

Message from the Minister

Much of the news surrounding the outbreak of the swine flu (Mexican flu) has emphasized the need for vaccination. However, many people, including medicinal experts, have been more concerned about the possible side effects of the vaccine than about the flu itself. This is not unreasonable since thousands of people who underwent vaccination for similar diseases have suffered serious side effects, especially related to the nervous system.

In Kali-yuga, religious principles are generally absent and people have little or no interest in liberation. What's more, powerful media tycoons advertise economic development and sense gratification through misleading propaganda to exploit common persons. In a world of cheaters and those who are cheated, this should come as no surprise. Thus, by the time this magazine is published, the debate about swine flu and vaccination may have been settled, but it is not unlikely that similar issues will stir up similar debates.

Of course, devotees of Lord Krishna are primarily interested in subjects concerning pure devotional service and Krishna consciousness. Still, they should also be aware of the different sides of health issues that arise, especially in Kali-yuga, so as to make informed decisions on practical matters that could either favorably or unfavorably affect their material wellbeing. In this way, their ability to perform devotional service and develop their Krishna consciousness will surely benefit.

> Prahladananda Swami ISKCON Minister for Health and Welfare

Disclaimer

- The articles in this magazine do not necessarily represent the views of the editors or the Health and Welfare Ministry.
- The magazine is not intended to treat, diagnosis any illness or disease, nor prescibe any remedy or medicine.
- The information contained herein is in no way to be considered as a substitute for consultation with a duly licensed health-care professional.

Credits

Editors His Holiness Prahladananda Swami

Rupa Sanatana Dasa Kancana-valli Devi Dasi

Layout Yadurani Devi Dasi

Isvari Devi Dasi

Subscriptions Sivananda Dasa

Hope This Meets You — in Good Health —

The Newsletter of the ISKCON Health and Welfare Ministry Issue No. 15 / 2009

3 Quotes from Srila Prabhupada

- 4 Ayurveda 101
 - Prahladananda Swami
- 6 Krishna's Garden
 - Kancana-valli Devi Dasi
- 10 The Spice is Right
 - Caroline Robertson
- 13 76 Ways Sugar Can Ruin Your Health
 - Nancy Appleton, Ph.D
- 17 Scientific Importance of Early Sleep
 - Mahanidhi Swami
- 16 Eight Immmunity Boosters

— Adam Baer

Front cover: Krishna and Balarama herd the cows.

Subscriptions

The subscription cost for two issues of this newsletter is US\$ 10. Please send a money order in US dollars, along with your name and address, to the ISKCON Health and Welfare Ministry:

ISKCON Health and Welfare Ministry

c/o ISKCON Radhadesh Château de Petite Somme 5 6940 Septon (Durbuy) Belgium

Please send all correspondence to this address.

We welcome contributions for future newsletters.

Please visit the ISKCON Health and Welfare Ministry Website, where you can download previous issues of this magazine or read news about health matters: www.iskcon.net.au/iskconhealth

Pictures on the cover and page 4 are used with

© Bhaktivedanta Book Trust International, Inc.

QUOTES FROM SRILA PRABHUPADA



taram praptih (Bg. 2.13). There is life after death, simply change of body. Now, there are so many bodies — 8,400,000's of bodies. I can become a fly in my next life, according to my karma. Or I can be- RAMESVARA: Do you think that they will IT IS NOT uncommon in India for a man come Brahma in my next life. That is also according to karma. But there are varieties of life. So the so-called scientists, they do not know what is life after death, how it happens, how it is going on. This is a great science. That you can understand from the Vedic literature, not from your so-called scientific research. That is not possible.

They have got their calculation: kapha, pitta, vayu. Tri-dhatu. This body is a composition of these three dhatus. Yasvatma-buddhih kunape tri-dhatuke (Bhag. 10.84.13). Kunape. This is a bag created by the interaction of the three elements, namely, kapha, pitta, vayu, or bile, mucus, and air. This is kaviraja treatment. They can understand the position of these three elements by feeling the pulse. This is Ayurvedic science. If one kaviraja can learn to feel the pulse, he can say everything. He can say when this man will die, today or tomorrow or... Accurately he will say. The pulse beating is so scientifically described in Ayurvedic science. As soon as he fixes up the pulse beating, immediately the formulas are there: "Such kind of pulse beating will create such and such symptoms." So you feel the pulse and inquire the patient, "Are you feeling like this?" If he says, "Yes," then it is confirmed. The disease is confirmed. Then the medicine is there. Very simple thing. Now in allopathic treatment, first of all you have to sacrifice one chatak (?) of blood, immediately. As soon as you go to the medical man, in your country, he will take so much blood. First of all you have to give your blood. Then fees. Then you have to purchase nonsense medicine. So here Ayurveda. Still, some of the patent medialso there are nonsense kavirajas also. So cines, they are effective. Just like cyavana-

■ BUTTHERE Is life after death. *Tatha dehan*- unless one is expert in feeling the pulse, prasa, nava-yogendra, yogendra-rasa(?). he is not *kaviraja*. That is the criterion.

- Lecture on *Srimad-Bhagavatam* 1.10.6, Mayapura, 21 June, 1973
- adopt Indian medicine over Western medicine, things like that? Because there has to be some varnashrama.

Prabhupada: No, medicine, if it is actually medicine, it will be accepted. It doesn't matter whether it is Indian or Western. If it is medicine it will be accepted.

Ramesvara: So that kind of research is in the mode of goodness.

Prabhupada: That is already there. We have to make little research. It is already there. There are books, Ayurvedic books. They are very nice. Everything can be done. Dhanvantari. It is given by Dhanvantari avatara, incarnation of Krishna.

Ramesvara: You have written in the First Canto that we welcome scientists, doctors...

Prabhupada: Yes, if it is beneficial.

- Room conversation, Bhubaneswar, 21 January, 1977
- TAMALA KRISHNA: There is not much big money in it, I think.

Prabhupada: Thing is allopathic is so popular now, nobody goes to Ayurveda. Tamala Krishna: Yeah, there is no... You can't make a living very much.

Prabhupada: They can give immediately, take. Although that is not very good, still, by lecture and by some strong medicine they can give him immediately. People like that. And Ayurveda is long term, and people cannot wait.

Tamala Krishna: Yeah. The cure is very

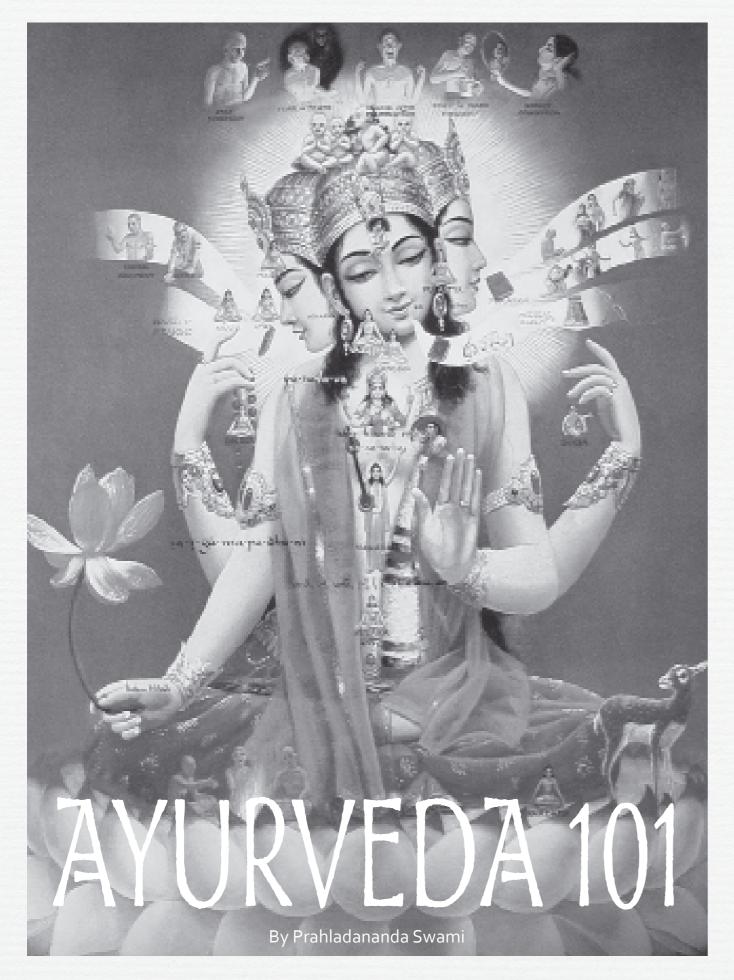
Prabhupada: And that is also not very sure, because the Ayurvedic physicians, they have not taken many cases. They cannot experience. Everything requires experience. These are the difficulties in If they are properly prepared.

- Room conversation, Bombay, 5 April,
- to give up all material engagements, to leave his home and family and take the renounced order, sannyasa, and after meditating for some while, begin doing philanthropic work by opening some hospitals or engaging in politics. The hospital-making business is being conducted by the government; it is the duty of a sannyasi to make hospitals whereby people can actually get rid of their material bodies, not patch them up. But for want of knowing what real spiritual activity is, we take up material activities.
 - Raja-vidya, Chapter 7
- PRABHUPADA: That's fine. That's your process. You are trying to do something for the disease.

Dr. Patel: You see we must know exactly what is happening. After all, science is the same with the Ayurvedic or allopathic or any. Science is... I mean, advancement of man's evolution, of man's understanding about things.

Prabhupada: I say but somebody says that... What is the medicine? I take some Avurvedic medicine.

