvestre
- Nimba - Azadirachta indica
- Harar choti - Terminalia chebula
- Giloy - Tinospora cordifolia
- Kutaj - Holarrhena antidysentrica
- Gokhrudana - Tribulus terrestris
- Bahera - Terminalia bellirica -
- Amala - Emblica officinalis
- Belpatra - Aegle marmelos
- Kachoor - Curcuma zedoaria
- Vasa - Adhatota vasica
- Badjata - Ficus bengalensis
- Kikarfali - Acacia arabica
- Kuchla Shudh - Strychnos nux-vomica
- Kaali jeeri - Centratherum anthelminticum
- Kutki - Picrorhiza Kurroa
- Jamun guthli - Syzgium cumini
- Chirayata - Swertia chirata
- Haldi - Curcuma longa- Turmeric
- Methi - Trigonella foenum-graecum
- Saptrangi - Salacia chinens

Mode of Administration

- Should be taken one hour before breakfast & dinner or after breakfast & dinner with lukewarm water or milk.
- If patient is taking insulin or allopathic medicine then he/she should test the level of his/her blood sugar two weeks after the intake of this medicine. If the level of sugar becomes normal then the dose of allopathic medicine should be reduced gradually.
- After the stoppage of allopathic medicine when the level of blood sugar reduces & becomes normal, the dose of this medicine should also be reduced gradually.

Uses & benefits of Divya Madhunashini Vati

This herbal remedy activates the pancreas & helps it to secrete a balanced quantity of Insulin, through which extra Glucose gets converted into Glycogen.

- It removes irritation and weakness as well as increases the capacity of brain by making it strong.

- This Ayurvedic medicine is useful in the numbness of hands and feet and makes the nervous system very strong.
- It removes complications like weakness, exhaustion & tension due to diabetes.
- It protects the patient from thirst, frequent urination, loss of body weight, blurred of eye vision, tingling sensation, tiredness, infections of skin, gums and urethra.
- This Ayurvedic tonic strengthens the immune system and increases hope as well as self-confidence.

Dosage of Divya Madhunashini Vati

Take 1 - 2 tablets twice a day.

Advice for Sugar patient

- Diabetes patient is advised to do Yoga and breathing exercises regularly to control diabetes. Anuloma viloma, Kapalbhati pranayama are very important.
- Bitter melon or bitter gourd (Karela) juice is very effective in diabetes.
- Shilajit is specially adviced for diabetes

Diabecon DS

Ingredients:

Gymnema's *(Meshashringi)* principal constituent is gymnemic acid, which has antidiabetic properties. It reduces excessive blood sugar. It also has a regenerative effect on pancreatic beta cells and is insulinotropic, which means that it stimulates the production and activity of insulin. Gymnema temporarily abolishes the taste for sugar and helps decrease sugar cravings. It increases the activity of enzymes responsible for glucose absorption and utilization.

Indian Kino Tree's *(Pitasara)* principal constituent, epicatechin, has alpha-glucosidase inhibitory properties and regularizes key metabolic enzymes involved in carbohydrate metabolism.

Shilajeet decreases hepatic glucose production and prevents hyperglycemia. Shilajeet has a protective action on b-c

ells of the pancreas, and promotes unrestricted endogenous insulin action

Action:

Diabecon DS is a double strength phytopharmaceutical formulation for the effective management of type II

Combats diabetes: The natural ingredients in Diabecon increase insulin secretion in the body. By reducing the glycated hemoglobin level (form of hemoglobin used to measure glucose content in the blood), normalizing microalbuminuria (a condition which is an important prognostic marker for kidney disease in diabetes mellitus) and modulating the lipid profile, Diabecon minimizes long-term diabetic complications. The drug also increases hepatic and muscle glycogen content, which enhances the peripheral utilization of glucose.

Anti-hyperglycemic: Diabecon reduces high glucose content in the blood. Effective hyperglycemic control is important in preventing micro- and macrovascular complications (large and small blood vessels) complications arising from diabetes.

