



EAT RIGHT LIVE HEALTHY

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Editor's Desk

Dear Reader,

Welcome to the 3rd issue of KIMS e-newsletter on Wellness on the topic **'Eat Right - Live Healthy'**.

This is in continuation of our earlier topic wherein we discussed exercise, sleep, attitude, gratitude, habits, etc. to lead a healthier and happier life. Since FOOD is an integral part of our lives, we thought it fit to dwell more in detail on the subject exclusively in this issue. In that vein, the following pages will provide you ample **'Food For Thought'**.

We hope you will find it interesting and informative to tone up your health.

Every month **KIMS Newsletter on WELLNESS** will feature an article to achieve and accelerate your wellness that impacts your quality of life in varied ways. Last but not the least, we thank all our readers for their appreciation and encouraging feedback on our previous newsletters.

We wish you all well.

Dr. Bhujanga Rao Vepakomma

Chief Editor

NO FOOD - NO LIFE KNOW FOOD - KNOW LIFE

- *FOOD is considered equivalent to GOD among many cultures across the world. It is customary to offer prayer before and after eating food*
- *Every Mother tells her child - Food is gift of God. Always respect it. There are so many people in the world who don't get enough food*
- *Food is the elixir that sustains our life by providing energy and promoting growth and immunity*
- *The food we absorb has a journey. It leaves a footprint. It leaves a legacy. To eat with recklessness, without conscience and without knowledge is detrimental to the body and mind*
- *We need to savour food with joyfulness and gratitude*
- *Nothing would be more tiresome than eating if Nature has not made it a pleasure as well as necessity*
- *The purer the food, the better the mettle, the purer the mettle, the better the memory- exhort our scriptures*
- *In the good old days, it was meant to satiate hunger. People ate fresh homemade food and savoured the fruits of the season. They worked hard and slept well. There were not many health issues because what they did was a perfect recipe for good health*



They didn't 'indulge' in food but ate in moderation. Food was not stored in refrigerators eternally. Thankfully there were no packed foods. The food, as such, fuelled sound health and not otherwise.

Now many people are not governed by hunger but by cravings. Splurge and bingeing have become the buzz words and ill health a consequence.

We are flooded with a variety of diets promising weight loss and trim and fit body. One system suggests eating raw vegetables. Eat a lot of protein, no carbs- screams another. Eat only millets, insists another. Thus, there is an ocean of confusion. People hop from one system to another in pursuit of elusive good health. We don't know how many of these are scientifically proven though each one claims some kind of validation.

It should be understood that health doesn't mean the absence of disease. It means a whole lot of other things that include energy, enthusiasm, cheerfulness, agility etc. Food abuse is the cause of rampant disease across all ages and genders. It means two things. **EATING WHAT IS NOT RIGHT** while **NOT EATING WHAT IS RIGHT**

Food is a combination of macro and micro nutrients. The nutrients that are needed in large amounts and constitute the bulk of the diet are macronutrients. These are carbohydrates, proteins and fats. Other nutrients that are required in smaller measure are vitamins and minerals called micronutrients.

Mothers want their children to eat good food to be healthy. Healthy children with adequate nutrition learn better while productive in their pursuits.

Macronutrients: What's the deal?



Carbohydrates: Carbohydrates belong to the macronutrients and serve as the main source of energy. They are converted into glucose, which is the main source of energy for brain cells. The general recommendation for carbohydrates is 55-65% of the daily intake. The Food and Drug Administration (FDA) recommends 275 grams of carbohydrates in a 2,000-calorie diet. Carbohydrates are found in various forms in foods such as fruits, vegetables, nuts, seeds, beans and whole grains, jaggery, cane, baked foods, candy and desserts.

Simple carbohydrates are sugars that provide quick energy but quickly make you hungry again. Examples are white bread, sugar and candy.