- Morning walk, Bombay, 26 December,
- ■THE SOLDIERS IN this Krishna consciousness movement must always possess physical strength, enthusiasm, and sensual power. To keep themselves fit, they must therefore place themselves in a normal condition of life. What constitutes a normal condition will not be the same for everyone, and therefore there are divisions of varnasrama — brahmana, kshatriya, vaishya, shudra, brahmacarya, grihastha, vanaprastha, and sannyasa.
- Srimad-Bhagavatam 8.2.30, purport



yurveda is the ancient science of life. "Ayur" in Sanskrit means "life" and "veda" means "knowledge" or "science." In this article, I will explain some of the basic principles of Ayurveda.

The science called Ayurveda deals with the five gross elements (Earth, Water, Fire, Air, and Ether) and three subtle elements (Mind, Intelligence, and False Ego). These eight elements constitute the material energy.

In general, when we speak of Earth with a capital "E," we refer to material elements that have the primary characteristic of being solid. Therefore, any substance made of clay, stone, metal, wood, or other "solid" matter would be classified as belonging to the Earth category. Those material substances that have liquidity as their primary characteristic belong to the category of Water. Fire refers to radiant or effulgent substances, and Air refers to those substances that move and have the power to move other things. Ether is the space in which other elements are contained.

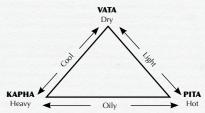
The combination of different physical elements produces six different tastes: sweet, sour, salty, pungent, astringent, and bitter. Sweet taste is a combination of Water and Earth and has properties similar to those two elements. Because Earth is solid matter, sweet taste is the heaviest of all the tastes and most like kapha. It is found in its pure form in sugar. Sour is a combination of Earth and Fire and will help the digestion. It is found in its pure form in alcohol. Similarly, the salty taste, found in its pure form in salt, is a combination of Water and Fire, and when present in food in the proper proportion, it increases the taste of food. The pungent taste is a combination Fire and Air. As air can fan a fire, the pungent taste is the hottest of the tastes and is present in its pure form in chilies. Astringent is a combination of Earth and Air and causes the mouth to pucker when ingested. It is found in its pure form in the tannins of teas. Bitter is a combination of Air and Ether and is found in its pure form in bitter melon or neem leaves.

A soul receives a material body according to the physical state and the consciousness of the parents at the time of conception. This body is said to be of a certain *prakriti* or combination of the above-mentioned material elements in what is called a "dosha." For instance, the combination of Earth and Water together in the body is called "kapha dosha." In a healthy material body, Earth and Water exist together in a balanced state, but when there is a lack of balance between these two elements problems arise. Too much Earth and not enough Water can produce diseases such as kidney or gall bladder stones. Too much Water and not enough Earth can produce edema (an abnormal accumulation of fluid beneath the skin, or in one or more cavities of the body).

In a similar way, Water and Fire combine together in the physical body. When there is an imbalance of too much Water and not enough Fire, indigestion results. Too much Fire and not enough Water results in ulcers. Air and Ether must also be in harmony to function properly in an organism. Air moving too quickly because of too much space can result in diseases such as diarrhea, while Air being restricted by not enough space can result in constipation.

For each dosha, Ayurveda lists twenty properties based on the relative strength of each dosha according to certain dualities. Of these dualities the most important are hot-cold, heavy-light, and moist-dry. The main qualities of the three doshas — pitta (bile), kapha (phlegm), and vata (air) — are that, compared to the other doshas, pitta is hotter, vata is drier, and kapha is heavi-

er. From this we can understand that, compared to *vata*, *pitta* is not only hotter, but also moister, and, compared to *kapha*, *pitta* is lighter. In this way we can say that, compared to the other *doshas*, *pitta* is hot, light, and moist; *vata* is dry, light, and cool; and *kapha* is heavy, moist, and cool (see diagram).



According to Ayurveda, at the time of birth each living entity has a body composed of a proportion of these three *doshas* called *janma prakriti*. This *prakriti* remains the same during one's entire life. One of the requirements for the body to be healthy is to maintain this balance of the *doshas*. When a different proportion of *doshas* arises in the body, this is called *vikriti*. For example, at the time of birth a person's doshic balance is V2P3K1 (*vata* 2, *pitta* 3, and *kapha* 1). Thus we could say that at birth *vata* is twice as prominent in the body as *kapha*, and *pitta* is three times as prominent as *kapha*, while *pitta* is 1.5 times as prominent as *vata*. If at some point this doshic balance changes to V2P4K1, we can say that there is now an imbalance of *pitta* in the body.

In the material world, the seasons, the time of day, our activities, our consciousness, our diet, and our age have doshic qualities. The doshic qualities of these factors have an influence on the balance of the *doshas* in our body and mind. For instance, in summer *pitta* predominates; in autumn, *vata* predominates; in winter, *kapha* predominates, and in spring both *pitta* and *kapha* predominate. In the summer heat, the body tries to balance itself by removing excess heat from the body. Sweat, which carries the heat out of the body, is a combination of water and fire. Because there is less heat in the body, the fire of digestion also decreases. In the winter, when it is colder, fire is maintained within the body and the fire of digestion becomes stronger.

Because time changes everything in the material universe, the body constantly has to readjust to changing external and internal factors. The ability or inability of the body to readjust itself is determined by the strength of the immune system. During the day, as the sun rises and heats up our environment, the body must deal effectively with these changes to remain balanced. If the body cannot adjust itself, an imbalance of the *doshas* will take place, and this imbalance is the beginning of a state of disease. Disease can be taken as a lack ("dis") of "ease."

Usually, one factor in our health we can readily control is our diet. Therefore, Ayurveda stresses being conscious of what we eat and how it effects our digestion. It is said in Ayurveda that food is what we can digest, medicine is what helps our digestion, and poison is what we cannot digest. One axiom or *sutra* in Ayurveda says, "Like increases like, and opposites balance each other." Every type of food has a certain unique balance of *doshas* and properties which affect our bodies as well as our consciousness in different ways when eaten. Therefore, if we want to maintain a healthy balance of the *doshas* in our body, we should choose the right kinds of food for our sustenance.

Knowing the science of what to eat, when to eat, and how to eat is a major factor in keeping good health. In our next article these subjects will be discussed further.

KRISHIA'S GARDEN

Five Compelling Reasons to Dabble in the Green Arts

By Kancana-valli Devi Dasi

ave you ever wondered whether a diet of highly processed food is actually good for you? If not, you might find Morgan Spurlock's *Supersize Me* interesting. In this film documentary, Spurlock vowed to eat only McDonald's food for one month. The result of this experiment was a near disastrous deterioration of his health which seriously damaged his liver and heart, and made him put on a lot of weight.

There are, of course, alternatives to processed foods. For instance, Ayurveda, India's traditional health system, states that an important aspect of achieving and maintaining physical health and harmony with our surroundings is to eat food that is grown locally and in season. Home-grown food tastes better than shop-bought food, and because we plant the food ourselves, we also have more control over what goes into it. Given sufficient time, land, and energy, such a way of life could be a means of livelihood and even of survival. Of course, it is not possible for everyone to move to the country. Still, for many of us it is feasible to do something, even if it is only to cultivate a small garden in the suburbs or grow some fresh herbs on the windowsill.

Gardening means developing a very special and personal relationship with Nature and the plants that feed us. What's more, there are many benefits that make growing our own food a valuable investment. But, the main reason why growing our own food is beneficial, is that it is much healthier, physically, socially, and spiritually, than buying shop-bought food (even if that food happens to be organic).

This basic point — that growing our own food improves our well-

being — can be subdivided into the following subjects:

- 1. It improves food quality.
- 2. It is a great way to get some exercise.
- 3. It makes us more independent.
- 4. It improves everyone's karma.
- 5. It is spiritually uplifting.

Gardening for Better Food Quality

It is sometimes argued that conventionally grown food contains the same amount of nutrients as organically grown food. However, on the whole, organic food contains more nutrients than intensively grown food. Of course, nutrient content is only one of the criteria for food quality. There are several others including:

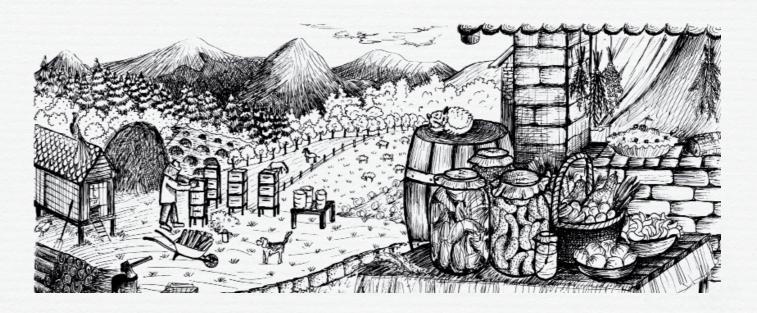
Avoidance of Bad Chemicals

There is no way to wash or cook off pesticide and fertilizer absorption. If we eat food that has been treated with such chemicals, it will enter the body whether the food is fresh, cooked, frozen, or canned. Food containing such dangerous chemicals poisons anyone who eats it, thus increasing their susceptibility to diseases such as cancer. These chemicals poison everything that comes in contact with them, including plants, animals, and fish. Moreover, overuse furthers insects' resistance to pesticide treatment. As a result, food crop yields go down, sometimes catastrophically.

Taking in Good Chemicals

Good chemicals derived from fresh food like antioxidants, im-

1 Organic for Health (see end for full reference).



mune boosters, and phytonutrients help protect the body against diseases of all kinds, including cancer, heart disease, and arthritis. To ward off such diseases, our bodies constantly need to replenish their resources. Fresh food is the best source of antioxidants, not vitamin supplements that have been shown to be ineffective in protecting the body from disease.

Interestingly, in a book describing the benefits of antioxidants in organic food, all the top sixteen superfoods were vegetarian. Immune boosting nutrients are also more readily available in organic food.