Indications:

- For non-insulin-dependent diabetes mellitus (NIDDM/type II), as a monotherapy or as an adjuvant to other oral antidiabetic drugs
- For NIDDM with signs and symptoms of hyperlipidemia
- For NIDDM with early retinopathy
- For NIDDM with microalbuminuria
- As an adjuvant in insulin-dependent diabetes mellitus (IDDM/type I)

Himalaya Karela

Bitter Melon / Bitter Gourd / *(Momordicacharantia)*
Karela Facts:

Botanical Name : MOMORDICA CHARANTIA
Family Name : CUCURBITACEAE
Common Name : BITTER MELON, BITTER GOURD, BALSAM PEAR, BALSAM APPLE, MELEGA SAGA
Karela is widely grown in India. It is a climbing vine and the fruits are used.
In Ayurveda, the fruit is considered as emetic, laxative, antibilous, tonic, stomachic, stimulant and alternative. Several studies have shown it to be extremely good for maintaining normal glucose levels in the blood and urine. Karela also supports the health of the pancreas, liver and spleen. It detoxifies and purifies blood.

Benefits of Karela:

Supports normal blood sugar levels, Promotes healthy sugar metabolism

Himalaya Karela is a pure herb extract. Karela also known as Bitter Melon or *MomordicaCharantia* is a herb that helps maintain normal blood sugar levels and keeps body functions operating normally.

Eating Karela over long period of time promotes normal glucose levels in the blood and urine. At least three different groups of constituents in Bitter Melon have been reported to have benefits in maintaining normal blood sugar levels. These include a mixture of steroidal saponins known as charantin, insulin-like peptides, and alkaloids. Karela contains Gurmarin, a polypeptide considered to be similar to bovine insulin, which has been shown in experimental studies to achieve a positive sugar regulating effect by suppressing the neural response to sweet taste stimuli.

Karela fruit is regularly used in the Indian diet. Bitter melon is rich in iron and has twice the beta carotene of broccoli, twice the calcium of spinach, twice the potassium of bananas, and contains vitamins C and B 1 to 3, phosphorus and good dietary fiber. It is believed to be good for the liver and has been proven by western scientists to contain insulin. At least 32 active constituents have been identified in bitter melon so far, including beta-sitosterol-d-glucoside, citrulline, GABA, lutein, lycopene and zeaxanthin. Nutritional analysis reveals that bitter melon is also rich in potassium, calcium, iron, beta-carotene, vitamins B1, B2, B3 and C.

Benefits of Karela / Bitter Melon

- Karela promotes normal sugar levels in blood and urine
- Karela helps achieve positive sugar regulating effect by suppressing the neural response to sweet taste stimuli.
- Karela helps to support is a good blood purifier
- Karela a polypeptide which is similar to bovine insulin
- Karela promotes health of the pancreas
- Karela supports liver health
- Karela helps in digestion
- Karela promotes the body's natural metabolism
- Karela is considered to be a powerful detoxifier
- Karela helps maintain a normal level of triglycerides and cholesterol in the liver and blood.
- Karela helps support a normal immune system function.

Karela in Ayurveda:

According to Ayurveda, Karela is kapha and pitta suppressant. Due to its properties it is very helpful in cooling the body so as to suppress the skin related problems caused by the excess of pitta. It also promotes wound healing. Due to its rasa it is very useful in normalizing the digestive tract and also helps in improving peristaltic movements in the body. Due to its bitter taste it is useful in suppressing worm infestation. It also helps in regularizing the urinary tract. It has remarkable properties in maintaining blood sugar levels. As per Ayurveda, Karela'sgunna or properties are that it is laghu (light) and ruksh (dry). It's rasa or taste is katu

or pungent and tickta or bitter. Its Virya or potency is ushan or hot

Directions for taking Himalaya Karela 1 capsule twice a day after meals. Allow several weeks for long lasting benefits. The use of natural products provides progressive but l

DIA BETA PLUS

UNIQUE & EFFECTIVE HERBAL SUPPLEMENT FOR DIABETES

- Dia-beta capsules work well for hypoglycemic patients
- Type-2 diabetes is managed using Dia-beta capsules
- Best for diabetic neuropathy
- Fights weakness and fatigue brought on by diabetes

III. RESULT AND DISCUSSION

INGRADIENTS

Sr.No	Herb used	Latin name	Quantity
1	Saptarangi	Salacia chinesis	50 mg
2	Vijayasar	Pterocarpus marsupium	50 mg
3	Gurmar	Gymnema sylvestre	150 mg
4	Ashwagandha	Withania somnifera	50mg
5	Tulsi	Ocimum tenuiflorum	50 mg
6	Karela	Momordica charnita	150 mg

WHAT ARE THE BENEFITS OF DIA BETA PLUS?