Complex carbohydrates are long chains of sugar molecules that keep a person fuller for longer and have more health benefits than simple carbohydrates. This includes whole grains and foods that contain fibre. Examples are fruit, vegetables, whole grains and beans as well as millets, whole grain bread and wheat pasta.

Proteins: Proteins provide the necessary energy to carry our daily activities. We need proteins to maintain our muscles, bones, skin and every other organ and tissue in the body. The recommended daily intake of proteins is 15% to 25% of the total calories. All most all whole foods contain proteins. However, it is conceived more in foods like meat, fish, poultry, soy, legumes, nuts and seeds.

Our protein metabolism needs 20 amino acids and 9 of them cannot be made in the body. That means they are to be taken in the form of food only. Animal proteins contain all essential nine amino acids and are called complete proteins (Eggs, Poultry and Lean Meat).

However, the combination of plant proteins can meet daily protein needs (soya beans and soy products, tofu, nuts, whole beans and legumes).

Fats: Fats are the third important macro-nutrients. The daily recommendation for fats is 20-30% of the daily calorie requirement. Fats come in the form of saturated and unsaturated fats. Saturated fats should make up one-third of your total fat calories. Animal fats (butter, lard), tropical coconut and palm oils contain mostly saturated fats.

Unsaturated fats are omega 3, 6 and 9 fatty acids, which are healthy and acceptable (nuts and oil seeds, vegetable oils, fatty fish such as sardines, mackerel, salmon, safflower, soy and sunflower oils, nuts, seeds). Avoid trans fats and saturated fats contained in fried foods such as french fries, donuts, pies, cakes, cookies and other baked goods, crackers and margarine.

Vitamins: Vitamins and minerals are non-caloric nutrients

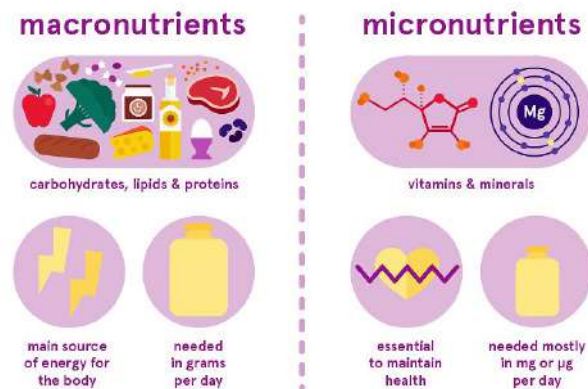


found in a variety of foods that are essential for regulating bodily processes, maintaining the body, and enabling growth and reproduction.

Fat-soluble vitamins A, D, E, K that occur naturally in fatty foods and are stored in the liver or in adipose tissue while water-soluble vitamins (Group of vitamins C and B complex) are not stored in the body. Although required

in minimal amounts, their role is enormous. Vitamins act as antioxidants and protectors. They convert food into energy and perform many vital functions in the body.

Minerals: Micronutrients are required by the body in small amounts and play an important role in many biological processes that support life, such as the digestion and absorption of nutrients and other regulatory functions of the body.



Minerals are classified according to their usefulness as major minerals (calcium, phosphorus, magnesium, sulphur, sodium, potassium, chloride) and trace elements (iron, zinc, iodine, selenium, copper). In general, a balanced diet takes care of the needed vitamins and minerals. However, if any deficiency is noticed, one has to take supplements as advised by the physician. Excess use of the supplements is not conducive though the market abounds with many juicy advertisements.

What is a balanced diet?

A balanced diet is one which provides all the nutrients in required amounts and in proper proportions. It can be achieved through a blend of basic food groups. What is natural suits you best than the manufactured items. Coconut water is the best health drink as against carbonated drinks.



How you eat and where you eat matters. Whether you eat sitting in front of a TV or computer or enjoy it sitting along with your family members makes a difference too.

Eating is not a mindless chore but should be a pleasure. One must savor the flavor, feel it and chew it to have the right benefit of food.

More is Better

Vegetables and fruits of a broad range, variety and whole grains like brown rice, brown bread, barley etc. are better.

