FOOD AS MEDICINE: AYURVEDIC PERSPECTIVE

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LET FOOD BE THY MEDICINE AND LET THY MEDICINE BE FOOD - HIPPOCRATES

UNWHOLESOME FOOD

Evolution!!!
GOALS of Ayurveda

Promotion of health in Healthy

Management of disease in sick person
PREVENTIVE CARE – Modern times

- We spend just about 2% of health spending on preventive care !!!

"Your insurance doesn’t cover the sniffles — come back when it develops into something more serious."
What is prevention?

- Early screening
Early detection of PROSTATE CANCER......!!!!
Specific and Non-specific prevention

- Vaccinations
Addiction prevention

[Image of no smoking sign]

[Image of no alcohol sign]
What is Ayurveda

The knowledge of healthy way of being in Harmony of forces of Nature / creation

Physically, Mentally and Spiritually
Eight Branches of Therapeutics

- Internal medicine
- Surgery
- Treatment of head and neck disease
- Gynecology, obstetrics, and pediatrics
- Toxicology
- Psychiatry
- Care of the elderly and rejuvenation
- Sexual vitality.
Rhinoplasty received its definitive origins about 600 BC ("Indian" method) - Prochno T PMID: 7844005
Ayurvedic medicine (also called Ayurveda) is one of the world's oldest medical systems. It originated in India and has evolved there over thousands of years. In the United States, Ayurvedic medicine is considered a CAM whole medical system.

At least 5000 years of Human use!!
Ayurvedic medicine holds that:

- Health will be good if one's mind and body are in harmony, and one's interaction with the universe is natural and wholesome.

- Disease arises when a person is out of harmony with the universe. Disruptions can be physical, emotional, spiritual, or a combination of these.
The aim of Ayurvedic medicine is to integrate and balance the body, mind, and spirit. This is believed to help prevent illness and promote wellness.

**Interconnectedness.** Ideas about the relationships among people, their health, and the universe form the basis for how Ayurvedic practitioners think about problems that affect health.
Stats

Use in the United States

According to the 2007 National Health Interview Survey, which included a comprehensive survey of CAM use by Americans, more than 200,000 U.S. adults had used Ayurvedic medicine in the previous year.
All things in the universe (both living and nonliving) are joined together. Every human being contains elements that can be found in the universe.
Sages who realized the science of Ayurveda observed the influence of changing seasons on the life.

The science of Ayurveda developed based on the laws of nature.
Macrocosm and Microcosm

WIND
SUN (Hot)
MOON (Cold)

VATA
PITTA
KAPHA
DOSHAS

Vata

Pitta

Kapha
Influenced by WIND
VATA body type
Influenced by HEAT
PITTA body type
Influenced by COLD KAPHA body type
Prime hours....

- 2 am – 6 am VATA
- 6 am – 11 am KAPHA
- 11 am – 2 pm PITTA
- 2 pm – 6 pm VATA
- 6 pm – 10 pm KAPHA
- 10 pm – 2 am PITTA
Prime age.....

- Child – KAPHA
- Adult – PITTA
- Elderly – VATA
Physiologically:

- **VATA** – Movement (Catabolic)
- **PITTA** – Transformation (Metabolic)
- **KAPHA** – Stability (Anabolic)

The three energies control all the prime functions of the body by coordinating with each other.
Diet and AGNI

- Valor, health, longevity and PRANA are dependent upon power of digestion and metabolism. When supplemented with whole some diet the power of digestion is sustained; it is vitiated when the diet is unwholesome.
SUSHRUTHA (500-300 BC) – Food is the PRANA of all living beings. It is the cause of life in all living and also responsible for normal strength, complexion and Ojas.

