DiaOptimum XP™ is the most complete vitamin supplement of its kind. It is a scientific formulation of 100% natural ingredients. Along with a healthy lifestyle and appropriate nutritional support. DiaOptimum supports and promotes a healthy and efficient sugar metabolism. **DiaOptimum XP™** has been clinically tested for the past 10 years at **Hope Diabetes Center** in Mesa, Arizona. **Prices List: $79.95**

VITAMINS	
B1 (Thiamine Mononitrates) 4.5mg (300%)	Like other B complex vitamins, thiamine is considered an "anti-stress" vitamin because it may strengthen the immune system and improve the body's ability to withstand stressful conditions. It is named B1 because it was the first B vitamin discovered. Thiamine is found in both plants and animals and plays a crucial role in certain metabolic reactions. For example, it is required for the body to form adenosine triphosphate (ATP), which every cell of the body uses for energy. Preliminary evidence suggests that thiamine along with other nutrients -- may lower risk of developing cataracts. B complex vitamins are necessary for healthy skin, hair, eyes, and liver. They also help the nervous system function properly, and are necessary for optimal brain function. **Recommended dosage 1.1 - 2mg.**
B2 (Riboflavin) 5.1mg (300%)	In addition to producing energy for the body, riboflavin also works as an antioxidant by scavenging damaging particles in the body known as free radicals. Free radicals occur naturally in the body but can damage cells and DNA, and may contribute to the aging process, as well as the development of a number of health conditions, such as heart disease and cancer. Antioxidants such as riboflavin can neutralize free radicals and may reduce or help prevent some of the damage they cause. **Recommended dosage 1.6 - 2mg.**
B5 (D-Calcium Pantothenic) 30mg (300%)	In addition to playing a role in the breakdown of fats and carbohydrates for energy, vitamin B5 is critical to the manufacture of red blood cells, as well as sex and stress-related hormones produced in the adrenal glands (small glands that sit atop the kidneys). Vitamin B5 is also important in maintaining a healthy digestive tract, and it helps the body use other vitamins (particularly B2 or riboflavin). It is sometimes referred to as the "anti-stress" vitamin because of its effect on the adrenal glands, but there is no real evidence as to whether it helps the body withstand stressful conditions. **Recommended dosage 5 - 10mg**.
B6 (Pyridoxide) 6mg (300%)	Vitamin B6 helps the body make several neurotransmitters, chemicals that carry signals from one nerve cell to another. It is essential for normal brain development and function, and helps the body make the hormones serotonin and norepinephrine (which influence mood) and melatonin (which helps regulate the body clock). Along with vitamins B12 and B9 (folic acid), B6 helps control levels of homocysteine in the blood. Homocysteine is an amino acid that may be associated with heart disease. B6 is also necessary for proper absorption of vitamin B12 and for the production of red blood cells and cells of the immune system. **Recommended dosage 1.3 - 2mg**.