Dia Beta Plus capsules are formed using a combination of various anti-diabetic herbs that individual work well for diabetes. Their combination works excellently well for diabetes. Dia Beta Plus capsules naturally control the blood sugar levels. The Dia Beta plus capsules are very effective against diabetic neuropathy. These capsules help rejuvenate the overall health. Works very well for stamina. Dia Beta Plus capsules work very well to decrease the fatigue levels of the diabetic victim. Prevents fluctuations in sugar levels in the body.

GURMAAR (GYMNEMA SYLVESTRAE):

In the native Indian language Hindi, Gurmaar is known as the 'Sugar Killer'. Physicians since the ancient times have been using Gurmaar for diabetes control. The research studies have shown that it contains gymnemic acids that are responsible for the anti-diabetic effects. These acid molecules inhibit the entry of glucose molecules in the intestines. This controls the blood sugar levels and therefore controls diabetes.

KARELA (MOMORDICA CHARANTIA):

Being very low in fat and calorie content, it is especially suited to people with diabetes and other metabolic disorders. It is worth noting that Bitter melons contain twice as much beta-carotene as broccoli, twice the amount of potassium of that of a banana, twice the calcium of spinach, and a very high content of iron. Bitter melon's diabetic results are excellent. A natural herbal product to manage diabetes in a natural way. A polypeptide present in Bitter melon acts like insulin to help fight diabetes. Bitter gourds can also be used in case of eye problems like far-sightedness and near-sightedness.

- It helps to prevent blood related disorders.
- It has wonderful blood-purifying actions and therefore provide relieves from toxemia and blood related diseases.

VIZAYSAAR (PTEROCARPUS MARSUPIUM):

It is a famous herb for diabetes.

- The bark of the tree is made into a wooden glass and this glass is called as the 'Miracle reliever of diabetes'.
- This glass is used to manage diabetes. The glass is filled with water and kept overnight. This water is had in the morning.
- Our product Dia Beta Plus has the miraculous effects of this herb.

SAPTRANGI (SALACIA OBLONGA):

- Physicians have used this herb since ages for diabetes.
- The Bark of the tree has anti-diabetic properties.

DIRECTION:

Dia Beta Plus Ayurvedic capsules are an easily available convenient to use veggie capsule formulation that should be consumed as a whole with water.

- Adults can take a daily dosage of 1-2 capsules with milk or water after meals.
- For children one capsule per day is the recommended dose.

The natural, herbal nature of Dia Beta Plus leaves behind no side effects. Its regular usage for long periods is considered safe. The capsules can be used as per choice and there are no withdrawal or habit forming symptoms seen.

Caution: However, Dia Beta Plus has no known side effects, pregnant females and lactating mothers should consume it only under medical supervision. The product is generally well tolerated by most of the users, excessive intake or intolerance can lead to mild abdominal pain and/or diarrhea. People consuming hypoglycemic drugs may need to alter the dosage of their drugs along with this product. Antidiabetic drugs may be subdivided into six groups: insulin, sufonylureas, alpha-glucosidase inhibitors, biguanides, meglitindes and thiazolidinediones.

GENERAL ALLOPATHIC TREATMENT OF DIABETES:

Description: Antidiabetic drugs may be subdivided into six groups: Insulin, Sufonylureas, alpha-glucosidase inhibitors, Biguanides, Meglitindes and Thiazolidinediones.

1.1 Insulin (Humulin, Novolin):

Insulin is the hormone responsible or glucose utilization. It is effective in both types of diabetes, since, even in insulin resistance, some sensitivity remains and the condition can be treated with larger doses of insulin.

