

# **Safety Medication Handbook for New Immigrants**

(English)

(英文)

# Understanding Healthy Medication Principles

One of the goals of Ministry of Health and Welfare is to promote and maintain people's health and welfare. Therefore, Ministry of Health and Welfare keeps planning well-organized policies of health and welfare, constructing community care network, developing diversified ways to advocate health education, and conveying correct healthcare and disease prevention ideas everywhere in Taiwan to those in need so that all the people's health and welfare can be protected.

Although it is fast and convenient to acquire knowledge regarding medication and diseases through Internet, news, and radio broadcasting, for the new immigrants, it might be risky because they are not familiar with the environment, language, and culture in Taiwan.

Besides in Chinese, English, Vietnamese, this year, Indonesian Safety Medication Handbook for New Immigrants is also printed in Thai and Khmer language. It not only helps the spreading of correct medication knowledge but also promotes the accessibility of correct medication information for new immigrants. The information regarding safety medication, medical care service, and introduction to diseases in the Handbook not merely protect their health, but also helps them understand current situation and development of medical policies in Taiwan so that they can identify with Taiwan culture and really become members of Taiwan.

With the Handbook, new immigrants can be familiar with common diseases and review their and their families' medication habits, reducing wrong understanding of diseases and improper medication, building correct medication ideas, and using community pharmacy and pharmacist network actively so that new immigrants can live in a healthier and better protected life.

Ministry of Health and Welfare  
Minister Qiu Wen-da  
July 2014

# Creating a Healthy and Happy New Life Together

According to the statistics made by Ministry of the Interior, ended in December 2013, the total number of foreign spouses in Taiwan is 486,703 people, most of which are from China, Hong Kong, and Macau, taking 67.61%, from Vietnam 18.29%, and from Indonesia 5.74%. For the new immigrants far away from their hometown, language plays an important role for them to adapt themselves to local society and culture, and blend into ethnic groups. More importantly, language is an important communication tool for the conveying of correct information. Besides, most new immigrants serve as wives, mothers, and daughters-in-law. It is essential for them to convey correct knowledge regarding diseases and medication so that they can understand medication information and enhance their ability to take care of themselves and their families.

Therefore, to protect new immigrants' right for medication and reduce their difficulties in the acquisition of disease and medication information or medication consultation because of their economic and language barriers, from 2012 to 2014, Food and Drug Administration commissioned Yunlin County National Health Insurance Community Pharmacy Association to conduct Project for Building Safety Medication System for Special Groups. Starting from Yunlin County, Nantou County, and Chiayi County, the government has been propagating medication education for new immigrants and the disabled in Taiwan, compiling and publishing *Safety Medication Handbook for New Immigrants* so as to promote new immigrants' medication knowledge and ability for healthcare.

This *Handbook* is divided into 40 chapters. Besides simple medication knowledge (introduction to labels of medical products and medicine bags), introduction to common chronic diseases (high blood pressure, high cholesterol, diabetes), this year, the *Handbook* also includes common gynecological disease and weight loss. The most prominent characteristic of the *Handbook* is that it talks about knowledge regarding diseases and safety medication in simple expression, and it is translated into English, Vietnamese, Indonesian, Thai, and Khmer language so that people and new immigrants not only can read it anytime, but also can learn more about basic medication knowledge and how to take care of themselves and their families.

With the *Handbook*, Food and Drug Administration hopes to reinforce people and new

immigrants' understanding of correct medication so that they can keep healthy and take care of themselves and their families and friends.

Food and Drug Administration, Ministry of Health and Welfare

Director-General Ye Ming-gong

July 2014

## **Table of Contents**

### **Pharmacists discussing Medicines**

- Chapter 1 Pharmacists discussing Medicines
- Chapter 2 What is medicine?
- Chapter 3 How to take medicine
- Chapter 4 Family standing medicine
- Chapter 5 Health food products

### **Pharmaceutical Care and Community Pharmacy**

- Chapter 6 Pharmaceutical Care
- Chapter 7 Your Friendly neighborhood---the pharmacy in a community
- Chapter 8 How to self-care by properly taking medicine when you are ill
- Chapter 9 Making good use of continuous prescription of chronic diseases
- Chapter 10 Drug's storage and expired-drug recycling

### **Correct Medical Concepts**

- Chapter 11 How to clearly state your syndrome to your doctor
- Chapter 12 Double check with pharmacist while receiving medication pack
- Chapter 13 Recognition of indications on medication packs
- Chapter 14 Labeling of the Medicine Bag and Medicines
- Chapter 15 Illegal medicine

### **Medication for Women**

- Chapter 16 How to use contraceptives?
- Chapter 17 Safe medicine use for pregnant women
- Chapter 18 Medication safety for breastfeeding mothers
- Chapter 19 Understanding infertility
- Chapter 20 Understanding osteoporosis
- Chapter 21 Understanding Endometriosis
- Chapter 22 Understanding Uterine fibroids
- Chapter 23 Fair ladies – healthy weight loss

### **Medication for Special Populations**

- Chapter 24 Drug safety for children
- Chapter 25 Medicine safety for seniors
- Chapter 26 Chinese Herbal Medicine's Safe Usage
- Chapter 27 Medication Myths

### **Public Health and Pharmacists**

- Chapter 28 Sex Education for teenagers
- Chapter 29 Understanding of the harmful effects of tobacco
- Chapter 30 Learning about AIDS
- Chapter 31 Understanding Illegal Drugs (Narcotics)
- Chapter 32 Preventing Biting Midges

**Self-care on Common Illnesses**

- Chapter 33 Understanding High Blood Pressure
- Chapter 34 Understanding High Blood Cholesterol
- Chapter 35 Understanding diabetes
- Chapter 36 Understanding asthma
- Chapter 37 Understanding of urinary incontinence
- Chapter 38 Knowing about Enlarged prostate
- Chapter 39 Understanding Urinary tract infections
- Chapter 40 Understanding Psoriasis

## **Chapter 1 Pharmacists discussing Medicines**

### **What is medicine?**

Medicines are substances that can influence the (1) physiology, (2) psychology, (3) function, (4) structure of your body.

### **What can the pharmacist do for you?**

1. The pharmacist practices at Hospitals clinics pharmacy pharmaceutical marketing identification inspection of public health and health education...
2. The pharmacy provides drug dispensing health food healthy food nutritional products women and children supplies medical equipment drug counseling self-care...

### **Is it very inconvenient when you see a doctor, you have to take the doctor's prescription to the pharmacy to get the filling?**

1. It is the safest for patient for doctor to provide diagnosis and write prescription, and then. Pharmacist evaluating the prescription before filling it, based on the respective professionalism of each.
2. Like wearing the safety helmet, even though it is hot, it provides an additional layer of safety and guarantee

### **Is it more convenient to fill the prescription at community pharmacy with chronic disease refills?**

1. National Health Insurance Administration announces 98 types of chronic diseases that doctors can prescribe chronic disease refills when conditions are stable.
2. When refilling prescription at community pharmacies, there is no need to wait in line and pay registration fees, and no need to pay drug copayment.

### **How to dispose of unfinished medicine?**

Dumping medicine into the soil will pollute it and destroy the environment. If people have unfinished medicine, for common family medicine, it is best to take the pills out of the package and collect them in a zipper bag. If there is any liquid medicine, pour it into the zipper bag as well. Then seal the bag and give it along with your garbage to a clean personnel. If it is a kind of genotoxic waste, such as antitumor drugs, take them back to the hospitals, and the hospital will handle them with other medical waste. Do not throw them away recklessly.

### **Are the medicine prescribed and received from community pharmacies the same as those from hospitals?**

1. Specialty contracted pharmacies must handle prescriptions from all medical institutions and hospitals nationwide, so prepare many medicine items.

2. Recommend the public to first bring the prescription to the specialty contracted pharmacies, and let the pharmacists prepare the medicine items beforehand.
3. Drug companies are all world class C-GMP specification, producing medicine with the same quality and same efficacy.
4. As long as the drug items have the same dosage, dosage form, content, indications, by regulations, the specialty contracted pharmacies can serve as substitutes.

**Is the community pharmacy your good neighbor?**

1. Community pharmacies are located at all locations, so for any questions regarding medicine items, can seek consultation from pharmacist.
2. Community pharmacies have long operating hours, with many business items; they are a professional form of 7-11.

Adverse medical reactions reporting system - Website: <http://adr.fda.gov.tw>

E-mail: [adr@tdrf.org.tw](mailto:adr@tdrf.org.tw)

Tel: 02-2396-0100

Taiwan Drug Relief Foundation - Website: [http://www.tdrf.org.tw/ch/00\\_home/home.asp](http://www.tdrf.org.tw/ch/00_home/home.asp)

E-mail: [tdrf@tdrf.org.tw](mailto:tdrf@tdrf.org.tw)

Tel: 02-2358-4097



## Chapter 2 What is medicine

“Medicine” is defined as: a material or mixture using for preventing, relieving or eliminating the syndrome or human disease, which may also recover or enhance human body’s normal physical function, or to assist doctor’s diagnosis.

It is said that “medicine is poison!” if you cannot use medicine properly. No matter its Chinese medicine or western medicine, once the medicine is being taken into human body, you can’t tell the difference. It can “cure” and “kill”. Without pharmacist’s instruction, it works one way or the other.

### Classifications of medicine

1. By appearance: injections, oral medicine, external use, medical instruments.
2. By categories: Prescription drugs, instruction drugs, and over-the counter drugs.

**Prescription drugs:** doctor’s prescriptions required, and dispensed by professional pharmacist.

The pharmacist dispenses the medicine under doctor’s prescriptions, and advises patient for the usage.

**Instruction drugs:** doctor’s prescriptions not required, can be purchased at community pharmacy and take it under the instructions of pharmacist and the package inserts.

**Over-the-counter (OTC) drugs:** OTC class B can be purchased at supermarket or drug store, while OCT class A&B can be purchased at community pharmacy. Patient can purchase freely and use it according to the instructions of package inserts.

## Charter 3 How to take medicine

When receiving medicine pack, you should check its quantity, ensure the dosage and time period of taking, and notices of the following:

1. Internal drugs should be taken with warm drinking water.
2. Drugs must be taken under the scheduled time.
3. Taking drugs within the regular time frame before or after the meals.
4. Do not take drugs along with tea, juice, milk or coffee, etc. stimulating beverages.
5. Taking drugs according to instructed dose of doctor's prescription. Do not change or stop taking drugs without doctor's instruction.
6. Whenever recalling a missing dose, take it immediately. Do not take the missing dose if next instructed dosing time is approaching.
7. After taking medicine, if no effectiveness to the symptoms or any unusual condition or side-effect occurred, advise doctor immediately.
8. Notice the drug's name, warnings and expiration period on the label.
9. After recovery, stop taking drugs and should not share the unused drugs to others.
10. Consulting with your physician or pharmacist for any questions regarding to the medication.
11. Two or more different kinds eye-drops should be applied with 5-10 minutes intervals.
12. Topical creams for external use should be not swallowed or applied to eyes.

### Instructions for taking medicine

1. Firstly, check to see if it is for internal use or external use:
  - (1) Oral drugs: confirm the correct usage and dosage, if it is taken by swallow, chewable, prior melted in mouth, or prior diluted with water, etc. and check if it's deteriorated or expired.
  - (2) For external use: confirm the portion to be applied, e.g. skin, eyes, ears, mouth, nose, rectum, vagina or via inhalation.
  - (3) To avoid contaminating drugs or wounds, wash hands carefully prior taking medicine.
  - (4) Shake well when using liquid suspension.
  - (5) Suppository is required to keep in refrigerator to maintain its shape. Drugs stored in refrigerator should be restored back to room temperature prior to usage.
  - (6) Be sure to cover the drugs tightly after usage.
  - (7) Do not use deteriorated or expired medicinal liquid. Eye drops must be discarded one month after opening.
  - (8) To avoid interactive transmission of virus or misusing drugs, do not use others' medicine.
2. Medication time:
  - (1) Drugs should be taken according to prescribed dosing time:
    - Four times daily: Take the medicines at breakfast, lunch, dinner and before bedtime
    - Three times daily: Take the medicines at breakfast, lunch and dinner
    - Twice daily: Take the medicines at breakfast and dinner
    - Once a day: a fixed time per day
  - (2) Before and after meals
    - Before meal (empty stomach): Take the medicines within an hour before meal or take them along with food two hours after meal.

Medicines taken before meal: Can be easily affected by food and absorbed with less gastrointestinal irritation.

After meal: Take the medicines within an hour after meal or take them immediately after meal.

Medicines taken after meal: Can be absorbed with the help of food to reduce gastrointestinal irritation.

Before bed time: half an hour before bed time.

(3) 4 times a day and 6 hours a day:

By different purposes:

4 times a day is for symptoms treatment, e.g. PANADOL.

6 hours a day is to maintain and stabilize blood concentration, e.g. antibiotic.

3. Medicine should be taken along with drinking water:

(1) The effectiveness of drug may be affected and resulted in interactions with juice (such as grapefruit juice), tea, coffee, or milk.

(2) To avoid drugs stay in esophagus too long and cause esophagus burns, do not lay down while taking medicine.

4. What to do if forgot to take medicine?

(1) Drugs for symptoms relief: it is Ok if forgot to take it, e.g. analgesics.

(2) Drugs for treatment or prevention: e.g. hypertension, diabetes. If you recall it within a short time after passing the prescribed dosing time, take it immediately. If it's close to next dosing time, do not take it.

(3) Drugs for taking before bed, no need to make it up in the day time.

### **Warnings:**

All of hospital, clinics or pharmacy will provide their medication pack with detailed information including usage, dosage, side-effects, indications, etc. Before taking medicine, you must carefully read contents and warnings on medication pack or package inserts.

1. Side-effects:

(1) When quoted with "this drug may cause drowsiness or dizziness", or "after medication, you should pay more attention on driving or operating machinery" warning, means it will prevent you from doing concentration required task.

(2) When quoted with "during the medication period, do not take any alcohol related beverage!" warning, means it may prolong the medication effectiveness or drowsiness.

(3) Warning of "during medication, avoid sun exposure!" is usually indicated on sulfa drugs and whitening products.

2. Special usage:

(1) Warning of "take it by swallowing, no grinding or chewing", indicates it's not tasty. For example, drugs in sustained releasing dosage form and enteric coating dosage form are not suitable for chewing.

