



## Recommended Hints for Improved Lifestyle and Health from Integrative Medicine (IM) In the Critical Situation of COVID-19

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### Abstract

For the current critical situation of COVID-19 worldwide, several recommended hints for improved lifestyle and health were described from integrative medicine (IM) point of view. It includes some categories as follows. i) Exercise: Hippocrates said that walking is the best medicine. Walking fast, climbing stairs, and squats are effective. ii) Sleep and rhythmic lifestyle: Keep sleep and wake up time regularly, avoid looking at display or VDT work before sleep, and have bright light when waking up, especially sunlight. iii) Mental care: The US CDC presents the stressful influences, such as fear and worry about health, worsening of chronic health problems, and increased use of alcohol. Some recommendations of controlling heart and minds include keeping the natural feeling of being as it is, and mindfulness related to the oriental Zen concept. iv) Nutrition: IM and anti-inflammatory diet were proposed by Dr. Andrew Weil at Arizona University. The diet is based on two diets—the Mediterranean diet and the Okinawan diet. v) IM: Several applicable tips for IM show chiropractic, aromatherapy, supplements, medical herbs, Chinese medicine, Ayurveda, acupuncture, and others.

### Keywords

COVID-19, Integrative Medicine, New Elderly Association, Integrative Medicine Japan, Mindfulness, Anti-inflammatory Diet

### Abbreviations

COVID-19: Coronavirus Disease 2019, IM: Integrative Medicine, NEA: New Elderly Association, IMJ: Integrative Medicine Japan

Across the world, the pandemic of COVID-19 has been developed [1]. A variety of organizations worldwide have continued maximum efforts to manage this critical issue [2,3].

In Asploro open access publications, each editorial

committee has been also anxious about the matter and considering for medical papers. When editorial committees receive any report concerning COVID-19, we review it immediately and present the paper on the internet site as soon as possible with totally no APC [4,5]. Due to this situation, many people in the world

have been obliged to stay home and keep still. Then, it is rather difficult to maintain and improve health.

On the other hand, the author has continued various research concerning integrative medicine (IM) [6], psychosomatic medicine, music therapy, diabetes, low carbohydrate diet (LCD) [7], sports medicine [8], and so on. Furthermore, we have developed the movement of Japan LCD promotion association (JLCDPA), New Elderly Association (NEA) of Hinoharism, and Shikoku Island of Integrative Medicine Japan (IMJ) [9]. Combined with these situations above, how to continue self-care in current daily life with COVID-19 would be important. It includes some categories, such as 1) exercise, 2) sleep and rhythmic lifestyle, 3) mental care, 4) nutrition and 5) IM. Their topics for daily life are described in this article.

#### *Exercise:*

"Walking is the best medicine," said Hippocrates, the father of medicine [10]. Conventionally, the use of aerobic exercise and anaerobic exercise (muscle training) has been widely known. A cytokine related to exercise has been myokine [11]. This is a generic term for the cytokine group that transmits intercellular information secreted from moving a skeletal muscle. The example of myokine is interleukin-6 (IL-6) [12]. IL-6 has been thought as an inflammatory protein in some inflammatory situations. However, during exercise, IL-6 secreted by skeletal muscle has been evaluated to be a preferable factor, which would regulate the body [13].

Myokine can increase with light exercise, so walking fast or climbing stairs is sufficient for the stimulation. In particular, myokine is secreted mainly from the lower half the body, then 10 x 3 squats plus walking (10000 steps per day) daily may be easy and effective.

The author has been investigating the exercise situation and lifestyle of Masters athletes. Among them, the ice-skating athletes of the Masters were characterized by low blood TG levels in blood lipids due to continued aerobic exercise for long years [14]. Therefore, it will lead to the prevention of lifestyle-related diseases and metabolic syndrome.

#### *Sleep and regular rhythm lifestyle:*

It is said that 20% of modern people have sleep disorders. Reasons for this include stressful life, irregular lifestyles, living with not sunlight but artificial light, influences of VDT (Visual Display Terminals) devices, and work that does not use muscles.

The reasons why sleep is important are: i) sleep adjusts the body and brain, ii) keeps and strengthens necessary memories, and iii) collects the necessary information for a person to live during sleep. The quality of sleep is involved in the various patterns of Rapid Eye Movement (REM) sleep and non-REM sleep [15].

