WHY ORGANIC FOOD?

COMPILED BY

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AND

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January 2012
## WHY ORGANIC FOOD?

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Slide No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MOFF Network &amp; Principal Activities</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Action steps for the promotion of organic farming</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>Definition of organic farming</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>Organic status at a glance</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>Organic Production &amp; demand mismatch</td>
<td>49</td>
</tr>
<tr>
<td>6</td>
<td>Concerns of producers &amp; procurers</td>
<td>50</td>
</tr>
<tr>
<td>7</td>
<td>Comparison of mineral content in dung &amp; milk of indigenous &amp; cross-bred cows</td>
<td>54</td>
</tr>
<tr>
<td>8</td>
<td>Impact of chemical contamination in food material on human health</td>
<td>56</td>
</tr>
<tr>
<td>9</td>
<td>Organic food – why should care ?</td>
<td>61</td>
</tr>
<tr>
<td>10</td>
<td>The chemistry of poison</td>
<td>63</td>
</tr>
<tr>
<td>11</td>
<td>In which way pesticides harm your health ?</td>
<td>64</td>
</tr>
<tr>
<td>12</td>
<td>Exploding the myths -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Common questions &amp; misconceptions about organic food</td>
<td>65</td>
</tr>
<tr>
<td>13</td>
<td>Interesting contacts &amp; addresses</td>
<td>73</td>
</tr>
</tbody>
</table>
MAHARASHTRA ORGANIC FARMING FEDERATION, PUNE

State level federation of :-

- Farmers
- Stakeholders
- Environmentalists
- NGOs
- Consumers

Contact – Vikram Bokey IPS (R)
Chairman, MOFF
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Deep Bungalow Chowk, Model Colony, Pune – 411 016
Tel No. (020) 25659090 (Tel fax) / 32907302
Email: moffpune@gmail.com,
Website: www.moffindia.com
OUR AIM

• Transfer of technology for Sustainable Agriculture to farmers at grass root level
• Promotion of low-cost, no-debt, sustainable production of agricultural crops & prevent farmers’ suicides.
• Training for value addition, grading, packing, labeling & marketing
• Certification of Organic farms
• Women participation & empowerment in Sustainable Agriculture
• Awareness of poison free organic food consumption in the urban society
• Facilitate marketing of organic food from farmers directly to the consumers.
• Publications.
COORDINATION WITH

- Food & Agriculture Organization - United Nations (FAO - UN)
- International Institute For Sustainable Agriculture, Pune (IISA)
- International Competence Center for Organic Agriculture, Bangalore (ICCOA)
- Gene Campaign, New Delhi
- Center for Environment Education, New Delhi (CEE)
- Research Foundation for Science, Technology & Ecology, New Delhi
- The Covenant Center for Development (CCD), New Delhi
- Department of Biotechnology, New Delhi (DBT)
- Organic Farming Association of India, Goa (OFAI)

contd
• National Center of Organic farming, Ghaziabad (UP)
• Commissioner of Agriculture, M.S, Pune
• MITCON, Pune
• AFARM, Pune
• Department of Agriculture Animal Husbandry and Dairy Science, M.S.
• Mahatma Phule Krishi Vidyapeeth, Rahuri, Dist. Ahmednagar, M.S.
• NGOs - Panipanchayat, Gramparivartan, NOCA, VOFA, KVK etc
NETWORK OF MOFF, PUNE

- Jurisdiction - Maharashtra State
  * 34 Districts
  * 140 Taluka
  * 15,000 Villages

- Head Office - Pune

- Trustees - 10

- Apex Council - 127 members (3 - 4 Senior Organic Farmers / District)

- Advisory Board - 12 members (Hon. Dr. Vijay Bhatkar, P.B. Shitole, Subhash Sharma, Mohan Shankar Deshpande, Raosaheb Dagadkar & others)

- District Heads - 34 Organic farmers.