- (2) Warnings of "keep in low temperature", means after receiving medication pack, it should be kept in the refrigerator.
- (3) Warnings of "shake well before use" which is often indicated on liquid suspension, liquid antibiotic, or eye drops.
3. **Pregnant woman and breast-feeding:**  
Warning of "pregnancy, pregnancy potentials or breast-feeding women are prohibited", means pregnant woman or breast-feeding mothers are not suitable to take the drugs.
4. **Drugs' interaction:**
  - (1) Warning of "at least 2 hours or more of interval is required for each dosing time while taking with irons, or antacids" is often indicated on antibiotic drugs like Quinolone antibiotics, because iron, milk or antacids will interfere with their absorptions and effects.
  - (2) Warning of "do not take together with grape fruit juice", means the mixture of calcium channel blockers, macrolide immunosuppressants and ergot derivatives, etc. with grape fruit juice will affect absorption and metabolism of medicine.

## Chapter 4 Family Standing medicine

Self care is what one would use medicine for one's health in general. What is most important is the "self evaluation" of what symptoms one has, and for following the instructions for self care medicine and the basic knowledge on them. One should follow the pharmacist's instructions to use medicine.

Family standing medicine can allow instant cure for minor sickness. Each family should have a small quantity of safe and effective standing medicine and should learn to how use them safely and reasonably. This way, the standing medicine will be able to bring about the maximum effect.

### The types of family standing medicine

#### 1. Types of standing medicine taken orally:

- (1) Medicine for common cold: Common cold medicines, rhinitis ingots, cough ingots, phlegm ingots or cough syrup.
- (2) Antipyretic analgesics: in addition to anti-fever can also relieve pain.
- (3) Gastrointestinal medication: indigestion, upset stomach, diarrhea symptoms.
- (4) Other: motion sickness for cars, motion sickness drugs for planes, allergy drugs.

#### 2. Types of standing medicine applied externally:

- (1) Iodine (2) anti-inflammatory ointment (3) alcohol (4) sore patch
- (5) anti-fever suppository (6) the eye drops (7) anti-itch creams
- (8) Other

### Note

1. If an adult continually takes a common cold medicine for over 7-10 days, or have fever for over 3 days without symptoms improving, he or she should get treatment from doctor.
2. If there are any serious side effects, should stop taking the medicine and get treatment from doctors.
3. Do not take 2 or more types of antipyretic analgesics at the same time, or else the side effect and toxicity will be reinforced.
4. In medicine for the common cold, antihistamines are usually contained. This will create symptoms of drowsiness.
5. Preservation for special types of medicine:

Eye drops: Can be stored under room temperature. If there are special instructions, or requirement to be stored in the lower level of refrigerator, handle according to labeling. If unfinished after opening within 1 month, they should be discarded.

Anal suppository: As they will start to melt at temperatures above 30°C, most need to be refrigerated to prevent softening.

General liquid / suspension: like stomach milk, cold or cough syrup can be stored at room temperature, unless there are special instructions.

## **Conclusion**

Family standing medicine is used to treat symptoms which are light and minor. However, if there] is no improvement of the symptoms after using them, one should get treatment from doctors to delay the regrets from delaying treatment. Also, as family standing medicine is kept for the possible future use, each family member should know what type of medicine is available, where they are located, and how to use them.

## Chapter 5 Health Foods

### What are health foods?

1. Based on “Health Foods Management,” health foods refer to “foods with health efficacy, or foods labeled or advertised with their efficacies.” “Health Foods” is a legal term. The foods must be examined and approved by Ministry of Health and Welfare before they can be called “Health Foods” While the so-called “Healthcare Foods” sold on the market are actually ordinary foods that can only be regarded as nutritional supplements. Both are entirely different!
2. Although health foods accredited by Ministry of Health and Welfare are able to enhance health, but they do not possess any medical efficacy, and neither do they feature equivalent medical effects and unable to replace the regular drugs used in medical treatments.

### Choose “Health Foods” wisely that bear the following insignias!

The accredited “Health Foods” are marked with “DOH Health Food Regulation No.” or “DOH Health Food No.”. Both of them are shown with a “standard green elliptical pattern.” These are guaranteed health foods examined by the Department of Health.



### Health foods consumption precautions

While selecting health foods, you should first “STOP” and think calmly whether they are really necessary and whether they can enhance your health? Then “LOOK” at the packages carefully for the “standard green elliptical patterns” and “license numbers,” warning notes,” “precautions,” recommended dosages,” and “health efficacies.” Please pay attention to “LISTEN,” consult the physician, pharmacist, dietitian or other specialists before you can correctly purchase health foods that are beneficial to your health. As a reminder, “a balanced diet, normal rest and consistent exercise schedules” are indeed the best route to good health. For more information, please assess <http://consumer.fda.gov.tw/> to check out on “Consumer Knowledge Network on Food and Drug.”

## **Chapter 6 Pharmaceutical Care**

### **The objective of Pharmacist Care for Patients**

The pharmacist evaluates medicine used, designs and implements care program, and does follow-up treatment, to ensure medicine treatment conform to symptoms, is effective, safe, and compliant, to raise quality of medicine use and life.

### **Issues with Drug Treatment**

1. Not using medicine when ill, and needing to increase amount of medicine for treatment
2. Not ill but using medicine, eliminate unneeded medicine for treatment
3. Inappropriate selection of medicine
4. Dosage too high or too low
5. Adverse reaction to drug treatment
6. Compliance regarding taking medicine poor

### **Process of Caring for patient**

1. Efficacy evaluation: understanding patient needs, confirming effectiveness, safety, convenience, & prevention of new issues of treatment. People are sick, but they are not under medical treatment.
2. Caring Program: solving drug therapy issues, verifying the treatment objectives, evaluating if there are new issues. People are not sick, but they take unnecessary medicine.
3. Follow-up of effectiveness: recording outcome of therapy, evaluate progress of illness, discover new issues with drug therapy.

### **Location of implementation of pharmacist care**

Hospitals: Intensive Care Units, General ward, blood drug concentration monitoring, pharmacist outpatient

Community Pharmacy: chronic disease management, OTC drug consultation

Long term care institution: Nursing home

Home care: Services to home

### **Care Services of pharmacist at community pharmacies**

Make up a prescription, chronic disease management, set up patient medication file

Consultation or guidance of using medication

Medicine delivery to home, medicine delivery to clinic, internet referral registration

Educate yourself on self-care health knowledge and the use of non-prescription drugs.

### **Care Services of pharmacist at long term care institutions**

Verifying the medicine prescription, storage, and correctness of delivery



Management of emergency and use of medicine

Provide medicine information & health education for patients, family members, & other medical staff

Evaluate appropriateness of patient drug treatment and solving drug treatment problems

### **Care Services of pharmacist for at home services**

Evaluate: Understanding the patient's recognition of his or her own illness, treatment objectives, and drug use

Set up and implement care program: Set up care program and propose solution to drug treatment program, correct ways of using drug, organizing drug use progress and out of date medicine

Recording and discussion: Do post care evaluation and communication with other care staff, monitor and track, reasons for medication errors

Others: Medical Equipment for home care, storage for medicine and handling of used medicine, guidance and instructions of home environment and cleanliness

### **Pharmaceutical Care**

To use the professional services and use local languages as bridge for communication to make caring part of everyday life. Listen with heart, and provide care at appropriate time, and discover the problems of patient. To provide plenty of care knowledge, recommend patient to develop a good lifestyle, starting from regular diet and exercise to help adjust patient body. Pharmacist uses the professional knowledge to find possible concerns and problems from drug use, and to help solve their lifestyle problems. To help patients in a natural and healthy way, as a form of care that is easily accepted by the public.

*Medicine can cure illnesses, and also cause illnesses*

*Medication Safety starts from oneself!*

## **Chapter 7 Your friendly neighborhood--the pharmacy in a community**

A community pharmacy is a place where a professional pharmacist sells and dispenses drugs. It acts like a 7-11 or the health center in the community, and provides the newest drug information and the knowledge of safe medications. Besides, it helps the community residents taking good care of themselves by providing instruction drugs, and assists the community residents in sorting or classifying their medications. The functions of a community pharmacy are as follows:

1. Dispensing --confirm prescriptions, establish patient drug profile, dispensing, give instructions of drugs, avoid doubling medications.
2. Drug supply--Provide prescription drugs, instruction drugs, health food and nutrition food.
3. Medicine care--Dispense the prescriptions of chronic diseases, arrange medications and explain prescriptions.
4. Medicine consultation --Provide medicine information, drug knowledge, safe medications and medicine educations.
5. Health consultation -- Provide consultation on health care, prevention of contagious diseases, patient guide, smoking cessation, weight losing and drug abusing.
6. Providing safe, convenient, cost-saving, time-saving and substantial drug related services.

Non-prescription drugs include instruction drugs and Over-the-Counter (OTC) drug, people can purchase these groups of drugs in community pharmacies without physicians' prescriptions. The characteristics of non-prescription drugs are: safe, effective, convenient, preventive or relieving. People can purchase them freely and use them according to pharmacists' instructions or explanations on package leaflet or label.

## **Chapter 8 How to self-care by properly taking medicine when you are ill**

What will you do when you get sick? Most of people go to see doctor, but for some minor illness, you actually can take care of yourself by getting medicine from community pharmacy.

### **Common Cold**

Mainly resulting from virus, it will make major impact to respiratory system, known as running nose stuffy nose, sore throat, coughing or even fever, etc. Patient should take great deal of water, take good rest, and get medicine from nearby community pharmacy.

There is no panacea for common cold. Mostly the medicine for common cold is instruction drugs. Patient just takes it under the pharmacist's instructions.

The influenza or seasoning flu may cause systemic symptoms, then going for doctors' diagnosis, examination and taking medicine is essential.

### **Pain**

People may experience "pain" more or less in one's life time, which including headache, toothache, stomach-ache, gastric distress, menstrual cramps pain, and muscle pain, etc.

Acute pain caused by any physical injury or damage can be relieved once the injury is treated or damage is recovered.

In the event of headache, menstrual pain or toothache, you may purchase painkiller at the community pharmacy as indicated by the pharmacist to relief the pain. If the pain sustains, you should then consult a physician for treatment and check on the drugs you consumed.

If pain appears frequently, such as severe chest pains, headache, or stomach-ache, etc. it is essential to see the doctor for diagnosis, examination and take medicine.

### **Fever**

When body temperature exceeds 38 Centigrade degree, it is called "fever". Fever is a phenomenon that human body drives its immune system to eliminate the invading virus, toxins, and fix all damages occurred.

Fever may be caused by common colds, bacterial, virus infections' disease. However, exercising or hot weather may cause higher body temperature temporarily. Just take some rest and drinking water if it is caused by the later factor.

If the fever results from the disease, it is required to take antipyretic. In addition, there are some ways to lower body temperature by placing ice pillow on forehead or back of the head, taking a good rest, drinking sufficient water, and taking off heavy clothes, etc.

If the fever comes back after 4-6 hours taking antipyretic, patient should see the doctor immediately for further treatment.

### **Nausea, Vomit**

They are common symptoms while you are sick. It will usually be recovered by taking OTC

medicine, good rest and avoiding dehydration.

If nausea and vomit result from gastric acid hypersecretion, patient may take antacids, and stay away from milk, tea, coffee, and any irritating beverages, such as acid drinks.

For those who usually gets dizzy, or even becomes nausea or vomit while taking any kinds of transportations, they may take motion sickness pills half an hour prior to the departure.

During pregnancy, if the nausea or vomit becomes a serious impact to her daily life, nutritional status and fetal development, the patient may take medicine in accordance with doctor's prescription.

### **Constipation**

Constipation becomes a common disease of civilization in modern days. It may result from work pressure, stress, lack of exercise, or unbalanced nutrition, and is possibly caused diseases or medicine as well.

If the constipation results from habits of diet or psychological stress, it can be improved by changing daily habits of diet to stimulate gastrointestinal motility, such as taking more vegetables, increasing water intake, building habits of exercise, etc. and developing a good defecation habit.

If the constipation results from diseases or medicine, patient may purchase stool softener from community pharmacy. However, patient should not abuse or rely too much on the softener, otherwise it may affect function of gastrointestinal motility, or neglect the reason of constipation which may further cause a delay treatment.

### **Diarrhea**

The reasons for diarrhea may be involving bacterial, virus, medicine, food poison, gastrointestinal malabsorption, etc.

Minor diarrhea can be cured by taking antidiarrhea drugs or gastrointestinal agent from community pharmacy. Besides, intake lots of water to avoid dehydration, and accompanying with light diet.

In any events of persistent diarrhea, diarrhea with fever, severe vomiting, or bloody stool happened, patient should go to the hospital immediately for further examination, and stop taking antidiarrheal or other medicines.

Once the condition of diarrhea is relieved, patient may stop taking antidiarrheal. However, it is essential to intake lots of water for electrolyte support, and serves liquid food to rest the belly.

For occasional minor illness or uncomfortable feeling, patient may take OTC or instruction drugs under the instruction of pharmacist nearby community pharmacy. In any event of patient's not getting improve or even worse, patient should go to the hospital immediately for further diagnosis and treatment.

## **Chapter 9 Making good use of continuous prescription for chronic diseases**

### **What is continuous prescription for chronic diseases?**

For a patient with chronic disease who needs to take same drugs continuously over 6 months, doctor will provide continuous prescription for their long-term use.

### **How long is the continuous prescription valid?**

This type of prescription should be valid for 3 months from the day doctor's prescription. The prescription may be dispensed in 2 to 3 times.

### **Who is eligible for using continuous prescription?**

For chronic disease patients who fit into the list of diseases announced by Department of Health, such as hypertension, high blood sugar, and hyperlipidemia, etc. When patients' condition becomes stable, physician may file a continuous prescription based on several factors as: types of drugs for treatment under evaluation, dosage and if patient is with good compliance, etc.

### **Where to receive the drugs?**

Not until 10 days before the last fill can chronic patients refill their prescribed medicines at their original contracted hospitals, clinics or the nearby National Health Insurance (NHI) appointed pharmacies along with their chronic illness prescription refill slips and NHI cards.

### **How to handle when sickness feeling occurred during the medication period?**

During medication period, when no effectiveness found or any unusual conditions or side-effects happened, advise doctor immediately. Patient should take the prescriptions and return to the hospital where the prescription was received for doctor's further consultation.

### **Any benefits for continuous prescriptions?**

In accordance with the continuous prescriptions, chronic disease patient may get his medicine easily from a health insurance contracted pharmacy or the hospital where prescription received or clinic, which would save patient's cost in registration at hospital or clinic, as well the time consuming in traffic.

