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Diabetes मधुमेह



Healthy choices make a healthy world

Eating Right at Restaurants: Avoiding Metabolic Crisis

Certainly, eating out is an inevitable part of our lifestyle today. Reasons could vary from business travel, to socialising, peer pressure, to merely a hard core addiction for that 'feel good' factor when we dine at our favourite international cuisine.

Indeed, it can be handy to learn making better choices at restaurants, avoiding metabolic crisis and a myriad of chronic diseases.

The basic trick then would be to 'TREAT' ourselves at restaurants to either relish our taste buds, or satisfy that innate craving for our favourite cheesy pizza.

While on inevitable business trips, where eating out becomes mandatory, cut portion size to half, eating just sufficient to provide some fuel for energy. Restricting eating full meals at restaurants can reduce the load of the wrong fats, carbohydrates and sugars to body's acceptable limit, avoiding metabolic crisis.

If you are travelling and need to eat out frequently, try carrying a packet of trail mix (mixture of nuts of choice, peanuts, channa, and dry fruit), some fruit and a tetra pack of natural soy milk to fill up your hunger after meals.

The second trick would be to select restaurants offering healthier food choices. These include simple south Indian or traditional cuisines, or International chains and select cafe's with health menu options.

The all time winning strategy is never exceeding any meal beyond 350 kcal. This can be done by selecting either soup + salad OR starter+ dessert OR main course as meal options. Do not include a cocktail of all alternatives.

A simple universal tactic for reducing portion size and craving can be by increasing spice in food

Portion size has been researched to decrease with spicy food. Include roasted papad, a splash of red pepper flakes, fresh chopped onions or green chillies in meals (spice should be avoided in case of gastric reflux or other contra-indications)

The main goal while eating out is making choices that can help us manage our intake of saturated, unsaturated and trans fat within the recommended range, that are moderate in simple carbohydrates, low in sugars and artificial chemicals, while high in fibre. Some better options for this goal could be as below:

BETTER CHOICES AT A GLANCE: Better beverage options:

Coconut water, fresh vegetable juice, fresh lime water /soda (sugar syrup by the side), tea, coffee, skim milk hot chocolate (avoid the ones which use Belgium chocolate or chocolate syrups, select those which use chocolate powder)

Avoid colas, sweetened drinks, alcohol, mocktails.

Healthier Cheese Options:

Select Fresh cheese and limit portions: cottage cheese, cream cheese, feta, quark, mascarpone and ricotta are some Varieties of fresh cheese.

Parmesan: 1tbsp (~25kcal; higher in calcium, lower in sodium than other cheese, easier to digest)

Ricotta: 1tbsp (~28kcal, fresh cheese) Feta: 1oz (~76kcal, soft cheese, fresh

cheese, high in sodium)

Cottage cheese: (1/2 cup, ~ 117kcal, high in sodium, good source of protein and calcium)

Goat cheese: 1oz (~109kcal, easily digestible)

Gouda: 1oz (101kcal, high in calcium & sodium)

If you are dining at restaurants not offering these choices, limit the portion of cheese and creamy cheese sauces.

Alcoholic Beverages: (Never exceed 1 drink per day)

Wine (Red wine preferred): 110-130kcal per 5oz rich in antioxidant resveratrol

Champagne: 80-100kcal per 4oz can be rich in antioxidant, polyphenols

Beer (light Lagers) select only light, which can be between 100-120kcal made from barley, rice & other grains, not particularly healthy in large quantities

Bloody Mary: contains vodka, tomato juice, horseradish, Worcestershire sauce, Tabasco, celery, salt and pepper relatively low calorie, may have some nutrition value from ingredients other than vodka

Make your own plan to 350kcal:

- Missi Roti (1medium) = ~110kcal
- Tandoori roti, without butter (1 medium) = ~110kcal
- Yellow Dal, tadka ($\frac{1}{2}$ cup) = ~ 120 kcal; with tadka =~170kcal
- Chole/rajma ($\frac{1}{2}$ cup) = ~170kcal
- Dry vegetable, ghobi, bhindi, mixed veggies. (no kurma/makhani/gravy) (½ cup) =~100kcal
- Alu Mattar ($\frac{1}{2}$ cup) = ~150kcal
- Raita (request veggie; avoid boondi, ½ cup) = ~
- Paneer tikka, roasted or grilled kebabs (2pieces, 2oz) = ~150kcal
- 1 Tomato omelette (medium) with 1 cup Sambhar + chutney = ~260kcal
- Pesarattu or pulse based adai (lentil crepe) (One, 6" preparation, request less oil) = ~250kcal
- 1 Sada dosa with 1 cup sambhar + chutney= ~240kcal
- 2 Idlis with sambhar +2tbsp chutney = ~240kcal
- Usal ($\frac{1}{2}$ cup, 100ml) = ~175kcal
- Dhokla (1 square) + ~100kcal
- Clear soups or soups without cream (1 bowl-300ml) = ~60kcal
- Cream of tomato/vegetable soup/mushroom (3/4 cup) = ~175kcal
- Minestrone soup $(1 cup) = \sim 125 kcal$
- Citrus Salad with mushrooms and olives, light olive oil dressing (1/2 cup) = ~150kcal
- Greek salad (1 cup) = ~105kcal
- Pasta salad (1/2 cup) =~200kcal
- Fettucini with veggies (1/2 cup) = ~135kcal
- Caesar salad (classic), (1 cup) = ~200kcal
- Tabouli (½ cup) =~125kcal
- Whole grain grilled vegetable sandwich without cheese (1/2 large sandwich) = ~150kcal
- Grilled cheese sandwich (½ large sandwich) = ~200kcal
- 1/3 cups hummus + $\frac{1}{2}$ whole wheat pita (4oz) = ~260kcal
- Pasta with tomato sauce/spinach/plain (1/2 cups) = ~150kcal
- Thin crust whole grain pizza with less cheese and lots of veggie and mushroom toppings (2 slices) = ~ 250kcal——high in sodium
- Thin crust Vegan pizza—pizza without cheese (2 slices) = ~ 150kcal
- Egg omelette, plain (1 egg) /whole grain egg sandwich (½ sandwich)= ~ 175kcal
- Grilled fish with corn and leek, 4oz = ~250kcal 3oz lean (grilled) fatty fish -sushi (2 pieces), sashimi (mackerel, sea bass) = ~130kcal

- Low fat milk with coffee, or masala milk (1 glass, 200ml) = ~150kcal
- Tea, Coffee, hot chocolate, regular (1 cup, 200ml)= ~150-175kcal (request without sugar to reduce calories)
- Vegetable combination ($\frac{1}{2}$ cup) = ~185kcal
- *1 cup = 200ml = 8oz $*\frac{1}{2}$ cup = 100ml = 4oz *Fish/chicken 3oz= 85gm

Selecting large portions of simple (refined) carbohydrates such as white rice, noodles, pasta, pizza, white bread, naan bread, & sugary dishes, as well as fried and gravy starters can invariably slug the metabolism

Beware of your portions in Oriental Restaurants...

Those with hypertension, kidney disease or cirrhosis should avoid sodium rich food

Moreover, limit whole dairy products, lots of cheese and creamy sauces as these are loaded with saturated and trans fat. Furthermore, choose grilled dishes over fried ones, whole grains over refined ones, and lots of stir fried or sautéed veggies in Italian and oriental cuisines. Make sure to share your favourite dessert with a couple of friends.

Indeed, relish your meals out, but with awareness of that scrumptious flavour. In fact, awareness on the pleasure sensation triggered by food can help reduce portion size, providing satisfaction and satiety. Enjoy, and be wise to know that it is never the food, but the sensation of pleasure or comfort that makes us crave for larger portions. This simple awareness can help involuntarily reduce dependence upon food as a sole source of pleasure.

