

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

Address:- 7SCR,BDA Colony, Chandrasekharpur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpandadiabetes.com>

E-Mail U:- drpanda@sify.com

THE EFFECT OF PATANJALI YOGA SUTRA IN DIABETES

INTRODUCTION:- Diabetes mellitus, often simply referred to as diabetes—is a group of metabolic diseases in which a person has high blood sugar, either because the body does not produce enough insulin, or because cells do not respond to the insulin that is produced. In 2000, according to the World Health Organization, at least 171 million people worldwide suffer from diabetes, or 2.8% of the population. Its incidence is increasing rapidly, and it is estimated that by 2030, this number will almost double. The greatest increase in prevalence is, however, expected to occur in Asia and Africa, where most patients will probably be found by 2030. The increase in incidence of diabetes in developing countries follows the trend of urbanization and lifestyle changes, perhaps most importantly a "Western-style" diet. Clinical research in the west has focused exclusively on diabetes as a physical disorder. Clinical research in India, by contrast, has recognized that diabetes is a psychosomatic disorder, in which the causative factors are sedentary habits, physical, emotional and mental stress and strain. It has studied the beneficial effects of the practice of yoga, which is much more than a physical exercise. In India most important factors are Sedentary habits, Stress & heavy consumption of polished rice. Switch over to "western style diet". I early I have already produce a Paper Dr Panda, Ways for long life "Zero Rice, Zero Oil, & Belly exercise". Now I thought how to manage Sedentary Habits and mental and Physical Stress. Thus I Thought the Process of "PATANJALI YOGA SUTRA". I started this study from 2006 to 2006 over 2008 my old case where I found reduction of Dosage of the drug, Maintenance of Blood sugar very stable as compared to without Patanjali yoga sutra. Constant maintenance of HBA1C 5.8 to 6.5 range. Increase in C-Peptide, Reduction in Serum Cholesterol & Serum Triglyceride. Normalisation of ECG Pattern.

INTENT: Intent of the study done By Dr Premanidhi Panda from 2006 to 2008 over a period of 3 years over 2000 Cases of Both Type-I & Type –II shows tremendous result in reduction of Dosage of the drug, Maintenance of Blood sugar very stable as compared to without Patanjali yoga sutra. Constant maintenance of HBA1C 5.8 to 6.5 range. Increase in C-Peptide, Reduction in Serum Cholesterol & Serum Triglyceride. Normalisation of ECG Pattern. Alcoholics could leave up there alcohol.

DISCUSSION:- Though Diabetes recognised as Psychosomatic disorder, in which causative factors are (1) Sedentary Habits (2) physical, (3) emotional and mental stress and strain. Yoga is not a simple Physical activity but it is a science. Patanjali Yoga Sutra has offered us guidelines that will allow us to have enhanced emotional and mental well-being and a more fulfilling and meaningful life," says Joan Shivarpita Harrigan, a practicing psychologist. In which suggests a program of ethical restraints or abstentions

- (2) lifestyle observances (niyamas),
- (3) postures (asanas)
- (4) breath control (Pranayama),
- (5) withdrawal of the senses (Pretyahara)
- (6) concentration (dharana)
- (7) meditation (dhyana),
- (8) absorption into the Divine (Samadhi).

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

Address:- 7SCR,BDA Colony, Chandrasekharpur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpandadiabetes.com>

E-Mail U:- drpanda@sify.com

They are designed to lead you, step-by-step, toward everlasting contentment & disease free life. It control of the thought process.Three diseases are proved to be helpful (1)DIABETES(2)HYPERTENSION & LOW OR HIGH BP(3)CANCER.

BRIEF DESCRIPTION OF PATANJALI YOGA SUTRA:

Maharshi Patanjali was the compiler of the Yoga Sutras, an important collection of aphorisms on Yoga practice Maharshi Patanjali was born on 150 B.C. in Sunga dynasty.

PATTANJALI YOGA SUTRA STANDS ON:-

(1)FIVE VOWS

(2)TWENTY FIVE NIYAMA

I have taken Five Vows and Six Niyamas in my Study.