## Chapter 10 Drugs Storage and Expired-Drugs Recycling

Drugs should be kept in fixed place at home. There are several ways to preserve medicine from getting lost or changing its quality as below:

- 1.Preventing from light, humidity and heat: drugs are easily to change their qualities in places of high humidity and heat, like bathroom or kitchen.
2. Keeping it in cool and dark: inside the drawer or cabinet
3. Low temperature required: keep it in refrigerator with temperature between 2 to 8 Celsius.
- 4.Special requirement of light prohibition: such as eye drops which should be stored with untransparent plastic bags.
5. Keeping in the place children can not reach.
6. Keeping drugs separately for internal and external uses.
7. Keeping separately different types of drugs.
8. Preserving drugs together with their original package in sealed container.
9. After opening, the attached cotton and drier should be abandoned immediately.
- 10.Storing the integrity of original package and container for further recognition.
- 11.Storing the package inserts, original package for further recognition.
- 12.Noting relevant information of effective date, usage and dosage.
- 13.Storing in glass container is better than in plastic bag.
- 14.Check the drugs at your house at least regularly, and dispose of the expired drugs. If people have unfinished medicine, for common family medicine, it is best to take the pills out of the package and collect them in a zipper bag. If there is any liquid medicine, pour it into the zipper bag as well. Then seal the bag and give it along with your garbage to a clean personnel. If it is a kind of genotoxic waste, such as antitumor drugs, take them back to the hospitals, and the hospital will handle them with other medical waste. Do not throw them away recklessly.

## **Chapter 11    How to state your conditions clearly to the doctor**

While seeing doctor, details of your statement should include the following:

1. Symptoms: part of body injured or feeling sick, status, and time occurred... etc.
2. Personal history of illness: including records of surgery, hospitalization, medical examining report, with or without diseases of diabetes, hypertension, liver kidney or familiar diseases, etc.
3. Have you ever had any unusual reaction over certain drugs? or allergies? Or special diet habits.
4. Drugs are currently taking: including chronic disease medicine, Chinese medicine, vitamins, contraceptive drugs, diet pills, healthy food and special food.
5. Have you ever taken any other drugs in past few weeks: – Some drugs may continuously function in your body which would affect current medicine from doctor's prescription.
6. Any other undisclosed diseases, which may influence the result of medication: for example, if you have a liver or kidney dysfunction, which prolongs the drugs' excreting time from your body, or even increase drugs' toxicity.
7. Are you breastfeeding your baby: Because some drugs may secrete into breast.
8. Do you have any surgery arrangement or medicare plan: Since current medicine may influence coagulation and medical report.
9. Are you participating any examinations? operating machinery? Or driving? because some drugs will make you feel sleepy which may cause your distraction and bad reaction.
10. Are you pregnant? Some drugs may get in the fetus body through the placenta.

## **Chapter 12 Double check with pharmacist while receiving medication pack**

When receiving medicine pack, be sure to check with pharmacist for any questions. Be sure your understanding on the details on the package inserts, and confirm item by item to the following:

1. Your name is properly printed on medicine pack;
2. Be aware of drugs' title and quantity;
3. Make sure the usage of intake time and dose;
4. Make sure this is the right medicine for your symptoms;
5. Check the time period of medication for the treatment;
6. Clearly ask for the post-medication precautions, side effects and warning notes.
7. Consult with pharmacist if necessary;
8. Ensure that the appearance of drugs has not deteriorated, and their expiration dates and storage methods.
9. While purchasing the prescribed or ready-made drugs, please inspect whether or not the packages are printed with DOH-approved drug permit numbers and valid dates.

### **You are the master of your own body, keep in mind of the following**

1. DO NOT listen to drugs recommended by other people.
2. DO NOT believe in the magical effects of drugs.
3. DO NOT purchase drugs sold at street stores, night markets, Internet and excursion buses.
4. DO NOT take drugs given by other people.
5. DO NOT recommend drugs to other people.



# Chapter 13 Recognition of indications on medication pack

When receiving medication pack, pharmacist shall advise patient the correct usage of medication. In any events, relevant indications should be printed on medication pack. For ease of reference, some hospitals may provide patient with diagrams of medication time frame on medication pack.

## 健康綜合醫院

地址: 雲林縣斗六市幸福街168號  
藥物諮詢電話: 05-6543210-2130

領藥號碼 No.

姓名: 金大風 (Name)	生日: 1955/09/09 (Date of Birth)	性別: 男 (Sex)	調劑日期: 2010/02/22 (Dispense Date)
病歷號碼: 123456 (Chart No.)	年齡: 54 (Age)	體重: (Body Weight)	藥師: 張淳淳 (Pharmacist)
科別: 胃腸科 (Department)	醫師: 許來發 (Doctor)	代號: 157 (Dr. Code)	

**【藥名】** A.M.D tab---Al(OH)3 gel 334mg+MgO 42 PC  
77247#5 166mg+Dimethicone 36.7mg/tab  
商品名: A.M.D 愛姆得  
廠牌: 溫士頓

**【使用方法】** 內服藥, 口服 2-5  
每天3次, 三餐飯後服用, 每次1粒, 14天份

**【臨床用途】** 1 緩解胃部不適或灼熱感 2 胃酸過多 3 消化不良 4 解除脹氣, 解除脹氣, 緩解氣脹相關症狀

**【注意事項】** 請嚼碎後吞服

**【副作用】** 便秘; 腹瀉; 噁心; 嘔吐

**【藥品外觀】** 白/綠色, 圓形, 雙層錠, 一面有刻痕, 另一面有310.WINST ON字樣

本品建議在 2010/03/29 前用完

早上



中午



晚上



睡前



飯前



飯後



請詳閱背面注意事項, 如需注射請將藥交給注射室醫護人員。

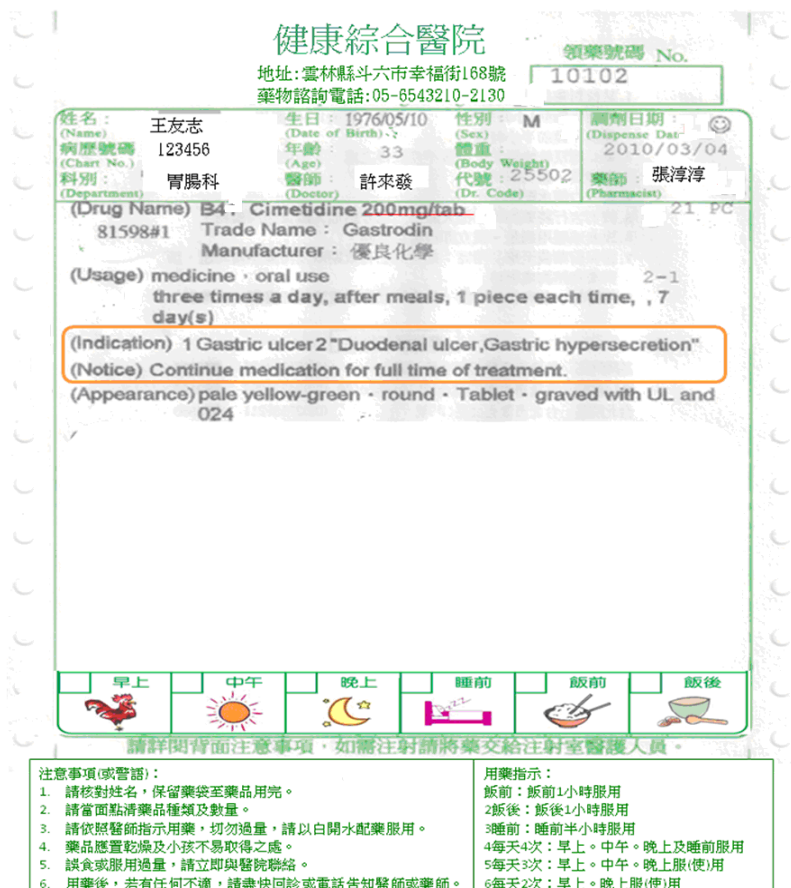
**注意事項(或警語):**

- 請校對姓名, 保留藥袋至藥品用完。
- 請當面點清藥品種類及數量。
- 請依照醫師指示用藥, 切勿過量, 請以白開水配藥服用。
- 藥品應置乾燥及小孩不易取得之處。
- 誤食或服用過量, 請立即與醫院聯絡。
- 用藥後, 若有任何不適, 請儘快回診或電話告知醫師或藥師。

**用藥指示:**

- 飯前: 飯前1小時服用
- 飯後: 飯後1小時服用
- 睡前: 睡前半小時服用
- 每天4次: 早上、中午、晚上及睡前服用
- 每天3次: 早上、中午、晚上服用(便)用
- 每天2次: 早上、晚上服用(便)用

For better understanding in medication, some hospitals even thoughtfully, provide foreign patients with medication pack in English version. Examples showed as below:



According to Ministry of Health and Welfare, the medication packs should contain 16 essential labels:

1. Patient's name
2. Patient's gender
3. Drug's name
4. Drug's dosage
5. Drug's quantity
6. Usage
7. Dosage
8. Name of pharmacy
9. Pharmacy's address
10. Telephone number of the dispensing pharmacy
11. Name of dispenser
12. Date of dispensing
13. Warning notes
14. Principal indications
15. Main side effects
16. Other medication instructions

## **Chapter 14 Labeling of the Medicine Bag and Medicines**

When customer service departments of medication institution deliver medicine to patients, they should include the name, gender, name of medicine, dosage, quantity, usage, effects or indications, warnings and side effects, the name and location of the medical institution, the name of the pharmacist, and the date when prescription was made up (by day, month, and year)

### **Read clearly the labeling of Medicine Bag and Medicines**

1. Clear medicine bag labeling can help patients use medicine correctly, understand their effects, and reduce the damages from side effect. When visiting different doctors for treatment, can help doctors prescribe the correct medicines.
2. Verifying the name of the medicine, the amount per unit, the dosage, the way to use it, and amount to take on the medicine bag and to verify if the name of the medicine and quantity is the same as that inside the bag.
3. After taking out the medicine from the original medicine back, one should put them back to the same bag. Be careful that when taking out many different types of medicine for checking of possibility of putting the medicine back into the wrong medicine bags leading to consuming the wrong medicine.
4. If the medicine prescribed is different from the previous ones, it is possible that the doctor changed the prescription or uses the medicine from different companies. However, it may be a wrong prescription; so should ask the pharmacist first and be clear that it is correct before taking the medicine.
5. Knowing why to take the medicine: for the medicine name, usage, content, and quantity. If the quantity is incorrect, taking the medicine may be ineffective or over dosage may occur.
6. Do you know how to take the medicine? The quantity (the number of pills each time), the frequency (how long before taking it), when to take it, how long the treatment period is, and the method of taking the medicine.
7. Do not use the external appearance to determine how to take the medicine: tablet or capsule may not necessarily be orally taken, and liquid inside bottles may be taken as eye drops, injection, or oral dosages. You must read the instructions clearly before taking.
8. Do you know the expected reaction, therapeutic effect, side effects, and things to pay attention to after taking the medicine?

## Chapter 15 Illegal medicine

### Medicine

Medication including medicine and medical devices:

1. Any manufactured or imported drug item, should file for application and registration with Ministry of Health and Welfare. After receiving approval with issuance of drug permit can they be manufactured or imported. Therefore, on the packaging of all legal medicine, there must be a permit number.
2. Any approved drug for manufacturing or importing, must by regulation list the following items on its label, manual, or package: Name of company and address, product name and license number, drug classification category, date of manufacture or approval number, the quantity contained for main ingredient, quantity to use, how to use, Indications or efficacy, side effects, contraindications and precautions, date of expiration or the shelf life.
3. “DOH Finished Manufacturing No. ○○○○○○” and “DOI DOH Finished Manufacturing No. ○○○○○○” indicate the DOH approved for manufacturing finished drug permit number.
4. “DOH Finished Import No. ○○○○○○” and “DOI DOH Finished Import No. ○○○○○○” indicate the DOH approved for importing finished drug permit number.
5. “DOH Manufacturing No. ○○○○○○” and “DOI DOH Manufacturing No. ○○○○○○” indicate the DOH approved for domestic manufactured drug permit number.
6. “DOH Import No. ○○○○○○” and “DOI DOH Import No. ○○○○○○” indicate the DOH approved for importing drug permit number.
7. “DOH China Import No. ○○○○○○” and “DOI DOH China Import No. ○○○○○○” indicate the DOH approved for importing China drug permit number.
8. “DOH Vaccine Manufacturing No. ○○○○○○”, “DOI DOH Vaccine Manufacturing No. ○○○○○○”, “DOH Vaccine Import No. ○○○○○○”, “DOI DOH Vaccine Import No. ○○○○○○” indicate DOH approve of domestic manufactured or importing from abroad biological agents permit number.
9. Medical device permit numbers are “DOH Medical Device Manufacturing No. ○○○○○○”, “DOH Medical Device Import No. ○○○○○○”, or “DOH Medical Device China Import No. ○○○○○○”.
10. Since DOH was upgraded into Ministry of Health and Welfare on May 31 2013, permit □□ numbers are revised into "MHW Drug Manufacturing No. "MHW Medical Device Manufacturing No. ○○○○○○," MHW Medical Device Import No. ○○○○○○," "MHW Drug Import No. "MHW Medical Device Manufacturing No. ○○○○○○," MHW Medical Device Import No. ○○○○○○," "MHW Medicine Manufacturing No. ○○○○○○," "MHW Medicine Import No. ○○○○○○," "MHW Medicine Chine Import No. ○○○○○○," "MHW Vaccination Manufacturing No. ○○○○○○," "MHW Vaccination Import," "MHW Medical Device Manufacturing No. ○○○○○○," MHW Medical Device Import No. ○○○○○○," and "MHW Medical Device China Import No. ○○○○○○.”

### Illegal medicine

Illegal medicine can be classified as:

1. Fake medicine:

- (1) Not approved and manufactured without authorization
- (2) The name of the ingredients does not conform to approved ones
- (3) Mixing or replacing with other's products
- (4) Changing or altering the label for effective period

2. Substandard drugs:

- (1) Unauthorized adding of coloring agents, preservatives, fragrances, flavoring agents and excipients to the drugs.
- (2) Inconsistency of the drugs' content quality, quantity or intensity to approval.
- (3) Part of or the entire batches of drugs contain filthy or foreign objects.
- (4) There are obvious appearances of discoloration, turbidity, precipitation, deliquescence or decomposition on the drugs.
- (5) Inconsistency of main efficacy of the drugs to approval.
- (6) The validity date or storage period of the drugs has already passed.
- (7) Deterioration of the drugs due to prolong storage or improper storage methods.
- (8) Using containers made from harmful materials or recycled containers to store the drugs.