Most insulin are now produced by recombinant DNA techniques, and are chemically identical to natural human insulin. Isophane insulin suspension, insulin zinc suspension, and other formulations are intended to extend the duration of action of insulin, and permit glucose control over longer periods of time.[4(6)]

1.2 Sulphonylureas (chlorpropamide diabinese, tolazmide Tolinase, glipizide glucotrol and others):

Sulphonylureas act by increasing insulin release from the beta cells of the pancrease. Glimepirie (Amaryl), a member of this class, appears to have a useful secondary action in increasing insulin sensitivity in peripheral cells.

1.3 Alpha Glucosidase Inhibitors - acarbose Precise, miglitol Glyset do not enhance insulin secretion. Rather, they inhibit the conversion of disaccharide and complex carbohydrates to glucose. This mechanism does not prevent conversions, but only delays it, reducing the peak blood glucose levels. Alpha-glucosidase inhibitors are useful for either monotherapy or in combination therapy with sulfonylurea's or other hypoglycemic agents.

1.4 Biguanides:

Metformin (Glucophage) is the only available member of the biguanide class. Metformin decreases hepatic glucose production, decreases intestinal absorption of glucose uptake and utilization. Metformin may be used as monotherapy, or in combination therapy with a sulfonylurea.[6]

1.5 Meglitinide Class:

There are two members of the meglitinide class: repaglinide (Prandin) and nareglitinide (Stralix). The mechanism of action of the meglitinides is to stimulate insulin production. This activity is both doses dependent on the presence of glucose, so that the drugs have reduced effectiveness in the presence of low blood glucose levels.

The meglitinides may be used alone, or in combination with metformin. The manufacturer warns that nateglitinide should not be used in combination with other drugs which enhance insulin secretion.

1.6 Thiazolidine Class:

Rosiglitazone (Avandia) and pioglitazone (Actos) and the members of the thizolidinedione class. They act by both reducing glucose production in the liver, and increasing insulin dependent glucose uptake in muscle cells. They do not increase insulin production. These drugs may be used in combination with metoformin or a sulfonylurea.

A) Treatment for type I diabetes :

People with type I diabetes no longer produce insulin, and they must have insulin injections to use the glucose they obtain from eating. People with type I diabetes must give themselves insulin every day. Insulin can either be injected, which involves the use of a needle and syringe, or it can be given by an external or internal insulin pump, insulin pen, jet injector, or insulin patch. Extra amounts of insulin A may be taken before meals, depending on the blood glucose level and food to be eaten. Insulin cannot be taken as a pill. Because it is a protein, it would be broken down during digestion just like the protein in food. I must be injected into the fat under the skin for insulin to get into the blood. The amount of insulin needed depends on height, weight, age, food intake, and activity level. Insulin doses must be balanced with meal times and activities, and dosage levels can be affected by illness, stress, or unexpected events.

B) Treatment for Type II diabetes:

People with type II diabetes make insulin, but their bodies do not correctly use it. Some people with type II diabetes need diabetes medication or extra insulin to help their bodies use their own insulin better.

Diet and exercise can often bring blood enough; the next step is the addition of medications that lower blood glucose levels.

Oral medications may include:

- Sulfonylurea drugs, which stimulate the production of insulin in the pancreas
- Biguanides, which decrease the amount of sugar made in the liver.
- Alpha-glucosidase inhibitors, which stimulate the production of insulin in the pancreas.
- Thiazolidinediones, which makes the body more sensitive to insulin.

Only people with type II diabetes can use oral medications; they are not helpful for a person with type I diabetes, whose pancreas has lost all ability to produce insulin.

Maintaining a proper diet and exercise program is important even when taking diabetes oral medications.

COMPLICATION OF DIABETES:

Both forms of diabetes ultimately lead to high blood sugar levels, a condition called hyperglycemia over a long period of time. Hyperglycemia damages the retina of the eye, the kidneys; the nerves, and the blood vessels. Damage to the retina from diabetes (diabetic retinopathy) is a leading cause of blindness.

Damage to the kidneys from diabetes (diabetic nephropathy) is a leading cause of kidney failure.

Damage to the nerves from diabetes (diabetic neuropathy) is a leading cause of foot wounds and ulcers, which frequently lead to foot and leg amputations.