CHARAKA (800-500 BC) – Life sustaining force that flows through breath
Concept of AAMA

- Literally – Raw, Unripe, Immature

- VAGBHATA:
  - Due to the hypo-functioning of AGNI, the metabolites undergo abnormal transformation. The bi-products of such metabolism are either stored in the body since they are not reducible or block channels of the body resulting in disease
    - Hypertension
    - Coronary heart disease
    - Stroke
    - Gallbladder disease
    - Sleep apnea and respiratory problems
Causes for AMA

- CHARAKA –
  - Abstinence from food
  - Indigestion
  - Over eating
  - Irregular food habits
  - Incompatible food articles
  - Consumption of cold articles
  - Improper administration of Detox
  - Tissue loss as a result of emaciating disease
  - Change in Climate and season
  - Suppression of natural urges
Confusing the body and Metabolism
Diet recommended for all

- Rice
- Mung bean
- Saindhava salt / Himalyan salt
- AMALAKA fruit
- Barley
- Ghee
- Meat of the arid animals
- Raw honey
Tastes as Qualities

6 Tastes
Sweet
Sour
Salt
Pungent
Bitter
Astringent
Taste and Food

- **Astringent or Kashaya**: For this taste group, you can incorporate food substances such as lentils, cruciferous vegetables (i.e. Cabbage and cauliflower), beans, turmeric, and cilantro.

- **Bitter or Tiktha**: For this taste group, you can choose from various kinds of greens, fenugreek, bitter gourd.

- **Pungent or Katu**: For this taste group, you can use ginger, clove, black pepper, chili peppers, white daikon, radish, and mustard.

- **Salty or Lavana**: For this particular taste classification, common food choices include pickles, salty pretzels, or salt (but rock salt is best recommended in Ayurveda diet).

- **Sour or Amla**: For this taste group, you can intake lots of citrus fruits, lime, lemon, mango, tamarind, pomegranate seeds, among others.

- **Sweet or Madhura**: For this food group, you can incorporate sweets, cream, rice, wheat, ghee, milk, honey, butter, ripe fruits, and raw sugar.
Qualities of MADHURA and its actions

Unctuous, Heavy, Cold

• Since the sweet is nourishing in its qualities it
  o Increases all the seven tissues
  o Satisfies all the sense organs and Mind
  o Provides strength
  o Reduces PITTA
  o Quenches thirst and soothes burning
  o Develops sense of love and affection in disposition

Madhura- Water+ Earth-K increase
  P decease
  V decrease
Over use of Sweet taste

- When consumed in excess it causes
  - Obesity
  - Flabbiness
  - Lethargy
  - Abnormal sleep
  - Tastelessness
  - Decrease in AGNI
  - KAPHA diseases
Qualities of AMLA and its actions

Light, hot and unctuous

- As it increases sense of taste in the food it brings about
  - Increase in the AGNI (Fire)
  - Stimulation the Mind
  - Stabilization the sense organs
  - ANULOMANA of VATA and PITTA
  - Beneficial to heart
  - Increases salivation

Amla- Earth+ Fire-K increase
  P increase
  V decrease
Over use of Sour taste

- When used in excess it causes
  - Sensitivity of the teeth
  - Excessive thirst
  - Irritation of eyes
  - Increases PITTA and KAPHA
  - Blood looses its composition
  - Burning sensations in the skin
Qualities of LAVANA and its actions

Moderately hot, unctuous and heavy

- Since it is Digestive, lubricating, Appetizing, eliminating, brings about
  - Reduction in VATA and KAPHA
  - Addresses to constipation and flatulence
  - Increase in the secretions
  - Cleanses the channels of the body
  - Produces softness of the organs

- Lavana- Fire+ Water- K increase
  - P increase
  - V decrease
Over use of SALT taste

- When consumed in excess it causes
  - Increase in PITTA
  - Changes the configuration of BLOOD
  - Excessive thirst and giddiness
  - Makes one prone for infective diseases
  - Causes skin ailments
  - Malfunctioning of sense organs
Qualities of KATU and its actions

It has Light, hot, Dry and Sharp qualities

- As it has cleansing action it does
  - Increase of the appetite
  - Help in absorption of the excess secretions
  - Watering of the nose and eyes
  - Removes accumulated fat and fluids
  - Reduces KAPHA
  - Produces compact muscle
  - Eliminate the parasites

Katu (Pungent) Air+ Fire- K decrease
P increase
V increase
Over use of PUNGENT taste

- When used in excess it causes
  - Low Libido
  - Masks the clear functioning of the sense organs and mind
  - Produces aggression
  - Reduction in the body mass
  - Burning sensation in the stomach and intestines
Qualities of TIKTA and its actions