3. Illegal drugs:

- (1) Narcotics promulgated by the central competent health authority to prohibit from manufacturing, dispensing, importing, exporting, selling or displaying.
- (2) Unauthorized importation of unapproved drugs. However, they are not limited to importation of self-used drugs carried by tourists or service personnel along with their transportation means.

Report hotline for illicit drugs: 0800-285000

## Chapter 16 Female medicine--usage of oral contraceptives

In general, there are 2 types of oral contraceptives, one is “Single-Phase”, and another is “Multi-Phase”.

1. Multi-Phase: contains both of estrogen and progestin.
2. Single-Phase: contains only progestin.

Mixed pill contains both of estrogen and progestin, in which:

1. With fixed dosage is called “Single-Phase”;
2. With various changes of 2 or 3 phases is called “Multi-Phase”.

### Mechanism of Contraception

Oral contraceptive is a low-dose compound female estrogen, which functions as below:

1. Major function is to inhibit ovulation, and then will not get pregnant.
2. Change of endometrium is to interfere implantation.
3. Change of cervical mucus is to block sperm passing through.

### Effectiveness:

The ratio of failure is 0.1%.

### Pros:

1. Taking medication correctly, the effectiveness of success almost reaches 100%.
2. No need for precautions prior to sexual intercourse.
3. To regularize menstrual period, reduce menstrual bleeding, and relief of menstrual cramps pain as well.
4. Suitable for just-married couple and single women.

### Cons:

In the beginning of medication, few women may have symptoms, such as dizziness, nausea, uncomfortable, spotting, gaining weight. These symptoms will be disappeared in 2 or 3 months.

### Cautions:

1. Patients with the following diseases are not allowed to take oral contraceptives: e.g. heart disease, diabetes, hypertension, vascular embolism related diseases, liver dysfunction, and genital or breast cancers history, etc.
2. Breast-feeding women are forbidden to take oral contraceptives.
3. Age over 35 and heavy smokers have better not to take oral contraceptives.
4. First-time users are required to receive physician’s diagnosis and prescription.
5. Oral contraceptives must be taken every day, otherwise it will result in contraceptive failure.
6. When forgetting to take it in scheduled time, patients should make it up according to the package inserts or other contraceptive measures.

7. It is required to revisit physician 3 months after taking contraceptives, and take gynecological examination periodically every 6 months.
8. Contraceptives medication together with Ampicillin might result in contraceptive failure.

## Chapter 17 Safe medicine use for pregnant women

### Safety Class for using medicine while pregnant

Pregnant women should avoid unneeded medicine, and should use either food therapy or change their lifestyle.

Class A: Clinical trials have shown it is safe for pregnant women

Class B: No clinical trials control, animal trials show safety or without adverse reaction, clinical trial control shown no problem

Class C: Animal trials showing teratogenicity, but no human trials control or lack of clinical trial information

Class D: Has teratogenicity, but can be used if “pros outweigh cons” medically

Class X: Absolutely forbidden for pregnant women

### Deciding factors on influencing fetus by pregnant women using medicine

1. Medicine causing teratogenicity, whether medicine will combine with proteins, the metabolism method for medicine
2. During which period of pregnancy was the medicine used
3. The length of time of medicine use and dosage
4. How medicine was given
5. Status of bleeding in uterus of pregnant women
6. The mother’s metabolic capacity, body fat amount

### Influences of Medicines on Fetus

Influence of medicine on the fetus: according to development stage of fetus, are as follows:

Preimplantation	0-2 weeks	Normally will not lead to fetus deformity
Embryonic	3-8 weeks	Critical period, organs forming stage, will lead to fetus deformity or death
Fetal period	9-16 weeks	May cause cleft lip and female fetal genital masculinization
Fetal period	16 weeks – just before birth	Fetus growth completed, may cause abnormality in physical functions of fetus

### Treatment of frequently seen symptoms of pregnant women

1. Nausea:

Cause: symptom frequently occurring during early stage of pregnancy will normally disappear after 12 weeks.

Treatment: Maintaining enough and stable amount of Vitamin B6 as supplement.

2. Sense of heartburn in stomach:

Cause: Rising of Abdominal and diaphragm leading to stomach being pushed upon.

Treatment: Eating less amount and more meals, avoiding soft drinks, using suitable amount of



Stomach milk, stomach milk tablets.

3. Constipation:

Cause: Expanding uterus, pushing on intestines causing slowing of intestinal peristalsis.

Treatment: Taking appropriate amount of water, appropriate amount of exercises, expansive laxatives or lubrication laxatives.

4. Hemorrhoids:

Cause: Veins near the rectum, and obstruct blood flow by the enlarged uterus oppression

Treatment: Use of hemorrhoid cream to facilitate defecation or Analgesic suppositories

5. Cold:

Treatment: Drink more water, rest more, and do not buy over the counter medicine. Most cold and respiratory medicines are Class C.

**Principles of Pregnant Women Using Medicine**

1. Without guidance of doctor or pharmacist, pregnant women should not add or stop medication.
2. Use less medicine, especially in the first three months of pregnancy, and to discuss and do evaluation with doctor.
3. When visiting doctors, should tell doctor or pharmacist if pregnant or possibly be pregnant.
4. For those on medication, should discuss with doctor or pharmacist on whether to stop medication.

**Effect of commonly used medicine on fetus**

Medicine	Effect on Fetus
Tetracyclines	Blocks development of bones, teeth changing color
Sulfa drugs	Kernicterus
Chloromycetin	Gray baby syndrome
Antithyroid preparations	Development of fetus intelligence sluggish
Too much vitamin A	Development of fetus intelligence sluggish, Increased intracranial pressure
Too much vitamin D	Development of fetus intelligence sluggish, Hyperkalemia

**Will using medicine leading to fetus deformity always lead to babies with problems?**

1. Not necessarily, but children with defects ranges between 3-6%. Fetal deformity increases the risk by over 5 times.
2. If using medicine that leads to fetal deformity, must stop medicine for a period of time before getting pregnant again.
3. The antiepileptic disorder drugs, anti-thyroid drugs belong to Class D, but the diseases damage fetus far more than the drugs, so will need to continue using drugs.

## Chapter 18 Medication Safety for Breastfeeding Mothers

Any kind of substances taken by mothers may get in the milk. Therefore, while taking medication, in addition to consider whether or not the babies may also consume the medicines in milk, mothers should also take into account the overall impacts on their babies, mother themselves, families and the society if they stop breastfeeding.

### The myths in breastfeeding stoppage while mothers are sick

1. The medication intake of babies depends on their daily milk feeding amount, gastrointestinal function and milk feeding time.
2. You may opt for breastfeeding before taking medication or preparing milk, or temporarily suspend the intake of drugs.
  - (1) The concentration of drug reaches its highest after 1-3 hours taking it.
  - (2) It is relatively safe to breastfeed 6 hours after taking medication.
  - (3) Consult your physician on the possibility to stop medication.
3. Preservation of breast milk:
  - (1) Can be stored 6-8 hours under room temperature.
  - (2) Can be stored 3-5 days if refrigerated.
  - (3) Can be stored 3-4 months in the freezer.

### Breastfeeding Medication Considerations

1. Whether or not it is necessary to take the medication?
2. Select safe drugs.
3. If the medication may affect the babies, you should measure their blood drug concentration.
4. Breastfeed before taking medication to reduce the impact of drugs on babies.

### Determining Factors of Drugs Affecting the Babies

1. Natures of the drugs:

Before taking medication, consult your specialist physician or pharmacist. Choose drugs, such as water-soluble drugs, drugs with high protein binding rate, and drugs with short half-life that cannot be absorbed by the gastrointestinal tract easily, and try your best to use single prescribed drugs.
2. Medicine intake dosage and frequency:

It is recommended to take drugs with a low dosage, short half-life and those that will not accumulate in the body. Despite the high medication frequency, they are less likely to distribute to the milk.
3. Avoid taking dangerous drugs:

Some drugs may cause damages to babies even taken in minute quantity. For examples Penicillin and sulfonamides, etc.
4. Contraceptive drugs:

Contraceptive drugs shall be avoid taking during breastfeeding because contraceptive drugs may cause damage to babies and reduce the amount of lactation.

### Medication recommended by American Academy of Pediatrics during breastfeeding period

1. You are allowed to take medication during breastfeeding, but choose those with lower risks:
  - (1) Antipyretic analgesics, non-steroidal anti-inflammatory painkillers, antibiotics, vaccines, developers, narcotic drugs, antidepressants, antihypertensive drugs, antiviral drugs, muscle

relaxants, anti-epileptic drugs, cardiac stimulants, anti-TB drugs, thyroxine, anti-thyroid drugs, Xylometazoline, potassium-sparing diuretics, and anticoagulants.

- (2) As the concentration of anxiolytics and antidepressants, etc. in milk is very low, there are only a few cases they have caused discomfort in babies. While using them long-term, pay attention to their impact on the baby's central nervous system.
  - (3) Local anesthesia is safe to use as it will not be absorbed by the baby's gastrointestinal tract.
  - (4) Like other drugs, general anesthesia is unlikely to cause any impact to babies. As its half-life is very short, you can breastfeed immediately after awakening.
  - (5) Almost all external dermatologic agents, inhaled medication (such as asthma medication) or nasal spray, and eye used drugs are regarded as safe drugs.
2. Drugs that you should avoid while breastfeeding:
- (1) Penicillin: As it likely to cause allergies, please handle it with care.
  - (2) Sulfonamides: More obvious to cause harms to kernicterus, hemolysis and favism patients.
  - (3) Tetracycline: It will cause permanent dental coloring and hinder bone development.
  - (4) Chloramphenicol: It may cause bone marrow suppression and aplastic anemia.
  - (5) Metronidazole: It may cause birth defects and mutations.
  - (6) Alcohol: It will cause respiratory depression and weak pulse in babies.
  - (7) Nicotine: It will cause shock, vomiting, diarrhea, respiratory diseases and sudden death in babies
  - (8) Caffeine: It will cause restlessness and weight loss in babies.
  - (9) Long-acting antidepressant fluoxetine: It will cause long-term drug action.
3. Drugs that should never be taken:

Anticancer drugs, radiation therapy drugs, Cyclosporin (immunosuppressive), Mysoline (epilepsy), Parlodel (Parkinson), Ergotamine (migraine), lithium salt (mania), cocaine, heroin, marijuana, amphetamines, nicotine and amphetamine.

### **How about radioisotope scanning of nuclear medicine?**

1. It is not necessary to stop breastfeeding while conducting X-ray and other scanning, even with the use of developer.
2. It is also not necessary to stop breastfeeding while conducting computed tomography (CT) and magnetic resonance imaging (MRI).
3. Technetium is usually used on mothers while accepting lungs or bone isotope scanning. The half-life of this drug is 6 hours and after a lapse of five half-lives, the drug will be discharged from the mother's body completely. So there is no need to worry about.

### **Is it alright for women with breast augmentation to breastfeed their babies?**

1. Silicone and saline bag are common materials used in breast augmentation.
2. Currently, scientific studies have found no evidence to indicate that the silicon polymer is harmful to human body.
3. The silicon content of silicon element found in milk and formula milk is even higher than the milk from mothers with breast augmentation. Therefore, mothers with breast augmentation can still breastfeed their babies.

## **Chapter 19 Understanding Infertility**

### **What is infertility?**

Under the circumstances of not taking any contraceptive measure, if the wife does not show any sign of pregnancy after one year of marriage, there is a possibility of infertility. The chance of infertility for married couples is approximately 15%.

### **Ovulation period**

The normal female menstrual cycle is 28 days, and the ovulation period roughly falls on the 14th days after the menstrual flow.

The day of ovulation, and three days before and after ovulation are known as the ovulation period. It is the period that most likely to conceive a baby.

Excluding the ovulation period, the reminding time is known as the safe period.

If you think of taking contraception measure during the safe period, the successful rate is not high due to periodic variability. We suggest you to take contraceptive measure through other methods (such as using condoms and birth control pills, etc.)

To enhance the chance of conceiving, you should master the female pregnancy period.

The sperms are able to survive up to 72 hours inside the female reproductive tract, but the egg can only live up to 24 hours.

Performing sexual intercourse within three days before ovulation and one day after ovulation is more likely to conceive a child.

### **Causes of female infertility**

1. Among the infertile couples, about 60% of infertility causes come from women.
2. Problems in female ovaries, fallopian tubes, uterus, cervix and other aspects are factors that may cause infertility.
3. The female menstrual cycle and menstrual flow volume, production history, with or without a history of pelvic inflammatory disease.
4. The women's age, whether or not they are infected with sexually transmitted diseases, smoking, alcoholism, drug addition or chronic diseases, etc.
5. The women's working natures, chemical drugs and radiation, etc. are also factors needed to take into consideration.
6. Overweight or too skinny, long-term strenuous exercises, excessive weight loss, life stress, ovarian diseases, pituitary dysfunction, hyperprolactinemia, thyroid dysfunction and other problems may affect normal ovulation.
7. Fallopian tube congestion or adhesion is also one of the important reasons to cause infertility.
8. Uterine cavity adhesion, endometrial polyps, uterine fibroids, adenomyosis, uterine congenial malformation, etc.
9. Cervical infection, anti-sperm antibodies and cervical mucus dysfunction are also factors that may cause infertility.

### **Causes of male infertility**

1. Congenial chromosomal abnormalities and endocrine system abnormalities.
2. Testicular dysfunction, varicocele, sperm transportation dysfunction, etc.
3. Living habits, working environment, physical and mental illnesses and other factors, such as drugs, radiation and sexual transmitted diseases, etc.

### **Conclusion**

As infertility examination and treatment are relatively complicated, husbands and wives should participate together in the entire treatment process.

Husbands and wives should encourage each other to generate more loving feelings, only then will they have a better chance of giving birth to a lovely child.

## **Chapter 20 Understanding Osteoporosis**

### **Why postmenopausal women will generate osteoporosis?**

A reduction in estrogen during postmenopausal period will result in an increase of osteoblast cells and osteoclast cells in women. Meanwhile, a faster action of osteoclast cells and a slower action of osteoblast cells will cause a huge loss of bone mass to result in bone porosity. Hence, the bones tend to fragile during postmenopausal period.

