



NutriWaves

In this Newsletter	Contributors
Editor's Note	Shazia Sharma Alka Sanghavi
Dietetic Case Study (Clinical) 1	Alka Sanghavi
Dietetic Case Study (Clinical) 2	Patel M, Mathew J
Blog 1	Rajashree Kajale
Blog 2	Prachi Shah
Article 1	Aakansha Bhargava
Article 2	Dr. Swati Dave
Recipes	Mrinali Divecha
Days to Celebrate	
IDAGC Activities	

From Editors' Desk.....

Dear colleagues,

The IDA Gujarat Chapter in its efforts to strive for propagating scientific knowledge in the field of nutrition and dietetics is taking many initiatives, one being our e-news letter. The current issue aims to improve the health status of individuals through meaningful and reliable information. It deals with two case studies, one on effectiveness of ketogenic diet with respect to glut-1 transporter deficiency, and second one on patient with HIV and its nutritional management. It has blogs on foods taken by people during festivities and their significance; and another on what we feed to the cattle and other animals around us without thinking much about its health impact on the animals being fed. This blog works as food for thought, because animal's health is equally important for the balance of ecosystem. The article on sleep hygiene translates the biology of sleep into practical advice and renders suggestions for promoting sleep through lifestyle and environmental changes. The article on calorie reduction and intermittent fasting mulls over the science underlying this popular approach for acquiring and maintaining health. This issue covers healthy recipes which aim to promote better health, and reaching the unreached. We begin a new section on activities done by various clubs of IDAGC.

We dedicate this issue of NutriWaves to the frontline health care professionals and all the warriors across the globe, serving mankind relentlessly in the hour of corona virus pandemic.

Hope you find the information shared here useful. Do share your views and give your feedback. IDA Gujarat Chapter is sincerely thankful to all the contributors for their articles.

Editors

Shazia Sharma
Alka Sanghavi



Dietetic Case Study (Clinical) 1

NUTRITIONAL MANAGEMENT OF GLUT1 TRANSPORTER DEFECT

Alka Sanghavi IDA/6035

Freelance Dietician, Ph.D. Scholar, Gujarat University, Ahmedabad

INTRODUCTION: Glucose transporter type 1 (Glut1) deficiency syndrome is a rare genetic metabolic disorder characterized by deficiency of a protein that is required for glucose to cross the blood-brain barrier. The most common symptom is seizures, which usually begins within the first few months of life. However, the symptoms and severity of Glut1 deficiency syndrome can vary substantially from one person to another. Additional symptoms that can occur include abnormal eye-head movements, body movement disorders, developmental delays, and varying degrees of cognitive impairment, slurred speech and language abnormalities. Glut1 deficiency syndrome is caused by mutations in the *SLC2A1* gene and is inherited as an autosomal dominant trait. Rarely, the condition also may be inherited as an autosomal recessive trait. Glut1 deficiency syndrome does not respond to traditional epilepsy treatments (e.g., anti-seizure medications), but has been successfully treated with the ketogenic diet (KD).

CASE PRESENTATION: A 2.6-year-old girl weighing 12 kg was diagnosed with GLUT 1 Transporter defect. She had recurrent seizures. Her CSF Glucose level was less than 20 and ratio of CSF glucose:RBS was less than 0.35 indicative of GLUT 1 deficiency. Her father had a history of epilepsy. Her speech and development were normal but she was a slow learner. She was on Oxetol 150mg, Trisium 5mg (anti-seizure medications), multivitamin and calcium supplements.

NUTRITIONAL MANAGEMENT: She was put on a Ketogenic Diet in the ratio of 3:1 for three months. Her meals included various recipes modified to keto with calculation of fats three portions: protein and carbohydrates one portion. She was given soya based recipes with exclusion of animal milk and milk products, cereals, pulses, starch, sugar, jaggery, honey, fruit juices and sweet fruits. Her seizures at the end of three months reduced to 1/day to no seizures. Her MRI was normal and her NGS (Next Generation Sequencing) was also normal, though her EEG was abnormal (multifocal). She discontinued the diet after that so had recurrent seizures again. She again started with KD. At present she is on a pure KD and is seizure free.

CAUTION: The KD is a high-fat and low-carbohydrate diet that causes the body to burn fat for energy instead of sugar. It requires strict adherence to relatively rigid principles. Individuals who are on the KD should be regularly monitored by their physicians along with a dietician nutritionist because of the need to strictly adhere to the diet's guidelines and the potential risk of side effects.