This sleep unit with an average period of about 90 minutes is repeated 4 to 5 times overnight. The parasympathetic nerve becomes dominant during non-REM sleep. It is time to give the body relaxes, sleep, and recover. Our body has a circadian clock mechanism to respond to daily rhythms and seasonal changes. When we are exposed to the light in the morning, the function in the brain is reset, and the body can wake up for active life [16].

There are several recommended points for getting good sleep. They are i) sleep 7 hours from 11:00 pm to 6:00 am the next day, ii) keep sleep and wake up time regularly, iii) make your bedroom dark and free of blinking lights, iv) have bright light when waking up, especially sunlight, v) dinner should not be skipped, but finished at least 1 hour before bedtime, vi) avoid caffeine and alcohol too much, vii) avoid looking at the display or VDT work before sleep, viii) Read a relaxing book or listen to quiet music before bed.

#### *Mental Care:*

The US CDC said on the homepage that the COVID-19 outbreak was stressful with the following influences [17]. They are i) Fear and worry about your health and the health of your loved ones, ii) Changes in sleep or eating patterns, iii) Difficulty sleeping or concentrating iv) Worsening of chronic health problems, v) Worsening of mental health conditions, vi) Increased use of alcohol, tobacco or other drugs.

Short Communication

There is Canada's largest mental health teaching hospital (CAMH), which has set the standards for care, research, education, and leading social change [18]. They have various challenges on individuals and families which respond to the demands of the difficult situation. The site is to give information and suggestions about how best to cope with this matter.

In the field of IM, Andrew Weil Center for IM at the University of Arizona has presented the information on the internet [19]. There are many ways to support our immune system, to help reduction of the risk and to

reduce the severity or duration of infection [19].

From the combination of oriental and western philosophy, the author recommends the following tips for controlling our heart and minds.

- 1) We value the natural feeling of being as it is. You can cry and talk about painful matters.
- 2) Do not try too hard. Depending on the situation, you can put in and put out force.
- 3) The ideal level is impossible. Initiate from what is possible in limited circumstances.
- 4) The target is low at the beginning. Gradually increase as you go up the stairs.

**Table-1: Recommended self-care by Integrative Medicine (IM)**

CAM	Exercise	Sleep and Rhythmic Life Style	Mental Care	Nutrition	Others
<b>Chiropractic</b>	1) Regular exercise, walking 15-30 min, stretch, weight training; 2) Remote working, stretch of neck, shoulder; 3) relax/work 50min	1) Recommendation of fast sleep for enough hours in the bed room; 2) Refrain insufficient sleep on the couch, sofa or chair	None	None	None
<b>Aromatherapy</b>	None	Lavender is recommended 1) use diffuser in bed room; 2) before sleep, taking a bath; 3) add elements in bath salt; 4) apply carrier oil to the chest; 5) Chamomile tea	Change the mood by the essential oils 1) relax, reduce tension; 2) choice as one likes; 3) lavender, orange, mandarin, ylang-ylang	None	Essential oils with possible antiviral effects by tea tree and eucalyptus radiata.
<b>Supplements</b>	None	None	None	Possible effects exist for reducing the risk of infection. 1) vitamin C: 1000-2000mg/day; 2) vitamin D: 1000 IU/day 3) Zinc: 13-20 mg/day	Zinc supplement for a few days may shorten morbidity period of the symptoms.

- 5) Individuals are different. Find the best way to keep your body and mind healthy.

#### Nutrition:

IM and anti-inflammatory diet were proposed by Dr. Andrew Weil at Arizona University [22]. The University of Arizona Center for Integrative Medicine (AzCIM) was founded in 1994 with a primary focus of educating physicians in IM. Twenty years later, IM has become an internationally recognized movement in medicine [22].

The anti-inflammatory diet is based on two diets—the Mediterranean diet and the Okinawan diet [23]. The anti-inflammatory diet is more than just a prescription for healthy food, but rather a way of life characterized by a plant-based diet. It includes eating various locally grown seasonal foods, culinary activities, physical activity, and rest [23].

#### Integrative Medicine (IM):

For the current social and medical situation, it will be possible for each person to apply various kinds of integrative medical care available at home. These mechanisms include i) warm the body, ii) increase blood flow, iii) stimulate the endocrine and immune system and iv) improve the natural healing power. Examples include chiropractic, aromatherapy, supplements, medical herbs, Chinese medicine [24], Ayurveda, acupuncture, and others. **Table-1** shows the easy-to-use items.

In summary, the information useful for people to self-care at home was introduced in this article. Hopefully, these tips would help to prevent infectious diseases and to maintain and progress daily health in the world.

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