Knowledge Management

To Own And To Share

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Knowledge Sharing is the Learning, Learning is the Knowledge Sharing

Sharing is all about leaving a legacy behind for others to treasure

knowledge sharing is innate to our human nature of wanting to connect and collaborate with others

Power = Knowledge Shared

Knowledge management

It is an emerging set of principles, processes, organisational structures, and technology applications that help people share and leverage their knowledge to meet their business objectives."

is a business philosophy

focus and responsibility on the individual

it is about meeting business objectives

Fundamentally about sharing knowledge and putting that knowledge to use

To this add Social responsibility, Protecting environment and touching human life

The image of science will suffer if people do not see any value for the money being spent on it and if it does not touch their life

Context for Knowledge sharing

Sharing amongst Industries, Universities, Research Institutes, Government

Pertaining to food industry

Strong association with health of the nation

Most cost effective solutions to prevention of life style diseases

From Farm to Fork: Entire supply chain

India advantage

Global context, Global leader

Social responsibility: Touching human life

Negative Impact of Poor Health

INDIA LOSES COMPETITIVE EDGE DUE TO POOR HEALTH, INFRA

Slips to 51st position in the global business competitiveness index

RANK LIST

BS REPORTER New Delhi, 9 September

ven as emerging markets in Asia showed impressive gains in global business competitiveness in 2010, India slipped two notches to the 51st position over the previous year due to poor health, education and infrastructure facilities.

The ranks, based on the Global Competitiveness Report 2010 released by the World Economic Forum (WEF), continued to have the developed economies of Switzerland, Sweden, Singapore, the US and Germany in the top five.

Among the BRIC nations — Brazil, Russia, India and China — only China improved its position in global competitive-

| TOP 5 | Rank 2009 | Rank 2010 | Change |
|----------------|-----------|-----------|--------|
| Switzerland | 1 | 1 | . 0 |
| Sweden | 4 | 2 | 2 |
| Singapore | 3 | 3 | 0 |
| US | 2 | 4 | -2 |
| Germany | 7 | 5 | 2 |
| BRIC | | | 6 11 |
| Brazil | 56 | 58 | -2 |
| Russia | 63 | 63 | 0 |
| India | 49 | 51 | -2 |
| China | 29 | 27 | 2 |
| Other Asian ec | onomies | | |
| Sri Lanka | 79 | 62 | 17 |
| Indonesia | 54 | 44 | 10 |
| Vietnam | 75 | 59 | 16 |

a future economic landscape characterised by uncertainty and shifting balances. It is more important than ever for countries to put into place the fundamentals underpinning economic growth and development," said Klaus Schwab, founder and executive chairman of WEF.

Switzerland topped the ranks, backed by robust capacity for innovation and "a very sophisticated business culture" while European countries like Germany, Poland and France improved their ranks, with increased focus on infrastructure and social development sectors.

Mongolia, ranked 99th in the latest report, was the highest gainer climbing 18 positions, followed by Sri Lanka, which gained 17 positions to be 62nd.