Less is Better

Sodium intake is to be under 2300 mg. You tend to get more salt from processed and packaged foods than from what you add in the kitchen. Less of saturated fats like butter, cream, cheese and fatty meat are better. Foods that contain high amounts of saturated fat, added sugars and sodium are best avoided.

A balanced diet should provide around 50-60 % of total calories from carbohydrates, preferably complex carbohydrates, about 10-15% from proteins and 20-30% from FATS (where saturated fat should be less than 7%).

Fad diets

They are diets meant for losing weight – but at what cost?



People who aim to lose weight quickly get into the trend of fad dieting. While the pressure to stay fit and look good is constant, the fad diet is emerging rapidly. Generally they promise an assortment of short-term changes requiring little to no effort attracting the interests of uninformed consumers.

There is no single definition of what a fad diet is.

Although fad diets are ever-changing, most can be categorized in these general groups:

- Food-specific diets, which encourage eating large amounts of a single food like ketogenic diet.
- High-protein, low-carbohydrate diets, such as the Atkins diet.
- High-fiber, low-calorie diets, which often prescribe double the normal amount of dietary fiber
- Liquids or detox.
- Intermittent fasting.

Pros	Cons
Weight loss sounds too good	Lost weight bounces back when off the diet
Ensures calorie deficit when macro nutrients are restricted	Energy deprived, Fatigue and less active
Focusing or restricting specific food group aids in weight loss	Leads to micro nutrient deficiencies
Suppresses appetite	Increase the number of awakenings at night
Satisfies the consumer to the fullest (Ketogenic diet)	Increases the risk of cholesterol
Vegan diets ensure you more of vitamins and minerals.	Leads to cynacobalamin deficiencies
Detox diet ensures adequate hydration	Over eating is usually observed while off the diet
Dieting can improve overall life expectancy	Choosing a specific food group may results in organ damage

Best Diet for a Teenager

Teenager's generally experience high rate of metabolism compared to other groups. In tune with his metabolic rate, it is better to provide him a small meal at regular interval rather than large meals at longer duration. This will keep him active all day while preventing from over eating after each long interval.

Good versus Bad Fat

The polyunsaturated fats including monounsaturated fats are a healthy choice. Avoid saturated and trans-fats as much as possible to keep heart disease away and to lead a healthy and productive life.

Unsaturated or good fat examples: Fish, nuts and seeds, oils like olive oil, canola oil, mustard oil, flax seed oil, walnut oil etc.

Saturated and trans-fats or bad fats examples: Cheese, butter, deep fried foods, processed oil, fatty meat.

What are the benefits of South Indian Rasam?

South Indian rasam has been a daily affair in households for centuries. This watery juice does not have much calorific value. But, rasam is more than that – it contains a wealth of spices, as listed below, adding taste and nutritional value.

Cummins:	Source of phytonutrients, essential oil and anti-oxidants.
Mustard Seeds:	Source of rich nutrients, anti-oxidants and vitamin B-complex.
Coriander Seeds:	Source of minerals like copper, calcium, potassium, manganese, etc.

Fenugreek Seeds:	Source of minerals, vitamins and phytonutrients, dietary fiber.
Curcumin (Turmeric):	health benefits like digestive, anti-inflammatory, anti-cancerous
Cloves:	Source of vitamins like vitamin A and carotene, anti-inflammatory agent.
Saffron:	Source of anti-oxidant and anti-depressant properties.
Cardamom:	Source of volatile oils, minerals anti-oxidants.
Bay leaf:	Source of vitamins like niacin, pyridoxine, pantothenic acid, etc.
Cinnamon:	Source of anti-oxidants and anti-septic agents.
Garlic:	Promotes heart health, regulates BP, digestion and source of anti-oxidants

How to calculate physical activity level (PAL) which gives daily energy consumption