Freshness

The freshness of food greatly determines how much benefit we derive from eating it. For example, Ayurveda describes a subtle element called *prana*, a vital, life-sustaining force or vital energy present in everything that is alive. When we eat fresh food, this subtle energy is still present and nourishes us energetically — the life force of others gives us life. Food, especially fresh food that has had a chance to ripen, is tastier and contains more nutrients

because it has been allowed to mature properly and can therefore be used almost as soon as it is picked.

Gardening as Great Way to Get Some Exercise

As long as gardening is done correctly, it is a great way to get some exercise. Stretching before and after gardening, as well as good posture, will help prevent back strain, reduce muscle soreness, and avoid injury. The fresh air comes as a bonus.

Losing Weight and Toning Muscles

Knowing how much weight one loses while gardening is a complex issue. The answer depends on gender, weight, body mass, and activity. While gardening, women use on average 220 to 510 calories per hour and men 320 to 730 calories. Therefore the amount of calories used depends on how strenuous the activity is and so will differ when you are, say, pottering, raking, weeding, or digging.

Gardening Don'ts and Do's

Don'ts	Do's
Garden all weekend until the job is done	Garden three times a week for 1–2 hours
Do the same activity for long periods	Alternate activities every 5—10 minutes
Insist on finishing a job completely even when you're tired and aching	Leave a job unfinished when you feel tired
Only do strenuous activities in one gardening session	Alternate activities between heavy and light ones
Bend from the waist and lift with the back and arms	Bend the knees and hips when lifting, keeping the back straight and arms close to the body
Jump straight into doing heavy work and stop moving as soon as you finish	Stretch before and after gardening for 5–10 minutes
Start with a huge garden	Start small and build up as you feel able

² A good resource for those who want to avoid getting aching muscles or sore knees from gardening is *Get Fit Through Gardening* (see end for full



Don'ts	Do's (cont.d)
Garden only in good weather or during the summer	Garden all year round
Rake, hoe, and weed using a chopping motion while using a tool bent at 90°	Rake, hoe, and weed using a pulling / pushing motion — use a tool bent at 45° (or that is straight)
Use old-fashioned tools with short handles that force you to bend	Use ergonomic tools with long handles that have extra grip handles that allow you to stand with your back straight
Use tools that give you blisters	Use tools with cushioned handles that protect your hands against blisters
Kneel without protection for your knees	Use knee pads
Work when you're tired or when you've strained yourself	Stop if you experience pain or strain
Repeat the same motion (like weeding) or keep the same stance (like hoeing) for hours on end	Regularly change activity and posture
Always use the same position	Alternate between different positions, and use both the right and left hand
Use only arms and back muscles	Use large muscles where possible, including those in the legs
Use blunt tools	Keep tools razor sharp

Gardening for Independence

"Overdependence on another's mercy and artificial standards of living sap the very vitality of human energy. Therefore the duration of life is shortened." Bhag. 1.1.10, purport.

According to Srila Prabhupada, the founder-acarya of the International Society for Krishna Consciousness, when we take care of our own basic necessities, we will be healthier — mentally, physically, and emotionally — and will have more time for spiritual life. Although establishing a habit of self-sufficiency tends to be time consuming to begin with, once it is established, there can be more time for spiritual practices like chanting Hare Krishna and reading *Srimad-Bhagavatam*. This is especially so in the winter when there is less to do in the garden. Also, the ability to act independently is personally empowering and can be a survival factor in crisis.

Choose difficult or labor-intensive plant varieties

Ignore the wear and tear caused by gardening

Choose types of plants that are simple and easy to take care of

Take care of your body, keeping hands clean, nails trimmed, skin oiled, and muscles massaged

> Sometimes when starting a garden, we may feel like doing everything from scratch, thinking that only then we will be really self-sufficient. However, sometimes modern short-cut methods (e.g., using a tilling machine to dig over the earth instead of a spade) are important expediencies to get jobs done when competing commitments would otherwise hijack our gardening plans. Most of us will have to strike a balance between doing things for ourselves and receiving help from others. It is not a weakness to compromise — it is an absolute necessity.

> Thus gardening is an opportunity to learn new skills, grow our own food, and be less dependent on outside sources for our necessities. It is a very individual thing and requires adaptation of what has been learned from others to the particular situation we are in. A great deal of our success will depend on how well

we adapt our techniques to the local climate, quality of the soil, amount of sunlight, and how much time we put into taking care of our plot. Thus, there are as many gardening styles as there are people and places. Some people use intensive methods, which use very little space and work, such as those detailed in Square Foot Gardening. Others may prefer to have a large market garden and employ some of the ideas provided in Joy of Gardening.2 In short, we can be creative, experiment, and go with what works for us in our situation.

Gardening for Improving Everyone's Karma

There is ample documentation showing that modern methods of growing food cause extinction of species; habitat destruction; soil erosion; increases of waste disposal; water pollution and water shortage; air pollution and acid rain; and global warming.3

By growing food ourselves, we greatly reduce our involvement in the enormous environmental damage done by commercial producers. Even if we buy organically produced food (which would reduce the use of chemical fertilizers and pesticides), this food is brought to us by polluting petrol-driven machines.

Having a garden also enables us to be directly involved in benefiting the earth by recycling our own organic waste into compost and using that to increase the earth's fertility.

Gardening for Spiritual Upliftment

Srila Prabhupada wanted his followers to establish farms and be self-sufficient — or at least partially so — by producing their own food and clothing. Because Vaishnavas offer their food to Lord Krishna, growing food for Krishna is a form of bhakti-yoga, devotional service. Since everyone eats several times every day, this is a very practical way to spiritualize one's life.

"Srila Prabhupada said, 'Krishna is the farm acarya. Baladeva is holding a plow, and Krishna is holding the calf. Krishna advised

Nanda Maharaja not to perform Indra puja but to worship the land, Govardhana, because it was supplying all foodstuffs for the residents of Vrindavan and the cows as well."4

How to Succeed in Gardening

- 1. Learn from experienced gardeners.
- 2. Keep your garden neat and weed-free.
- 3. Keep it simple don't plant a bigger garden than you can reasonably take care of.
- 4. Only plant as much as you can reasonably eat, give away, or trade.
- 5. Take breaks when you are tired.
- 6. Do not own a TV.
- 7. Pray a lot.

References

- All New Square Foot Gardening; Mel Bartholomew; Cool Springs Press (2006); ISBN-10: 1591862027.
- Bhaktivedanta Vedabase 2003: BBT.
- Don't Eat This Book; Morgan Spurlock; Penguin (2005); ISBN-10:
- The Encyclopedia of Country Living; Carla Emery; Sasquatch Books; 10th edition (2008); ISBN-10: 1570615535.
- · Four Season Harvest; Eliot Coleman; Chelsea Green Pub Co (1993); ISBN-10: 0930031571.
- Get fit through Gardening; J.P. Restuccio; Hatherleigh Press, U.S. (2008); ISBN-10: 1578262682.
- The Hare Krishna Book of Vegetarian Cooking; Adiraja Dasa; Bhaktivedanta Book Trust; New edition edition (1990); ISBN-10:
- Higher Taste; A Guide to Gourmet Vegetarian Cooking and a Karma Free Diet; A.C. Bhaktivedanta Swami Prabhupada; Bhaktivedanta Book Trust; ISBN-10: 1845990471.
- · Joy of Gardening; Dick Raymond; Storey Books (1984); ISBN-10: 0882663194
- Organic for Health; Sandy Powers; iUniverse.com (2007); ISBN-10: 0595473083.

8 Hope This Meets You in Good Health

¹ See end for full reference

² See end for full reference.

³ Higher Taste and Don't Eat This Book (see end for full references).

⁴ Tamal Krishna Goswami (Srila Prabhupada's secretary), letter to Rameshvara Swami (ISKCON Officer), Vrindavan, 10 August, 1977.

THE SPICE IS RIGHT

Need to spice up your life? Bored with the same old tastes and aromas? Spices not only add a distinctive flavor to food, they also have impressive health benefits. So instead of popping pills when you feel unwell first consider how you can use food as your medicine. If you've got the runs, try nutmeg. Nausea? Chew on ginger. Feeling bloated? Favor fennel tea. To savor the variety of medicinal spices available create your own kitchen pharmacy with the following essential spice elixirs.



ASAFETIDA

Asafetida's one of those rare foods that smell weird but taste great. Sulfurous compounds in this resin give it a distinctive garlicky aroma. Also known as hing, this yellow resin is most and wheat.

I think of it as the "great bloat banisher" due to its unprecedented power to absorb gas from the body, flush out fluid, and neutralize gaseous foods in cooking. For millennia, Indian mothers have massaged their baby's colicky tummies with 1/5 tsp roasted asafetida and 2 tbs warm sesame oil, and were delighted when the pain and crying rapidly dissipated. Asafetida is also effective for painful periods, asthma, and arthritis. For this it is taken as a mixture of equal parts cumin seeds, ginger powder, black cumin seeds, ajwain seeds, and rock salt. Try 1 tsp twice daily before meals with warm water or more frequently with persistent pain.

The easiest way to cook with asafetida is to throw a pinch of powder in with your beans, nuts, veggies, or grains. This will not only add a rich oniony flavor but will quieten any uncomfortable after-dinner rumblings.

CARDAMOM

A sweet seed often added to desserts, cardamom gives one a sweet breath and voice. Called the grain of paradise, cardamom was once one of the most valued exports of South India. It is not only delicious but bears medicinal properties that make it indispensable to any kitchen dispensary.