An Unhealthy Nation Has A Higher Carbon Foot Print

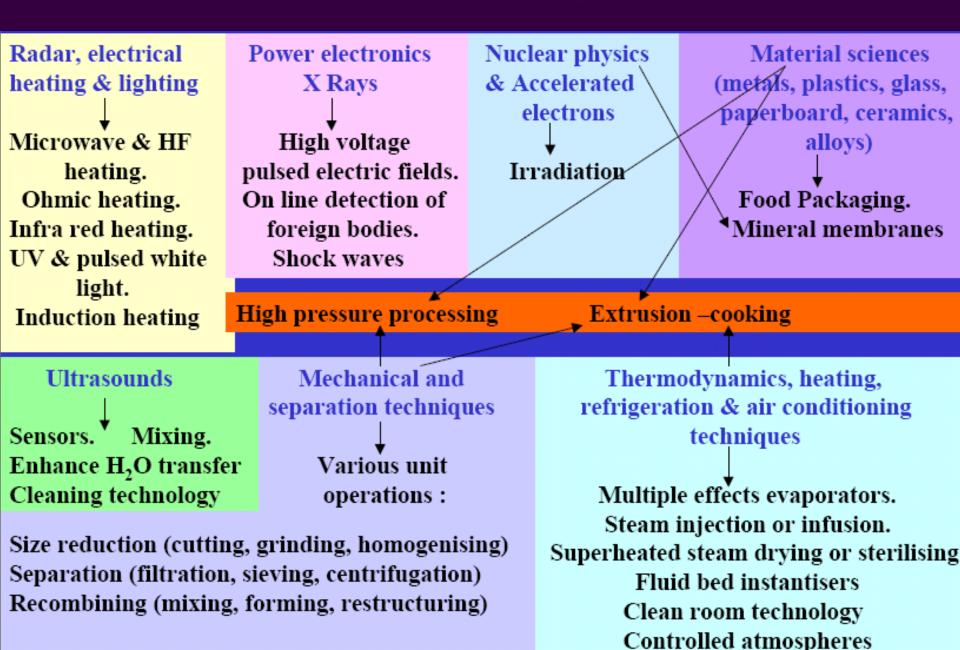
Advantage India: An Opportunity

- A biodiversity hot spot
- Many years of traditional wisdom
- Leader in Ayurveda, aromatherapy
- Herbs and spices used traditionally in food preparations
- Diversity in cereals, lentils and vegetables
- Rich and diverse food habits and cooking styles
- Pan Indian/ Pan global taste development
- Revival of interest in traditional wisdom
- Only 5% of food sold is packed and branded
- Only 2% of vegetables and fruits processed
- Capital of Life style diseases

Herbs, contain healthful compounds that are supported by research to various extents Current research with in vitro tests show that for crude spice extracts, at least, anticarinogeneis can be obtained with only a few ppm.

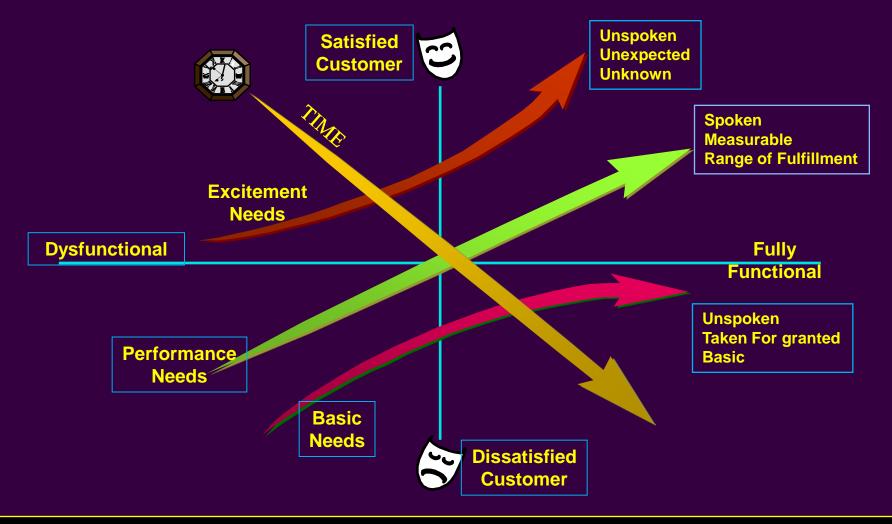
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Food Technologies: Physics Perspective





Extended Kano Model

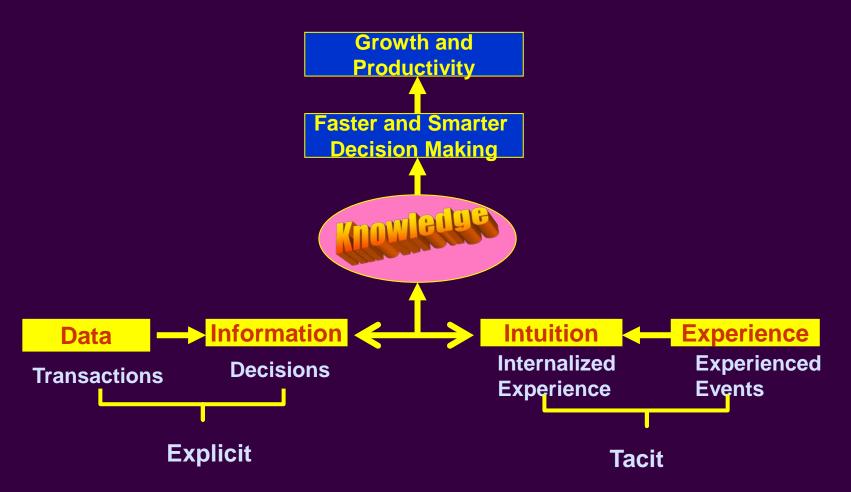


Customer Needs Change With Time, Customer Voice Depends On Need Type

Increasingly the only sustainable competitive advantage is continuous innovation which is application of new knowledge.

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Knowledge Management



"Our problem as an organisation is that we don't know what we know".