CONCLUSION: Glut1 deficiency syndrome does not respond to traditional epilepsy treatments, but has been successfully treated with the KD. It thus works very well in many genetic disorders with symptom of epilepsy. It is recommended that the KD be started as early as possible and be continued till at least adolescence.

TEAM NutriWaves 2020-21:- Dr. Bhavana Vaid, Ms. Rima Rao, Ms. Shazia Sharma, Ms. Alka Sanghavi, Ms. Amita Tambekar, Dr. Renu Singh, Ms. Megha Rathore, Ms. Vandita Inamdar, Dr. Sheetal Chhaya, Dr. Swati Parnami, Ms. Huma Vora, Ms. Tanvi Sampat and Dr. Swati Dave



Dietetic Case Study (Clinical) 2

NUTRITIONAL MANAGEMENT OF HIV WITH POTT'S SPINE

1. Patel M IDA / 14581 2. Mathew J.

1. Dietician and Tutor, Dhiraj Hospital, Piparia 2. RD intern, Dhiraj Hospital, Piparia

INTRODUCTION: The human immunodeficiency virus (HIV) is an enveloped retrovirus that contains copies of single stranded RNA genome. It causes the acquired immunodeficiency syndrome (AIDS), the last stage of HIV disease. AIDS is mainly characterized by infection and tumors which are fatal without treatment. People with HIV are more likely to contract tuberculosis (TB) as HIV weakens the immune system which makes harder for the body to fight TB germs.

CASE PRESENTATION: A 58 year old female presented with complaint of right side chest pain for 15 days along with abdomen pain, fever, loss of appetite and body pain, was admitted to the isolation ward. The patient had history of pneumonia with pulmonary koch's and five years ago she was HIV positive (transmitted via blood transfusion done following an RTA).

Anthropometry assessment (on admission): She weighed 70 kg and height was 152 cm which indicated that she was obese (BMI = 30 kg/m²). Ideal body weight = 52 kg.

Biochemical assessment (on admission): Hb was 9.6 gm/dL, urea=29 mg/dL, SGPT = 33 IU/L , SGOT = 59 IU/L.

Patient was operated for Pott's spine with abscess and was kept on NBM for 2 days. Continuous monitoring was done of temperature, respiratory rate, pulse rate, input and output volume. Medication started was Inj ceftriaxone, inj streptomycin, Tab akt 4, blong, nuhenz, calcita. On 3rd day, she was shifted to special ward. Nutrition assessment was done and clear liquids were started orally, for few hours. As observed, patient well tolerated the feeds. So full liquid was given which provided 1000 kcal and 30 g protein. On 4th day, analyzing the improvement based on daily nutritional assessment, the patient was given liquid + soft diet which provided 1200 kcal along with vitamin supplementation. On 5th day, normal diet was initiated as the patient well tolerated the food.

MEDICAL NUTRITION THERAPY:

- High calorie and high protein diet was recommended.
- The diet should contain more of protein, so it was suggested to include milk and its products, pulses and soya products.
- Green leafy and other vegetables should be consumed in adequate amount.
- Avoid processed foods, bakery products, salted, fried and packed foods.
- Avoid consumption of raw fruits and vegetables.
- To meet protein requirement, protein supplements 2 tsp, three times a day should be taken.
- Steamed fruits can be consumed.

CONCLUSION: The patient has to consume high protein diet to treat Pott's spine and consumption of only cooked food items was suggested to avoid any infection caused due low immunity. Proper precautions should be taken to prevent transmission of HIV.



BLOG 1

LET THEM ALSO EAT RIGHT !!!!

Rajashree Kajale IDA / 14395

Friends as we are supporting the Eat Right India movement; I think along with humans each animal also deserves right food. Isn't it?

