



衛生署

Department of Health

Poisoning Watch

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Slimming products – cocktails?

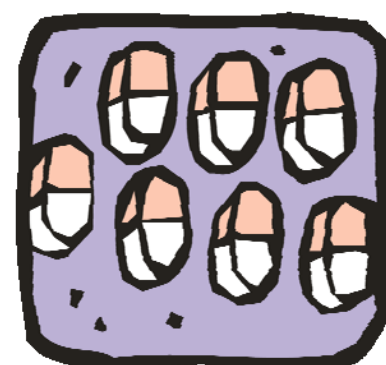
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Slimming products – cocktails?

Introduction

'Cocktail' is referred as an alcoholic drink consisting of a spirit or spirits mixed with other ingredients, such as fruit juice or cream. It may also refer to some treatment modules in medical field, such as "cocktail therapy" (雞尾酒治療法) for treating HIV/AIDS. In this issue of Poisoning Watch, we would like to talk about the 'slimming pill cocktails' and summarise the local situation of adverse effects / poisoning related to their use.

Nowadays, many people perceive slim body figure tantamount to beauty and health. Many people, especially ladies, are searching for shortcut to lose weight quicker and easier. Though according to the 'Health Facts of Hong Kong (2014 Edition)', 27.8% of female population aged 18-64 are overweight and obese, which are by far lower than 47.2% among males aged 18-64. Advertisements with respect to a variety of products which promote weight loss are extensive and flourishing. Apart from conventional media publicity, such as newspapers and television, new platforms including the internet, mobile phone apps and online shopping sites are becoming more popular and increasingly accessible. Furthermore, buying products through overseas websites is as easy as shopping at local stores. At the same time, different types of slimming products are emerging in the market, among which



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'slimming pill cocktails', a regime consisting of multiple types of pills, are becoming more popular in this locality. The use of slimming pill cocktails can cause significant health problems and is potentially fatal. This cocktail of slimming products is more likely to be psychotoxic compared with products which contain sibutramine only.

Local situation

From January 2013 to September 2014, the Department of Health (DH) was notified by the Hospital Authority a total of 54 notifications related to consumption of slimming products for investigations. Among these cases, 22 of them involved the use of slimming pill cocktails (Figure 1). All cases were young females who were aged from 15 to 34 years (median: 22 years old). Their body mass index (BMI) ranged from 18.6 to 37.5 (median: 22). They presented with various signs and symptoms including palpitations, tremor, shortness of breath, hypertension, seizure, abnormal thyroid function, depressive states and psychosis after taking cocktails of slimming pills (Figure 2).

All patients required hospitalisation and were discharged eventually without complications and no fatal case was recorded. 73% of these cases (16 out of 22 cases) obtained slimming products via the Internet or instagram mobile apps. The slimming pill cocktails consisted of multiple types of drugs e.g. sibutramine, fluoxetine, hydrochlorothiazide, frusemide, animal thyroid tissue, chlorpheniramine, bisacodyl, etc.

There is no clear indication of linkage among the cases. The slimming products were either labeled in Thai or had a purported Thai origin. However, it could not be ascertained if the slimming products were faked or if they were really linked to Thailand.

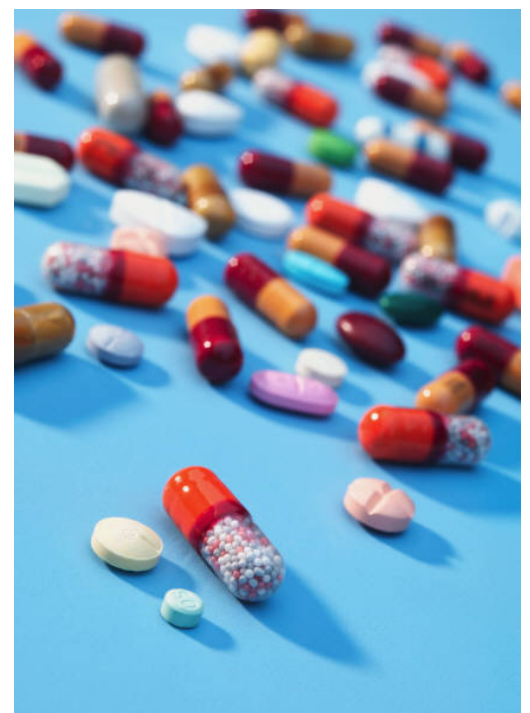




Figure 1: Number of poisoning cases related to the use of slimming pill cocktails notified to the Department of Health from January 2013 to September 2014, by month.