- District Coordinators - 68 organic farmers

- Member NGOs - 120

- Farmers in Contact - 1,42,000
Principal Activities

- Organic Farm schools – (Every Thursday, 2 hrs Theory & 2 hrs Practical on organic farms)
- Organic Model Farms
- Organic Crop demonstrations
- Trainers’ Training on Organic farming
- Self help groups of male & female farmers
- Organic farm certification with Participatory guarantee scheme (PGS)
- Farmers’ Producer Companies
- Farmer rallies, seminars, workshops, exhibitions, organic Mandi / Bazar

Contd
• Study tours for farmers in & out of Maharashtra State
• Organic food consumers club
• Seed Banks of traditional, improved, straight & composite varieties of major crops (Hybrids & Genetically modified crops Prohibited)
• Active participation in OFAI sponsored Anti. GM. Campaign, Chennai
• Documentation of organic farmers’, experiences, Innovative experiments, Success Stories, Technical & research findings, Marketing data etc
• Self Sustainable Biovillage Projects
• “Farmers Suicide Prevention Mission” in Vidarbha
• Leading role in state Government’s organic policy
• Leading role in establishment of An International Institute, for Sustainable Agriculture, Pune
ACHIEVEMENTS OF THE MISSION

100 suicides each month...

Farmers' death continues...

Organic foods outlet to come up in city

Pune: The Maharashtra Organic Farming Federation (MOFF), a body of organic farm experts, farmers and NGOs engaged in promotion of healthy organic food and products, is launching a retail outlet on December 3, at the city's Shivajinagar. The outlet will be extending MOFF approved products, he said. Over the last one year, MOFF established 150 organic farms across the state and another 100 over the state's eastern region.

OPINION & ANALYSIS

Farmers rapidly shifting to organic farming

Despite clear understanding that this is a dog eat dog world, I was shocked to read a news report.

The report published in a well known news magazine revealed that a number of farmers of this country are giving up crops to manure while they grow organic food for their own families.

So, why do some of our brethren understand and realize the harmful consequences of chemical fertilizers. They have shifted to organic farming, but only for their families. Making money over other’s health is a priority for some food producers of India, due to wrong beliefs.

There are reports of some farmers who had to get medical attention due to the use of chemical fertilizers. The use of chemical fertilizers and pesticides will not only cause loss of life, but also to soil. Which is why I am a firm believer in organic fertilizers.

More farmers going organic

No organic farmer has committed suicide in Vidarbha

Monoculture is a reason for suicides, said Vasant Fute, from Rawalgon in Amravati district. He was in Pune recently to attend a workshop on organic farming. In Vidarbha and Marathwada, cotton is an obsession, he said. "Growing cotton is a way for farmers to make money quickly," he added. "But when they cannot sell it, they get into debt and start committing suicide."
MOFF
PROJECT ON
SELF SUSTAINABLE BIOVILLAGE: JAMBHARUN
स्वालंबी सेंड्रिय गाव निर्मिति प्रकल्प: जांभरून तालौहाजिनांकेड़े
मार्फतः महाराष्ट्र ऑर्गानिक फार्मिंग फेडरेशन, पुणे
(मो. 9425614982, 9881497092)
ACTION STEPS FOR PROMOTION OF ORGANIC FARMING

I. Awareness :-
   - Farmers :-
     a. Rainfed or irrigated farmers
     b. Male & female farmers (youths)
     c. Self help groups
       - NGOs
       - Consumers
       - Educational Institute

contd…
II. Technology Transfer :-

Transfer of precise organic farming technology to individual farmer / NGO. Ensure Switching over farmer gets same net Profit from 1st year itself.

Study Tours.
Farmers’ rallies, Workshops, Trainings, Seminars, Capacity building workshop, Beej Mahotsav, Organic Bazar/ Mandis, Publications.

III. Value addition in organic Produce Cleaning, grading, processing, packing, labeling

IV. Marketing .
Certification with PGS
Market Survey – Overall Survey of demand & availability of Produce in 12 Months.
Farmers Producer Company
Farmers to Consumer direct selling (Takai System – Japan)
ORGANIC MANURE

Jeevamrut – Cow Dung, Urine, Jaggery, Gram flour
JEEVAMRUT – FERMENTATION TANK
ORGANIC SUGARCANE
TRANSPORTATION TO ORGANIC PROCESSING UNIT
ORGANIC JAGGERY & CONCENTRATED JUICE
ORGANIC WHEAT
ORGANIC BANANA WITH MIX CROP
BANANA BUNCH
ORGANIC TURMERIC WITH MIXED CROPS

15 - 8 - 2009
ORGANIC TURMERIC WITH MIXED CROPS

17-11-2009
ORGANIC TURMERIC WITH MIXED CROPS
ORGANIC SUGARCANE WITH MIXED CROP  
OF TURMERIC  
12-8-2010
DEFINITION OF ORGANIC FARMING

“Organic Agriculture is a holistic production management system which promotes & enhances agro-eco-system health including biodiversity, biological cycles & soil biological activity. It emphasizes the use of management practices in preference to the use of on farm inputs. This is accomplished by using, where possible, agronomic, biological & mechanical methods, as opposed to using synthetic materials to fulfil any specific function within the system”.