### **Medical Treatments of Osteoporosis**

The priority treatment is to change the lifestyle, including to quit smoking, quit drinking, exercise, eating habits, and supplement calcium and vitamin D. On more serious condition, it is necessary to take the following medical treatments:

1. Bisphosphonate drugs: They are able to repress the osteoclast cells and reduce the reabsorption of bone element. In addition, vitamin D is able to enhance calcium absorption.
2. Selective estrogen receptor modulators: Such as Raloxifene. Its effect may be weaker and more suitable for women who cannot tolerate bisphosphonate drug treatment and women with a high risk of breast cancer.
3. Hormone replacement therapy: Used in preventing and treating osteoporosis during the postmenopausal period. It is suitable for women who cannot tolerate other osteoporosis drug treatment and women with menopause symptoms.
4. Other medical treatments: Calcitonin, parathyroid hormone, RANKL monoclonal antibodies and other drugs.
5. Multi-drug combination therapy: It is used to treat patients with excessive bone density increment and prevent bone fracture. However, the effectiveness is slim.

### **Conclusions**

1. Menopause is a major transformation period in a woman's lifetime.
2. It is a priority to choose low-dose hormone replacement therapy, for it is able to improve the menopausal period and improve the life quality.
3. Except for women with a high risk of breast cancer, the hormone supplement therapy is suitable for general women.
4. Select drugs with best efficiency and lowest side effects after their risks and benefits have been carefully evaluated by your specialist physician.
5. Prevention is better than therapy. The best way to reduce the occurrence of bone loss and avoid osteoporosis is to engage in regular exercise, quit smoking, quit alcohol, take up a balanced diet, and supplement enough calcium and vitamin D.

## Chapter 21 Understanding Endometriosis

### What is Endometriosis?

**Endometriosis is a problem caused by the dislocation of endometrial cells. If endometrial cells grow in the ovary, it will destroy normal ovary cells. It is called "Endometriotic cysts."** If endometrial tissues grow in myometrium, it is called "Adenomyosis." Endometrium is normal cells inside women's uterus. They help the embryo implanting when the woman is pregnant. It serves as a breeding ground for the embryo. Women's uterus are ready to breed a new embryo during each period. If the woman gets pregnant, her endometrium will continue growing. If not, the endometrium will fall off and turn into menstruation.

### Clinical Symptoms and Complications

Endometriosis is a kind of chronic inflammation and abdominal organs will easily become adhesive. Endometrium is the most active during ovulation and menstruation. Therefore, most symptoms happened during these two periods of time, especially during menstruation. Generally, menstrual pain becomes the most serious during the first two days of menstruation. Serious endometriosis will cause both pain and adhesion, resulting in long-term chronic pelvic pain and gastrointestinal problems. Clinically, menstrual pain is a possible symptom for endometriosis. Common symptoms include: menstrual pain, infertility, pain during sexual intercourse, irregular periods, or too much menstrual blood.

### Treatment

1. Medical Treatment: Taking hormones to reduce the activeness of the foci and shrink the scale, including injection, oral, intra-uterine dosing
2. Surgery: Completely remove all the foci, including laparoscopy, laparotomy.

### Releasing Menstrual Pain

1. Go to hot springs one week before the period, or take hot water bath, eat more hot food and less iced food.
2. Hot compressing lower abdomen during the period.
3. Meditation.
4. Doing some exercise properly, such as yoga, Taijiquan, jogging, weight training.
5. Massage, acupuncture, applying magnet patch, finger pressing massage.
6. Taking painkillers: On the day you expect to feel most painful, or take moderate dosing at the beginning of the pain.

### Conclusion

Although endometriosis cannot be cured easily and has 50% of possibility for relapsing, if one can undergo treatment as soon as possible, adapt herself in life, and have OPD patiently, it is not difficult to treat this disease.

## **Chapter 22 Understanding Uterine fibroids**

A uterine fibroid is a benign tumor originates from the smooth muscle layer of the uterus. It is commonly found in women between 30-50 years old. A tumor grown within the muscle layer is called an intramural fibroid, while a tumor grown inside the uterus is called a submucosal fibroid, and a tumor grown underneath the mucosal (peritoneal) surface of the uterus is called a subserosal fibroid. Most women with uterine fibroids do not have any symptoms. They are found when the women are under regular gynecological examination such as internal examination or ultrasonic examination by gynecologists.

### **Clinical Symptoms**

1. Compression Symptoms: urinary frequency, difficult defecation, backache, stomachache, and pelvic pain.
2. Heavy and irregular periods: especially for submucosal fibroids.
3. Infertility and miscarriage: Submucosal fibroids often cause infertility or recurrent miscarriage.

### **Operation Time**

For women intending to bear a baby, if the fibroid is not very big, unless its location influences implantation, there is no need for operation. If the symptoms are obvious, the fibroid can be removed and the uterus can be retained. However, if the condition is severe, after the treatment, the patient should immediately undergo artificial insemination lest the fibroid relapses. When women have the following symptoms, operation should be taken into consideration:

1. Too much menstrual blood, causing anemia.
2. Severe compression (difficult defecation and pelvic pain)
3. The fibroid grows very fast. There is possibility for having a sarcoma.
4. Infertility caused by uterine fibroids.
5. Severe pelvic pain.
6. The size of the fibroid exceeds a three-month pregnancy uterus.

### **Treatment**

Treatments depending on the patient's age, the retention of fertility, and psychological conditions can be divided into: hysterectomy, myomectomy, medical therapy, uterine artery embolization. Those who want to keep fertility or keep their uterus are applicable for myomectomy, but it is possible to relapse.

Some people misunderstand that after hysterectomy, one would enter menopause, but in fact, it is the ovary rather than the uterus that controls female hormones. Therefore, the undergoing of hysterectomy does not guarantee menopause. One only stops having periods.

### **Could the fibroid shrink after menopause?**

Generally speaking, lacking of the stimulation of hormones, after menopause, the fibroid would usually shrink. If it doesn't, the patient should concern about complications or possibilities of



malignant tumors.

## Chapter 23 Fair Ladies – Healthy Weight Loss

### Definition of obesity

Definition: BMI at between 18.5 and 24 is regarded as normal, over 24 is considered overweight, and over 27 is considered obese.

$BMI = \text{personal weight (kg)} / \text{height}^2 \text{ (square meter)}$

For men's waistline exceeding 90cm and women's waistline exceeding 80cm, they are referred to as obese.

The actual body weight has exceeded 20% of ideal body weight.

### Ideal body weight

Men's ideal body weight (kg) =  $[\text{height (cm)} - 80] \times 0.7$

Women's ideal body weight (kg) =  $[\text{height (cm)} - 70] \times 0.6$

### Causes of obesity?

There has been a problem in life management, such as binge eating (too much intake of foods), physiological and psychological effects (hunger feeling), genetic (metabolic rate), eating habits, social environment, endocrine and genetic inheritance.

A shortcut to weight loss is to conduct a proper life management program. Weight loss success lies in psychological and living habits.

### Why you should lose weight?

Obesity is an illness. An ideal weight will allow you to feel healthier and prettier.

### How to lose weight?

By means of food control, regular exercise, drug assistance and medical weight loss (liposuction, surgery, intestinal truncation, bariatric surgery, stomach tied-up and intestinal bypass).

Undetermined efficacy remedies such as saupopus, slimming tea and ear acupuncture, etc.

### Common side effects of weight loss

Medical liposuction has the side effects of partial hardening and unevenness on body, etc.

Saupopus tends to cause respiratory failure and a need to perform lung transplantation.

The senna ingredient found in slimming tea will cause diarrhea and electrolyte imbalance.

Please take caution!

### Weight loss diet principles

1. Take three meals daily and do not eat snacks. Take meals at a fixed time and fixed amount. Take light foods prepared by means of boiling and cooking.
2. Drink the soup first, followed by taking vegetables and finally eating meats and rice slowly. Reduce the intake of high calorie foods.
3. Chew and swallow the foods slowly. If you don't feel hungry, you should then stop eating.
4. Concentrate on eating without watching TV or reading a book.
5. Eat less snacks or desserts, drink less beverages and liquor, and eat fewer foods with high calories such as peanuts and nuts.

### Regular exercise

Increase energy consumption and control the body weight. Increase the metabolic rate to enhance immunity. Take regular exercise to improve heart and lung functions.

Improve the muscle strength and flexibility to reduce unintentional injuries. Relieve life stress to eliminate physical and mental fatigue. Respond to social life to improve interpersonal relationship.

### **333 Exercise Principles**

Engage in aerobic exercise, and exercise at least 3 times weekly.

Spend at least 30 minutes in each exercise.

Exercise up to the extent of feeling out of breath but still manage to talk, or reaching a pulse rate of 130bpm.

## Chapter 24 Drug safety for children

### Oral dosages suitable for small children

Include Troches, capsules, powders, liquids, elixirs, syrups, solutions, and suspensions.

### Health Education on Medicine use for children

1. Children are not small sized adults:
  - (1) The stomach absorption: Gastric peristalses are slower in newborns and young children
  - (2) Liver metabolism: neonatal liver function only of at 20 to 40% of adults
  - (3) The kidneys excluded: neonatal renal is only about 30% of adults, will reach adult level after 1-year-old
  - (4) Skin absorption: high permeability of the skin of infants and young children, better absorption of topical medicines
2. Is it more convenient for children grinded packed medicine?
  - (1) Using grinded adult medicine may lead to easier contamination, less medicine stability, with shorter preservation period
  - (2) Mixing many types of medicine through grinding may lead to changes in medicine substance or create interaction, and inaccurate dosage in the packs
  - (3) Children that are older can practice swallowing or with small amount of food together
3. Children's medication guides:
  - (1) Not all medicine are suitable for grinding: may lead to easier contamination, less medicine stability, with shorter preservation period, with interactive effects
  - (2) Can ask doctors to prescribe specialty medicine designed for children, such as: Liquid preparations, syrups, solution agent, suspending agents
  - (3) Grinded packs should be taken all at once, to ensure quality of medicine
4. Advice for using syrup or suspended liquids:
  - (1) Unopened and sealed syrup or suspended liquids can be kept at room temperature
  - (2) Dry powder suspended liquid should be used during the first time by following instructions to add cold water and mixed evenly. Before taking medicine each time, they should be mixed and stirred evenly. Make sure the correct dosage amount is taken each time.
  - (3) Medicine that are unsealed and opened should be stored at room temperature or refrigerated according to instructions. Note the date of expiration.
5. Giving medicine to babies:
  - (1) Use graduated pipette or oral syringe
  - (2) Hold on your lap and support the head of the baby
  - (3) Give only small amount of medicine each time to prevent choking
  - (4) Drip the medicine at the back side or edges of the oral cavity
  - (5) Pacify the baby while giving medicine
6. Giving medicine to infants:

- (1) Let the infant choose the position of taking the medicine, and let the infant be familiar with the measuring tool.
- (2) If necessary, use small amount of food or beverage to hide the flavor and odor. After taking the medicine, drink water or beverages to eliminate the flavor and odor.
- (3) Give simple instructions or encourage for their cooperation.
- (4) If there is need of taking many types of medicine, let the infant choose the order of taking medicine.

7. Vomiting medicine by children:

If the children spit out the medicine after taking it, they must take it again. Usually choose those that are easiest to absorb such as: Syrup, liquid, or grinded. If it is already 10-15 minutes after taking the medicine, then there is no need to take again. The disintegration times for tablets are different and have different handling. If after vomiting, the pill is still intact, then it must be retaken. Otherwise, there is no need to retake medicine.

## **Chapter 25    Medicine Safety for Seniors**

### **Senior Distress and signs of aging**

1. Vision, hearing, cognitive, memory degradation.
2. Drug absorption, distribution, metabolism, excretion changed
3. Physiological balance, compensatory function degradation, more difficult to regulate blood sugar, blood pressure, heart rate, body temperature, etc..
4. Coordination function degradation, unresponsive, mobility, easy to fall, fractures, urinary frequency, urinary incontinence

### **Frequently problems for medicine usage by seniors**

1. Repeated taking of medicine, forgetting to take medicine, taking the wrong medicine, taking medicine at the wrong time
2. Adjusting the medicine by oneself or stop taking medicine, with increasing frequency of side effects occurring
3. Like to buy medicine, remedies, Chinese herbs, drugs with exaggerated effects, and give each other drugs
4. Preserving the medicine the wrong way, reluctant to discard expired drugs

### **Causes for problems of seniors taking medicine**

1. Having many types of chronic diseases, taking prescriptions from many different hospitals at the same time, complexity in the types of medicine used
2. Resting time unable to conform with time for taking medicine
3. Deterioration of body functions, reduction in memory and cognition

### **Notes on seniors taking medicine**

1. When seniors visit doctors, they should tell doctors or pharmacists all the medicines they are taking currently
2. Should let doctors or pharmacists understand all the types of medicine you are using, to avoid repeated usage or effects of drugs interactions
3. When taking medicine, be clear about the usage, the amount, the time, and dosage. If there are any questions, should inquire the pharmacist immediately
4. Be careful of the medicine's side effects and new symptoms that appear
5. Not to buy health products with unclear sources, not to believe in unrealistic and exaggerated advertisements, to avoid spending money and damaging oneself
6. Insist on the 5 Not to Principles: Not to listen, not to believe, not to buy, not to eat, not to recommend
7. Memory and cognition reducing, using methods to avoid forgetting taking medicine such as: calendar, drug box

**Need to know for senior medicine taking**

1. Should do regular health checkups, to understand functions of inner organs, so to adjust the medicine dosage and avoid side effects happening
2. Diuretics, multivitamin preparations to avoid before bedtime, so as not to affect sleep
3. Comply with doctor's or pharmacist's instructions of taking medicine, and not to change it by oneself
4. After taking sedatives and sleeping pills, to rest and not walk afterwards, to prevent falling down
5. After taking high blood pressure medicine, to prevent feeling dizzy caused by low blood pressure from one's postures
6. Using medicine box for long effect medicine or single dosage medicine to help prevent forgetting to take medicine

## Chapter 26 Chinese Herbal Medicine's Safe Usage

### Preservation of Chinese Herbal Medicine

1. Refrigeration: This is a more ideal method, because preservation under low temperature (below 5 °C) can prevent bacteria and fungus growth and signs of decay such as changing color and taking oil.
2. Preservation by chemical agents: Frequently used chemical agents include dioxide benzene, camphor, carbon tetrachloride, etc.

### Preservation of scientific formulations

Scientific formulations sold on market include dosage form of granules, powders, tablets, ointments, etc. and should be stored in dry locations. To prevent moisture, it is best to place inside glass bottle to be damp-proof.

### Caution of using medicine when pregnant

1. Easy to increase uterine contractions causing miscarriage include rhubarb, Glauber's salt, senna and other heat diarrhea drug. Medicine such as Mitsubishi, Curcuma, Changshan that are extremely powerful medicinal drugs are prohibited, to prevent miscarriage.
2. Pregnant women should use caution with citrus aurantium, the blood circulation stasis the peach kernel, safflower; the hot and spicy Pinellia, tuber, and smoothing function's Muk Tong, Rhizoma Imperatae, etc.
3. The effect of Yiyiren is to facilitate urination, making the uterus excited and enhancing contraction of the uterus.
4. The effect of malt is to promote digestion and starch decomposition, causing retreating of milk in pregnant women.