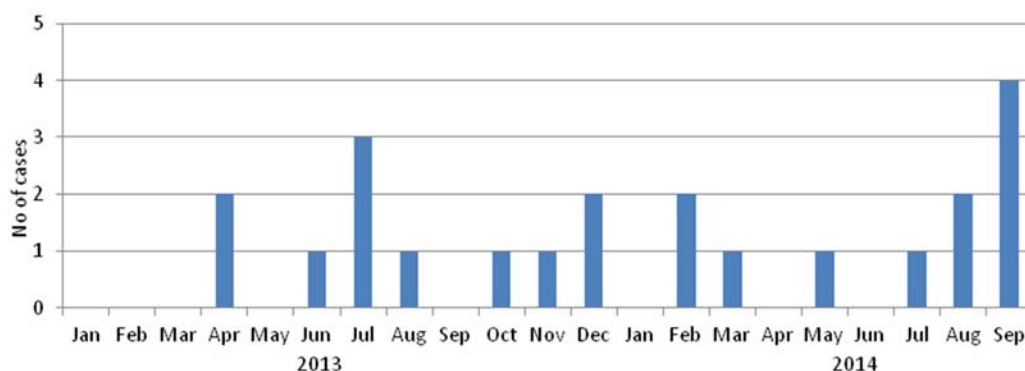
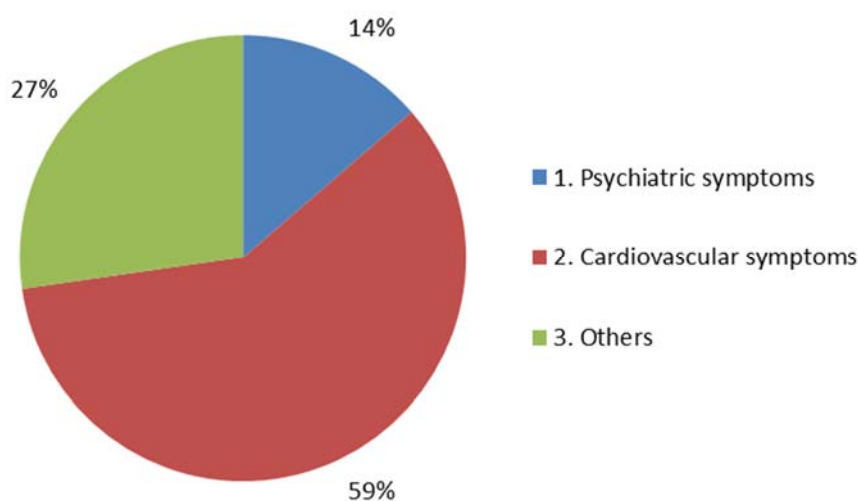


Figure 2: Distribution of presenting symptoms attributed to the use of slimming pill cocktails among 22 cases, January 2013 to September 2014.



Adverse effects of drugs commonly found in the slimming pill cocktails

Sibutramine

Sibutramine is an appetite suppressant. It had been used for the treatment of obesity. Cardiovascular and cerebrovascular adverse effects, sometimes serious, including vasodilatation, cardiac arrhythmias, hypertension, myocardial infarction, and stroke, have been noted.



Fluoxetine

Fluoxetine is used for the treatment of depression. It may cause neurological adverse effects such as headache, tremor, anxiety, confusion, hallucination and insomnia.

Hydrochlorothiazide and frusemide

Hydrochlorothiazide and frusemide are diuretics used for the treatment of conditions like congestive heart failure, high blood pressure and edema. It may cause low blood pressure and electrolyte imbalance with loss of potassium, calcium, sodium, and magnesium. Serious adverse effects from overdose may lead to dehydration, seizures, kidney damage, collapse or even coma.

Animal thyroid tissue

Animal thyroid tissue contains a mixture of thyroid hormones, which increase the basal metabolic rate leading to weight reduction. It carries a risk of hyperthyroidism and cardiovascular complications such as headache, insomnia, heat intolerance, tachycardia, palpitations and cardiac arrhythmias.

Chlorpheniramine

Chlorpheniramine is an antihistamine which may cause drowsiness.

Bisacodyl

Bisacodyl is a laxative that may cause abdominal pain.

Legal requirements related to the sale or supply of drugs commonly found in slimming pill cocktails

Sibutramine is regulated as a Part I poison in Hong Kong. Because of the increased cardiovascular risk, the Pharmacy and Poisons Board of Hong Kong has de-registered all pharmaceutical products containing sibutramine in November 2010.