- Damage to the nerves in the autonomic nervous system can lead to paralysis of the stomach (gastroparesis), chronic diarrhea, and an inability to control heart rate and blood pressure during postural changes.
- Diabetes accelerates atherosclerosis (the formation of fatty plaques inside the arteries), which can lead to blockages or a clot (thrombus). Such changes can then lead to heart attack, stroke, and decreased circulation in the arms and legs (peripheral vascular disease).[5]

3. GLUCOMETER

ALLOPATHIC AVILABLE MARKETED FORMULATIONS

MARKETED PREPARATIONS	CONTENTS	MANUFACTURED BY
1) Glyciphage-250mg Glyciphage-500 mg Glyciphage-1000 mg Glyciphage-800 mg	1) Metformin hydrochloride I.P-850mg 2) Excipients----------9.5	Franco – Indian Remidies pvt Ltd Mumbai
2) Glyciphage-G1 Glyciphage-G2 Glyciphage-PG1 Glyciphage-PG2	Each uncoated bilayered tablet contains 1) Glimeperide Usp – 1 mg 2) Metformin Hydrochloride - 500mg 3) Excipients----------9.5 4) Colour--------Red oxide of iron	Themis laboratories Pvt.Ltd.
3) Glyciphage – PG1	1) Metformin Hydrochloride---- 500 mg (In sustained release form) 2) Pioglitazone Hydrochloride---- 15 mg Equivalent to pioglitazone 3) Glimepiride U.S.P---1mg 4) Excipients------9.5 mg 5) Colour------ Lake of Erythrosine	Franco- Indian Remedies P.V.T. L.t.d. Mumbai.
4)Semi- Glynase – 5mg	Each uncoated tablet contain 1)Glipizide I.P.---2.5 mg (in beta cyclodextrin) 2)Excipients----------9.5 mg	U.S.V. Limited Ahmedabad
5)Glymase MF-5mg	1) Metformin Hydrochloride I.P.---500mg 2) Glipizide I.P.----5 mg (in beta cyclodextrin) 3) Excipients---9.5 mg	U.S.V. Limited Govandi, Mumbai
6)Glycomet----250mg Glycomet --500mg Glycomet ---850mg Glycomet---G1 Glycomet---G2	1) Metformin Hydrochloride I.P.—500mg 2) Excipients--- 9.5 mg	U.S.V. Limited Baddi, himachal Pradesh
7)Ductrol	1) Glibenclamide I.P.---5mg 2) Metformin Hydrochloride I.P.---500mg 3) Excipients--------- 9.5 mg	U.S.V. Limited Govandi, Mumbai
8)Pilgar---30mg Pilgar---15mg	1) Plitazon Hydrochloride equivalent to pioglitazone-----15mg	RANBAX lab Ltd. Tehsil nalaghar Dist. Solan (H.P.)
9)Pioz* MF 15	Each uncoated tablet contain 1) Plitazon Hydrochloride equivalent to pioglitazone-----30mg 2) Metformin Hydrochloride I.P.---500mg 3) Colour—red oxide of iron 4) Excipients--------- 9.5 mg	U.S.V. Limited Baddi, himachal pradesh
10)PiosafeMF*15	Each uncoated tablet contain 1) Plitazon Hydrochloride equivalent to pioglitazone-----30mg 2) Metformin Hydrochloride I.P.---500mg 3) Colour—quinoline yellow lake 4) Excipients--------- 9.5 mg	Otsira Genetica Aristo p'ceutical Pvt Ltd. Mandideed mumbai
11)Glpmiprex* 2	1) Glimeperide U.S.P.—2mg 2) Excipients---9.5mg	Aristo p'ceutical Pvt Ltd. Mandideed mumbai
12)Tribet—2	1) Glimeperide U.S.P.—2mg 2) Plitazon Hydrochloride equivalent to pioglitazone-----15mg 3) Metformin Hydrochloride I.P.---500mg (in extended release) 4) Colour-: brilliant blue.	Nicholas piramal india Ltd.
13)Dianorm-M	Each uncoated tablet contains 1) Glimeperide U.S.P.—80mg 2) Metformin Hydrochloride I.P.---500mg	Micro labs ltd Baddi Tehsil Nalagarh Dist-Solan
14)AZULIX 2 MF	Each uncoated tablet contains 1) Metformin Hydrochloride I.P.---500mg (In sustained released form) 2) Glimeperide U.S.P.—2mg 3) Colour:-Lake of erythraline	Tarrent Pharmaceutical Ltd. Indrad Dist-Solan
15)Gemer-1	Each uncoated tablet contains 1) Metformin Hydrochloride I.P.---500mg (In extended released form) 2) Glimeperide U.S.P.—2mg 3) Colour:-yellow oxide of iron 4) Excipients------9.5mg	Sun Pharmaceutical Industries 396191 Dadra, Jammu