### Drug interactions

1. Chinese medicine and their preparations containing calcium, such as: Gypsum, keel, oysters, because calcium ions and cardiac stimulants have similar effects, that can strengthen heart muscle contractions, and strengthen the effects and toxicity of cardiac stimulants
2. Licorice-containing medicines and decoctions should not be used with cardiac stimulants such as digitalis. Licorice has Deoxycorticosterone Sample effects, can "preserve sodium and expel potassium", leading the heart to become sensitive to cardiac stimulants and cause poisoning

### Food with cold nature

Can lower the effect of body heat and temperature. Therefore, those who bodies are asthenia cold and are afraid of cold or have upper respiratory diseases or gastrointestinal dysfunction should avoid these foods. Those who bodies are hot can choose food with cold nature to lower the reaction of body's heat.



**Warm and hot food**

Strengthen the effects of body heat creation and raises the effects of physical fitness and strength. Those whose bodies are asthenia cold can choose to use more. However, these foods will cause symptoms of dryness in mouth, constipation etc or symptoms of having too much heat. Therefore, those whose bodies are hot should avoid these foods.

**Food of insipid nature**

Food of insipid nature can be taken by most people on a daily basis, except for those with particular allergic reactions, such as: fruits, vegetables, meat.

## **Chapter 27 Medication Myths**

### **Curing Illnesses if one has them, strengthening the body if not sick?**

1. The purpose of using medication is to cure or prevent illnesses.
2. No medicine can be used to cure a particular disease and be used as tonic.

### **When taking medicine, stomach medicine must be taken together to protect the stomach?**

1. Not all medicine will hurt the stomach. In fact, only a small percentage of medicine will have side effects on the stomach.
2. The main ingredients of stomach medicine can easily combine with other medicine, affecting the absorption of these medicines.

### **It is best to take medicine after meals?**

1. Many people believe that medicine will hurt the stomach and deduce that it is best to take medicine after meals.
2. The absorption of some medicine is affected by food, so may need to be taken on an empty stomach.

### **After the symptoms disappear, the medicine need not be taken?**

1. The effect of medicine is to eliminate causes of illnesses, control, or delay the progress of the illness, and relieve symptoms.
2. Many antibiotics are designed to eliminate the source of infectious diseases. If medication is stopped in the middle of the treatment process, it may lead to drug resistance of the illnesses.
3. Taking medicine to control blood pressure and diabetes long term can significantly reduce complications.

### **Introducing “good medicine” to good friends?**

Every person’s organ functions, disease conditions, reactions to therapy, and body nature are different. Therefore the dosage of a particular medicine may affect different people differently. Doctors and pharmacists will usually choose different medicine for different patients.

### **Injections are better than taking medicine orally?**

1. Pain: the part injected will suffer pain.
2. Infection: Incomplete disinfection of needles or syringe or piping may lead to infection.
3. Risks: Negative reactions to injections or overdose through injections have smaller chance of rescue and detoxifying.
4. Basic principle of taking medicine: If can be used partially, then do not take orally. If can take orally, then do not take injections.

### **Grinding the medicine will lead to faster and better effects?**

1. Some medicine cannot be grinded into powder or chewed, such as sublingual tablets, long-lasting tablets or continuous tablets, casings tablets etc.
2. The stability of medicine after being grinded into power is less, and the packing is less accurate, making the drug effects and dosage unable to control fully.

### **Sedatives and sleeping pills are bad for you, and should not be taken?**

1. Currently, commonly used sedatives and sleeping pills are very safe.
2. They can be used to relieve tension and stress, relax muscles, and help one sleep.

3. If necessary, short-term use at appropriate level of sedatives and sleeping pills can help patients relieve stress and sleep disorders.

### **Morphine will lead to addiction, so it is better to endure pain rather than take morphine?**

1. Morphine is the strongest pain-killer, and is most frequently used to stop pain after surgery and for treatment of cancer, etc.
2. There is hardly ever addiction when used medically. Also, having minimal pain is the right of cancer patients in the terminal stage, and is an indicator of human rights.

### **Does synthesized medicine cause more side effects than natural medicine?**

1. Unless there are impurities, the effects of medicine are only related to its composition. It does not matter whether it is synthesized chemically or abstracted naturally.
2. We won't react differently to the same chemical molecules deriving from different sources.

### **Are there complementary effects when we take both Chinese and western medicine?**

1. Unauthenticated medical combination may bring adverse drug interactions. For example, strengthening or weakening effects, poisoned, or failing to be effective.
2. Staggering medicine taking time can only prevent the interaction during absorption. It cannot completely avoid the effects, metabolism, and excretion for taking multiple medicine.

### **I dare not take steroid!**

1. Steroid is used to treat many diseases, such as endocrine disorders, skin diseases, allergies, asthma, blood disorders, and others. Steroid is the top choice for the right indications such as autoimmune diseases. If you take it when you are not supposed to, it becomes poisonous.
2. To take steroid for a long time might cause some adverse reactions, such as muscle disease, osteoporosis disease, water and electrolyte imbalance, worsening or covering infection, and others. It depends on a doctor's professional diagnosis to determine and monitor these treatments.

### **Is antibiotic the best anti-inflammatory drug?**

1. Antibiotic is not an anti-inflammatory drug. Rather, it is used to resist infection caused by microbes.
2. Used improperly (for example, no such infection, wrong kind of antibiotic, not completing the treatment process, inadequate dosage) may cause drug resistance to the microbes, or even have the risk of no drugs to use when having severe infection.

## **Chapter 28 Sex Education for teenagers**

### **Dangerous behaviors**

Having sex without condoms or unsafe sex partners may lead to fluid exchanges, including semen and vaginal fluids. If one partner has sexually transmitted disease, the other may be infected. Having sex without wearing condoms may lead to semen enter the female body leading to pregnancy.

### **Contraceptive methods**

1. Using condom
2. Oral contraceptives
3. Intrauterine device
4. Female or male ligation

### **Male condoms**

1. Excellent contraceptive effect – 100% against pregnancy
2. Prevention of sexually transmitted diseases - AIDS. Syphilis. Pointed condyloma. Gonorrhoea ...
3. No side effects – simple, convenient, safe
4. Super thin – almost forget its presence

### **Female oral after pill**

1. To be used within 72 hours after having sex, the earlier it is used, the better the effect
2. Within the 1 month of period cycle, can be taken at most 3 times

### **Abortion after pregnancy**

1. Oral abortion pill – RU486 (within 1.5 months of pregnancy)
2. Uterine curettage (within 5.5 months of pregnancy)

### **Female oral contraceptives**

Use: Female taking 1 pill every day at same time (before sleep)

Target: Suitable for after marriage

Characteristics: Good contraceptive effects, few side effects, but cannot prevent sexually transmitted diseases

### **Ligation**

Female ligation: Prevent ovulation and egg from getting fertilized

Male ligation: Seminal fluid will continue to be produced not affecting ejaculation. Semen will not be ejaculated, and be absorbed by body.

### **Sexually transmitted disease infected through sexual behavior**

1. AIDS
2. Gonorrhoea
3. Syphilis
4. Pointed warts
5. Chlamydia

6.Herpes    7.B hepatitis

## **Chapter 29 Understanding of the harmful effects of tobacco**

### **Ingredients of cigarettes**

Each cigarette burns about 4000 types of compounds, with most dispersed in air, with only few that are absorbed into the lung tissues. These compounds can be classified into 4 major categories:

1. Nicotine
2. Tar
3. Carbon monoxide
4. Dozens of stimulants and over 40 types of cancer causing agents

### **The dangers of smoking**

The hazards of smoking: lung cancer, emphysema, cardiovascular disease, sexual dysfunction, bad breath, oral diseases, passive smoking will hurt the health of their families, can cause fetal abnormalities and premature birth.

### **Why is it hard to quit smoking?**

Nicotine dependence, appearance of psychological cognitive habits, the temptation of the environment

### **To alleviate the symptoms of nicotine withdrawal**

1. Overcoming by willpower:
  - (1) Not relying of any drug assistance, and purely overcoming the desire for cigarettes by one's willpower. However, success rate is far below those with drug assistance, professional and health education and consultation.
  - (2) Avoidance of environment, physical and psychological aid is all very important.
2. Nicotine replacement therapy:
  - (1) To gradually reduce the nicotine density in the quitter's body, and not to reduce suddenly.
  - (2) Will greatly reduce the discomfort that comes from withdrawal symptom, and raise the success rate for quitting cigarettes.
  - (3) Ministry of Health and Welfare approved dosage forms: patches, chewable tablets, orally disintegrating tablets, oral inhalation, and oral tablets.
  - (4) The best choice is patches, because of ease of use and compliance among quitters high.

### **How to use Nicotine Patches**

1. Use it daily after taking the shower. Change a new piece every 24 hours, and affix it on different body parts daily.
2. To be used in body part below neck and above waist, such as arm, chest, abdomen, where there is no body hair
3. Drink more water regularly, and avoid alcohol, tea, coffee, cola, stimulating drinks
4. No need to tear down when washing hand or taking shower
5. If it drops off, replace it with a new patch immediately, and then change the patch during regular time

### **Chewable tablets or orally dissolving tablets**

Pros: The dosage can be flexibly adjusted, have oral sensation, and reduce behavior of addiction

Cons: lead to oral ulcers or not suitable for those with unsound teeth

### **Oral Inhalant**

Pros: The dosage can be flexibly adjusted, have oral sensation, and reduce behavior of addiction

Cons: Itchy throat, but will disappear after continuous use

### **Medication usually requiring doctor's prescription**

1. Antidepressant: Bupropion
2. New medicine Varenicline
3. Both of them can be used to together as nicotine replacement therapy

### **Non-medication aid to quit smoking**

When desiring to smoke:

- Brush your teeth
- Take 3 deep breaths and drink a glass of water
- Eat fresh fruit or vegetable, or juice
- Do a hobby that you like
- Exercise

**Free quit smoking hotline 0800-636363**

## **Chapter30 Learning about AIDS**

Acquired Immune Deficiency Syndrome (AIDS) is a disease caused by the HIV virus. This type of disease will destroy a person's immune system, making one unable to fight against disease. It will lead to infection by all types of diseases and to death. There are no current vaccines and is currently unable to be cured fully.

### **Modes of Transmission for AIDS**

#### 1. Sexual behavior:

When having sex orally, anally, vaginally, or other forms of fluid exchange with an AIDS infected partner may cause the virus to enter human body and infect through one's wound or mucous membranes.

#### 2. Blood:

- (1) When contacting or transfused with contaminated blood or blood products infected with AIDS virus.
- (2) Sharing a needle or syringe with an AIDS patient.
- (3) Receiving organ transplant from an AIDS patient.

#### 3. Mother-children infection:

Mothers infected with AIDS have a 15-50% chance of passing on the virus during pregnancy, birth, or breast feeding period. Therefore, a woman should get tested for AIDS virus before getting pregnant.

### **Wrong types of fear**

Unless there are "sexual behaviors" or "blood" contact, no need to be too nervous!

Sharing phone, sharing tools, going to class, working together, hugging, coughing will not lead to infection.

### **Preventing AIDS**

Having regular sexual partner, avoid having sexual behavior with stranger. Using condoms correctly during the entire process.

Avoid sharing toothbrush, razors, syringe or needles, or utensils stained with blood.

Doing an AIDS antibody checkup before marriage and pregnancy.



## Chapter 31 Understanding Illegal Drugs (Narcotics)

Many drug abusers start experimenting with drugs out of curiosity, seeking excitement, escaping pressure and setback, or under pressure from others, etc. Once a person is addicted, then life becomes miserable. Life is priceless, so do not make the fateful and wrong decision. At the beginning of drug use, one will become excited, have illusions, and experience joy. However, long term use will produce tolerance effect, psychological and physical dependence. To stop use, other than the withdrawal reactions at the physical level, the desire at the psychological level is the hardest for drug addicts to overcome.

### What happens to drug users

1. Damaging one's health and creating social problems, such as: theft, robbery.
2. Tolerance: the need to increase drug amount to reach the same effect previously.
3. Dependence: physical and psychological dependence.
4. Withdrawal symptoms: When suddenly cut off, discomfort at the physical level.
5. The earlier one contacts addictive drugs, the greater the bodily harm.
6. When mothers takes drugs: children born with abnormalities, insufficient intellectual capability, damages coming from mother's drug addiction.
7. Sharing a needle in intravenous drug administration can be easily transmitted with AIDS, B-type hepatitis, C-type hepatitis and other infectious diseases.

### Common forms of drugs

1. Opium, morphine, heroin:

The most typical sensation is excitement and joy, but followed by exhaustion. Long term use will lead to tolerance and psychological and physical dependence. Withdrawal symptoms include yawning, tears, Runny nose, "cold turkey." etc.

2. Amphetamines:

In the beginning, effects include refreshing, uplifting, euphoric, satisfaction, etc. Long term use will lead to tolerance, psychological and physical dependence. Withdrawal symptoms after cutting use include suicide or violent attacks and behaviors.

3. Cocaine, marijuana:

In the beginning, effects include subjective feeling such as euphoric, energetic, keen attention, clear thinking. After increasing amount used, tolerance, psychological dependence, illusions, Sensory distortions, suspicion will appear.

4. MDMA:

The toxic effects on the central nervous system include degradation of the nerve ends, depression, mental confusion, panic anxiety, and even suicidal tendencies, tolerance and psychological dependence, creating an addiction.

5. Ketamine:

Ketamine can affect sensation, coordination and judgement, and cause nausea, vomiting,

blurred vision, image distortion, temporary onset of amnesia, loss of balance and other symptoms. A long-term use will enhance tolerance and psychological dependence, resulting in compulsive use and difficult to quit. Recent studies have shown that Ketamine abuse will cause chronic interstitial cystitis, resulting in bladder wall thickening and smaller capacity to generate frequent urination, urgent urination, painful urination, hematuria, lower abdominal pain and other symptoms. In more severe cases, there are the occurrences of urine output reduction, edema and other symptoms of renal insufficiency, and even up to the extent of performing bladder reconstruction surgery.

#### **Four core actions to reverse narcotic harms**

##### **1.Action 1:Cherish life - love yourself.**

Every life is precious, but we tend to encounter various forms of stresses and temptations in our life. If we do the right decision, we will get a complete different result.