This is a very important numeric. It is proportional to amount of physical exertion in one day (or averaged over a week). This determines how many calories is consumed in that period to maintain the required activity. If weight is to be lost then you can increase your activity or weight is to be gained you can decrease the activity. Physical activity level (PAL) takes into account total daily energy expenditure (TDEE) and basal metabolic rate (BMR) as given below: $PAL = TDEE / BMR$

BMR stands for basal metabolic rate which is the minimum number of calories that a human body needs for basic functions like breathing, digestion, temperature maintenance over 24 hours. The average BMR is 1409 kcal for a woman and 1696 kcal for a man. Following Harris-Benedict equation remains the best practical estimation available for estimating BMR for all practical purposes.

For men: $BMR = (13.75 \times w) + (5 \times h) - (6.76 \times a) + 66$.

For women: $BMR = (9.56 \times w) + (1.85 \times h) - (4.68 \times a) + 655$. where weight (w) in kilograms, height (h) in centimetres and age (a).

TDEE is sum of the number of calories used in a day both at rest (BMR) and during physical activities which depends on body height, weight, age, body type and gender. Pedometer (which counts the number of steps taken in a day) can be used to reasonably determine TDEE apart from other methods. Rough equations for TDEE (as a measure of calories used) can be obtained using the following expression:

For sedentary people: $TDEE = \text{weight (in pounds)} \times 14$. For moderately active people (light duty workers, moderate exercising persons or amateur players): $TDEE = \text{weight (lbs)} \times 17$. For active people (heavy duty workers, those who exercise or play a sport daily): $TDEE = \text{weight (lbs)} \times 20$.

Place TDEE and BMR into the equation for physical activity level (PAL). Generally PALs fall in this range:

Inactive: less than 1.4.

Sedentary: 1.4 - 1.69.

Moderately active: 1.70 - 1.99.

Vigorously active: 2 - 2.4.

Extremely active: greater than 2.4.

The number of calories that is appropriate for you is dependent on your age, current size, activity level, sex, and goals. This method acts as a rough indicator and helps you arrive at diet estimations.

Does stress disturb eating habits?

Chronic stress is known to influence eating patterns, leading to overeating or undereating and neither is conducive to health. Stress-induced eating may be one factor contributing to obesity. Weight gain is one of the common problem when associated with stress with more changes seen in men. Stress-induced eating may be one factor contributing to the development of obesity. Stress raises the body's metabolic rate and induces the utilization and excretion of many nutrients.

- People who experience chronic stress may crave comforting foods such as highly processed snacks or sweets, which are rich in fat and calories but low in nutrients
- People feeling stress may lack the time or motivation to prepare nutritious, balanced meals, or may skip or forget to have meals
- Stress can disrupt sleep by causing more frequent awakenings, which lead to fatigue during the day. In order to cope with daytime fatigue, people may use



stimulants to increase energy such as caffeine or high-calorie snack foods. The reverse may also be true that poor-quality sleep causes stress

- During chronic stress, elevated levels of cortisol may cause cravings, particularly for foods high in sugar, fat, and calories, which may then lead to weight gain
- Chronic stress can also increase the risk of type 2 diabetes, cardiovascular diseases, high blood pressure and fertility problems can also leads to weight gain or loss

(Note: Readers are referred to read KIMS Newsletter on “Stress is bad but the good news is it is manageable”).

Food and nutritional labeling and its importance

A food label, the information presented on food product is one of the most important and direct means of communicating information to the consumer. This information, which includes items such as ingredients, quantity and nutritional values, can accompany the food or be displayed near the food to promote its sale.



Ensuring food safety is a shared responsibility between governments, producers, industry and consumers. Food labeling is one way in which consumers can get knowledge about the food they consider buying. Correctly following the information provided on food labels (such as expiry dates, handling instructions and allergy warnings) can help consumers prevent unnecessary food-borne illness and allergic reactions.

The Nutritional information on Food labels helps consumers to compare food products more easily. Nutritional label gives you information about which nutrients are present in food. Nutritional labeling makes significant impact on consumer health through declaration of nutrients.