Added to sweet curries, desserts, dahls, and curries, it will help

to clear the passageways of mucus and to reduce gassy indigestion. Given with ginger, it is credited with stimulating the appetite and reducing nausea. Recent research also indicates that it commonly sold as a powder generally mixed with turmeric may aid the body to detoxify from caffeine and codeine. Used in cooking, you can bruise a green pod, fry it, and add to savories, or for sweets add the powder, seeds, or raw crushed pods. To help strengthen the respiratory system and eliminate coughs and colds, try this traditional chai tea:

> To 4 cups of boiling water add 5 bruised cardamom pods, 2 cinnamon sticks, 2 peppercorns, 6 slices of ginger root, and 2 basil leaves. Boil down to 2 cups. Cool and serve with honey or palm sugar. This is also a tasty and therapeutic alternative to caffeinated drinks.

CINNAMON

A spice used extensively in Ayurvedic and Chinese medicine, cinnamon is the perfect ingredient to add to your warming winter dishes. The Egyptians used cinnamon as a preservative for embalming, and the Portuguese valued its tangy taste so much that it inspired several expeditions. Cinnamon is a suitable companion to cardamom in sweet dishes or drinks. The sourness of stewed fruit is disquised by the addition of cinnamon and cardamom. By itself, however, you can't beat cinnamon sticks or powder to charge the circulation and warm backache related to chilled kidneys. You can apply it by making a cup of boiled water with 1 cinnamon quill or 1/2 tsp cinnamon powder steeped in it for 5 minutes. A few drops of clove and cinnamon essential oils are effective painkillers when applied directly to toothache. Also used to settle hiccups, try a pinch of cinnamon and 1/4 cup of apple cider vinegar to ease the discomfort.



There is a belief in India that "a clove a day keeps a sore throat at bay." In fact cloves' antiseptic properties are what led to the old English tradition of hanging oranges studded with cloves in cupboards. The ideal clove is black with a thick stem and a closed bud, which stimulates the taste buds with its spicy pungency.

Clove buds are often cooked with rice dishes whereas the powder is better in vegetable dishes. For sore throats and coughs, you could take a pinch of clove with 1 tsp of honey three times a day or inhale the steam of 7 cloves in 5 cups of boiled water. Chinese courtiers chewed the cloves to freshen their breath and in Ayurveda its stimulating qualities are used for low blood pressure and low libido.

A combination of cloves, black walnut hulls, and wormwood is also a popular remedy used by naturopaths against worms and amoebas.

CORIANDER

Next time you feel hot and bothered, sprinkle some cooling coriander leaves on your stir-fry or add to your juice. The seeds are also great for the first stages of conjunctivitis and urinary tract infections. Use as an eyewash for eye redness and drink the diuretic tea for the urinary tract. For the vast number of people suffering from allergies such as hay fever, a daily intake of coriander leaves can often reduce symptoms.

This is attributed to the leaves natural antihistamine, vitamin C, and bioflavonoid content, which fortifies hyper-reactive mucous membranes. The high bioflavonoid content can also aid hemorrhoids, varicose veins, and spider veins. For cooking, the best powder is made fresh by grinding whole seeds, lightly frying and adding to dishes. Fresh leaves can be stored by cutting off roots, draining moisture away, and keeping them in a sealed plastic bag in the fridge.

Cum-an' get it! Perhaps the most popular spice in Ayurvedic cooking, cumin has a rich flavor along with a wealth of medicinal properties. Have you ever had a mix of spices offered to you after an Indian meal? These spices, including cumin, are to help your digestion and freshen your breath. To make your own mix

at home, combine the following: 1 tsp cumin seeds, 1 tsp fennel seeds, 1/4 tsp ground ginger, 1/2tsp rock sugar and a pinch of rock salt. Munch on about 1/2 tsp after a meal to ensure healthy digestion.

Adding ground and roasted cumin or roasted cumin seeds to dishes and drinks is the easy way to access its healing powers. Both the black and brown cumin help to relieve gas, period pain, and diarrhea. Taken with fennel, cumin is a popular tea in India to increase breast milk in nursing mothers. A tea made from the seeds is also a safe drink to give to colicky children. For kids under six, add 1/2 tsp brown cumin seeds to 2 cups of boiling water. Simmer uncovered until reduced to 1 cup of water. Strain and cool to lukewarm temperature. Give 20 mls of this warm drink to the child every hour until pain subsides. To disguise the taste it can be mixed with peppermint tea or diluted buttermilk.

CURRY LEAVES

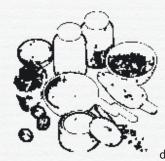
To make a good Indian dish great, just add fresh curry leaves. The leaves must be fresh because once dried, they become relatively bland. The good news is that curry trees are one of the easiest and hardiest plants to grow. Curry leaves are added either fresh or lightly fried in oil to dishes generally towards the conclusion of cooking. They are then either taken out or left in, depending on the diner's preference.

Curry leaves are traditionally used to soothe stomach upsets. They are most effective in cooling the burning pain of ulcers and skin conditions. In Ayurvedic medicine, diarrhea and dysentery are also treated with curry leaves. They are often thrown into dahls and chutneys to combat gas and worms. To keep curry leaves fresh for months, keep them on the stalk and store them in the freezer in an air-filled plastic bag.

FENUGREEK

People tend to avoid this wonderful spice because of its bitter taste. But the secret to reduce its bitterness is to dry roast fenugreek seeds, which renders them more palatable.

Why bother using fenugreek at all? The ancient Greeks, Egyptians, Chinese, and Indians highly prized this spice for



its ability to increase breast milk, ease childbirth, and reduce period pain and stomach cramps. Modern science has also confirmed its efficacy as a hypoglycemic agent for late onset diabetes. For stubborn pimples,

boils, or cellulitis, make a poultice of

the powdered seeds and apply the warm paste to the affected area for 20 minutes.

The Chinese recommended 1/2 tsp seeds daily to maintain a healthy female reproductive system. Its mucilaginous and lymphatic properties are also good for lymphatic conditions and lung problems such as smokers' cough. This can be taken as a tea by adding 1 tsp of seeds to 2 cups of boiling water. Boil down to one cup, strain, and drink up to three cups a day. Fenugreek is a spice that should be avoided during pregnancy as it can promote uterine contractions.

GINGER

Known in India as vishwabeshaj or the universal medicine, ginger is an irreplaceable addition to your spice apothecary. Recent medical trials have supported its traditional prescription for morning and motion sickness. Try chewing on a slice of fresh ginger or enjoy a cup of ginger tea to alleviate these conditions.

An addition to about 80% of Chinese and Ayurvedic medicines, ginger has a long history as a remedy for poor circulation, coughs, colds, flu, nausea, and poor digestion. To improve circulation in winter, try a morning cup of ginger root, cinnamon quill, and pepper tea. Combine 5 slices of fresh ginger, 1 cinnamon stick, and 2 peppercorns in 1 cup of boiling water. Reduce to one cup, strain, and add honey to taste before drinking. It can keep you warm all day. To soothe lower backache, sciatica, and kidney pain, a poultice can be applied in the early phase of the condition. When selecting ginger, choose a root with smooth skin, that is hard, and that has no green color or mould. The resin of the skin can upset the stomach, so peel this off before adding the grated, diced, or thinly sliced root to dishes. Dry ginger is stronger than fresh ginger, so use it sparingly.

Nutmeg's unique flavor indicates its distinctive medicinal qualities. This aromatic nut is famous in Indian households for curing diarrhea and malabsorption. Nutmeg's effectiveness has been shown in modern clinical trials with sufferers of Crohns' disease. This is one of the best remedies for morning diarrhea, an indication that the digestive energy is very weak. For this take 1/4 tsp ground nutmeg with 1 tsp cumin seeds and 3 curry leaves cooked with boiled soupy rice for breakfast — yum! Or just mix a pinch with your breakfast cereal. Nutmeg's dubious reputation in the past was due to its hallucinogenic action when taken in large quantities — people taking it reported a feeling of being "deliriously inebriated." In fact, nutmeg does have

mind-altering properties and therefore should only be taken in small quantities. For insomnia or restless sleep, try taking 1/4 tsp freshly grated nutmeg adding it to 1/2 cup of warm milk. This can really help to calm the mind and induce a sound sleep.

Nutmeg essential oil has also been used as a clove substitute for toothache when applied directly to the painful region. Mixed with a base of sesame or almond oil, it can be used as massage oil for arthritis and combined with Clary sage for delayed labor.

For women, saffron is a fabulous tonic that increases milk flow, reduces period pain, and improves fertility. As such it shouldn't be taken during pregnancy but is great post-natally.

Since pure saffron is very expensive it is generally adulterated with Calendula or Chrysanthemum petals. The pure stuff is a dark red, very soft and wispy. To maximize its color, aroma, and flavor sit the threads in a small quantity of water of milk for 20 minutes then add to the dish when it has only 5 minutes remaining to cook. You can also use it as a garnish for rice, dairy, and potato dishes to add a dash of color.

Traditionally, Ayurveda uses saffron for liver and spleen enlargement as well as for migraines, chronic fevers, and epilepsy. Legend says that one who eats saffron will get a golden complexion free of dark pigmentation.

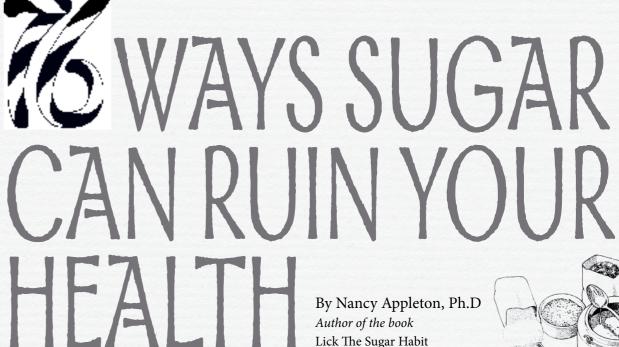
Crowned "the Queen of the kitchen," this outstanding spice is the reigning healer amongst kitchen spices. Adored in India for its purifying properties, turmeric is known as kringhna in Sanskrit, which means "germ killer."