Definition proposed for adoption by FAO / WHO Codex Alimentarius Commission.
ORGANIC STATISTICS
AT A GLANCE

- Total organic area: > 1,207,000 ha
- Total projects: 1812
- No of Grower groups: 886
- Total organic farmers: 7,54,618
- Total certified production: 19,58,621 t
- Number of processors: 276
- Total export: 51,370 t
- Value of export in Rs.: 5711 million INR
  119 million US$
- Number of exporters: 299
<table>
<thead>
<tr>
<th>States</th>
<th>Organic</th>
<th>In-conversion</th>
<th>Total area in ha</th>
<th>Total No of farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madhya Pradesh</td>
<td>322863</td>
<td>140689</td>
<td>463553</td>
<td>167141</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>129077</td>
<td>148703</td>
<td>277780</td>
<td>213456</td>
</tr>
<tr>
<td>Orissa</td>
<td>60006</td>
<td>21554</td>
<td>81560</td>
<td>43852</td>
</tr>
<tr>
<td>Gujarat</td>
<td>23559</td>
<td>27367</td>
<td>50927</td>
<td>17057</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>7377</td>
<td>25072</td>
<td>32450</td>
<td>34185</td>
</tr>
<tr>
<td>Mizoram</td>
<td>12097</td>
<td>22808</td>
<td>34906</td>
<td>41841</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>11093</td>
<td>19408</td>
<td>30501</td>
<td>46135</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>9959</td>
<td>19307</td>
<td>29267</td>
<td>15214</td>
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<tr>
<td>Nagaland</td>
<td>1212</td>
<td>22830</td>
<td>24042</td>
<td>28365</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>9613</td>
<td>12633</td>
<td>22246</td>
<td>15417</td>
</tr>
</tbody>
</table>
IMPORTANT STATES & COMMODITIES

• Madhya Pradesh
• Maharashtra
• Gujarat
• Orissa
• West Bengal
• Kerala
• Rajasthan
• Tamil Nadu
• Punjab/Haryana/HP
• Madhya Pradesh & Rajasthan

Cotton
Cotton, rice, wheat, soybean
Cotton
Cotton
Tea
Spices
Cluster bean & herbs
Coffee & herbs
Basmati rice, Honey
Wild collection
SOME OUTSTANDING FEATURES OF INDIA ORGANIC GROWTH

• India is the largest Organic Cotton grower with more than 50% share
• With 1.2 million ha cultivated land India is the country with largest cultivated area under organic
• With 8.0 million ha wild harvest collection area India is single largest country.
• India produces wide range of commodities
## FOOD GRAINS

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity in MT</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organic</td>
<td>In-Conversion</td>
<td></td>
</tr>
<tr>
<td>Paddy (Total)</td>
<td>44,335</td>
<td>32,354</td>
<td>76,690</td>
</tr>
<tr>
<td>Paddy (Basmati)</td>
<td>14638</td>
<td>7,520</td>
<td>22,159</td>
</tr>
<tr>
<td>Wheat</td>
<td>6892</td>
<td>15364</td>
<td>22256</td>
</tr>
<tr>
<td>Other cereals and millets</td>
<td>67,333</td>
<td>63,985</td>
<td>1,31,318</td>
</tr>
</tbody>
</table>
# MOST CULTIVATED

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity in MT</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organic</td>
<td>In-Conversion</td>
<td>Total</td>
</tr>
<tr>
<td>Cotton</td>
<td>2,84,835</td>
<td>86,906</td>
<td>3,71,740</td>
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</table>
# PULSES AND OILSEEDS

<table>
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<tr>
<th>Crop</th>
<th>Quantity in MT</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organic</td>
<td>In-Conversion</td>
<td>Total</td>
</tr>
<tr>
<td>Pulses</td>
<td>17560</td>
<td>16785</td>
<td>34345</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>1,63,506</td>
<td>59,647</td>
<td>2,22,832</td>
</tr>
</tbody>
</table>
## Tea Coffee Spices