B9 (Folic Acid) 1200mg (300%)	Folic acid is crucial for proper brain function and plays an important role in mental and emotional health. It aids in the production of DNA and RNA, the body's genetic material, and is especially important when cells and tissues are growing rapidly, such as in infancy, adolescence, and pregnancy. Folic acid also works closely with vitamin B12 to regulate the formation of red blood cells and help iron function properly in the body. Vitamin B9 works with vitamins B6 and B12 and other nutrients to control blood levels of the amino acid homocysteine. Elevated levels of homocysteine are associated with certain chronic conditions, such as heart disease and, possibly, depression and Alzheimer's disease, although the link isn't clear. **Recommended dosage 400 -600mg.**
B12 (Cyanocobalamine) 12mg (300%)	Vitamin B12 is an especially important vitamin for maintaining healthy nerve cells, and it aids in the production of DNA and RNA, the body's genetic material. Vitamin B12 also works closely with vitamin B9 (folate) to regulate the formation of red blood cells and to help iron function better in the body. Folate and B12 work together to produce S-adenosylmethionine (SAMe), a compound involved in immune function and mood. Vitamins B12, B6, and B9 work together to control blood levels of the amino acid homocysteine. High levels of homocysteine are associated with heart disease. However, researchers aren't sure whether homocysteine is a cause of heart disease or merely a marker that indicates someone may have heart disease. **Recommended dosage 2.4 - 2.8mg.**

E (D-alpha Tocopheryl succinate) 60 IU (200%)	People with diabetes tend to have low levels of antioxidants, which has led some researchers to theorize that this might explain why they're at increased risk for conditions such as cardiovascular disease. Vitamin E supplements and other antioxidants may help reduce the risk of heart disease and other complications in people with diabetes. Research shows that antioxidants may help control blood sugar levels and lower cholesterol levels in people with type 2 diabetes while protecting against the complications of retinopathy (eye damage) and nephropathy (kidney damage) in those with type 1 diabetes. Chronic deficiency may also cause liver and kidney problems. Although most people in the United States aren't seriously deficient in vitamin E, it' s not uncommon for people to be slightly deficient. Vitamin E is also important in the formation of red blood cells and it helps the body to use vitamin K. **Recommended dosage 22.5 - 28.5mg.**
H (Biotin) 900mg (300%)	Preliminary research indicates that a combination of biotin and chromium might improve blood sugar control in some people with type 2 diabete,. Your body needs biotin to metabolize carbohydrates, fats, and amino acids (the building blocks of protein). Biotin is often recommended for strengthening hair and nails and it's found in many cosmetic products for hair and skin. It is a water-soluble vitamin, meaning the body does not store it; however, bacteria in the intestine can make biotin. **Recommended dosage 30 - 600mg.**
MINERALS	
Magnesium 100mg (25%)	Every organ in the body -- especially the heart, muscles, and kidneys -- needs the mineral magnesium. It also contributes to the makeup of teeth and bones. Most important, it activates enzymes, contributes to energy production, and helps regulate calcium levels as well as copper, zinc, potassium, vitamin D, and other important nutrients in the body. People who have type 2 diabetes often have low levels of magnesium in the blood. A large clinical study of over 2000 people found that getting more magnesium in the diet may help protect against developing type 2 diabetes, studies suggest that taking magnesium supplements in capsule may help blood sugar control and insulin sensitivity in people with diabetes or prediabetes. **Recommended dosage 270 - 400mg.**
Zinc 15mg (100%)	Zinc is an essential trace mineral, so you get it through the foods you eat. Next to iron, zinc is the most common trace mineral in the body and is found in every cell. It has been used since ancient times to help heal wounds and plays an important role in the immune system, reproduction, growth, taste, vision, and smell, blood clotting, and proper insulin and thyroid function. Zinc also has antioxidant properties. Therefore it helps protect cells in the body from damage caused by free radicals. Free radicals may contribute to the aging process, as well as the development of a number of health problems, including heart disease and cancer. Antioxidants, such as zinc, can neutralize free radicals and may reduce or even help prevent some of the damage they cause. **Recommended dosage 8 - 11mg.**
Selenium 100mg (143%)	Selenium is an essential mineral found in trace amounts in the body. It works as an antioxidant, especially when combined with vitamin E, by scavenging damaging particles in the body known as free radicals. Free radicals can damage cell membranes and DNA, and may contribute to aging and a number of conditions, including heart disease and cancer. Antioxidants, such as selenium, can neutralize free radicals and may reduce or even help prevent some of the damage they cause. Selenium plays a role in thyroid function and is needed for the immune system to work properly. People with a number of conditions, ranging from rheumatoid arthritis to some types of cancer, often have low levels of selenium. **Recommended dosage 40 - 70mg**.
Chromium 500mg (417%)	People with diabetes either do not produce enough insulin or cannot properly use the insulin that their bodies produce. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. As a result, glucose or sugar builds up in the bloodstream. Chromium was later identified as the active component of GTF. Today, scientists believe that chromium helps insulin bring glucose from the blood into the cells for energy. Low chromium levels can increase blood sugar, triglycerides (a type of fat in the blood), cholesterol levels, and increase the risk for a number of conditions, such as diabetes and heart disease. **Recommended dosage 24 - 44mg.**
ARP Proprietary Blend (supplying 1915 gram per serving)	
Gymnema Sylvestre	Preliminary human research reports that gymnema may be beneficial in patients with type 1 or type 2 diabetes when it is added to diabetes drugs being taken by mouth or to insulin. Improvements in levels of triglycerides, LDL and free fatty acids were also noted in the Gymnema group.