Many of us offer food to the animals which they are not supposed to eat, i.e. the food which is given to these animals is not meant for them. These animals are unknowingly habituated to eat such food without taking efforts to find their right food. Ultimately they become lazy, sedentary, and malnourished. For example, cows are fed with rotis (and other leftover food or kitchen waste such as vegetable and fruit peels) on a regular basis. Actually cows are supposed to eat grass and greens. Their digestive system, which has a complex four compartment stomach, is meant for the same. Initially these cattle eat the grass in a large quantity without chewing it properly and then again when they rest for a while, this partially chewed food is regurgitated and it is re-chewed with the saliva and other enzymes from the mouth. We all must have seen this in our childhood. But nowadays, cows are not seen resting and regurgitating because we make them eat such food which does not require regurgitation, e.g. rotis are digested in the first compartment of the stomach. These cows become so habituated to eat this readymade food that they visit the regular place at regular time for this food. These rotis and other leftover food which we give them is definitely not providing them adequate nutrition and at the same time making them malnourished. They also become lazy as they do not have to search food nor do they have to make extra efforts to digest the food. On the other hand, we expect good quality milk from these malnourished cows. Obviously the milk quality deteriorates and we often hear people say “Pahle jaisa doodh bhi kahan milta hai aaj kal”.

Same is the case with street dogs. They are regularly fed with rotis, toasts, biscuits, milk etc. Actually dogs are carnivores. They should hunt and get food for themselves. They are supposed to eat rats, rodents and other small animals. Their teeth are adapted for the same. They have strong canines and molars. But by making them eat rotis, toasts and biscuits, we prevent them from using their canines and molars adapted for tearing of meat. Cow or buffalo milk is not their food, because animals take only their mothers' milk unlike humans. We make them habituated to it and make them forget the technique of hunting. They are not even able to run fast which is required for hunting. Ultimately inadequate nourishment and lack of physical activity make them malnourished and lazy.

On the same note let us see the case of birds. Birds are fed with grains like jowar, bajra, wheat etc. By feeding them these grains we take away their strength to fly distances for food. Flocks of these birds come to a fixed place to eat grains available in abundant quantities. Actually they should search grains by flying, or search small insects from ground by digging it. These activities increase the strength of their wings and beaks, making them more healthy.

When we consider these animals' health we also should think about the food which we give them. In fact if we offer the same food (rotis, milk, grains etc.) to the needy humans; their nutrition will be taken care of, and we would be conserving the environment by not disturbing its ecosystem, and making “Jivo Jivasya Jivanam” true.

(This blog is not meant to intentionally hurt anyone's beliefs and emotions)



BLOG 2

INDIAN FOODS AND FESTIVITIES

Prachi Shah IDA / 12958

Diwali, eid, holi, pongal makar sankranti and many more festivals are celebrated in India. Aren't you proud to live in such a beautiful, diverse country where we not only celebrate the festivals, but also foods?

The moment you are born, your family celebrates this beautiful occasion by having ghee and jaggery. How can one switch to fancy diets in later life? Don't you think that's a cultural shock?

Every festival in India marks celebrations, and with celebrations come food. The most common question being asked while eating "undhiyu" and "jalebi" on makar sankranti or while sipping "thandai" during holi is, 'I badly want to eat these tasty foods, but they are having too much calories and how will I manage my weight??' This question jolts my scientific mind because I always say food is not always about calories, it's about nourishment.

You see the traditional foods as lump of calories, but in fact they are traditionally true to your culture. They do justice to your body by fulfilling your seasonal bodily requirements. For example, you have thandai only in the festival of holi and not during diwali. WHY? Because thandai acts as a coolant, as holi marks the start of summer season. Another example of why Indian culture is fantastic is of "Til Chikki" consumed in makarsankranti. The scientific reason behind it is the availability of sunlight for synthesis of Vitamin D3 which is made by the body in presence of sunlight, and secondly brown sesame seeds (til) which have abundant calcium (1174 ± 189 mg per 100g) (IFCT value) (buffalo and cow milk have 121 ± 3 mg, and 118 ± 2.9 mg respectively). Our body is capable of storing Vitamin D up to a year, and use the reserve. The body is capable of getting its Vitamin D reserve full with three days of sunlight. The best quality of sunlight is the end of winters and beginning of summers. Now connect the dots and see how wise our ancestors were! They created a festival of kite flying where all, young and old, go in the open, under the direct sunlight, stay throughout the day from early morning and eat til chikkis/laddoos.

Now readers, tell me who doesn't like "modaks" that we offer to Bappa? Modak made from ghee, rice flour and nuts are power packed with good fats and vitamins like B6, B12, and E. So, isn't it advisable to have traditional sweets instead of choosing a piece of highly processed chocolate cake?