Antidiabetic Herbal Products Marketed in India[7]

Sr. No.	Brand Name	Manufacturer	Ingradients
1	Diabecon	Himaliya	Balsamodendron mukul, Pterocarpus marsupium, Casearia esculenta, Gymnema sylvestre, Glycyrrhiza glabra, Tinospora cordifolia, Swertia chirata, Tribulus terrestris, Phyllanthus amarus, Gmelina arborea, Berberis aristata, Aloe vera, Eugenia jambolana, Asparagus racemosus, Boerhaavia diffusa, Sphaeranthus indicus, Gossypium herbaceum, Shilajeet and powders of Momordica charantia, Piper nigrum, Ocimum sanctum, Abutilon indicum, Curcuma longa, Rumex maritimus and Trikatu.
2	. Pancreatic tonic 180 cp	Ayurvedic herbal supplement	Pterocarpus marsupium, Cinnamomum tamala, Gymnema sylvestre, Azadirachta indica, Ficus racemosa, Aegle marmelos, Trigonella foenum graceum, Momordica charantia, Syzygium cumini
3	Bitter gourd Powder	Garry and Sun natural Remedies	Bitter gourd (Momordica charantia)
4	Diabeta	Ayurvedic cure Ayurvedic Herbal Health Products	Momordica charantia (Bitter Gourd), Zingiber officinale (Ginger), Gymnema sylvestre, Curcuma longa (Turmeric), Pterocarpus marsupium (Kino Tree), Vinca rosea (Periwinkle), Azadirachta indica (Neem), Tinospora cordifolia, Acacia arabica (Black Babhul), Syzygium cumini (Black Plum).
5	Dabur Madhu Rakshak	Dabur	Amla (phyllanthus emblica), Tejpatra (Cinnamomum tamala), Vijaysar (Pterocarpus marsupium), Gurmar (Gymnema sylvestre), Jamum seed (Eugenia jambolana), Kali marich (piper nigrum), Neem leaves (azadiracheta indiaca), Methi (trigonella foenum-graecum), Bahera (Terminalia belerica), Bhavana Dravyas, Shudh Shilajit, karela fruit (momordica charantia), Hareetaki (Terminalia chebula
6	Madhumehari Granules	Baidyanath	gudmar (gymnema sylvestre), Jamun guthali (syzygium cumini), Gulvel (Tinospora cordifolia), Kkarela Beej (Momordica charantia), Khadir Chuma (Acacla Catechu), Haldi (Curcuma Longa), Amia (Emblica-officinalis), vijay-sar (Pterocarpus Marsupium), Tejpatra (cinnamomum-Tamala), Shilajit (Asphaltum), Gularphal Chuma (Ficus Glomerata), Kutki (Picrorhiza Kurroa), Chitrak (plumbago Zeylanica) , Methi (Trigonella-foenum graecum), Bhavna of Neem Patti (Azadirachta - Indica), Bilwa Patra (Aegle Marmelos)

IV. CONCLUSION

Antidiabetics are the preparations used for the treatment of diabetes mellitus and for maintaining the sugar level in blood. Diabetes observed mostly in male (74%) and in female (24%). It is chronic disease & it get spreads day by day because of modern life style & lack of physical exercise mostly seen in elder & fatty persons. Due to long term therapy again complications are seen like nerve damage of autonomic nervous system & atherosclerosis. From servey of marketed preparations it is recognised that the most prescribe drug by the physicians is Glyciphage & its combinations. Now days a device namely glucometer is used for measurement of blood sugar level for that only a drop of blood is required. It is hand operated & does not require expert person. As diabetes is more common now a days and therefore it is must to develop a new antidiabetic agents with more therapeutic applications with less or reduced severity or complications. This survey indicates most commonly used Ayurvedic & Allopathic antidiabetic drugs available in market.

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