FIVE VOWS ARE:-

(1)Tyranny of the Ego

(2) Ahimsa

(3) Truthfulness:-Effect of truth on human body is established.

(4) Brahmacharya(Celibacy)

(5) Non-covetousness and Non-stealing

SIX NIYAMAS ARE:-

(1) Purity

(2)Santosh or Contentment

(3)SELF SURRENDER

(4)ASANAS & PRANAYAMA(THESE ARE SPECIAL EXERCISES)

(5)MEDITATION

(6) Samyama

(7)VIVEKA(discrimination)

EFFECT OF TRUTH & AHIMSA(NON-VIOLENCE) IN HUMAN BODY:-

Truth is conformity of our judgments with the things. It is the Ideas with external objects but also the internal consistency of our ideas with one another. Truth has been proved:-

(1)Complete sequence of a human genome

(2) fMRI:- Functional Magnetic Resonance Imaging is a technique used for multiple purposes which shows the uses of oxygen by the brain, allowing for the identification of which portions of the brain are using more oxygen, and thus being used during a specific task. The technique is also used in drug development, a wide-variety of research, and diagnostically

(3) Physiological changes like;- increased pupil size, an indicator of tension and concentration in comparison to TRUTH

(4) Facial Action Coding System (FACS) like voice and speech measures, gestures and words

(5) verbal and written output changes liars take longer to start answering questions than truth-tellers. liars actually start their answers more quickly than truth-tellers

(6) Change of Perception as liars seem more negative--more nervous and complaining, and less cooperative--than truth-tellers. Individuals lying sound "more discrepant and ambivalent, the structure of their stories is less logical, and their stories sound less plausible.

(7) Linguistic Inquiry and Word Count (LIWC) that is accuracy in predicting lying

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

Address:- 7SCR,BDA Colony, Chandrasekharpur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpanadiabetes.com>

E-Mail U:- drpanda@sify.com

(8) General questioning and testing techniques. By asking (a) Irrelevant questions (b) Comparison questions (c) Relevant questions

(9) Polygraph:- Commonest method but sometimes unreliable. It detects autonomic reactions. They also may consider respiration rate, blood pressure, capillary dilation, and muscular movement, heart rate

(10) Event-related potentials (ERP)

(11) Electroencephalography (EEG) Changes.

(12)) Facial EMG Changes.

(13) Eye-tracking Changes.

(14) Functional near-infrared spectroscopy Changes.

(15) Truth reduces glucagons and possibly improving insulin action.

(16) Truth causes Muscle Relaxation thus muscles might enhance insulin receptor expression on muscles causing increased glucose uptake by muscles and thus reducing blood sugar.

(17) Blood pressure plays a great role in development of diabetic and related complications, which is proven to be benefited by yoga. The same holds true for increased cholesterol levels. Truth is the vital things for a person to be calm down thus reduces Blood Pressure.

(18) Truth & AHIMSA reduces adrenaline, noradrenalin and cortisol in blood, which are termed as ? stress hormones ? This is a likely mechanism of improvement in insulin action.

(19) Truth & Non-Violence Increase level of C-Peptide after 3 Months of Yoga.

(20) AS PER Marcy C. McCall* et al Patanjali Yoga Sutra Reduces proinflammatory cytokines such as IL-6, interleukin-2, C-reactive protein is attributed to yoga's capacity to stimulate the vagus nerve, improving immunity.

AHIMSA IN DIABETES:-

It works as truth. Ahimsa (**NON-VIOLENCE**) Reduce your wants and lead a happy and contented life. Never hurt the feelings of others and be kind to all. I have little differed from Patanjali Yoga Sutra regarding taking only vegetable diets. I used to advice for High Protein Diet and less carbohydrate diet. I am only restricted non-violence in action to the society. Love all, hate none will lead you better control of blood sugar. All other things are same s TRUTH.