Knowledge

Tacit Vs explicit

Art Vs Science

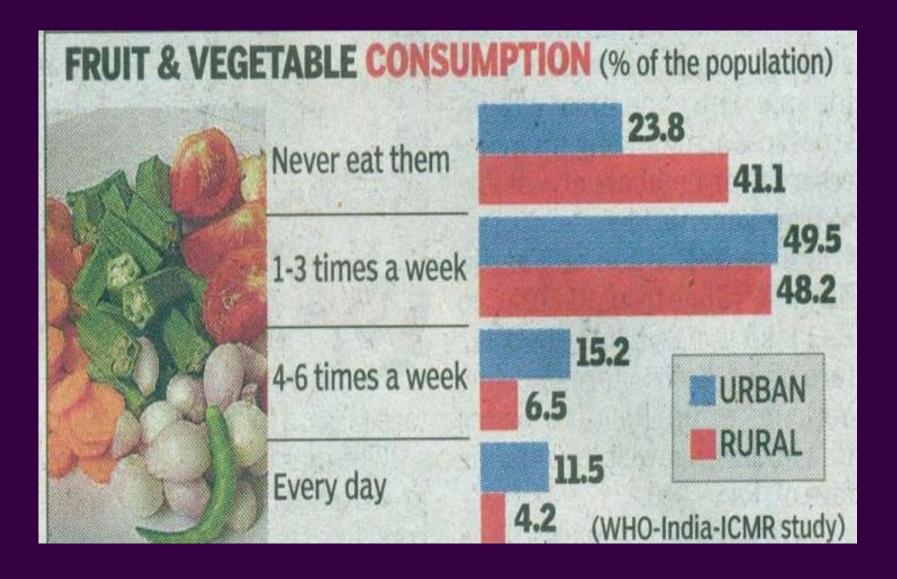
Own Vs Share

Should A Chef

Own or Share

His recipe

Hard Facts: Reality Check



Hard Facts: Reality Check

10-Yr-Olds Too Hit; Blame Obesity, Diet, Lifestyle All of 10 years and diagnosed with type 2 diabetes? In a worrying trend noticed in Bangalore.

20 to 30 per cent of schoolchildren in Delhi have resistance to the action of insulin, which is the central feature of metabolic syndrome. Most of these children have obesity, high TG, blood sugar and excess fat on the chest and abdomen,"

10 per cent of school children in Punjab had Gluten allergy Delhi children were found to have a higher incidence of obesity Compared to those from Mumbai and Ahmedabad.

Indians are more susceptible to not just heart diseases, but certain kinds of cancer and mental disorders as well.

Environmental factor like low birth weight, malnutrition also possibly predisposes Indians to increased risk of diabetes and heart attacks in adulthood.

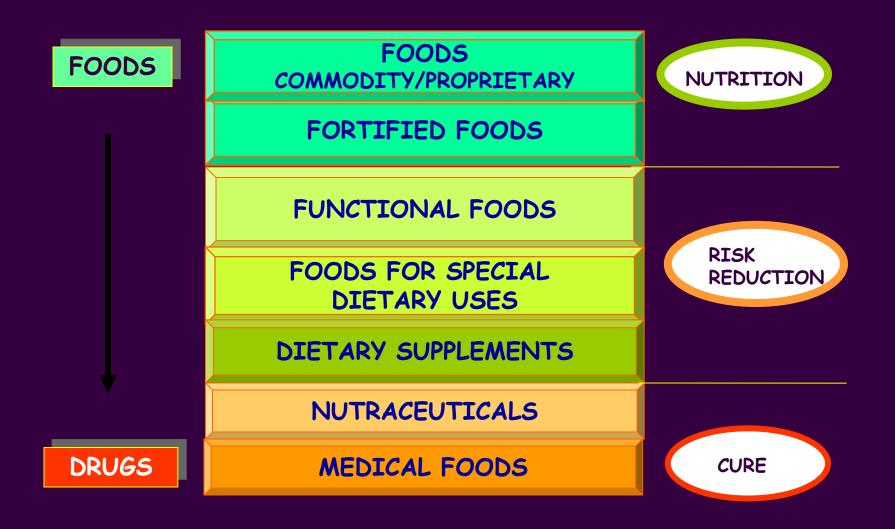
Choice making

| Past | Present | Future |
|-----------------------|-----------------|---------------|
| | Taste | Taste |
| | Convenience | laste |
| Taste | | Solution |
| Level of Hunger | Health | Enhancement |
| | Life style | Sustainable |
| Local availability | Trendy | Justamable |
| Seasonal availability | C. f. l | Improvement |
| Traditional | Safety | Antiaging |
| | Packaging | Made for me |
| | Experimentative | |
| | | Communication |
| | Cost | |