Therapeutic and Healing effects of Natural Herbs

Natural herbs and seeds traditionally used in International cuisines have known to be therapeutic since centuries, and science has recognized their biochemically active ingredients in recent times. Indeed, research has been carried out on herbs and seeds such as flaxseeds, fenugreek seeds (methi), cinnamon (dalchini), bitter melon (karela), and Indian gooseberry (amla).

Flaxseeds: (Alsi)

Undeniably, flax seeds have won applause from all over the world, for its protective heart effect. Flax seeds are rich in omega 3 PUFA, soluble dietary fibre and abundant in lignans, known for their phytoestrogen properties. This combination of

biologically active components accounts for their hypolipidemic, antiatherogenic, anti inflammatory, colon friendly and anti- carcinogenic potential. Moreover, as a low source of carbohydrate, high fibre and antioxidant content, flax seeds when added in meals have been shown to reduce the carbohydrate load and glucose levels in research studies. Marked with a high coefficient of digestibility for proteins and rich in vitamin E, regular consumption of 1-2tbsp of flax seeds in our meals can reduce the risk of major chronic diseases considerably, keeping us fit and healthy.

Fenugreek Seeds: (Methi Seeds)

In Ancient tradition, fenugreek is known to have anti-diabetic compounds, research now recognizes Fenugreek seeds as a metabolic regulator, beneficial in diabetes, high cholesterol, inflammation, gastrointestinal problems andhaving anti-tumour activity. Fenugreek contains abundant phenolic compounds, demonstrating high antioxidant activity thereby reducing oxidative stress mediated diseases.

Fenugreek can be made as an integral part of all cuisines, either as seeds or as a fresh green vegetable to enhance overall fitness, reducing the risk of several chronic diseases. Include at least 1tsp of fenugreek seeds in your meals every day, or include a cup of cooked vegetable at least 3 times a week as your leafy green choice. Nevertheless, most research of its therapeutic property has been carried out on seeds.

In some instances, an IgE induced allergic response has been shown to be mediated by fenugreek seeds.

Cinnamon: (Dalchini)

Certainly, cinnamon is the most promising spice with a range of therapeutic and protective effects, reducing the risk and recurrence of several threatening chronic diseases. Research indicates cinnamon as having an anti-microbial reducing insulin resistance and blood sugar levels. reducing serum cholesterol, as well as blood pressure, in addition to being a potent anti-oxidant and anti-inflammatory.

Cinnamon, by far is a spice encompassing cuisines and cultures universally. Studies indicate significant reduction in fasting glucose levels as well as serum cholesterol, with as little as 1g of cinnamon taken everyday. Up to 3-5g can be taken in rigid cases.

Add a dash of cinnamon to your tea or coffee, fresh vegetable juice, some more in vegetables, or beans every day and relish the taste, as well as enjoy the ensuing good health.

Bitter melon (Karela)

Bitter melon has been used extensively in various cultures for its anti- diabetic activity. Recent research also indicates an anti tumour, hypocholesterolemic and anti-inflammatory potential of bitter melon. Researchers demonstrated that 200g of bitter melon per day has significant hypoglycemic activity, reducing blood sugar levels considerably. In ancient Chinese culture, bitter melon is used for managing weight imbalance, and as a metabolic regulator.

Including approximately 5oz fresh bitter melon juice first thing in the morning and after meals can reduce blood sugar levels. Include a cup of cooked bitter melon vegetable with cinnamon, ginger, flax seeds and lemon juice, at least 4-5 times a week, and watch the drop in the blood sugar and cholesterol levels; a fine trick for metabolic regulation, good health and vitality.

Indian gooseberry (Amla)

Indian gooseberry is known to be a powerful source of vitamin C, useful in scavenging free radicals. In research studies, Indian gooseberry at 500mg per day is shown to have significantly inhibited platelet aggregationin type 2 diabetes patients, a function similar to aspirin. Moreover in other studies, Indian gooseberry has shown to exhibit anti-proliferative, anti- oxidative activity in cancer and peptic ulcer due to its high polyphenol and antioxidant content.

Include at least 5-6 chopped pieces of Indian gooseberry (unsweetened) everyday as in between snacks or as a part of your trail mix. Having it with meals may also aid iron absorption due to its high vitamin C content.