EFFECT OF EGO IN DIABETES:-

According to the concept of ego Control, theory, any activities that demand a sense of self-control--inhibiting or overriding impulses, regulating emotions, or reaching difficult choices and decisions--utilizes resources or energy from a single, limited supply (Baumeister, Bratslavsky, Muraven, & Tice, 1998). When individuals engage in an act that demands self control, this supply diminishes, and a state called ego depletion prevails. This state impairs the capacity of individuals to enact other activities that demand self control.. Glucose offset the effects of ego Control, even though the two drinks were rated as equally pleasant by participants. Very good control in both diabetic and non diabetic.. DeWall, Pond, and Bushman (2010) study shows ego control increases the blood glucose utilization of body.. Gailliot and his colleagues found a significant drop in blood glucose levels by ego control.

EFFECT OF BRAMHACHARYA (Celibacy):-

Celibacy is absolute freedom from sexual thoughts and desires. But I have taken in my study normal sexual behaviour with own spouse is not under celibacy. In olden days, boys of the

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

Address:- 7SCR,BDA Colony, Chandrasekharapur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpanadiabetes.com>

E-Mail U:- drpanda@sify.com

Gurukula (ancient educational system of India) were healthy and strong. Today there is no real ethical culture in modern schools and colleges. The present system of education needs a drastic and radical change. Modern civilization has enfeebled our boys and girls. They lead an artificial life. Children beget children. There is racial degeneration. The report from BMJ 1997 also cited other studies to show that having sex even a few times a week may be associated with the following: improved sense of smell; reduced risk of heart disease; weight loss and overall fitness; reduced depression; the relief or lessening of pain; less frequent colds and flu; better bladder control; and better teeth. The report cited a study published by the British Journal of Urology International which indicated that men in their 20s can reduce by a third their chance of getting prostate cancer by ejaculating more than five times a week.

Social and emotional consequences of refraining from sexual activity among diabetes. it is same way self control of taking carbohydrate diet. Not indulgence of taking carbohydrate diet. In my study I used to advice for normal sexual behaviour.conjugation with your wife is eternal. But with others lead to Excessive Physical & Emotional excitement lead to excessive release of adrenaline & cortisone which increases the blood sugar in the body.

Non-covetousness and Non-stealing:-

Non-covetousness and non-stealing are three of the five yamas in Patanjali Yoga sutra known for disciplining the mind and increasing self-control.It is same way how Truth & Non-Violence does in diabetes.

EFFECT OF ASANAS & PRANAYAMA:-

Yoga Asana like include 'Surya Namaskara,Tadasan,Padmasan,Vastrika, Pashimottanasana ,Pranayam,Ardhamatsayendrasan,Shavasan,Sarpasan already known to reduce Blood Sugar,Post Prandial Blood Sugar,Lipid Profile,HBA1C.It is more beneficial in Type 2 Diabetes. Yogic exercises cause the muscles to absorb the excess glucose in the blood, thereby reducing the blood sugar level. They help the pancreas and liver to function effectively, which regulates the blood sugar levels. Asanas help in rejuvenating the pancreatic cells, thereby assisting insulin secretion. The muscular movements also help in bringing down the blood sugar levels. Asanas induce relaxation, which also plays a key role in the healthy functioning of the internal organs of the body. Effect of pranayama & yoga-asana on cognitive brain functions in type 2 diabetes-P3 event related evoked potential (ERP) has been proved.



SURYA NAMASKARA TADASAN



PADMASANA



BHASTRIKA

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

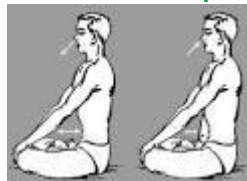
Address:- 7SCR,BDA Colony, Chandrasekharpur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpandadiabetes.com>

E-Mail U:- drpanda@sify.com



PASHIMAOOTASANA



KAPALAVATI



SHAVASANA



SARPASANA

PRANAYAM:-

I am giving Impotence to KAPALAVATI ASANA. It is observation that KapalaVati Asana is very beneficial in diabetes.