- (1) **Be a master of yourself:** Establish and maintain a healthy lifestyle without relying on drugs to refresh your mind and lose weight. Choose a rational way to relieve emotion, and take a positive thinking attitude to increase your self-confidence. Establish a close and harmonious family relationship.
- (2) **Learn the technique of making friends:** Make friends with good conducts and right behaviors. Engage yourself in healthy recreational activities to build up your correct life goals and values.
- (3) **Enhance self-resilience:** Train up your social skills through school, community and religious activities, and strengthen your toughness to face challenges.

##### **2.Action 2:Avoid and reject narcotics – keep away from tobacco, alcohol and narcotics.**

Adopt a tactful and firm way of rejection to avoid harms and injuries. Once you try on narcotic, you will spend your whole life quitting it.

- (1) **Keep away from unhealthy places:** Such as Internet cafes, pubs and nightclubs, etc. Stay alert and do not simply accept drinks and tobacco from strangers. Pay special attention to your friend's friends even if they are females or people you familiar with. If you are unfortunately being sexually assaulted or suffered other injuries, you should take the time to call 1996 and other hotlines, or seek help from friends and relatives.
- (2) **Refuse additive substances:** Adopt a healthy way to make friends. The use of tobacco, alcohol, betel nut or any other narcotics is likely to cause addiction to affect your physical and mental health. You should avoid contacting them.
- (3) **Learn refusal skills:** If you face with peer pressure to try on tobacco, alcohol, betel nut or any other narcotics, you should refuse directly, look for an excuse, leave the scene quickly, try to mock yourself or take a friendly persuasive approach to explain your stringent family background, and say in a tactful and firm attitude to refuse.
- (4) **To get high without taking narcotics:** Do not try alcohol and narcotics but seek health in a positive self-satisfied and relaxed manner. You should engage yourself in physical and intellectual activities such as ball matches, extreme sports and art appreciation, etc.

### 3.Action 3:Understanding and rejecting narcotics – fighting and refusing narcotics

There is no different in severity of narcotics as they will anyhow damage the user's physical and mental health. By all means, DO NOT take the wrong step!

- (1) Understanding the actions of narcotics: Based on their effects to human body, narcotics can be classified into central nervous system depressants (such as opiates and Ketamine), central nervous system stimulants (such as amphetamines and MDMA), and hallucinogens (such as marijuana, glue and sand).
- (2) Understanding the emerging drugs: Marijuana, MDMA, Ketamine and FM2, etc. are also known as club drugs. These drugs have new names and appearances to attract people, and once consumed, people can be easily addicted. Meanwhile, the natures of the narcotics themselves will force users to seek for even more intense narcotics.
- (3) Fight against illegal: The manufacturing, trafficking, application, allowing people to use or lure people to use narcotics are all illegal. If the narcotic users surrender themselves to qualified medical institutes for professional treatment, they can be reduced with other legal responsibilities.
- (4) Prevent drug hazards: Narcotics can cause great harms to personal health such as the risks of nerve damage, bladder atrophy, sexual dysfunction, respiratory depression, cardiovascular toxicity, AIDS or other infectious diseases. Furthermore, a mixed use of the drugs may create interactions, and the commonly seen crimes such as robbery, self-injury, injuring other people, etc. that derived from using the drugs.

### 4.Action 4:Care and help – positive referral

In addition to avoid narcotic harms yourself, you should also extend a helping hand to concern and assist the friends around you to prevent them from narcotic harms.

- (1) Discovering the sign of drug addicts: Drug addicts often appear to have a chaotic schedules, trance, skin covered with rashes, special smell on their body or room, increase in money spending, stealing and lying, irritable and hot-tempered, decline in paying attention, poor appetite or weight loss and carrying drug-related appliances with them, etc.
- (2) Provide professional assistance and referral: Support from the family, friends and society is the best help to assist drug addicts to face their own self frankly, face with reality positively and get away from drug dilemma. The channels that provide referral and professional service include the relevant unit of Department of Health, medical institutions, Drug Abuse Prevention Center and drug counseling agencies (such as Operation Dawn), etc.

## **Chapter 32 Preventing Biting Midges**

### **What is a "biting midge"?**

A biting midge, scientific name "Forcipomyia taiwana," is an indigenous species in Taiwan. It is a bloodsucking insect rather than a real mosquito. People often call it "small black mosquito" or "small King Kong." Because it is tiny, when you can hardly notice it when you are bitten.

### **Life of a Biting Midge**

A biting midge has strong and rapid procreation ability. It needs to suck blood to lay eggs. A female midge can lay 40-80 eggs after sucking blood once. After mating, the female midge will hide in a shadowed area with large amount of blue-green algae (moss) and large number of people gathering so that it can suck blood and lay eggs. It takes about 20-30 days to grow up from an egg to an adult. The peak hours for female midges to suck blood are from 11:00am to 3:00 pm. Biting midges largely procreate during the period after spring rain and the end of fall each year.

### **Biting Midges' Breeding Environment**

The most important breeding environment for biting midges are areas with high humidity, weak sunlight, and a lot of blue-green algae. For example, bamboo garden, vegetable garden, underneath flower pots, under the tree, between the gaps of the sidewalks, shadowy areas around the house, and temples.

### **Clinical Symptoms and Treatment after bitten by a biting midge**

Biting midges usually come in groups. When bitten, you won't feel anything or only sense a slight sting, but afterwards, you will have groups of swelling and itchy rash. You can rinse the affected area with cold water, ice compress, or apply some cold medicine such as prickly heat cream to reduce swelling, relieve the pain and itchiness. Those bitten by biting midges should avoid scratching the affected area lest be infected by bacteria.

### **Preventing Biting Midges**

1. Wear long sleeves, pants, shoes, and socks outside to avoid being bitten.
2. When going out, applying some mosquito repellent. Pay attention to the time limit of the protection effect.
3. Prevent biting midges by protecting yourself and the environment so as to avoid drug resistance.
4. Eliminate moss. Keep the environment dry. Plant dense grasses.
5. Prevent both the adult and biting midges and larvae at the same time with medicine approved by Environmental Protection Administration such as organophosphate or insect growth regulators.

## Chapter 33 Understanding High Blood Pressure

### What is high blood pressure?

According to the standard issued by the US National United Conference Report

Classification	Systolic blood pressure (mmHg)		diastolic blood pressure (mmHg)
		and	
Normal	< 120	and	< 80
Prehypertension	120~139	or	80~89
The first stage of hypertension (mild)	140~159	or	90~99
The second level of hypertension (moderate)	$\geq 160$	or	$\geq 100$

### Is high blood pressure a disease?

High blood pressure is a condition, not disease.

When sympathetic nerves in normal people are affected, such as: Happiness, anger, sadness, joy, cold, and blood pressure is also affected.

Therefore, upon measuring blood pressure as high just once and thinking it as high blood pressure is incorrect. Usually, it is only when measuring over 3 times in a period of time with abnormal blood pressure, before considering treatment.

### What are feelings associated with high blood pressure?

High blood pressure is an invisible killer. The patient may feel headache, sore neck, or lack of clarity. When it rises too much suddenly, conditions such as nausea and blurred vision may occur.

### Complications of hypertension

Atherosclerosis. stroke. Lower extremity vascular obstruction, and in severe cases, amputation.

Aortic dissection. Left ventricular hypertrophy, myocardial ischemia, myocardial infarction, heart failure.

Eye damage, blindness in severe cases. Kidney dysfunction, kidney failure.

### Treatment

1. Control diet: Take less sodium, supplement food with potassium, calcium, magnesium, lower cholesterol level, high fiber food.
2. Lifestyle: Reduce stress, plenty of sleep, exercise regularly, control cigarettes & alcohol, normal weight.
3. Drug treatment: Must consider quality of life and convenience for long term use.
4. Sudden stopping medicine: Easy to lead to angina or heart damage, and even sudden death.
5. Long-term medication: You should not self-adjust the dosage, and don't decide whether to take the medication or not according to your blood pressure.

## Chapter 34 Understanding High Blood Cholesterol

### What is high blood cholesterol ?

When there is too much Cholesterol, triglycerides and other fatty substances in the human blood, plaque will form in blood vessels which affect the speed of blood flow. In serious cases, may lead to clogging of blood vessels.

Table of the Diagnosis of High cholesterol:

	Ideal Value (mg/dl)	Marginal Value (mg/dl)	Critical Value (mg/dl)	High Critical Value (mg/dl)
Total cholesterol (without fasting)	< 200	200~239	> 240	> 240
Triglycerides (Fasting for 12 hours)	< 200	200~400	400~1000	> 1000
Low-density lipoprotein (Fasting for 12 hours)	< 130	130~159	160~189	> 190
High-density lipoprotein	> 35	> 35		

### The effect of cholesterol on body

1. When the amount of cholesterol in blood vessels is low, blood will flow very smoothly.
2. Too much cholesterol will hinder blood flow, leading to heart attack, stroke.
3. When the long term blood fat is too high, the blood supplied to the blood will clog the blood vessel, leading to heart attack.
4. When the blood vessel supplying blood to the brain is clogged, stroke will occur, endangering one's life.
5. When there is too much cholesterol in the body, it will damage the blood vessel walls.
6. The body needs sufficient amount of cholesterol to maintain its proper function, but too much will lead to high blood cholesterol.

### Causes of high blood cholesterol

1. The main danger factors for heart attack are food containing too much fat or too little exercise.
2. Those with high blood cholesterol and diabetes family history, will lead to phenomena of high blood cholesterol.
3. Most high blood cholesterol patients need to be treated.
4. There are usually no external symptoms of high blood cholesterol.

### What is good cholesterol? What is bad cholesterol?

Cholesterol mainly consisted of Low-density lipoprotein cholesterol (LDL-C) and High-density lipoprotein cholesterol (HDL-C). Low-density lipoprotein cholesterol is also “bad cholesterol”, while high-density lipoprotein cholesterol is called “good cholesterol”. LDL-C is a key

factor in causing heart attacks and stroke. Good cholesterol can reduce a portion of the danger of high blood cholesterol symptoms.

### **Treatment**

1. If a patient had suffered from Cardiovascular disease, such as: angina pectoris, myocardial infarction, stroke, diabetes, then should take medicine that lower cholesterol, to reduce the chance of heart attack and stroke from happening.
2. Quitting smoking, controlling diet, and regular exercises can raise the amount of high-density lipoprotein cholesterol in the body, and lower the bad low-density lipoprotein cholesterol from the blood stream.

## Chapter 35 Understanding diabetes

### What is diabetes?

Under normal circumstances, the body will convert starchy foods into glucose to serve as fuel for body. Insulin is a hormone produced by the pancreas, which helps glucose enter the cells and provide energy. However, diabetes patients can not produce enough insulin or can not use insulin effectively or produce insulin resistance, so that glucose can not properly enter the cells, leading to rising level of blood glucose level.

Table of Diagnosis for High Blood Glucose:

Plasma values	Normal	Objective Range for Patients with Diabetes
The average blood sugar before meals ( mg/dL )	< 100	90-130
The average blood sugar after meals ( mg/dL )	< 110	< 180
* Capillary blood glucose value		

### Blood glucose

1. Blood glucose is the glucose produced after the human body completes the digestion process of food, to serve as fuel source.
2. The ideal blood glucose level before meal should be controlled in the range of 80~120 mg/dl.
3. Diabetes patients usually will be accompanied by symptoms of blood cholesterol abnormality.

### Who can get diabetes easily?

1. Those with a diabetic family history
2. Middle to old aged people above 40 years old
3. Fat or obese people

### Symptoms

Diabetes acute symptoms (not apparent during the initial stage, but they will show up gradually)

1. An urge to drink more, urinate more and eat more, and rapid weight loss.
2. Vision loss, tingling hands and feet, weakness and a reduction in resistance.
3. Skin vulnerable to infection and not easy to get better, and poor wound healing.

### Principles of treatment

1. In the beginning period of curing diabetes, the keys are diet control, suitable level of exercises, and maintaining normal weight.



2. If blood glucose cannot be controlled, then should drug treatment be considered.
3. Only when oral diabetic medicine leads to poor control should insulin shots be considered.
4. The diabetes patient not only has to control blood glucose level but also should actively control blood cholesterol.

### **Drug treatment**

1. Only when diet and exercises fail to control it well, should medication be used.
2. Need to use medicine under guidance of medical staff, and should not change medicine or adjust the dosage by oneself.
3. If there are adverse reactions after taking medication, should inform medical staff.
4. There should always be a reserve of medicine at home, but in case of sudden needs.
5. Avoid not following instruction of consuming food after taking medicine within regulated time (15-30 minutes) leading to low blood glucose.
6. Low blood glucose may mean that there is an imbalance between the three items of diet, exercise, and medicine, so appropriate adjustments should be made.

### **Non-medical treatment**

1. Quit smoking and losing weight, regular exercises, diet treatment, reducing danger factors, regularly doing re-examination.
2. Must follow instruction of doctor, pharmacist, and nutritionist.
3. Maintain a healthy lifestyle, with good and pleasant emotions and a regular lifestyle.

### **Hypoglycemia and Treatments**

#### 1. What is hypoglycemia?

When the glucose content is lower than 50-60g/dl or there are occurrences of hypoglycemia symptoms.

- (1) Insulin or hypoglycemia drugs overdose.
- (2) No intake of food after taking blood sugar-lowering drugs or insulin injection.
- (3) No extra food supplement after an increase in physical activity.
- (4) Liver and kidney dysfunction.
- (5) Drinking alcohol or taking aspirin, sulfa agent or beta-blocker at the same time.

#### 2. Symptoms of low blood sugar:

- (1) Autonomic symptoms: The occurrence of hunger, trembling, cold sweating, heart palpitation and rapid heartbeat during the initial stage.
- (2) Central nervous system: Drowsiness, unconsciousness, convulsion and coma.
- (3) Non-specific symptoms: Headache, dizziness, nausea and lip numbness.

#### 3. Hypoglycemia prevention:

- (1) Take three meals and snacks daily at regular time and at a fixed amount.

- (2) Take note on warning signals.
- (3) Do not exercise with an empty stomach.
- (4) Take oral medication on time and do not keep a long interval with food intakes.
- (5) The insulin injection dose must be accurate, and you should eat within half an hour after the injection.
- (6) Carry candies and cookies along with you anytime and prepare an identification card.
- (7) If the blood sugar concentration is  $\leq 110$  before bedtime, then you should take a snack.
- (8) For patients with “no hypoglycemia awareness” avoid overly strict control of blood sugar.