Turmeric plays an important role in all Hindu rituals, where cleanliness is of prime importance. As an antiseptic wash, it is said to give one a golden aura. Hence its use for bridal baths as well as to counter skin infections or blemishes. Its antiseptic properties also help to combat throat infections.

A good home remedy for sore throats is a mixture of 1/2 tsp turmeric and 2 cloves in 1 cup of boiled water. Sit for 5 minutes. Strain well and add 1 drop of tea tree oil plus 1 tsps of rock or sea salt. Gargle this warm mix three times a day.

The ground turmeric root is the most potent form of this spice, but a fresh deep orange powder is also effective. Turmeric's antibiotic, blood purifying, and bile stimulating action make it useful in liver, blood, and pancreatic disorders. For these ailments, one teaspoon of the fresh powder or ground root can be taken with 1/4 cup of warm water every morning. Recent clinical trials have suggested turmeric may also be useful

Alzheimer's. This may be related to its antioxidant properties, supporting its classical Ayurvedic application for "untimely ageing syndrome." To preserve turmeric, keep it in a dark container in a cool cup-





n addition to throwing off the body's homeostasis, excess sugar may result in a number of other significant consequences. The following is a listing of some of sugar's metabolic consequences from a variety of medical journals and other scientific publications.

- Sugar can suppress your immune system and impair your defenses against infectious disease.1,2
- 2. Sugar upsets the mineral relationships in your body: causes chromium and copper deficiencies and interferes with absorption of calcium and magnesium.3, 4, 5, 6
- Sugar can cause can cause a rapid rise of adrenaline, hyperactivity, anxiety, difficulty concentrating, and crankiness in children.7,8
- 4. Sugar can produce a significant rise in total cholesterol, triglycerides and bad cholesterol and a
- decrease in good cholesterol.9, 10, 11, 12 Sugar causes a loss of tissue elasticity and function.¹³
- Sugar feeds cancer cells and has been connected with the development of cancer of the breast, ovaries, prostate, rectum, pancreas, biliary tract, lung, gallbladder, and stomach. 14, 15, 16, 17, 18, 19, 20
- Sugar can increase fasting levels of glucose and can cause reactive hypoglycemia.21, 22
- 8. Sugar can weaken eyesight.23
- Sugar can cause many problems with the gastrointestinal tract including: an acidic digestive tract, indigestion, malabsorption in patients with functional bowel disease, increased risk of Crohn's disease, and ulcerative colitis. 24, 25, 26, 27, 28
- 10. Sugar can cause premature aging.29

- 11. Sugar can lead to alcoholism.30
- 12. Sugar can cause your saliva to become acidic, tooth decay, and periodontal disease.31, 32, 33
- 13. Sugar contributes to obesity.34
- 14. Sugar can cause autoimmune diseases such as: arthritis, asthma, and multiple sclerosis. 35, 36, 37
- 15. Sugar greatly assists the uncontrolled growth of Candida Albicans (yeast infections).38
- 16. Sugar can cause gallstones.39
- 17. Sugar can cause appendicitis.40
- 18. Sugar can cause hemorrhoids.41
- 19. Sugar can cause varicose veins.42
- 20. Sugar can elevate glucose and insulin responses in oral contraceptive users.43
- 21. Sugar can contribute to osteoporosis.44
- 22. Sugar can cause a decrease in your insulin sensitivity thereby causing an abnormally high insulin levels and eventually diabetes. 45, 46, 47
- 23. Sugar can lower your Vitamin E levels. 48
- 24. Sugar can increase your systolic blood pressure.49
- 25. Sugar can cause drowsiness and decreased activity in
- 26. High sugar intake increases advanced glycation end products (AGEs) (Sugar molecules attaching to and thereby damaging proteins in the body).51
- 27. Sugar can interfere with your absorption of protein.52

- 28. Sugar causes food allergies.53
- 29. Sugar can cause toxemia during pregnancy.54
- 30. Sugar can contribute to eczema in children.55
- 31. Sugar can cause atherosclerosis and cardiovascular disease. 56, 57
- 32. Sugar can impair the structure of your DNA.58
- 33. Sugar can change the structure of protein and cause a permanent alteration of the way the proteins act in your body.^{59, 60}
- 34. Sugar can make your skin age by changing the structure of collagen.⁶¹
- 35. Sugar can cause cataracts and nearsightedness. 62, 63
- 36. Sugar can cause emphysema.⁶⁴
- 37. High sugar intake can impair the physiological homeostasis of many systems in your body. 65
- 38. Sugar lowers the ability of enzymes to function. 66
- 39. Sugar intake is higher in people with Parkinson's
- 40. Sugar can increase the size of your liver by making your liver cells divide and it can increase the amount of liver fat. 68, 69
- 41. Sugar can increase kidney size and produce pathological changes in the kidney such as the formation of kidney stones.^{70, 71}
- 42. Sugar can damage your pancreas.⁷²
- 43. Sugar can increase your body's fluid retention.⁷³
- 44. Sugar is enemy #1 of your bowel movement.74
- 45. Sugar can compromise the lining of your capillaries.⁷⁵
- 46. Sugar can make your tendons more brittle.76

- 47. Sugar can cause headaches, including migraines.⁷⁷
- 48. Sugar can reduce the learning capacity, adversely affect school children's grades and cause learning disorders.^{78, 79}
- 49. Sugar can cause an increase in delta, alpha, and theta brain waves which can alter your mind's ability to think clearly.⁸⁰
- 50. Sugar can cause depression.81
- 51. Sugar can increase your risk of gout.82
- 52. Sugar can increase your risk of Alzheimer's disease.83
- 53. Sugar can cause hormonal imbalances such as: increasing estrogen in men, exacerbating PMS, and decreasing growth hormone. 84, 85, 86, 87
- 54. Sugar can lead to dizziness.88
- 55. Diets high in sugar will increase free radicals and oxidative stress.⁸⁹
- 56. High sucrose diets of subjects with peripheral vascular disease significantly increases platelet adhesion.90
- 57. High sugar consumption of pregnant adolescents can lead to substantial decrease in gestation duration and is associated with a twofold increased risk for delivering a small-for-gestational-age (SGA) infant.^{91, 92}
- 58. Sugar is an addictive substance.93
- 59. Sugar can be intoxicating, similar to alcohol.94
- 60. Sugar given to premature babies can affect the amount of carbon dioxide they produce.⁹⁵
- 61. Decrease in sugar intake can increase emotional stability.⁹⁶



- 62. Your body changes sugar into 2 to 5 times more fat in the bloodstream than it does starch.⁹⁷
- 63. The rapid absorption of sugar promotes excessive food intake in obese subjects.⁹⁸
- 64. Sugar can worsen the symptoms of children with attention deficit hyperactivity disorder (ADHD).⁹⁹
- 65. Sugar adversely affects urinary electrolyte composition. 100
- 66. Sugar can slow down the ability of your adrenal glands to function. 101
- 67. Sugar has the potential of inducing abnormal metabolic processes in a normal healthy individual and to promote chronic degenerative diseases.¹⁰²
- 68. I.V.s (intravenous feedings) of sugar water can cut off oxygen to your brain.¹⁰³
- 69. Sugar increases your risk of polio.104
- 70. High sugar intake can cause epileptic seizures. 105

- 71. Sugar causes high blood pressure in obese people. 106
- 72. In intensive care units: Limiting sugar saves lives. 107
- 73. Sugar may induce cell death. 108
- 74. In juvenile rehabilitation camps, when children were put on a low sugar diet, there was a 44 percent drop in antisocial behavior.¹⁰⁹
- 75. Sugar dehydrates newborns. 110
- 76. Sugar can cause gum disease.111

Original source: www.mercola.com/ article/sugar/dangers-of-sugar.htm



Copyright 2009 Dr. Joseph Mercola. All Rights Reserved. Dr. Mercola is the founder of the world's most visited natural health web site, Mercola.com. You can learn the hazardous side effects of OTC Remedies by getting a FREE copy of his latest special report The Dangers of Over the Counter Remedies by going to his Report Page.

References

- Sanchez, A., et al. Role of Sugars in Human Neutrophilic Phagocytosis.
 American Journal of Clinical Nutrition. Nov 1973; 261: 1180-1184.