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity in MT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organic</td>
</tr>
<tr>
<td>Tea/Coffee</td>
<td>16506</td>
</tr>
<tr>
<td>Spices</td>
<td>17419</td>
</tr>
<tr>
<td>Category</td>
<td>Quantity</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Organic</td>
<td>1,94,505 MT</td>
</tr>
<tr>
<td>In Conversion</td>
<td>5,38,073 MT</td>
</tr>
<tr>
<td>Total</td>
<td>7,32,579 MT</td>
</tr>
</tbody>
</table>
# HERBAL, MEDICINAL, DYE & AROMATIC PLANTS & OTHERS

<table>
<thead>
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<th>Crop</th>
<th>Organic</th>
<th>In-Conversion</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>Herbal and medicinal plants</td>
<td>129543</td>
<td>58767</td>
<td>188310</td>
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<tr>
<td>Other crops/ plants</td>
<td>8001</td>
<td>25232</td>
<td>33236</td>
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</tbody>
</table>
MARKETING OF GROWN COMMODITIES

- Total Production: 1.878 Million Tons
- Exported quantity: 39,000 MT
- % of quantity exported: 2.07%
- Domestic sales: 15.00% as organic

More than 80% of food commodities are sold locally with or without premium. No assessments available
PROCESSING OF ORGANIC FOOD ITEMS

• 75% of Tea, coffee and spices are being processed
• More than 75% of organic cotton is processed
• 50% of fruits and vegetable are processed
• Remaining items are not processed as organic products. At the most they are dried and powdered
MARKET GROWTH
GROWING DEMANDS
AND CONSTRAINTS
PRODUCTION-DEMAND MISMATCH

• Practically all crops are being grown
• Farmers complain that there are no buyers
• Buyers and processors complain of low supply & poor quality
• Farmers/ groups are dispersed over long areas
• Lack of proper agreements between producers and buyers
CONCERNS OF PRODUCERS

• No assured purchase
• No assured market
• Fluctuating prices and absence of Govt. support. No level playing field.
• Loss of productivity on being organic
• Production technology still immature
• Lack of dedicated processing units
• Problems in storage
CONCERNS OF PRODUCERS

• Poor and inconsistent quality
• Low volumes and inconsistent supply
• Lack of awareness among consumers
• Consumers not willing to pay premium prices
• Non-existence of supply chain for continued supply of consistent quality material
• Lack of value addition and processing facilities
• Low demand in domestic market for value added/processed food items
OPPORTUNITIES
The area is likely to grow by 25-35%.

It is likely to capture 5% of total cultivable area & total food market in next 10 years.
Comparison of Mineral contents in dung & milk of indigenous & cross-bred cows

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Mineral</th>
<th>Mineral content in Micrograms / Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cow dung</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sahiwal</td>
</tr>
<tr>
<td>1</td>
<td>Iron</td>
<td>102.63</td>
</tr>
<tr>
<td>2</td>
<td>Zinc</td>
<td>10.66</td>
</tr>
<tr>
<td>3</td>
<td>Copper</td>
<td>2.66</td>
</tr>
<tr>
<td>4</td>
<td>Magnesium</td>
<td>2764.83</td>
</tr>
<tr>
<td>5</td>
<td>Calcium</td>
<td>1276.67</td>
</tr>
<tr>
<td>6</td>
<td>Potassium</td>
<td>1503.75</td>
</tr>
</tbody>
</table>

Ref. Bhabha Atomic Research Centre, Mumbai)
Note :-

1. NBAGR Kernal (Haryana) report in indigenous cow milk A-2-Allili gene content is more (good for health) than (HF & Jersey) cows.

2. A-1-Allili content in HF & Jersey Cow Milk is more is harmful to human health-causing obesity, diabetes & heart problems.