Bitter Melon (Momordica Charantia)	Bitter melon has traditionally been used as a remedy for lowering blood glucose in patients with diabetes mellitus. Preliminary clinical studies have indicated that bitter melon may decrease serum glucose levels.

Fenugreek	Fenugreek seeds, a spice found in many curry preparations, are high in fiber and have been shown to regulate glucose and improve lipid levels in both animals and humans. In two small studies of people with either type 1 or type 2 diabetes, fenugreek seed powder lowered blood glucose and improved levels of blood cholesterol and trigylcerides, among other beneficial effects.
Nopal Opuntia	The stems and fruits of Opuntia ficus-indica contain eight flavonoids, which have antioxidant properties. Nopal has been studied for its effects on blood sugar levels, with one study published in the "Journal of Ethnopharmacology" in 1995 finding the cactus extracts caused a significant decrease in blood glucose values by almost 18 percent.
Banaba	Banaba helps the body to handle glucose (glucose transport activator)
Vanadium (AAC)	The pancreas plays a role in controlling blood sugar and insulin levels by creating vital normalizing cells called alpha, beta and delta cells. A study in 1997 of vanadyl sulfate concluded that the trace mineral protects insulin secreting pancreatic beta cells. Other studies confirm this finding.
Asian Ginseng	Although both Asian (Panax ginseng) and American (Panax quinquefolium) appear to lower blood glucose levels. Several clinical studies report a blood sugar lowering effect of ginseng in individuals with type 2 diabetes, both on fasting blood glucose and on postprandial glucose levels. One clinical study found that people with type 2 diabetes who take ginseng before or together with a glucose meal experience a reduction in glucose levels after they consume the meal.
Quercetin	Quercetin belongs to a group of plant pigments called flavonoids that give many fruits, flowers, and vegetables their color. Quercetin acts like an antihistamine and an anti-inflammatory, and may help protect against heart disease and cancer. Flavonoids such as quercetin are antioxidants -- they scavenge damaging particles in the body known as free radicals, which damage cell membranes, tamper with DNA, and even cause cell death. Antioxidants can neutralize free radicals and may reduce or even help prevent some of the damage they cause.
Alpha-Lipoic acid	Alpha-lipoic acid is an antioxidant that is made by the body and is found in every cell, where it helps turn glucose into energy. Unlike other antioxidants, which work only in water (such as vitamin C) or fatty tissues (such as vitamin E), alpha-lipoic acid is both fat- and water-soluble. That means it can work throughout the body. In addition, antioxidants are depleted as they attack free radicals, but evidence suggests alpha-lipoic acid may help regenerate these other antioxidants and make them active again. Alpha-lipoic acid can lower blood sugar levels, and its ability to kill free radicals may help reduce pain, burning, itching, tingling, and numbness in people who have nerve damage caused by diabetes (called peripheral neuropathy).
Coensyme Q10	CoQ10 supplements may improve heart health and blood sugar and help manage high blood pressure in people with diabetes. Two studies found that CoQ10 daily improved A1c levels, a measure of long-term blood sugar control. Coenzyme Q10 (CoQ10) is a substance that's found naturally in the body and helps convert food into energy. CoQ10 is found in almost every cell in the body, and it is a powerful antioxidant. Antioxidants fight damaging particles in the body known as free radicals, which damage cell membranes, tamper with DNA, and even cause cell death. Scientists believe free radicals contribute to the aging process, as well as a number of health problems, including heart disease and cancer. Antioxidants, such as CoQ10, can neutralize free radicals and may reduce or even help prevent some of the damage they cause. Some researchers believe that CoQ10 may help with heart-related conditions, because it can improve energy production in cells, prevent blood clot formation, and act as an antioxidant.