- Since this taste disrupts the sense of taste it has
  - Elimination of the toxins
  - Anti – parasitic in nature
  - Reduction in excessive thirst, burning sensation, itching and skin eruptions
  - Has drying action on the body tissues and fluids

Tikta (Bitter) - Space+Air- K decrease
P decrease
V increase
Over use of BITTER taste

- When used in excess it causes
  - Reduction in the body mass
  - Restlessness
  - Improper coordination of mind and body
  - Dryness of the entire GIT
  - Increases VATA
Qualities of Kashaya and Its action

- It comprises of Ruksha, Sitha, Guru.
  When taken internally it helps to tighten and toughen the tissue of the body by absorbing excess fluids.
  It is used in the general treatment of Diarrhea, Hemorrhage and wound healing.

  Kasaya(astringent) Air+ Earth- K decrease
  P decrease
  V increase
Over use of Kashaya Rasa

Over use causes

- Dries up the mouth
- Causes pain in the heart region, distention of the abdomen
- Causes obstruction of srotas.
- Increases Vata
Balancing the energies through taste

- **Vata**
  - Balancing - Sweet, Sour, Salty
  - Aggravating - Bitter, Pungent, Astringent

- **Common vata disorders are**
  - Arthritis, Muscle stiffness, Headache, Dry skin, Constipation, Insomnia, Gas and bloating, Low back pain, Chronic fatigue etc.
• **Pitta**
  ○ Balancing - Sweet, Bitter, Astringent
  ○ Aggravating - Sour, Salty, Pungent

• **Common Pitta Disorders are:**
  ○ Skin diseases, ulcers, Acidity, fever, inflammation and irritation
• **Kapha**
  - Balancing - Pungent, Bitter, Astringent
  - Aggravating - Sweet, Sour, Salty

• **Common Kapha disorders are**
  - Obesity, Cholesterol, edema etc
Utilization of tastes while eating the food

- First start with
  - Sweet
  - Add sour and salt after
- Middle of the meal
  - Middle – Bitter, Astringent
- End the meal with
  - End – Pungent
Mishreya – Foeniculum vulgare

Name: Mishreya/Fennel

Taste: Pungent, bitter and stringent
Qualities: Light
Post digestive transformation: Pungent
Potency: hot

Action on DOSHAs: Reduces K and V

Indicated as best digestive spice
Useful in indigestion, Diarrhea, Dysentery, constipation, abdominal distention, abdominal pain, beneficial for the heart, eyes, heals wounds
Metika – Trigonella fenugreecum

Sanskrit name: Metika
Botanical name: Trigonella fenugreecum

Taste: Bitter
Little pungent
Qualities: Unctuous and light to digest
Potency: Cold
Post digestive transformation: Pungent
Action on Doshas: decreases Vata and Kapha.
Other actions: Increases digestive fire, reduces bloating, increases lactation, reduces edema and helps in proper elimination of stools.
Dhanyaka – Coriandrum sativum

Sanskrit name: Dhanyaka
Botanical name: Coriandrum sativum

Taste: Slightly bitter and astringent.
Qualities: light and mildly oily.
Potency: Cold
Post digestive transformation: Sweet
Action on Doshas: decreases Pitta and Kapha.
Fresh leaves alleviates all the thridoshas.
Other actions: Digestive, Carminative,
Increases urination, reduces thirst and
burning sensation, helps in digestion of
undigested food. Calms the Mind.
Ela – Elactaria cardamomum

Sanskrit name: Ela
Botanical name: Elactaria cardamomum
Taste: Pungent
Little bitter and sweet
Qualities: Dry and light to digest
Potency: Cold
Post digestive transformation: Pungent
Action on Doshas: decreases Pitta and Kapha.
Other actions: Increases taste, reduces bad breath, and relieves uterine disorders, cough, dyspnoea, and difficulty in micturation.
Mango:
Sanskrit Name: Amra
Botanical name: Mangifera indica

- Rasa (Taste): Sweet, when ripe and slightly sour when not riped.
- Guna (Qualities): unctuous, light to digest/ when not ripe dry
- Veerya (Potency): Cold/ hot when not ripe
- Vipaka (Post digestive transformation): Sweet/ sour when not riped.
- Action on Doshas: Reduces Vata, increases Pitta and mildly Kapha
- Other actions: Fully ripe Mango acts as a Aphrodisiac, increases the muscular strength, nourishes all the tissues, improves digestive power, good for heart, improves color and complexion.
Grapes:
Sanskrit Name: Draksha
Botanical name: Vites vinifera