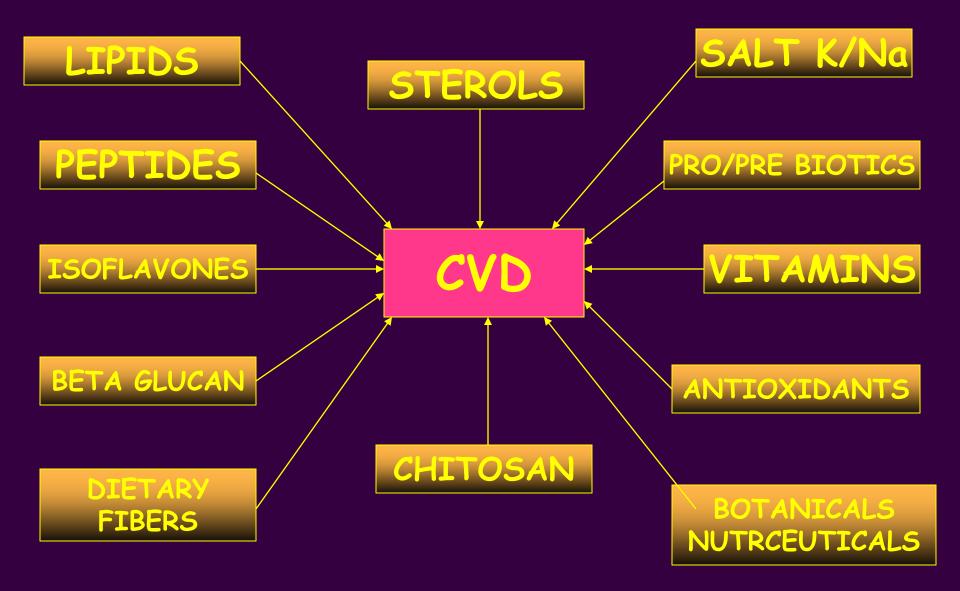
Choice Making

| Past | Present | Future |
|---------|-----------------|---------------------|
| Family | Individual | Biotechnologists |
| | Doctors | Internet |
| | Nutritionists | Sustainability |
| | Dietician | Nutrogenomics |
| | Labelling | Proteomics |
| | Peer group | Metabolomics |
| | | Molecular Nutrition |
| | | Food vs Fuel |
| | | |
| Good | Different foods | Personalized |
| For all | for different | |
| | People | |

FOOD CATEGORY MOVEMENT: OPTIMUM NUTRITION



Functional Foods and CVD



Framingham Heart Study by NHLBI

Started in 1948 under the direction of NHLBI committed to identifying the common factors or characteristics that contribute to cardiovascular disease (CVD).

The overall mandate to the Heart Study at its inception in 1948 was to determine, using epidemiologic techniques, why humans develop atherosclerotic disease of the heart, brain and other vessels.

CVD development followed over a long period of time in three generations of participants. (1948, 1972, 2002)

Framingham Heart Study, Boston University School of Medicine, National Heart, Lung, and Blood Institute, Boston University College of Arts & Sciences, Framingham Heart Study Genetics Lab, Boston University School of Public Health, National Center for Biotechnology Information

The Friends of the Framingham Heart Study was formed in 1991 as a community based organization to provide supplemental support for the research activities of the Framingham Heart Study and advocacy for the participant population. It is a 501C3 non-profit organization with taxexempt status and is supported solely by donations.

Reducing incidence of Diabetes: A collective fight

World capital of Diabetics: 50.8 million (China 43.2)

Disease at younger age: New challenge

Costs Rs 13000 Cr per year: Economic Intelligence unit 2007

Extent to which genes predispose or exacerbate diabetes are largely unresolved

Relationship among diabetes and related conditions such as CVD, Obesity and hypertension unclear

CSIR to track causes, mechanism of type 2 diabetes. Indian Diabetes
Consortium a Rs. 100 Cr initiative that involves researchers Physicians from
centers such as Inst of Genomics & Integrative Biology, AIMS

It is undineable that exercise and proper diet may be enough to control the disease

Knowledge Sharing

Consortiums to generate knowledge specific to Indians/ India

Multidisciplinary Scientific meets and work shops

India specific statistics

Demographic/ Epidemiology

Industry+ Academics + Govt

most effective use of IT

Making students a part of this sharing

Joint clinical and epidemiology studies

Exploit India advantage fully to be a global leader

Publish as much as you can

Thank you