BELLY EXERCISE:- we do quick exhalation and natural inhalation. Normally exhalation takes one fourth of the time of inhalation. Quick exhalation and natural inhalation follow each other.

HOW TO DO:-Seat in a comfortable position with back straight. Inhale deeply through both the nostril.Then exhale with forceful contraction of the diaphragm by which The air is pushed out of the lungs by the contraction of diaphragm. One can begin with 20 times twice daily.

EFFECTS:- Normally exhalation takes one fourth of the time of inhalation. Quick exhalation and natural inhalation follow each other. During quick Exhalation there is increased in venous pooling. During quick natural Inhalation there is arterial pooling. By this way if there will be Venous pooling and arterial pooling there will be slow degradation of arterial plaque. I have studied it in two case report frank case of Myocardial Infarction where is There is definite indication AMI.Trop-T is positive. But with the medication and my maneuver Complete normal ECG with Zero score in CARDIAC CT Angio.

This is tremendous methods By which I am claiming there will be reversal of Coronary arterial plaque. Not only coronary but all the tissue organ will function well.

Benefits of Belly Exercise:-

- (1) Belly Exercise cleanses the lungs and entire respiratory system.
- (2) The blood is purified and body gets an increased supply of oxygen to all cells.
- (3) Digestion is improved.
- (4) Abdominal muscles are strengthened.
- (5) Prepare the mind for meditation.
- (6) Energize the mind for mental work.

Common Mistake: -

- (1) Abdomen is contracted while inhaling.
- (2) Shoulders are contracted to push the air out when exhaling.

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

Address:- 7SCR,BDA Colony, Chandrasekharapur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpandadiabetes.com>

E-Mail U:- drpanda@sify.com

(3) Back and shoulders move during exercise.

Point to Note:

(a) Exercise should not be done if you are feeling uncomfortable at any time during the exercise.

(b) Rapid breathing used in this technique should be from the abdomen and not from the chest.

(c) Belly Exercise should be practice on an empty stomach only.

(d) Belly Exercise should be practiced followed by Relaxation (atleast 10 minutes) and before meditation.

(e) Chest should not move very much.

CONCLUSION:-

By Belly exercise Heart, Kidney and all the tissue functions well. There will be reduction of aging process.

IN MY STUDY:-

FBS in 2000 cases shows wide variation without Patanjali Yoga. Some time it was 100-130mg/dl. But after 3 Months of Practice It comes to 78-106mg/dl.

2hr Post Prandial Before 110-200mg/dl. But after Patanjali Yoga it remain constant 96-120mg/dl.

HBA1C(GLYCOSULATED HB):-Before Patanjali Yoga it was 6.7 to 7.8. But after 3 months practice HBA1C it was 5.8 to 6.8.

C-Peptide:- C-Peptide level before this procedure ranges 1.4 to 2.7 but after Patanjali Yoga 1.8 to 3.2 Nanogram/ml.

CONCLUSION:-In my study I conclude that a diabetic person if follow the Patanjali Yoga sutra both in life style and few asans & Breathing Exercise will lead to normal life without any complication affecting kidney, Heart, Eye & Nervous system. There is definite Reduction of dose of medication. Diabetics will lead a long life span satayu bhavantu (LONG LIVE FOR HUNDRED YEARS)

REFERANCE:-

Ackerman, J. M., Goldstein, N. J., Shapiro, J. R., & Bargh, J. A. (2009). You wear me out: The vicariodepletion of self-control. **Psychological Science**, 20, 326-332.

Alberts, H. J. E. M., Martijn, C., Greb, J., Merckelbach, H., & de Vries, N. K. (2007). Carrying on or giving in: The role of automatic processes in overcoming ego depletion. **British Journal of Social Psychology**, 46, 383-399.

Alberts, H. J. E. M., Martijn, C., & de Vries, N. K. (2010). Fighting self-control failure: Overcoming ego depletion by increasing self-awareness. **Journal of Experimental Social Psychology**, 47, 58-62.