Rasa (Taste): Sweet and slightly astringent/ unripe sour
Guna (Qualities): Heavy
Veerya (Potency): Cold/ unripe hot
Vipaka (Post digestive transformation): Sweet/ unripe sour
Action on Doshas: Reduces Vata and Pitta, increases Kapha
Other actions: Nourishing, beneficial for Eyes, good for throat, increases digestive fire, good for the skin, mild laxative, reduces the burning sensation of the eyes.
• Sanskrit Name: Dadima
• Botanical name: Punica granatum
• Rasa (Taste): Sweet and slightly sour
• Guna (Qualities): light to digest
• Veerya (Potency): Cold
• Vipaka (Post digestive transformation): Sweet
• Action on Doshas: Reduces all three doshas, but when sour mildly increases pitta
• Other actions: Good for heart, relieves indigestion, destroys bad breath, reduces thirst, burning sensation, and reduces fever.
**Banana/ Plantain:**
- Sanskrit Name: Kadali
- Botanical name: Musa paradisiaca

- Rasa (Taste): Sweet
- Guna (Qualities): Unctuous, soft and Heavy
- Veerya (Potency): Cold
- Vipaka (Post digestive transformation): Sweet
- Action on Doshas: Reduces Pitta, increases Kapha
- Other actions: Removes impurities of blood, skin disorders, relieve thirst, burning sensation, nourishing, promotes strength, increases the bulk of the muscles.
Ayurvedic concept of food

• Balanced diet is essential for good health.

• Ahara and achara i.e. diet and behavior are extremely important consideration in Ayurveda.

• The basic theme of good diet lies in mitahara (small quantity and easily digestible food).
Ayurvedic concept of food

- While taking food, half of the stomach should be filled with solid food, one fourth with liquid food, and rest one forth should be left empty for air and easy digestion of food.
Ayurvedic concept of food

- Only one kind of diet should not be taken continuously and in excess quantity in order to preserve digestive power and vitality balance.

- Food containing different rasa (tastes) and guna (properties) should be consumed so that all necessary nutrient are obtained.
Ayurvedic concept of food

• According to Charaka the biological body is born out of the ahara.
• Pathya is that diet which promotes health and brings about happiness to the body and mind and balance the panchmahabhootha constitution without obstructing the channels.
Ayurvedic concept of food

- Following factors play important role apart from elemental constitution of food, in the acceptability of wholesome diet.
  - Matra- Quantity
  - Kala- Time or season
  - Kriya- Mode of preparation or cooking
  - Bhumi- Habitat
  - Deha- Constitution of person who has to eat
  - Desa- The body humours (microcosm) and the environment and climate (Macrocosm)
Eight factors determining the utility of food

- Ayurvedic classic describe 8 rules of taking diet, apart above 6 factors which mainly related to food intake.
  - Prakruthi; Nature of food article
  - Karana: Method of their processing
  - Samyoga: Combination
  - Rasi: Quantity
  - Desa: Habitat or climate
  - Kala: Time
  - Upayoga smastha: Rules governing the intake of food
  - Upayokta: Wholesomeness of individual who takes it.
Samskara (processing)

- By processing, one introduce several properties in the food.

- The processing results in the transformation of the inherent attributes of the dietary substances.

- Transformation of attributes is effected by means of dilution, application of heat, cleaning, churning, storing, maturing, flavouring, impregnating, preservation container etc.
Rules governing the intake of food

- **One should take warm food**: Helps digestion
- **One should take unctuous food**: It provokes subdued power of digestion
- **One should take food in proper quantity**: Promote longevity
- **One should take meal only when previous meal is digested**: If not, provoke the dosha imbalances
Rules governing the intake of food

- One should take food having no contradictory potencies
- One should take food in proper place
- One should not take food too hurriedly
- One should not take food very slowly
- One shouldn’t talk or laugh during taking food and should take food with all full concentration
- One should take food in prescribed manner, with due regard to oneself.
Dietetic incompatibility

• Everybody should avoid consuming incompatible dietary article together.