 Bernstein, J., al. Depression of Lymphocyte Transformation Following Oral Glucose Ingestion. American Journal of Clinical Nutrition.1997; 30: 613.
- Ringsdorf, W., Cheraskin, E. and Ramsay R. Sucrose, Neutrophilic Phagocytosis and Resistance to Disease. Dental Survey. 1976; 52(12): 46-48.
- Couzy, F., et al. Nutritional Implications of the Interaction Minerals. Progressive Food and Nutrition Science 17; 1933: 65-87.
- Kozlovsky, A., et al. Effects of Diets High in Simple Sugars on Urinary Chromium Losses. Metabolism. June 1986; 35: 515-518.
- Fields, M.., et al. Effect of Copper Deficiency on Metabolism and Mortality in Rats Fed Sucrose or Starch Diets. Journal of Clinical Nutrition. 1983; 113: 1335-1345.
- Lemann, J. Evidence that Glucose Ingestion Inhibits Net Renal Tubular Reabsorption of Calcium and Magnesium. Journal of Clinical Nutrition. 1976; 70: 236-245.
- Goldman, J., et al. Behavioral Effects of Sucrose on Preschool Children. Journal of Abnormal Child Psychology, 1986; 14(4): 565-577.
- . Jones, T. W., et al. Enhanced Adrenomedullary Response and Increased Susceptibility to Neuroglygopenia: Mechanisms Underlying the Adverse Effect of Sugar Ingestion in Children. Journal of Pediatrics. Feb 1995; 126:
- Scanto, S. and Yudkin, J. The Effect of Dietary Sucrose on Blood Lipids, Serum Insulin, Platelet Adhesiveness and Body Weight in Human Volunteers. Postgraduate Medicine Journal. 1969; 45: 602-607.
- Albrink, M. and Ullrich I. H. Interaction of Dietary Sucrose and Fiber on Serum Lipids in Healthy Young Men Fed High Carbohydrate Diets. American Journal of Clinical Nutrition. 1986; 43: 419-428. Pamplona, R., et al. Mechanisms of Glycation in Atherogenesis. Med Hypotheses. Mar 1993; 40(3): 174-81.
- Reiser, S. Effects of Dietary Sugars on Metabolic Risk Factors Associated with Heart Disease. Nutritional Health. 1985; 203-216.
- Lewis, G. F. and Steiner, G. Acute Effects of Insulin in the Control of Vldl Production in Humans. Implications for The insulin-resistant State. Diabetes Care. 1996 Apr; 19(4): 390-3 R. Pamplona, M. J., et al. Mechanisms of Glycation in Atherogenesis. Medical Hypotheses. 1990; 40: 174-181.
- Cerami, A., Vlassara, H., and Brownlee, M. Glucose and Aging. Scientific American. May 1987: 90. Lee, A. T. and Cerami, A. The Role of Glycation in Aging. Annals of the New York Academy of Science; 663: 63-67.
- Takahashi, E., Tohoku University School of Medicine. Wholistic Health Digest. October 1982: 41: 00
- Quillin, Patrick. Cancer's Sweet Tooth. Nutrition Science News. Ap 2000 Rothkopf, M.. Nutrition. July/Aug 1990; 6(4).
- Michaud, D. Dietary Sugar, Glycemic Load, and Pancreatic Cancer Risk in a Prospective Study. J Natl Cancer Inst. Sep4, 2002; 94(17): 1293-300.
- 17. Moerman, C. J., et al. Dietary Sugar Intake in the Etiology of Biliary

- *Tract Cancer.* International Journal of Epidemiology. Ap 1993.2(2): 207-214.
- The Edell Health Letter. Sept 1991; 7: 1.
- De Stefani, E. *Dietary Sugar and Lung Cancer: a Case control Study in Uruguay*. Nutrition and Cancer. 1998; 31(2): 132-7.
- o. Cornee, J., et al. A Case-control Study of Gastric Cancer and Nutritional Factors in Marseille, France. European Journal of Epidemiology 11
- Kelsay, J., et al. Diets High in Glucose or Sucrose and Young Women.
 American Journal of Clinical Nutrition. 1974; 27: 926-936. Thomas, B. J., et al. Relation of Habitual Diet to Fasting Plasma Insulin Concentration and the Insulin Response to Oral Glucose. Human Nutrition Clinical Nutrition. 1983; 36C(1): 49-51.
- 22. Dufty, William. Sugar Blues. (New York: Warner Books, 1975).
- 23. Acta Ophthalmologica Scandinavica. Mar 2002; 48; 25. Taub, H. Ed. Sugar Weakens Eyesight, VM NEWSLETTER; May 1986: 06: 00
- Dufty.
- 25. Yudkin, J. Sweet and Dangerous.(New York: Bantam Books,1974) 129
- Cornee, J., et al. A Case-control Study of Gastric Cancer and Nutritional Factors in Marseille, France. European Journal of Epidemiology. 1995; 11
- 7. Persson P. G., Ahlbom, A., and Hellers, G. Epidemiology. 1992; 3: 47-52.
- Jones, T. W., et al. Enhanced Adrenomedullary Response and Increased Susceptibility to Neuroglygopenia: Mechanisms Underlying the Adverse Effect of Sugar Ingestion in Children. Journal of Pediatrics. Feb 1995; 126: 171-7.
- Lee, A. T.and Cerami A. The Role of Glycation in Aging. Annals of the New York Academy of Science.1992; 663: 63-70.
- o. Abrahamson, E. and Peget, A. Body, Mind and Sugar. (New York: Avon,
- Glinsmann, W., Irausquin, H., and Youngmee, K. Evaluation of Health Aspects of Sugar Contained in Carbohydrate Sweeteners. F. D. A. Report of Sugars Task Force. 1986: 39: 00 Makinen K.K., et al. A Descriptive Report of the Effects of a 16-month Xylitol Chewing-gum Programme Subsequent to a 40-month Sucrose Gum Programme. Caries Research. 1998; 32(2): 107-12.
- Glinsmann, W., Irausquin, H., and K. Youngmee. Evaluation of Health Aspects of Sugar Contained in Carbohydrate Sweeteners. F. D. A. Report of Sugars Task Force. 1986; 39: 36-38.
- 3. Appleton, N. New York: *Healthy Bones*. Avery Penguin Putnam: 1989.
- 34. Keen, H., et al. Nutrient Intake, Adiposity, and Diabetes. British Medical Journal. 1989; 1: 00655-658
- Darlington, L., Ramsey, N. W. and Mansfield, J. R. Placebo Controlled, Blind Study of Dietary Manipulation Therapy in Rheumatoid Arthritis. Lancet. Feb 1986; 8475(1): 236-238.
- 36. Powers, L. Sensitivity. You React to What You Eat. Los Angeles Times. (Feb. 12, 1985). Cheng, J., et al. Preliminary Clinical Study on the Correlation Between Allergic Rhinitis and Food Factors. Lin Chuang Er Bi Yan Hou Ke Za Zhi Aug 2002; 16(8): 393-396.
- 37. Erlander, S. The Cause and Cure of Multiple Sclerosis, The Disease to End Disease. Mar3, 1979; 1(3): 59-63.
- 38. Crook, W. J. The Yeast Connection. (TN: Professional Books, 1984).

- 39. Heaton, K. *The Sweet Road to Gallstones*. British Medical Journal. Apr 14, 1984; 288: 00: 00 1103-1104. Misciagna, G., et al. American Journal of Clinical Nutrition. 1999; 69: 120-126.
- Cleave, T. The Saccharine Disease. (New Canaan, CT: Keats Publishing, 1974).
- 41. Ibio
- 42. Cleave, T. and Campbell, G. (Bristol, England: *Diabetes, Coronary Thrombosis and the Saccharine Disease*. John Wright and Sons, 1960).
- 43. Behall, K. Influence of Estrogen Content of Oral Contraceptives and Consumption of Sucrose on Blood Parameters. Disease Abstracts International. 1982; 431437.
- Tjäderhane, L. and Larmas, M. A High Sucrose Diet Decreases the Mechanical Strength of Bones in Growing Rats. Journal of Nutrition. 1998: 128: 1807-1810.
- Beck, Nielsen H., Pedersen O., and Schwartz S. Effects of Diet on the Cellular Insulin Binding and the Insulin Sensitivity in Young Healthy Subjects. Diabetes. 1978; 15: 289-296.
- 46. Sucrose Induces Diabetes in Cat. Federal Protocol. 1974; 6(97). diabetes
- Reiser, S., et al. Effects of Sugars on Indices on Glucose Tolerance in Humans. American Journal of Clinical Nutrition. 1986; 43: 151-159.
- 48. Journal of Clinical Endocrinology and Metabolism. Aug 2000
- Hodges, R., and Rebello, T. Carbohydrates and Blood Pressure. Annals of Internal Medicine. 1983: 98: 838-841.
- Behar, D., et al. Sugar Challenge Testing with Children Considered Behaviorally Sugar Reactive. Nutritional Behavior. 1984; 1: 277-288.
- Furth, A. and Harding, J. Why Sugar Is Bad For You. New Scientist. Sep 23, 1989; 44.
- Simmons, J. Is The Sand of Time Sugar? LONGEVITY. June 1990: 00: 0049-53.
- 53. Appleton, N. New York: *Lick The Sugar Habit*. Avery Penguin Putnam: 1988. allergies
- Cleave, T. The Saccharine Disease: (New Canaan Ct: Keats Publishing, Inc., 1974).131.
- 55. Ibid. 132
- Pamplona, R., et al. Mechanisms of Glycation in Atherogenesis. Medical Hypotheses . 1990: 00: 00 174-181.
- 57. Vaccaro O., Ruth, K. J. and Stamler J. Relationship of Postload Plasma Glucose to Mortality with 19 yr Follow up. Diabetes Care. Oct 15,1992; 10: 328-334. Tominaga, M., et al, Impaired Glucose Tolerance Is a Risk Factor for Cardiovascular Disease, but Not Fasting Glucose. Diabetes Care. 1999: 2(6): 920-924.
- Lee, A. T. and Cerami, A. Modifications of Proteins and Nucleic Acids by Reducing Sugars: Possible Role in Aging. Handbook of the Biology of Aging. (New York: Academic Press, 1990.).
- Monnier, V. M. Nonenzymatic Glycosylation, the Maillard Reaction and the Aging Process. Journal of Gerontology 1990: 45(4): 105-110.
- 60. Cerami, A., Vlassara, H., and Brownlee, M. *Glucose and Aging*. Scientific American. May 1987: 00: 0000
- 61. Dyer, D. G., et al. Accumulation of Maillard Reaction Products in Skin Collagen in Diabetes and Aging. Journal of Clinical Investigation. 1993: 93(6): 421-22.
- Veromann, S.et al. Dietary Sugar and Salt Represent Real Risk Factors for Cataract Development. Ophthalmologica. 2003 Jul-Aug; 217(4): 302-307.
- 63. Goulart, F. S. *Are You Sugar Smart?* American Fitness. March-April 1991: 00: 0034-38. Milwakuee, WI
- 64. Monnier, V. M. Nonenzymatic Glycosylation, the Maillard Reaction and the Aging Process. Journal of Gerontology. 1990: 45(4): 105-110.
- 65. Ceriello, A. Oxidative Stress and Glycemic Regulation. Metabolism. Feb 2000; 49(2 Suppl 1): 27-29.
- Appleton, Nancy. New York. Lick the Sugar Habit. Avery Penguin Putnam, 1988 enzymes
- 67. Hellenbrand, W. Diet and Parkinson's Disease. A Possible Role for the Past Intake of Specific Nutrients. Results from a Self-administered Foodfrequency Questionnaire in a Case-control Study. Neurology. Sep 1996; 47(3): 644-650.
- 68. Goulart, F. S. *Are You Sugar Smart?* American Fitness. March-April 1991: 00: 0034-38.
- 69. Ibid
- Yudkin, J., Kang, S. and Bruckdorfer, K. Effects of High Dietary Sugar. British Journal of Medicine. Nov 22, 1980; 1396.
- Blacklock, N. J., Sucrose and Idiopathic Renal Stone. Nutrition and Health. 1987; 5(1-2): 9- Curhan, G., et al. Beverage Use and Risk for Kidney Stones in Women. Annals of Internal Medicine. 1998: 28: 534-340.
- Goulart, F. S. Are You Sugar Smart? American Fitness. March-April 1991: 00: 0034-38. Milwakuee, WI.
- 73. Ibid. Fluid retention.
- 74. Ibid. Bowel movement.