Fluoxetine, hydrochlorothiazide, frusemide and products containing thyroid hormones are Part I poisons and prescription only medicines. They should only be used under the advice of medical doctor and supplied at pharmacies under the supervision of a registered pharmacist upon a doctor's prescription.



Chlorpheniramine and bisacodyl are over-the-counter medicines.

Products containing the above drug substances at therapeutic level are considered pharmaceutical products in Hong Kong. According to the Pharmacy and Poisons Ordinance (Cap 138), all pharmaceutical products must be registered with the Pharmacy and Poisons Board of Hong Kong before they can be sold legally in the local market. Part I poisons should only be sold at pharmacies under the supervision of a registered pharmacist. Illegal sale or possession of unregistered pharmaceutical products and Part I poisons are criminal offences. The maximum penalty for each offence is a fine of \$100,000 and two years' imprisonment.

All registered pharmaceutical products in Hong Kong should carry a registration number on the package in the format of "HK-XXXXX". Information of registered pharmaceutical products could be searched from the Drug Office website:

http://www.drugoffice.gov.hk/eps/do/en/consumer/search_drug_database.html



Investigation by Department of Health

Upon notification of each case, DH will collect information including epidemiological, clinical and laboratory data through interviews with patients, family members and clinicians. The patient and other drug collaterals will be advised to stop taking the slimming products immediately. For incidents with public health significance, timely public health control measures will be instigated and public announcements made in the form of press releases.

DH will investigate each case to identify the source of slimming products from the information provided by the patient. DH will collect evidence in relation to suspected offences. Joint operation with other departments, such as Hong Kong Police Force and Customs and Excise Department, will be carried out if necessary. Prosecution may be instituted against the offenders upon the advice of the Department of Justice.

What should I do?

First of all, are you obese?

For adults, BMI is a useful indication to assess whether you are overweight or obese. It is calculated by dividing the body weight (in kilograms, kg) by the square of height (in metres, m), i.e. kg/m^2 . For Chinese adults living in Hong Kong, BMI from 23.0 to less than 25.0 is classified as overweight and BMI 25.0 or above is classified as obese. Another method is to measure the waist circumference. A waist circumference over 90 cm or about 36 inches for males, or over 80 cm or about 32 inches for females, is considered as central obesity.

How can I manage weight in a healthy way?

Balancing the in-and-out calories from food (and beverages) and physical activity is the key to achieving and maintaining healthy body weight. Having a balanced diet according to the Food Pyramid is a good way to begin. Adults are recommended to do at least 150 minutes of moderate-





intensity aerobic physical activity or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity physical activity for better health. Persons with chronic health problems and elders should first consult a doctor before embarking on any physical activity that is more vigorous or demanding than usual. Drinking should be avoided as alcohol contains many more calories than carbohydrates by weight.



Healthy eating is possible through:

- ✓ Following the recommendations of the food pyramid to eat a wide variety of food and have a well-balanced diet;
- ✓ Eating grains and cereals in every meal, especially high-fibre options like red rice, brown rice, rice with added vegetables, buckwheat noodles or wholemeal bread, etc.;
- ✓ Eating at least two servings of fruit and three servings of vegetables every day;
- ✓ Choosing food containing less salt, fat and sugar, e.g. low-fat milk/skimmed milk, lean meat, fish, poultry with skin removed, fresh fruit and vegetables, etc.;
- ✓ Reducing consumption of preserved or processed food, e.g. ham, bacon, sausage, preserved Chinese sausages or meat, salted duck egg, salted fish and preserved vegetables, etc.;
- ✓ Avoiding snacks high in salt, fat/oil and sugar, e.g. French fries, deep-fried chicken drumsticks, hamburgers, candies, soft drinks and instant noodles, etc.; and
- ✓ Preparing meal with low-fat cooking methods, e.g. steaming, blanching, baking and poaching, etc.



Is it safe to take slimming products for weight control?

Having a balanced diet and regular exercise are the most healthy ways for weight control. If you consider taking slimming product for weight control, you should consult healthcare professionals before making decision. What is almost certainly true is that slimming pill cocktails can cause significant side effects and is potentially fatal.

More information about healthy eating, physical activity and prevention of Non-communicable Diseases is available at DH's Health Zone (www.cheu.gov.hk) and on the "Change for Health" website (www.change4health.gov.hk).



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