• This principle is very important while cooking and preparing food.

• Incompatible food should considered similar to poisoning and artificial poisoning
Milk incompatible with-
- Bananas
- Fish
- Meat
- Melons
- Curd
- Sour fruits
- Cherries
Three aspect of dietary incompatability

- Mutually contradictory biological or chemical qualities among different component of diet which are taken together

- Incompatibility due to prakrti or constitution, nature and conduciveness or otherwise of person who is taking

- Incompatibility with contemporary place and time.
Brmhana samanya and Langhana Samanya

- Food which are heavy, oily, cool, soft, have the properties of increasing total tissue and body weight. Those foods are known as **brmhana samanya**.

- Food which are light, hot, dry, and hard have the properties of decrease in total tissue mass and body weight are called **Langhana samanya**.
Psycological influence of food

- Three fold Psychic effect of food can be determined by knowing its elemental constitution, external appearance, its rate of digestion after intake, metabolism and its vital and mental effects.
  - SATWIK
  - RAJASIK
  - TAMASIK
Satvic diet

- Pure and ideal for promoting satva guna in systems.
- Satvic diet may not provide enough nutrition and nourishment particularly individual involved in physical labour.
- Such diet orientates the mind and provides a better sense of sympathy and compassion.
- Out of six rasa madhura rasa is considered as satvika because of its pleasing, satisfying, harmonizing and readily nourishing properties.
- Most of the fruits considered as satvika
- Rice is considered as satvika among the grains.
Satvik diet should be simple, uncomplicated or not mixed particularly with incompatible items.

- It should be easily digestible minimal in quantity and infrequent.
- The principal meal should be usually be taken in the noon time.
- Heavy meal should be easily avoided after sunset.
RAJASIK diet

- This diet augments activity and agility.
- It consists of tasty, delicious, spicy, salty and sour food such as chilies, garlic, onion, pickles, vinegar, wine.
- Meat especially red meat is rajasik and also tamasik.
- Strong tea, coffee and alcohol are rajasik.
- Rajasik food may cause hyperacidity, irritability, restlessness and insomnia.
- It may cause hypertension, dyspepsia, peptic ulcer, anxiety, nervousness and manic episodes.
**TAMASIK diet**

- Tamasik diet includes inactivity and inertia.
- It include fermented and stored food.
- Heavy, dull, difficult to digest.
- All stored, old, recooked, rancid, artificial, highly oily, greasy and heavy food should be considered tamasika and should be avoided.
References:

THANK YOU
Beat the Naturally

AYURVEDIC SUMMER REGIMEN
Ideal conditions – Example

- Temperature – 60 to 70 °F
- Humidity – 40 to 70 %

Too hot
Perspiration
The effects of hot

- By the influence of heat – “Days are longer”
  All the life such as flowers, fruits, vegetables, Water etc., are influenced by Bitter, Astringent and Pungent tastes
  Also reduction in energy, strength and vitality in human beings
Summer the season of PITTA

- The intense heat in the external environment increases the PITTA

- Influence on Body –
  - Sensitivity of eyes
  - Skin rashes
  - High blood pressure etc.,

- Influence on Mind –
  - Irritation
  - Anger
  - Impatience
Routine for SUMMER

- Diet –
  Tastes – Primarily SWEET, ASTRINGENT and SOUR

  Quality – light to digest

  Cereals – Rice, Spelt, Barley

  Pulse – Mung and lentils
Diet –

Meat – Fresh water fish, Goat, Lamb, Chicken (less), No eggs

Dairy – Butter milk, Curds (little in the afternoon), Low fat milk, Cottage cheese, Goat cheese

Fruits – Grapes, Melons, Pomegranate, Lemon, Mango, Musk melons, Banana, Berries, Dates, Coconut
Routine for SUMMER

- **Diet** –
  - **Vegetables** – Spinach, Squash, Asparagus, String beans, Lotus bulbs, Amaranth, Purslane, Fenugreek, Bitter guard, Dandelions, Sweet potato, Yams, Cucumber, Lettuce, Kale, Collards, Scallions, Onions
  - **Spices** – Cardamom, Coriander, Funnel, Cumin, Turmeric, Ginger, Poppy seeds