All in all, simple herbs, seeds and spices used as delicious flavouring agents are now being recognized to have potent therapeutic and healing properties for a myriad of chronic diseases. Include these liberally in your meals to enhance flavour and health.

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The Diabetes Epidemic: **Lifestyle Medicine** could hold the key

💪 Guest Author: Dr.Shveta Sanghani

Research has flared internationally, pointing at the positive effect of diet, exercise, and behaviour on curbing diabetes. It is possible in some cases to go off medications with simple lifestyle changes, if started early.

Recent research suggests that physical activity can play a major role in reducing insulin resistance, as well as elevated blood sugar levels. Nevertheless, the question always lingers as to what could be an ideal exercise prescription to combat this rise.

Incorporating a variety of exercises or sports, such as muscle strengthening strategies, yoga, chi gong, tai chi, karate and breathing exercises in particular, amongst others could make up the required blend to help reduce blood sugar levels. Exercise needs to be tailored to each person's requirements and abilities.

Breathing exercise regimens include relaxing breathing exercises, such as breathing through the throat, breathing with alternating nostrils, humming bee exercise and breathing with the rolled tongue.

After a few days, stimulating rhythms are started depending upon individual capacity. These include rapid exhalation, rhythmic inhalation and exhalation as well as other specific yogic regimens.

Breathing exercises can reduce inflammation, calm the stress response, balance the HPA axis and reduce insulin resistance significantly.

At least 20-30min of these breathing exercises are to be done everyday. Starting with lower repetitions and accumulating throughout the day.

Once the body is capable to take on more challenge, muscle stimulation and strengthening programme is started.

Simple band exercises, which work on major muscle groups, can be adequate and easily done at home.

Research suggests that muscle stimulation has insulin like effect, which significantly lowers blood glucose levels. The strengthening routine can reduce triglycerides as well. Research indicates that more the muscle in the body, as compared to fat, lower the risk of diabetes, related comorbidities, and complications.

10min. of band exercises about 15min. after every meal help to lower blood glucose levels.

Weights and fancy strengthening programmes at gyms can also be included depending upon individual fitness, capacity and interest after consulting the physician. At least 30min. of major muscle group strengthening 4 times a week, will need to be included.

Shaping up a cardio-pulmonary plan has indeed shown to bring down blood sugar, lose weight, and increase stamina.

Shaping the duration and intensity is crucial, which enables to continue the sport without a crash down.

Start slow with walking or alternating walking and jogging for 20-30min. per day. The duration can be shaped up to 30-45min. after one or two weeks, which is adequate to reduce blood glucose levels.

If looking for a weight loss, shape up to 60-90min. per day, splitting the routine to 2-3 sessions, 30min. each. The elliptical is a good work-out choice.

Other simpler options like walking in the office area, parking the car further away, taking stairs, walking in malls, or just walking while watching TV shows, can be some strategies to increase movement in hectic routines.

Exercise should be done according to individual capacity; a breathing exercise programme alone in many instances can regulate blood glucose levels.

On the other hand, if you enjoy high fitness, all the categories of exercise can be started at the same time. Moreover, Sports such as Karate, dance strategies or power yoga routines can be built-in as physical activity.

Certainly, the role of exercise in normalizing blood glucose levels and cutting the risk and complications of diabetes is significant. The major component for compliance to any lifestyle change, including exercise is the feel of enhanced fitness and a normal blood report. Self talk, resolutions based on will power, or pressure to enforce exercise routines could have a negative impact, limiting compliance in the long run

Certain precautions need to be taken during exercise by a person with diabetes –

- Adequate carbohydrate feed prior to exercise (1) so as to avoid hypoglycemia
- Adequate fluid intake
- Monitoring blood glucose with a glucometer Reduction in dose of insulin may be required in some cases

- Avoiding exercise when ketones are present Wearing comfortable footwear Certain exercises are to be avoided in patients with Diabetic complications such as proliferative diabetic retinopathy, neuropathy, heart disease and nephropathy.

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