- 75. Ibid. Compromise the lining of the capillaries.
- 76. Nash, J. Health Contenders. Essence. Jan 1992; 23: 0079-81.
- 77. Grand, E. Food Allergies and Migraine. Lancet. 1979: 1: 955-959.
 78. Schauss, A. Diet, Crime and Delinquency. (Berkley Ca; Parker House,
- Schauss, A. Diet, Grine und Deunquency. (Berkley Ca, Farker House, 1981).
 Molteni, R, et al. A High-fat, Refined Sugar Diet Reduces Hippocampal
- NeuroScience. 2002; 112(4): 803-814. 80. Christensen, L. *The Role of Caffeine and Sugar in Depression*. Nutrition Report. Mar 1991; 9(3): 17-24.

Brain-derived Neurotrophic Factor, Neuronal Plasticity, and Learning.

- 1. Ibid.44
- 82. Yudkin, J. Sweet and Dangerous.(New York: Bantam Books,1974) 129.
- 83. Frey, J. Is *There Sugar in the Alzheimer's Disease?* Annales De Biologie Clinique. 2001; 59 (3): 253-257.
- 84. Yudkin, J. Metabolic Changes Induced by Sugar in Relation to Coronary Heart Disease and Diabetes. Nutrition and Health. 1987; 5(1-2): 5-8.
- Yudkin, J and Eisa, O. Dietary Sucrose and Oestradiol Concentration in Young Men. Annals of Nutrition and Metabolism. 1988: 32(2): 53-55.
- 86. The Edell Health Letter. Sept 1991; 7: 1.
- Gardner, L. and Reiser, S. Effects of Dietary Carbohydrate on Fasting Levels of Human Growth Hormone and Cortisol. Proceedings of the Society for Experimental Biology and Medicine. 1982; 169: 36-40.
 Journal of Advanced Medicine. 1994; 7(1): 51-58.
- Ceriello, A. Oxidative Stress and Glycemic Regulation. Metabolism. Feb 2000; 49(2 Suppl 1): 27-29.
- o. Postgraduate Medicine.Sept 1969: 45: 602-07.
- 91. Lenders, C. M. Gestational Age and Infant Size at Birth Are Associated with Dietary Intake among Pregnant Adolescents. Journal of Nutrition. Jun 1997; 1113- 1117
- 2. Ibid
- 93. Sugar, White Flour Withdrawal Produces Chemical Response. The Addiction Letter. Jul 1992: 04: 00 Colantuoni, C., et al. Evidence That Intermittent, Excessive Sugar Intake Causes Endogenous Opioid Dependence. Obes Res. Jun 2002; 10(6): 478-488. Annual Meeting of the American Psychological Society, Toronto, June 17, 2001 www. mercola.com/2001/jun/30/sugar.htm
- 94. Ib
- 5. Sunehag, A. L., et al. Gluconeogenesis in Very Low Birth Weight Infants Receiving Total Parenteral Nutrition Diabetes. 1999; 487991-800.
- Christensen L., et al. Impact of A Dietary Change on Emotional Distress. Journal of Abnormal Psychology.1985; 94(4): 565-79.
- 97. Nutrition Health Review. Fall. 85 Changes Sugar Into Fat Faster Than
- 98. Ludwig, D. S., et al. *High Glycemic Index Foods, Overeating and Obesity*. Pediatrics. March 1999; 103(3): 26-32.
- Pediatrics Research. 1995; 38(4): 539-542. Berdonces, J. L. Attention Deficit and Infantile Hyperactivity. Rev Enferm. Jan 2001; 4(1)11-4
- Blacklock, N. J. Sucrose and Idiopathic Renal Stone. Nutrition Health. 1987; 5(1 & 2): 9-
- Lechin, F., et al. Effects of an Oral Glucose Load on Plasma Neurotransmitters in Humans. Neurophychobiology. 1992; 26(1-2): 4-11.
- 102. Fields, M. Journal of the American College of Nutrition. Aug 1998; 17(4): 317-321.
- Arieff, A. I. Veterans Administration Medical Center in San Francisco. San Jose Mercury; June 12/86. IVs of sugar water can cut off oxygen to the brain.
- 104. Sandler, Benjamin P. Diet Prevents Polio. Milwakuee, WI,: The Lee Foundation for for Nutritional Research, 1951
- 105. Murphy, Patricia. The Role of Sugar in Epileptic Seizures. Townsend Letter for Doctors and Patients. May, 2001 Murphy Is Editor of Epilepsy Wellness Newsletter, 1462 West5th Ave., Eugene, Oregon97402
- Stern, N. & Tuck, M. Pathogenesis of Hypertension in Diabetes Mellitus. Diabetes Mellitus, a Fundamental and Clinical Test. 2nd Edition, (PhiladelphiA; A: Lippincott Williams & Wilkins, 2000)943-957.
- Christansen, D. Critical Care: Sugar Limit Saves Lives. Science News. June30, 2001; 159: 404.
- 108. Donnini, D. et al. *Glucose May Induce Cell Death through a Free Radical-mediated Mechanism*. Biochem Biohhys Res Commun. Feb 15, 1996: 219(2): 412-417.
- Schoenthaler, S. The Los Angeles Probation Department Diet-Behavior Program: Am Empirical Analysis of Six Institutional Settings. Int J Biosocial Res5(2): 88-89.
- 110. Gluconeogenesis in Very Low Birth Weight Infants Receiving Total Parenteral Nutrition. Diabetes. 1999 Apr; 48(4): 791-800.
- 111. Glinsmann, W., et al. Evaluation of Health Aspects of Sugar Contained in Carbohydrate Sweeteners." FDA Report of Sugars Task Force -198639 123 Yudkin, J. and Eisa, O. Dietary Sucrose and Oestradiol Concentration in Young Men. Annals of Nutrition and Metabolism. 1988; 32(2): 53-5.

SCIENTIFIC IMPORTANCE

OF EARLY SLEEP



By Mahanidhi Swami

his short essay based on scientific research, is presented to help aspiring Krishna devotees recognize the need to take rest early each night (latest by 10 p.m.) and to rise by 4 a.m. each morning in order to chant the Hare Krishna *mahamantra* and attain the perfection of human life.

Special thanks goes to Kirti Devi Dasi for researching the topic of sleep and providing the printed scientific reports and conclusions which form the basis of this article. After conducting hundreds of experiments on sleep and health, the world's leading scientists have discovered that to keep optimum health, one should sleep early and rise before sunrise. The best hours of sleep for your body are between 10 p.m. and 6 a.m. going to bed at 11 p.m., 12 p.m. or 1 p.m. is extremely harmful to human health, and is a direct cause of many modern "killer diseases" such as heart disease and cancer.

Nature acts and moves according to precise rhythm cycles influenced by the rotation of the earth, sun, and moon. Daily the sun rises and sets, the seasons come and go, the moon waxes and wanes, and the ocean tides rise and fall. The function of sleeping and wakefulness is part of this natural rhythm. In Nature, one finds that the animals and plants are awake and asleep in tune with these rhythms. Human beings also have natural rhythms.

Our human bodies, like Mother Nature, function according to natural cycles, body rhythms commonly called the internal body clock or the biological clock.

Disruptions of the natural functions of our biological clock due to improper habits and incorrect sleeping patterns cause many different diseases. When our bodies are out of balance and not functioning in harmony with nature, nothing seems to feel right. This is because hormones, chemicals, and neurotransmitters that determine our energy levels, vitality, and how we feel, sleep, and eat are out of sync. In other words, we are imbalanced and out of tune with our biological clock and going against the natural harmony established by mother nature. Prior to the widespread use of electricity, as seen in Indian villages fifty years ago, people would go to bed shortly after sunset, as most animals do and which Nature intended for humans as well. The best hours of sleep for your body are the hours of 10 p.m.- 6 a.m.

These hours and what your body is naturally programmed to do during these hours (see chart below), are governed by the movements of the sun and the 24-hour natural rhythm cycle of your internal body clock — both of which are beyond your control. During these times (10 p.m. – 6 a.m.), the human body is designed to be at a state of rest, repair, detoxification (elimination of waste products and poisons), and rejuvenation. Our bodies are produced by Mother Nature. If we act foolishly and go against the natural order and design of our body, we will pay the price by getting various diseases and problems. For example, if your body is overtaxed digesting a heavy late meal or you are up late (after 10 p.m.) working, playing, watching TV or computer, your vital body energy is focused there and not available for rest and rejuvenation.