4. What should the surrounding people do in the event of hypoglycemia coma?

- (1) Do not inject the patient with insulin.
- (2) Do not feed the patient forcefully.
- (3) Maintain a free respiratory tract of the patient.
- (4) Inject the patient with glucagon.
- (5) Call 119 for help.

5. Hypoglycemia treatment:

- (1) Take 4-6 lumps of sugar in the conscious stage, then take another one (or 120-180cc of fruit juice or a spoonful of honey) if the condition does not improved 10-15 minutes later.
- (2) Under the unconscious stage, provide sugar through intravenous administration.

## Chapter 36 Understanding Asthma

### What illness is asthma?

Asthma is a kind of chronic inflammation and a repeated outbreak of airflow blockage pathological change. It will heal spontaneously or treated. For those uncured patients, they can also take proper therapy to control the symptom and still lead a normal life.

### What are the symptoms of asthma?

During an asthma attack, there are symptoms of breathing difficulty, wheezing and chest tightness, etc. depending on the severity. The onset time varies from several minutes to several hours.

It is characterized with completely no symptom at all or mild symptoms between two onsets.

### What causes asthma?

1. Genetic, allergic, infectious or a combination of three factors.
2. Approximately 30% of asthma patients have an allergic physique, or allergic to dust or pollens. It is a type of seasonal illness.
3. Majority of patients has no apparent causes, and it is known as a specific physical reaction.

### Causes that induced asthma

1. Allergens: Dust, dust mites, animal danders, pollens and molds, etc.
2. Bacterial or viral infections: Colds and bronchitis.
3. Sports: Running in bittering cold weather.
4. Emotional: Excitement or anger.
5. Environmental stimulation: Smoke, emissions or air pollution.
6. Drug or food allergies: Painkillers, milk, egg and seafood, etc.

### Treatments

The treatment principles are divided into four levels: Mild intermittent, mild persistent, moderate persistent and severe persistent.

1. Avoid or reduce exposure to allergens – improve home environment and eliminate allergens in the environment.
2. Medical treatments – the asthma medical functions can be classified into control drugs and reliever drugs:
  - The efficacy of control drugs is to lighten inflammation and swelling of the respiratory tract, and prevent asthma attack.
  - The efficacy of reliever drugs is to smoothen and relax the respiratory tract to eliminate asthma symptoms.

3. Anti-allergen therapy – inject the patients with minute amount of allergen repeatedly within a period of time, and then increase the dosage gradually to strengthen the patients’ tolerance to allergen.

### **Precautions**

Asthma diagnosis requires clinical characteristics and measurement of pulmonary functions.

The patients should record daily peak expiratory flow rate and onset frequency.

Reduce allergen exposure and avoid contact with pets.

Prohibit using drugs that will induce asthma attack, such as high blood pressure medication of beta blocker and aspirin, etc.

## **Chapter 37 Understanding of urinary incontinence**

### **Definition of urinary incontinence**

Medically, the condition when the conscious mind cannot control urine leakage is defined as urinary incontinence.

Most symptoms are light, but will create physical and psychology disturbances because of poor odor and frequent urination.

### **Causes of urinary incontinence**

#### 1. Physical causes of urinary incontinence:

Damages to urinary tract including muscle, structural weakness of the abdominal perineal muscle, nerve motor conduction disease, colorectal lesions, and changes in angle of the female urethra and bladder are all causes of urinary incontinence.

#### 2. Psychological causes of urinary incontinence:

When psychological symptoms of dependence, resistance, fear, and insecurity appear which affect the physiology, leading to urinary incontinence.

### **Classifications of urinary incontinence**

#### 1. Stress incontinence: about 80% of cases:

When the abdomen exerts force, such as lifting heavy objects, coughing, sneezing, or laughing, urine involuntarily leaks out.

After women's natural childbirth or after pelvic surgery, leading to pelvic muscle ligamentous laxity.

Reduction of hormone postmenopausal for women leading to contraction of urethral mucosa and leaking urine.

Male after excision of prostate due to prostate cancer.

#### 2. Urge incontinence:

When patient cannot make it to toilet after sensing urinary urgency, and incontinence accompanies it, can be classified as overactive bladder.

#### 3. Mixed incontinence:

This refers to combination of stress and urge incontinence.

#### 4. Overflow incontinence:

When patients suffer neuropathy, Long-term holding back urine, prostatic hypertrophy, or the urine long term can not be emptied.

Bladder with poor contractile force, even if the bladder is full, there is no urination sense, causing overflow incontinence.

#### 5. Temporary Incontinence:

Occurs mainly in the urinary tract infection, puerperal, & insanity.

#### 6. Nerve incontinence:

Stroke, spinal cord injury, hysterectomy and rectal cancer surgery may possibly cause neurological incontinence.

7.Constant leakage incontinence:

Urinary tract fistula or urethral tissues severely damaged in patients leading to constant leaking of urine throughout the day.

## **Chapter38    Knowing about Enlarged prostate**

### **Is BPH only for men?**

Females have tissues similar to prostate, but they are degraded already. Scientists confirm that female have prostate, which is a gland that surrounds the female urinary tract. Therefore, female may also get prostate related diseases.

### **The development of prostate?**

1. At birth, it is small like a pea
2. Grows rapidly during teenage period
3. Fully developed between 25-30 years old
4. Second growth at middle age (around 40 or more years old)
5. under 50 years old – no problem
6. above 60 years old – 50% have benign enlarged prostate
7. above 80 years old – 80% have benign enlarged prostate

### **Symptoms of enlarged prostate?**

1. Urine stream thins, with discontinuous urination process
2. When starting to urinate, is very difficult, and after urination, will continue to drip
3. Frequent urination or when feeling urge to urinate, unable to be completely emptied

### **Treatment Objectives and Method**

1. Observational Treatment:
  - (1) Restrict intake of beverages and liquid, and to empty urine in bladder as much as possible
  - (2) Restrict use of alcoholic beverages, and being careful to use cold medicine including anti-nasal congestion drugs
  - (3) Regular exercises, and keep body warm
2. Medication:
  - (1) Influenza adrenaline antagonists: relax the muscle of the prostate and smooth bladder neck.
  - (2) Male hormone inhibitor: shrink the prostate, prostatic hypertrophy with good results.
3. Surgery:
  - (1) Transurethral prostate resection
  - (2) Transurethral prostate incision
  - (3) Open prostatectomy surgery

### **Conclusion**

When there is abnormality with prostate, should visit doctor and not to believe in folk prescription that may lead to delay of treatment, leading to worsening of condition.

## Chapter 39 Understanding Urinary tract infections

Common urinary tract infections include cystitis, pyelonephritis, urethritis and prostatitis in men. Cystitis in women is the most common. When bacteria enter urethral and bladder, normally urination will wash out the bacteria so that they won't procreate inside. Diseases are prevented. However, when urination is not normal (holding back urine, urinary stricture, urinary tract obstruction, external injuries), bacteria will adhere to the body, procreate, and cause diseases.

Aging often increase the possibility of having urinary tract infections. The most common bacteria are *E. coli*, often gathering at urethra or perineum due to sexual intercourse or bad sanitation habits and going up to the bladder or kidney, causing urinary tract infections. Male urethra is about 17 centimeters long, while female's is only 4 centimeters. Therefore, women are more likely to have urinary tract infections. If women do not have sufficient knowledge about urinary tract infections, they might not know when they are infected. Bad living habits create high risks in urinary tract infections. According to statistics, for women in Taiwan, not drinking enough water before or after sexual intercourse causes the most infections, 81%; The second is not having enough water daily, 57%, and holding back urine 55%. When urine is stored in the bladder for too long, *E. coli* will multiply, causing acute cystitis and hematuria.

### Symptoms of Urinary Tract Infections:

Cystitis: urinary frequency, urgency, painful urination, nocturia, urinary up feeling, lower abdominal pain or hematuria.

Pyelonephritis: fever, chills, back pain and cystitis.

Urethritis: painful urination, urethral discharge, burning.

Treatment of Urinary Tract Infections: After diagnosis, use antibiotics and control complications to completely remove all the bacteria in urine or blood and prevent the infections from turning into a chronic disease or relapses. Urinary tract infections in men or recurrent infections in women shall be examined further to find out underlying causes, such as urinary tract stenosis, obstruction, prostatic hypertrophy, urinary tract stones, reflux, neurogenic bladder disorders. If the underlying causes are excluded, relapses can be prevented.

To prevent urinary tract infections, one should: 1. have sufficient sleep to strengthen immunity; avoid wearing tight pants or skirts; 2. dry perineum after taking a bath; 3. drink plenty of water; not hold back urine; keep urinary track clean; 4. after urination, clean from urinary track to anus to prevent infection.



## Chapter 40 Understanding Psoriasis

Psoriasis is a common chronic skin disease characterized by silvery white and red, scaly patches, papules, and plaques. Patients can undergo treatment in outpatient clinic. There are rarely cases endangering life and needing to be taken to a hospital.

### Epidemiology

Global prevalence of psoriasis has huge disparities. The farther away from the equator, the prevalence of the disease increases. It can happen on people of all ages, but it is more common on adults.

### Etiology and risk factors:

The specific factors for psoriasis are not yet found. However, the disease can be developed due to immunological, genetic, environmental factors and other risk factors including infection, physiological or psychological stress, drugs, smoking, obesity, vitamin D deficiency, poor immunity and alcohol abuse. Patients with HIV are more likely to have psoriasis. Patients with psoriasis may become psoriatic arthritis. Patients with moderate to severe psoriasis have higher probability for hypertension, diabetes, high cholesterol and other metabolic syndrome.

### Symptoms of Psoriasis

1. Dry or red skin, usually covered with silvery white scales and sometimes with raised edge.
2. Rashes, itchiness, and painful skin on scalp, joints, legs, lower back, genitals, skin folds.
3. Joint pain, swelling, or stiffness, deformation.
4. Nail abnormalities, such as depression, discoloration, thickening or fragile

### Clinical Types

1. Plaque psoriasis: The most common kind of psoriasis, appearing in any parts of the skin. The lesions will have no change when developed to a certain extent. The affected part is covered with red plaque with silvery white scales. They will be easily pelted down after scuffing. Spots of blood appear while they are pelted.
2. Teardrop-shaped psoriasis: It is commonly found in children between 7 and teens. Streptococcal or viral upper respiratory tract infection may happen before the psoriasis. They are acute symmetry guttate papules covering mainly trunk and limbs, expanding as time goes by. In weeks, they will subside automatically.
3. Pustular psoriasis disease: Rare but severe psoriasis, visible but non-infectious pustular, covering the whole body or partially. (1) partial: plantar pustular disease on palms or soles. In the middle part of the fingers or the front of the soles grow many sterile, not easy to break small pustules covered with thick scab. It can be commonly seen in middle-aged women. Rare Hallopeau Acrodermatitis is a kind of psoriasis slowly invading fingers and nails. (2) Whole body: acute or subacute. Patients will have fever and pain, and their whole body will be covered with sterile and not easy to break small pustules in one or two days. Although it is rare, it is fatal, so the patient

shall be taken well care of or sent to the hospital immediately.

4. Anti transformation psoriasis: Also known as buckling psoriasis. Rare, but mostly happened on the elderly. Armpits, groin after, gluteal cleft, ears, female breasts and male genitals beneath folds are common affected areas. The wet patches with smooth surface and crimson color look like candidiasis infection.

5. Erythroderma psoriasis: acute redness and scales diffusing the whole body infected adults. It is often caused by medicine or external stimulation. The skin will turn red and peeling, with fever, chills, itching, or pain. The patient needs treatment in hospital.

### **Treatment**

Although psoriasis cannot be cured under current medical technology, as long as the patients continue receiving treatment, most of them can control their disease well or even relieve from the disease for a long time. The treatment methods include partial and whole body treatments. Doctors will make assessment according to the level of severity of the disease, complications, the patient's preference (including cost and convenience), medical effects, and individual reactions.

## Editor's Notes

We have already entered the fourth consecutive years after publishing the “Establishment of a Safety Medication System Program for Special Populations.” Over the past three years, we have dedicated ourselves to advocate safety medication for the new immigrants. We have received affirmation not only from the new immigrants, but have also fulfilled the professional values of pharmacists. This year, in addition to concern the socially vulnerable populations, we will continue to extend our care to the disabled people and the aborigines. We look forward to playing our professional role as pharmacists to upgrade the medication quality and safeguard the safe use of medicines for the disadvantaged groups.

Medicines can cure illnesses, but can also cause illnesses. Only proper medication can eliminate illnesses and maintain good health. Hence, there is still a lot to learn about on the correct use of medicines. We have received favorable comments from many units and new immigrants on our last publication of *Safety Medication Handbook for New Immigrants*. This year, we have put more efforts to edit five more chapters, increasing the original 35 chapters to 40 chapters. The contents have become richer and diversified. Besides in Chinese, English, Vietnamese and Indonesian, we also translate the *Handbook* into Thai and Khmer language. We aim to promote the medication knowledge extensively.

I would like to express my many thanks to the Director General of Food and Drug Administration, Ministry of Health and Welfare for giving me much support and guidance; the Bureau Chief Wu Zhao-Jun, Deputy Bureau Chief Liao Dun-Zhen and Secretary Yang Hui-Mei of Yunlin County Public Health Bureau; the Chairperson Wu Zong-Zhou of National Health Insurance-appointed Pharmacy Association; the former Chairperson Liao Ling-Qiao, Chairperson Yang Wen-Rong of Yunlin County Pharmacists Association, Section Director Li Yan-jin of Nantou County Public Health Bureau, former Chairperson Zhang Fu-Yao and Chairperson Lin Jiang-Quan of Nantou County Pharmacist Association; Chairperson Zhang Qi-chun and Representative Director Shan Jin-wen of Chiayi City Pharmacists Association; former Chairperson Chen Jin-xiong and Chairperson Liao Xiu-ling of Taitung County Pharmacists Association for giving me great support; the former Director Zeng Mei-Rong and pharmacists Lin Zhi-chan, Lin Chung-hing, Xu Xin-jiao, Lin Yun-chong, and Huang Ju-wen and many colleagues from the Department of Pharmacy of St. Joseph's Hospital to help collect relevant information; as well as Miss Tsai Li-Yu and Song Yu-lan who had solemnly assisted me in compiling the data. For without them, it would be impossible for me to publish this handbook smoothly and provide the easy-to-understand medication knowledge for everybody. Through the release of this handbook, I look forward to helping the disadvantaged groups to effectively establish correct medication concepts. Lastly, I sincerely hope that the safe and appropriate medication would be able to guide every family's health and lead a better life altogether.

Project Manager, Lin Zhen-Shun  
July 2014