   (Ref. Dr. Nitin Markandeya – Agrowon 28.07.2011)
Impact of chemical contaminated in food material on human health

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Food Material</th>
<th>Chemical</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Milk</td>
<td>Oxytocin (hormone to let milk)</td>
<td>Abortion, sterility</td>
</tr>
<tr>
<td>2</td>
<td>Coffee, tea</td>
<td>Coal tar dye</td>
<td>Carcinogenic Stimulants</td>
</tr>
<tr>
<td>3</td>
<td>Dal</td>
<td>Coal tar dye</td>
<td>Carcinogenic Stimulants</td>
</tr>
<tr>
<td>4</td>
<td>Turmeric</td>
<td>Lead chromate</td>
<td>Anemia, paralysis, mental retardation, brain damage, miscarriage, abortion.</td>
</tr>
<tr>
<td>5</td>
<td>Sweets</td>
<td>Metanil yellow (Rhodamin B)</td>
<td>Carcinogenic Stimulant</td>
</tr>
<tr>
<td>6</td>
<td>Pickles</td>
<td>Copper salt</td>
<td>Damage to kidneys</td>
</tr>
<tr>
<td>Sr.No.</td>
<td>Food material</td>
<td>Chemical</td>
<td>Impact</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------</td>
<td>----------------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Saumf</td>
<td>Malachite green dye</td>
<td>Carcinogenic Stimulant</td>
</tr>
<tr>
<td>8</td>
<td>Vanaspati</td>
<td>Rancid animal fat</td>
<td>Nausea, Vomiting</td>
</tr>
<tr>
<td>9</td>
<td>Lady’s finger</td>
<td>Copper sulphate</td>
<td>Anemia</td>
</tr>
<tr>
<td>10</td>
<td>Brinjal</td>
<td>Carbofuran</td>
<td>Growth development delays, carcinogenic</td>
</tr>
<tr>
<td>11</td>
<td>Cauliflower</td>
<td>Phosphamidon II</td>
<td>Growth development delays, carcinogenic</td>
</tr>
<tr>
<td>11</td>
<td>Cauliflower</td>
<td>Methyl parathion II</td>
<td>Growth development delays, carcinogenic</td>
</tr>
<tr>
<td>12</td>
<td>Salt</td>
<td>Rangoli</td>
<td>Irritation to gastro intestinal tract</td>
</tr>
<tr>
<td>13</td>
<td>BT Cotton cloth, oil &amp; cake</td>
<td>- Cry I Ac gene (transgenic)</td>
<td>Human – Skin allergic (cloth)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- CaMv 35 (cauliflower mosaic virus promoter gene)</td>
<td>- Sterility,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Digestion, problems,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Children &amp; elders are more prone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Livestock – reduces conception rate</td>
</tr>
<tr>
<td>Sr.No.</td>
<td>Food material</td>
<td>Chemical</td>
<td>Impact</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14</td>
<td>BT Brinjal</td>
<td>Antibiotic resistant marker gene NPTLL, AAD</td>
<td>Cancer, Abortion, retarded growth Miscarriage, Sterility, Allergy, Reduces immunity (Ref. India Medical Parliamentarian Forum, New Delhi)</td>
</tr>
<tr>
<td>15</td>
<td>Dhania powder</td>
<td>Horse Shit</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>16</td>
<td>Raw jowar (Hurda)</td>
<td>Green dye</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>17</td>
<td>Vegetables</td>
<td>Lead, Mercury, E-choli, Selmonil</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>18</td>
<td>Brinjal</td>
<td>Poor quality oil coating</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>19</td>
<td>Apple</td>
<td>Wax coating (for shining)</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>Sr.No.</td>
<td>Food material</td>
<td>Chemical</td>
<td>Impact</td>
</tr>
<tr>
<td>-------</td>
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<td>--------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>20</td>
<td>Carrot &amp; watermelon</td>
<td>1. Injection of red colour water</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Dipping in acetocene solution (for size &amp; colour)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Mango, Banana</td>
<td>Cultar, Ripening agents – ethrel, calcium carbide (for artificial ripening)</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>22</td>
<td>Fish</td>
<td>Gilebi &amp; gulal colour coating (for luster &amp; colour)</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>23</td>
<td>Chilli Powder</td>
<td>Brick powder</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>24</td>
<td>Pista</td>
<td>Low quality sponge</td>
<td>God knows (No studies)</td>
</tr>
<tr>
<td>25</td>
<td>Almost all vegetables &amp; fruits</td>
<td>Calcium carbide, ethrel, cyкосil, livosin, sulphate of potash, potassium diethro phosphate (for weight increase &amp; luster)</td>
<td>God knows (No studies)</td>
</tr>
</tbody>
</table>