The winter delicacies like aradya, gund laddu, raab, jaggery, saunth barfi, methi pak etc. have thermal-regulatory properties. Apart from this, ingredients used in these preparations help prevent bloating, cure constipation and help in improving dry skin problem. Have small quantity of any of these items every morning with your breakfast and see that it works miracles. These food items not only help to gain good health, but help in weight loss journey when combined with proper workout sessions.

Therefore, incorporating seasonal foods around the year is the smartest choice one can have to climb the ladder of optimum health.



ARTICLE 1

SLEEP HYGIENE

Aakansha Bhargava IDA / 6247

The very word “Hygiene” conjures up images of hand washing, personal grooming and over all cleanliness. But sleep hygiene is different. The rituals, behaviors and norms you follow all through the day to get a good sleep are referred to as sleep hygiene. Diet and exercise have been at the centre of the fitness and wellbeing paradigm for the last few decades. Sleep also has always been acknowledged as having beneficial effects, but ever-increasing busy lifestyles and too many distractions have been getting in the way of a good night sleep. Thus sleep, like nutrition and physical activity, is critical to our health. It is important to have a good 7-8 hours of sleep every day. In recent times the term “sleep hygiene” is gaining a lot of attention but the main aim is to translate the biology of sleep into practical advice and suggestions for promoting sleep through lifestyle and environmental changes. A good night’s sleep is essential for a number of physiological functions -

- **Reduced stress:** Busy lifestyles have always been linked to an increase in stress but a full night’s sleep helps to reduce stress hormones such as cortisol.
- **Improved memory:** Each day we are presented with new information both in our professional and personal lives, and during sleep the brain sorts the important information from the unimportant and files long-term memory.
- **Impact on weight gain:** Lack of sleep influences what and how much you eat. Hormones are regulated during sleep, so when we are sleep deprived, our hunger hormones get out of control, which increases feelings of hunger and decreases satiety (nhlbi.nih.gov, 2018).
- **Feeling energized and alert:** Sleep has been proven to kick-start and boost the metabolism thereby increasing energy levels and performance.
- **Reduced inflammation:** Reduced sleep has been linked to an increase in inflammation which in turn can cause the increase in the risk of cardiovascular diseases (Faraut et al, 2012). Sleep deprivation is also associated with diabetes, high blood pressure, depression along with many joint aches and pains.
- **Recovery of cells:** While sleeping, the body and cells are given a chance to recover, however quality and quantity of sleep both affect the recovery of cells. Studies have linked extended periods of poor sleep to cell damage and reduced recovery. (Everson et al, 2014)

Some tips for getting better sleep and creating the foundation for your overall wellness.

- **Set a sleep goal:** Aim to get at least seven hours of sleep a night so that you have the energy to tackle everyday demands and good sleep will help you make smart decisions.
- **Establish a regular bedtime and honor it:** Establish a regular bedtime and stick to it as much as possible. Avoid smart phone before sleeping so that you aren't tempted to scroll through social media right before bed. Too much screen time activates brain activity making it difficult to fall asleep.
- **Ease into sleep:** Setting aside a little time before bed for relaxation can help you easily transit into sleep. A warm shower, reading a book, dim lights and a cool, well ventilated room could be few techniques that help sleep better.
- **Regular exercise:** Exercise during daytime helps improve the quality of sleep. However avoid exercising right before bedtime as the body needs time to relax and cool down after work out.



- **Food and drug habits:** The combination of foods and drinks we fuel our bodies with throughout the day creates a significant impact on our sleeping patterns. Eating healthy and allowing the body to absorb proper nutrients provides the brain with the chemical environment that it needs to produce the neurotransmitters to maintain adequate sleep.

Few habits are mandatory to sustain good sleep regime.

- Avoid caffeine within 6 hours of bed time; this is the average time for the effects of caffeine to wear off.
- Avoid excessive alcohol as this can help induce sleep but affect the quality of the sleep.
- Have dinner early and allow time for digestion. It is suggested that the last meal of the day should be consumed at least 2 hours before bed.

The foods we choose to eat, how much we eat and when, can affect our sleep. Our food choices can influence how rested we feel in the morning. Research has found that increasing levels of tryptophan from dietary protein sources like eggs, poultry, dairy, nuts etc. improve our sleeping patterns. Tryptophan is an amino acid which boosts sleepiness. Another study (Wurtman R J et al) has shown that when carbohydrates are eaten with tryptophan, insulin is stimulated which helps to convert tryptophan into sleep inducing compound called serotonin (a neurotransmitter) more reliably. While carbs with proteins make you sleepy, it's important for overall health to choose healthy carbohydrates like whole grains and fresh fruits over carbonated beverages, sugary drinks, noodles, pasta etc.