Nutrition Facts	
6 Serving per container Serving Size	
Calories	245
Total Fat	317 mg
Saturated	30 mg
Trans Fat	21 mg
Salt	21 mg
Cholesterol	128 mg
Sodium	34mg
Protein	56 mg
Vitamin A	41 mg
Vitamin B	21 mg
Vitamin B 12mg	21 mg
Percent Daily Values are based on a diet of other people's secrets.	

By knowing how to use food label, you can understand how a specific food item can fit into your overall diet. You can more effectively and efficiently select foods and choose between products. So go ahead, check the label and manage your health better.

How does nutrition impact sleep patterns

It's no secret that both nutrition and sleep play a fundamental role in our health, but the complex and important relationships between them are frequently overlooked. Diet and nutrition can influence the quality of your sleep, and certain foods and drinks can make it easier or harder to get the sleep that you need. At the same time, getting enough sleep is associated with maintaining a healthier body weight. Recognizing the connections between sleep and nutrition creates awareness to eat smarter, sleep better, and live a healthier life.

- The link between nutrition and obesity, diabetes and heart health are well-known, but many people are unaware that their diet can also affect sleep
- Many studies found a lack of key nutrients, such as calcium, magnesium, and vitamins A, C, D, E, and K to be associated with sleep problems
- High-carbohydrate meals and high fat meals can affect one's energy level and sleep quality. In fact it has been shown to increase the number of awakenings at night and reduce the amount of sleep
- A balance between macro and micro nutrients will ensure a better quality of sleep
- Obesity is a key risk factor for obstructive sleep apnea. An unhealthy diet that contributes to excess body weight may cause or worsen this sleep disorder. Insufficient sleep has been associated in multiple studies with an elevated risk of obesity.



Drinking water plays a major role in maintaining good health.

In many households, guests are first offered water. Apart from quenching thirst it refreshes the body and mind.

Here are some reasons why our body needs plenty of water: It lubricates the joints for maintaining shock absorbing capacity and not leading to joint pain. Cartilage, spine disks remain healthy in the presence of sufficient water.

Water helps in formation of saliva needed to digest food and keeps the mouth, nose, and eyes moist. 90 percent of blood is water and it delivers oxygen throughout the body

Plenty of water makes the skin structure glow with proper functioning of sweat glands and prevents, premature wrinkling. Proper hydration helps to form a layer of cushion for the brain structure and helps its functioning.

Water helps in regulating the body temperature. Sufficient water in the body will reduce physical strain if heat stress occurs during exercise. The digestive system depends on availability of water for proper functioning. The bowel needs water to work properly devoid of constipation. Plenty of water is needed to flush body waste. Water is essential for the processes of sweating and removal of urine and faeces.

The kidneys regulate fluids in the body. Insufficient water can lead to kidney stones and other problems. According to the U.S. National Academies of Sciences, Engineering, and Medicine, the average recommended daily intake of water from both food and drink is: For men: Around 3.7 litres; For women: Around 2.7 litres. Around 80 percent of this should come from drinks, including water, and the rest will be from food.

Wrapping up discussion

- Eat a balanced diet.
- Eat in moderation. Excess of anything is bad.
- Eat homemade food. There is no substitute for this. However, if it's not possible, have a meal plan.
- Eat local & fresh food and not the one that had traveled miles and for days
- Eat fruits of the season
- Avoid processed foods
- Say No to junk food
- Eat fruits rather than drinking juices

FOOD IS GOOD PROVIDED YOU TAKE GOOD FOOD. OTHERWISE, IT WILL BE A RECIPE FOR BAD HEALTH.



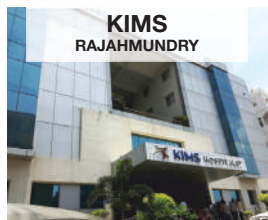
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We wish all our readers and their families a very happy Diwali



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