Ref :-
1. Green watch, UK & Greenpeace (GM contamination register)
2. Centre for Cellular & Molecular biology, Hyderabad (AP)
3. Times of India 24.02.2005
## Difference between Organic & Inorganic Food

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Organic Food</th>
<th>Inorganic Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shelf Life</td>
<td>No conclusive report</td>
<td>No conclusive Report</td>
</tr>
<tr>
<td>2</td>
<td>Water Content</td>
<td>Less</td>
<td>More</td>
</tr>
<tr>
<td>3</td>
<td>Vitamin &amp; mineral content</td>
<td>More</td>
<td>Less</td>
</tr>
<tr>
<td>4</td>
<td>Pesticide content</td>
<td>Nil</td>
<td>Above harmful limits</td>
</tr>
<tr>
<td>5</td>
<td>Free nitrate radicals</td>
<td>Less</td>
<td>More (Due to use of urea &amp; therefore pest attack is more)</td>
</tr>
<tr>
<td>6</td>
<td>Fiber contents</td>
<td>More</td>
<td>Less</td>
</tr>
</tbody>
</table>
ORGANIC FOOD

Why you should care

• We do a lot to keep our loved ones healthy
• Much of the produce we consume – rice, vegetables, fruits-contains alarming amounts of dangerous chemical residues from fertilizer & pesticide use.
• Young children are especially at risk.
• The really harmful stuff actually permeates well into the skin and flesh & cannot even be completely removed by cooking, let alone washing the skin.
ORGANIC FOOD IS THE ANSWER

- Organic food is food that is grown the way it was meant to be without the use of chemical fertilizers & pesticides.
- Switching to organic food is a safe, easy & economical way to enhance your family’s well being.
THE CHEMISTRY OF POISON

• In a cluster of villages in Kerala
• In a short span of time, an alarmingly high percentage of newborns showed deformations & birth defects.
• The mystery was finally solved when investigations revealed the cause—heavy spraying of the pesticide ENDOSULPHAN on the cashew crop being grown in plantations in the area.
• You are at risk even if you live in a city, miles away from any farm or plantation.
• It is also not true that only high concentrations of pesticide are harmful to human health—long term exposure to low levels of pesticide are known to cause severe ill-effects, which become evident only after years after exposure.
IN WHICH WAYS PESTICIDES HARM YOUR HEALTH

• Acute poisoning can lead to :- Headaches, blurred vision, nausea & vomiting, changes in heart rate, muscle weakness, respiratory paralysis, convulsions, coma or even death.

• Constant low-level exposure over the years can lead to :- Respiratory problems, liver & kidney damage, nervous system disorders, reproductive problems & even cancer.

• Pesticide poisoning can cause :- Damage to foetuses, causing miscarriage, stillbirth, birth defects & mutations.
Exploding the Myths
Common questions & misconceptions about organic food

1. Organic fruits & vegetables doesn't look as bright & fresh as non-organic ones :-
- It is common practice to add chemicals to crops like bananas, brinjals to give them a brighter colour.
– The simple act of polishing rice removes certain vital nutrients present in The huste people prefer unpolished rice that ‘Whiter’ hybrids.
– ‘Good’ appearance is not necessarily an indicator of nutritive quality.

2. This whole ‘organic food’ thing is just another fad that will disappear in a few years :-
- Fads usually disappear in 2 to 3 years at most.
– The global market for organic food has been growing at a tremendous 20 25 % rate for the past 8 years.
– It is projected that the world organic market size will grow to US $ 125 billion by the year 2015.
3. I have heard that organic farming is low – yielding. If the whole world goes organic, how will farms produce enough food?

- The yield from organic agriculture is equivalent to non organic agriculture, if precise & science based organic package of practices are adopted.

- In traditional rainfed agriculture, organic methods can actually increase the yield

- ‘International Conference on Organic Agriculture & Food Security’ held at Rome on May 3-5, 2007 assured that organic farming policy if adopted effectively can feed whole world.

- Additionally, the chief cause for shortage of food has not been insufficient production but bad management practices. Tremendous amounts of food produce is wasted due to improper storage & inefficient distribution.

- On the contrary if in-organic farming continues, repeated chemical treatments has been known to decrease the soil fertility in the long run, leading greatly diminished yields over time.
- With organic methods, the soil quality is sustained & the yields are far more consistent over the years.