One of the best results of sleep were associated with low-glycemic eating, minimally processed fresh foods, phytonutrients, moderate protein, whole grains and healthy fats (such as olive oil, nuts, and seeds). This variety of food intake provides better distribution of nutrients for sleep.

To sum up, no conclusive studies point to one particular diet that is best for sleep. It is still unclear that any one isolated vitamin, mineral, or macronutrient plays the definitive role in optimizing sleep, but rather many play together as an orchestra in maintaining the sleep hygiene.

(This article is a compilation of views received from IDAGC members)

Upcoming days to celebrate: April, May and June

World Health Day

World Liver Day

Stop Food Waste Day

International No Diet Day

World Hypertension Day

World Milk Day

World Environment Day

International Day of Yoga



ARTICLE 2

CALORIE RESTRICTION AND INTERMITTENT FASTING

Dr. Swati Dave IDA / 05347

Calorie restriction (CR) is consistent reduction of daily calorie intake voluntarily. Fasting is time bound food intake focusing mainly on the frequency and type of food. It does not necessarily have a calorie restriction during the non-fasting period.

Intermittent fasting (IF) has gained considerable popularity owing to its easy to follow and convenient eating pattern and evidence based findings. Calorie restriction is proven to be the most effective method.

It is a very well known fact that nutritional habits, sleep pattern and meal frequency have significant impact on human health. During a fast of 24 or more hours, glycogen stores, the storage form of carbs, is depleted and insulin levels are reduced. According to some researchers, fasting for 10–16 hours can cause the body to turn its fat stores into energy, which releases ketones into the bloodstream. Fasting has also been associated with a reduction in oxidative stress, reduced insulin resistance and blood sugar levels, as well as reduced inflammation, all of which are good for the health of the brain. This can also result in weight loss. In addition to enhancing weight loss, 16/8 IF is also believed to improve blood sugar control, boost brain function and enhance longevity. 16/8 IF involves eating only during an eight-hour window during the day and fasting for the remaining 16 hours.

Several studies have been conducted to show the impact of fasting on brain function and health. No food is allowed during the fasting period, but one can drink water, coffee, tea and other non-caloric beverages. Some forms of IF allow small amounts of low-calorie foods during the fasting period. Taking supplements is generally allowed while fasting, as long as they are devoid of calories. Non-fasting days are not days when one can splurge on whatever they want as this can lead to weight gain. Fasting may also lead to an increase in the stress hormone, cortisol, which may lead to even more food cravings. Keep in mind that overeating and binge eating are two common side effects of IF.

To date, prolonged CR (i.e., a reduction in caloric intake without malnutrition) is the only non-genetic intervention that has consistently been found to extend both mean and maximal life span across a variety of species. Most individuals have difficulty sustaining prolonged CR, which has led to a search for alternative approaches that can produce similar benefits as CR. A growing body of evidence indicates that periodic fasting regimens can trigger similar biological pathways as CR. For this rational motive, there is growing scientific interest in further exploring the biological, metabolic and long term effects of IF as well as whether long-term compliance may be improved by this type of dietary approach.

#Fasting #Calorie_Restriction #Insulin_Resistance #Intermittent_Fasting
#Low_Carbohydrate #Weight_Loss #Lipid_Metabolism #Ketone_Bodies
#Body_Composition

(This article is a compilation of views received from IDAGC members)

IDAGC Contributors:

Shruti Bhardwaj Swati Patel, Anouli Patel, Sadhana Patel, Huma Vora, Janki Patel, Prarthi Dalal, Dr Smita Patel, Tanvi Sampat, Charmi Shah, Jinal Palania, Himani Kabrawala, Vandita Inamdar, Aakruti Shah, Mrinali Divecha, Jigna Patel, Chetna Bhatt, Sheetal Chhaya, Payal Jobanputra

1. CHANA -SPROUTS SALAD (protein rich, fibre rich, low sodium)

Preparation Time: 10 minutes

Cooking Time: 20 minutes

Total Time: 30 minutes

Total Servings: 1 (Quantity – 1 bowl)

INGREDIENTS:

- Black chana, soaked overnight -30 gm
- Soft whole-wheat, soaked overnight -10 gm
- Green gram sprouts -10 gm
- Fenugreek seeds sprouts -1/4 Tsp
- Potatoes, boiled, chopped – 10 gm
- Tomato, finely chopped -10 gm
- Spring onions with greens, finely chopped -10 gm
- Cucumber, finely chopped -10 gm
- Mint leaves finely chopped – 5 gm
- Garlic pod, peeled -1 pod
- ½ tsp. lemon juice
- 1/4 tsp cumin seeds, crushed
- 1/4 tsp. pepper, crushed
- Salt-to taste
- For garnishing:**
- 2-3 leaves of fresh mint leaves
- 1 tsp. chopped coriander
- 2 Sliced Olives



Mrinali Divecha
IDA/13890



METHOD:

1. Pressure cook black chana and whole-wheat till tender (5-6 whistles).
2. Drain out all excess water and spread over a clean kitchen towel.
3. Allow to cool completely and dab dry.
4. Mash garlic pod; rub all over inside of bowl to be used for making salad.
5. Add pressure cooked wheat, black chana, green gram sprouts and fenugreek sprouts into this bowl.
6. Add potatoes, tomatoes, cucumber, spring onions and mint.
7. Add lemon juice, salt, pepper and cumin.
8. Toss well.
9. Garnish with mint leaves, coriander and sliced olives
10. Serve cold.

NUTRITIVE VALUE per serving: (Serving- 100g)

Nutrient	Value
Energy (Kcal)	180.00
Protein (g)	10.24
Carbohydrate (g)	26.80
Total Fat (g)	2.79
Total Fibre (g)	9.53
Calcium (mg)	66.80
Iron (mg)	3.61
Sodium (mg)	7.86

2. SPROUTED MOONG CHILLA (high protein, high fibre, iron-rich, gluten-free)

Preparation Time: 10 minutes

Cooking Time: 20 minutes

Total Time: 30 minutes

Total Servings: 2 (Quantity - 08 small chillas)

INGREDIENTS:

Whole moong, sprouted – 100 gm

Green chili – 2 gm

Coriander – 10 gm

Ginger-garlic paste – 3 gm

Oil – 15 gm

Cauliflower greens – 50 gm

Oats flour – 10 gm

Salt (To taste) - <1 gm

Cumin seeds – 2 gm

Mint coriander chutney

METHOD:

1. Make a paste of sprouted moong and oats flour in a mixer.
2. Grind ginger, garlic, green chilies and coriander leaves in a mixer to make a fine paste.
3. Finely chop cauliflower greens and sauté it in a fry pan.
4. Mix both the paste in sautéed cauliflower greens, add salt, cumin seeds and some water to adjust the consistency of the batter (You may either use immediately or set aside this batter for 2-4 hours before making chilla).
5. Take an iron tawa or pan, and heat it for a while. Then apply little oil and pour some batter to make round shaped chillas and shallow fry. Cook on both the sides.
6. Serve hot with mint-coriander chutney.

NUTRITIVE VALUE: Total Serving – 8 chillas

Nutrient	Value
Energy (Kcal)	537.00
Protein (g)	28.60
Carbohydrate (g)	56.70
Total Fat (g)	20.50
Total Fibre (g)	24.17
Omega 3 (mg)	413.00
Iron (mg)	10.00
Calcium (mg)	278.90

Mrinali Divecha
IDA/13890



Stay at home and Stay safe....Defeat Corona

- *Cook well before you serve and eat*
- *Use food safety and hygiene measures*
- *Take foods that boost immunity*
- *Wash your hands frequently*
- *Stay hydrated*
- *Maintain social distancing*



IDAGC ACTIVITIES (JANUARY – MARCH 2020)



Dietetics Day 10/01/2020 – Swasthyacon, Recipe Competition, Walkathon, Nutriducative talk



Run/walk for Fun 02/02/2020



World Cancer Day 04/02/2020 – Expert talk for college students and hospital patients



CNE on Living Well with Diabetes - 22/2/2020

International Women's Day 08/03/2020 – Panel Discussion, Bicycle Ride



World Kidney Day 12/3/2020 – Awareness Program

Hb Check Up Camp 19/3/2020

Dr. Bhavana Vaid, CONVENER

29, Kasturi
2, Silver Park
Amin Road, Rajkot 360001

<https://www.facebook.com/Indian-Dietetic-Association-IDA-Gujarat-Chapter-435282800003554/>