THE BIOLOGICAL CLOCK & YOUR INTERNAL ORGANS

The main internal organs of your body work according to a "Time Schedule." Knowing how your body works can help you regulate your schedule in order to attain the optimum level of health and well-being

9.00 p.m. – **11.00 p.m.**: At this time, your body eliminates toxic chemicals from the immune system (lymph nodes).**

11.00 p.m. – 1.00 a.m.: This is the time your liver eliminates poisons and rejuvenates itself.**

12.00 midnight - 4.00 a.m.: this is the time your bone marrow produces blood.**

1.00 a.m. – **3.00 a.m.**: This is the time your gall bladder eliminates toxins and rejuvenates itself.**

3.00 a.m. – **5.00 a.m.**: This is the time your lungs eliminate toxins and rejuvenate themselves.**

5.00 a.m. – **7.00 a.m.**: This is the time your colon eliminates poisons and rejuvenates itself. This is the proper time to empty your bowel.**

7.00 a.m. – **9.00 a.m.**: This is the time that vitamins, minerals, proteins, and nutrients are absorbed in your small intestines. You should definitely eat breakfast at this time.**

**It is best to be sound asleep by 9 p.m. or 10 p.m. for your body to properly execute this important function.

Global scientists have concluded that everybody should go to bed early (falling asleep by 10 p.m.) to obtain quality sleep, which will

ensure proper physical regeneration. When you co-operate with your internal biological clock and allow Nature to take her course, you will feel refreshed, joyful, and energized when you wake up (by 4 a.m. of course!).

Going to bed before 10 p.m.is essential to keep the human body in tune with Nature and to remain healthy, happy, and holy. Material scientists have concluded that the average human being needs eight hours of sleep per day, which is best obtained by sleeping between 10 p.m. - 6 a.m. When you follow the spiritual path, however, by eating sattvic vegetarian Krishna prasadam, your body becomes sanctified. And by chanting the Hare Krishna maha-mantra and engaging in Krishna's devotion, your mind becomes purified, pacified, and relaxed. Although, most people require eight hours daily sleep, Krishna devotees usually only need six hours daily rest to maintain ideal health because their spiritual practices produce tremendous physical and mental peace, purity, and internal harmony.

Besides, all sincere devotees want to follow the teachings of the scriptures and saints like His Divine Grace Srila Prabhupada, who said, "In this Krishna conscious movement, we require everyone to rise early in the morning by four a.m." (Nectar of Instruction, p. 34). Someone may think the Srila Prabhupada phrase, "Krishna conscious movement" refers only to ISKCON temples and the devotees

living therein, and it does not apply to anyone living outside the temples in their own homes or apartments. This is incorrect! Actually, Srila Prabhupada is saying that "Everyone should rise by 4 a.m."

In other words, if you are conscious, alive, and serious about moving towards Krishna and attaining pure love of God then you are, regardless of where you live, in the Krishna conscious movement. Aspiring practitioners of Krishna consciousness and initiated devotees should remember that rising by 4 a.m. and chanting the Hare Krishna maha-mantra between 4 a.m. and 7 a.m. is an absolute requirement. Everyone must follow this golden rule to be mentally happy and progress nicely in spiritual life. It is a fact — early to bed, early to rise, makes one healthy, wealthy, and wise. Of course, to rise by 4 a.m. or before, you must sleep early. Practice makes perfect.

You have to try sincerely to change your schedule and work towards this goal of taking rest at 10 p.m. and rising at 4 a.m. We hope this short essay will help the devotees understand the extreme importance of sleeping and rising early in order to realize the full potential of this rare and valuable form of human life. Our heartfelt desire is that each and everyone of you will live long healthy life full of Krishna conscious happiness, and attain the ultimate perfection of Radha-Govinda's eternal loving service in the groves of Vrindavan.

Scientific Tips for Good Rest

- 1. Cave-like darkness: The bedroom should be pitch-black, so you can't even see your hand in front of your face, which means no bright lights, clock lights, or any light coming in from the windows. Why? When we sleep in total darkness, the human brain produces a hormone called melatonin.
 - Melatonin is an important antioxidant which protects our DNA structure and prevents cancer. Tests prove that even a small amount of light hitting the skin almost immediately shuts off the production of melatonin. Therefore, scientists say, never turn on the light should you need to get up from sleep and go to the toilet.
- 2. Daily go outside and get natural sunlight: This helps regulate your biological clock and increases the production of melatonin, which promotes well-balanced sleeping patterns.
- **3.** Daily exercise: At least thirty minutes a day will help improve the quality of your sleep.
- **4.** Avoid bright lights: One should avoid keeping bright lights on inside the house before going to bed. At this time, bright light hitting the eye disrupts the biorhythm of the pineal gland and shuts off your melatonin production.
- 5. Hot shower before bed: This relaxes the body and helps you fall asleep quickly.
- **6.** Sleep as early as possible: You should be in bed and asleep by 10 p.m.
- 7. Wear socks to bed.
- **8.** The bedroom should be free from electromagnetic field: Do not keep a TV, computer, or any other electronic item in

- your bedroom because they create strong electromagnetic fields which disrupt the quality of your sleep.
- 9. Fresh air: Open the window at least a crack to get fresh air to circulate while sleeping.
- 10. Avoid fluids: Do not drink any fluids two hours before
- 11. Sleep regulation: Get up and go to sleep at the same time every day. If you are up late one night, still rise at your usual time and nap later in the day.
- 12. Daytime nap: If one needs to take a nap in the day, it should not be longer than one hour for optimal rejuvenation, rest, and repair. If you nap longer, it will disrupt the night time sleep quality.
- 13. Avoid noise: Because it disrupts sleep.
- 14. Hot water bottle: To relieve tension and anxiety, place a hot water bottle between the navel and the bottom of your
- 15. Head massage: To relax before sleeping.
- 16. Foot rub: Rub ghee or sesame oil on the bottom of your feet and promote restful sleep.

Eight Immmunity Boosters By Adam Baer



SWEET POTATOES

Often confused with yams, this tuber is one of the healthiest foods on the planet. In addition to countering the effects of secondhand smoke and preventing diabetes, sweet potatoes contain glutathione, an antioxidant that can enhance nutrient metabolism and immune-system health, as well as protect against Alzheimer's, Parkinson's, liver disease, cystic fibrosis. HIV. cancer, heart attack, and stroke. "One sweet potato a day is a great alternative to the traditional variety," says Clark.



POMEGRANATES The juice from the biblical fruit

of many seeds can reduce your risk of most cancers, thanks to polyphenols called ellagitannins, which give the fruit its color. In fact, a recent study at UCLA found that pomegranate juice slows the growth of prostate cancer cells by a factor of six. "Drink a cup a day," says Bowerman.



TOMATOES

"I think of tomatoes as the 'fighting herpes helper'," says Petersen. Their lycopene content can also help protect against degenerative diseases. "Cooked tomatoes and tomato paste work best," he says. Shoot for half a tomato, or 12 to 20 ounces of tomato juice, a day.



TEA/GREEN TEA

Studies show that green tea infused with the antioxidant EGCG - reduces the risk of most types of cancer. "The phytonutrients in tea also support the growth of intestinal bacteria," says Bowerman.

"Specifically, they inhibit the growth of bad bacteria — E. coli, Clostridium, Salmonella — and leave the beneficial bacteria untouched." Why is this important? "Because up to 70 percent of your immune system is located in your digestive tract," says Bowerman. "Four cups a day will keep it functioning at its peak."



Packed with potassium, manganese, and antioxidants, this fruit also helps support proper pH levels in the body, making it more difficult for pathogens to invade, says Petersen. Plus, the fiber in figs can lower insulin and blood-sugar levels, reducing the risk of diabetes and metabolic syndrome. Select figs with dark skins (they contain more nutrients) and eat them alone or add them to trail mix. Newman's Own fig newtons are also a quick and easy way to boost the immune system. Aim for four figs per week.



FIGS



(reiki, shiitake, maitake)

Delicious when added to brown rice or quinoa, these mushrooms are rich in the antioxidant ergothioneine, which protects cells from abnormal growth and replication. "In short, they reduce the risk of cancer," says Bowerman, who recommends half a cup once or twice a week.



CHILI PEPPERS "Chilis stimulate the metabo-

BLUEBERRIES "This potent little fruit can help prevent a range of diseases from cancer to heart disease," says Ryan Andrews, the director of research at Precision Nutrition, in Toronto, Canada. One serving (3.5 ounces) contains more antioxidants than any other fruit. Drizzle with lemon juice and mix with strawberries for a disease-fighting supersnack.

lism, act as a natural blood thinner, and help release endorphins," says Petersen. Plus, they're a great way to add flavor to food without increasing fat or calorie content. Chilis are also rich in beta-carotene, which turns into vitamin A in the blood and fights infections, as well as capsaicin, which inhibits neuropeptides (chemicals that cause inflammation). A recent study in the journal Cancer Research found that hot peppers even have anti-prostate-cancer properties. All this from half a chili pepper (or one tablespoon of

18 Hope This Meets You in Good Health

Hope This Meets You in Good Health 19

chili flakes) every day.



Hope This Meets You — in Good Health —

The Newsletter of the ISKCON Health and Welfare Ministry

Chant:

HARE KRISHNA HARE KRISHNA / KRISHNA KRISHNA HARE HARE
HARE RAMA / RAMA RAMA HARE HARE

and be happy!

If undeliverable, please return to:

ISKCON Radhadesh Petite Somme 5 6940 Septon (Durbuy) Belgium

☐ Changing your	address?		Would like	a subsciption?
	Please send v	vour	details to:	

ISKCON Health and Welfare Ministry
ISKCON Radhadesh
Petite Somme 5
6940 Septon (Durbuy)
Belgium

www.iskcon.net.au/iskconhealth

Name _	 		
Address		 	
_			
_			
Country			