Batson, C. D., Duncan, B. D., Ackerman, P., Buckley, T., & Birch, K. (1981). Is empathic emotion a source of altruistic motivation? **Journal of Personality and Social Psychology**, 40, 290-302.

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

Address:- 7SCR,BDA Colony, Chandrasekharpur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpandadiabetes.com>

E-Mail U:- drpanda@sify.com

Batson, C. D., Sager, K., Garst, E., Kang, M., Rubchinsky, K., & Dawson, K. (1997). Is empathy-induced helping due to self-other merging? **Journal of Personality and Social Psychology**, 73, 495-509.

Baumeister, R. F. (2002). Yielding to temptation: Self-control failure, impulsive, purchasing, and consumer behavior. *Journal of Consumer Research*, 28, 670-676.

Baumeister, R. F. (2005). *The cultural animal: Human nature, meaning, and social life*. New York: Oxford University Press.

Baumeister, R. F., & Alquist, J. L. (2009). Is there a downside to good self-control? *Self and Identity*, 8, 115-130.

Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? **Journal of Personality and Social Psychology**, 74, 1252-1265.

Baumeister, R. F., Gailliot, M. T., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality: Strength-boosting interventions and trait moderators of ego depletion. **Journal of Personality**, 74, 1773-1801.

Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. San Diego, CA: Academic Press.

Baumeister, R. F., Muraven, M., & Tice, D. M. (2000). Ego depletion: A resource model of volition, self-regulation, and controlled processing. *Social Cognition*, 18, 130-150.

Baumeister, R. F., & Vohs, K. D. (2007). Self-regulation, ego depletion, and motivation. *Social and Personality Psychology Compass*, 1, 115-128.

Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, 16, 351-355.

Begue, L., Bushman, B. J., Giancola, P. R., Subra, B., & Rosset, E. (2010). "There is no such thing as an accident", especially when people are drunk **Personality and Social Psychology Bulletin**, 36, 1301-1304.

Botvinivk, M., Braver, T. Barch, D., Carter, C., & Cohen, J. (2001). Conflict monitoring and cognitive control. **Psychological Review**, 108, 624-652.

Botvinick, M. M., Cohen, J. D., & Carter, C. S. (2004). Conflict monitoring and anterior cingulate cortex: An update. *Trends in Cognitive Sciences*, 8, 539-546.

AUTHOR:-DR. PREMANIDHI PANDA

(M.D(MED),HON PHD IN DIABETES(USA),MRCP,FRCP)

DR. PANDA DIABETES CENTRE

Address:- 7SCR,BDA Colony, Chandrasekharapur, Bhubaneswar, Odisha, India

Website Url :-<http://www.drpandadiabetes.com>

E-Mail U:- drpanda@sify.com

Botvinick, M., Nystrom, L. E., Fissell, K., Carter, C. S., & Cohen, J. D. (1999). Conflict monitoring versus selection-for-action in anterior cingulate cortex. *Nature*, 402, 179-181.

Brosschot, J. F., Van Dijk, E., & Thayer, J. F. (2006). Daily worry is related to low heart rate variability during waking and subsequent nocturnal sleep period. *International Journal of Psychophysiology*, 63, 39-47.

Burger, J. M. (1999). The foot-in-the-door compliance procedure: A multiple process analysis and review. ***Personality and Social Psychology Review***, 3, 303-325.

Burger, J. M., & Petty, R. E. (1981). The lowball compliance technique: task or person commitment? ***Journal of Personality and Social Psychology***, 40, 492-500.

Cialdini, R. B. (1993), *Influence: The psychology of persuasion*. New York: Morrow.

Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., & Neuberg, S. L. (1997). Reinterpreting the empathy-altruism relationship: When one into one equals oneness. ***Journal of Personality and Social Psychology***, 73, 481-494.

-Indian Journal of Traditional Knowledge Vol2(3),April 2004.PP,162-167 By Malhotra,Singh & Tandon

- Indian J Med Res 131, May 2010, pp 636-640