- Organic Farming recommends mixed cropping & not monocropping as prevalent today. In provides cereals, pulses & oilseeds along with main crop, therefore ensures food security more.

- In long run, organic agriculture is far more sustainable & **is the only way** to ensure global food security.
I’d like to eat only organic food, but the range of products is very limited.

What’s the point if I can’t get organic food for all my family’s need?
- While it is true that the range is rather limited, these are new products being launched regularly, & soon you will be able to get a far wider variety of organic produce.
- As the organic movement gathers further momentum, organic produce will be available much more easily.
- MOFF can provide organic produce if collective order is placed.

Isn’t organic food far more expensive than regular food?
- It is true, but please understand following factors:-
  1. With chemical farming in India being heavily subsidised, certain costs are actually borne by the Govt., so the consumer is spared. With the support of Govt. organic farmers will no longer be at a disadvantage, & will be able to offer much more competitive prices.
  2. Chemical agriculture also involves a number of hidden costs that are not immediately obvious. If factors like damage to the environment & human health are factored in to the mix, the picture would appear very different.
3. Think of the additional cost you pay for an organic product as a payment made towards preservation of the environment & towards minimising your family’s exposure to harmful chemicals.

4. In organic farming, initial period of 3 to 4 years may witness a drop in yield- until the soil recovers its fertility. However, after this, the yield will increase substantially, reducing the retail cost of the produce.

5. As demand for organic food & products is increasing, technological innovations & economies of scale should reduce costs of production, processing, distribution & marketing for organic produce.
Eventually, organic food may cost as much as or even less than chemically grown food.

How do I know if food is organic?
- While buying, check organic label or logos on the packaging that indicate that the product is certified as organic.
- If you are confident that your supplier is honest and giving you genuine organic produce, you don’t have to look for a label.
- Organic certification is costly and complicated with tedious documentation, therefore small farmers cannot afford the cost, but their produce is genuine.
- Organic certification under “Participatory Guaranty System” is affordable and easy and is being popularised.

Does ‘Organic’ mean ‘Chemical free’?
- When a product is termed ‘organic’ it means that it has been produced by a process that adheres to certain guidelines, laid down by certifying bodies.
- Organic food is grown without the use of synthetic pesticides & fertilizers. It therefore does not contain residues of these chemicals.
- In general, plants grown organically tend to be more resistant to pests & diseases.
- Farmers are using biofertilizers & herbal pesticides for the control of pests & diseases.
What kind of food can be organic?
- Any kind of food can be organic.
- Organic rice, vegetables, fruits, milk, meat, honey, oils, nuts, pulses, spices, medicinal herbal products.
- Processed foods like butter, cheese, chocolate, wine.

We have been eating non-organic food all along, it hasn’t harmed us.

Why switch to organic now?
- It is indisputable that the chemicals used in pesticides & fertilizers are not meant for human consumption.
- An alarmingly large percentage of India food products have been tested & found to be highly contaminated.
- Across a range of vegetables, fruits & milk products, between 10% to 70% of the samples were found to contain pesticide residues well over permitted levels making them unfit for human consumption.
- Studies have proved that the chemical residues present in produce from chemical farms greatly increase the risk of several health disorders like.
- Respiratory illness, nervous disorders & cancer being the most notable.
- Other side effects that are not immediately noticeable like reduced sperm counts in men & weakened immune systems. These become apparent only over time.
- Eating organic eliminates a large number of risks simply by virtue of not containing chemical residues.
- Additionally, organic food is usually found to have higher nutritional value.
- Organically grown potatoes, oranges & leafy vegetables have higher levels of vitamin C than conventionally grown ones.
- Phenolic compounds are also found in significantly higher concentrations in organically grown foods, which act as antioxidants, protecting against heart disease & cancer.
INTERESTING CONTACT ADDRESSES

1. ‘Organic food & traditional remedies for women’s health’ :
   Lalitha B.R. & Navanish Prasad
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2. ‘Centre for Indian knowledge systems’ :
   www.ciks.org, Email :- ciks@vsnl.com

3. ‘Organic Products’ – Greenpeople :

4. ‘Curative powers Organic Food’ :
   Dr. K. Natrajnan – TamilNadu
   Mb. 09443358379
EAT ORGANIC & STAY HEALTHY

THANKS !!