# **Ensuring Product Quality and Safety**

## 確保產品質素及安全

#### WHY THIS IS IMPORTANT

The Council conducts tests on consumer products to provide unbiased comparative test results for consumers to make rational choices, to alert them to product hazards and to induce improvements in product quality and safety. Major test items include safety, performance, ease of use, durability and environmental sustainability for most products.

Media coverage of testing results reach not only consumers in Hong Kong, but the neighbouring regions in the Mainland, as well as overseas Chinese who have access to Hong Kong's broadcast and printed news.

That explains why the Council's product testing reports are well sought after by consumers while at times received with mixed feelings by traders, depending on the ratings of their products in comparison with those of their competitors. This has in turn become an impetus for traders to improve their product and service quality.

#### **HOW THIS IS DONE**

There are three different types of tests, firstly, those which are initiated and solely conducted with the Council's own resources. Most of these tests are conducted by accredited and independent laboratories in Hong Kong. In case local testing facilities do not meet the Council's requirements, appropriate overseas laboratories will be commissioned. Secondly, joint tests conducted by International Consumer Research and Testing (ICRT), an international consortium of more than 45 independent consumer organisations worldwide. As an active member, the Council has benefited from ICRT's joint tests through which utilisation of resources can be maximised and experience shared. Otherwise, the Council could not have provided Hong Kong consumers with latest test findings of short product life cycle products such as digital cameras and mobile phones regularly. Thirdly, the Council also actively co-operates with various local Government/statutory organisations. It should be noted that all test samples were sourced from reliable outlets in the market.

## 產品測試的重要性

本會進行產品測試,為消費者提供客觀、中肯的 資訊,令他們注意產品的安全並作出適當的選擇。產 品測試主要在產品的安全、效能、使用方便程度、耐 用程度及對環境的影響等多方面作出評估。

本會的產品測試結果獲傳媒廣泛報道,除了為本港的消費者提供資訊外,鄰近的華南地區及海外能接觸本港新聞的華人,均能獲益。

正因如此,本會的產品測試報告相當受消費者重視,而商界的反應則較為複雜,多因應其產品與競爭對手產品的評分差距而定,同時,本會的測試有助推動製造商改善產品的質素及安全。

## 如何測試?

測試分三類,一是由本會獨立發起及進行的測試,費用及資源全由本會負責。此類測試由本會委託認可及獨立的測試機構進行,若本地未能提供所需的測試設施,便交由海外合適的實驗室測試。第二類是參與國際消費者研究及試驗組織(ICRT)的聯合測試,ICRT是包含世界各地超過45個消費者組織的協會,本會作為該會的活躍成員,參與其主辦的聯合測試,使資源得以充分利用,及與海外組織分享經驗,獲益良多。若沒有這些聯合測試,本會未必能定期為本港消費者提供包括數碼相機及手提電話等短產品生命周期產品的最新測試報告。第三類是本會積極與本地不同政府部門或法定團體的聯合測試。特別一提,所有測試樣本均從市場上可靠的零售點採集。

#### WHAT WE HAVE DONE

In the year under review, 43 product testing reports were published in CHOICE. Findings in a number of tests indicated that not all products fully complied with relevant standards, e.g. International Electrotechnical Commission (IEC) standards, Mainland's Hygiene Standard for Cosmetics. Based on the findings, the Council notified the government regulatory bodies for follow-up action, and made proposals to the manufacturers and agents for product improvement. Over the years, the Council's product testing has proved to be an effective mechanism in enhancing quality and safety of products. A list of the tests conducted is at Appendix 8.

#### **HIGHLIGHTS OF TESTS**

### **Electrical Products**

### Varied life span of compact fluorescent lamps

Long life is the selling point of compact fluorescent lamps (CFLs). The Council conducted a 10 000 hours life test on CFLs in collaboration with the Electrical and Mechanical Services Department. The test covered 20 models of 12 brands. The test results showed that while the average life span of 18 CFL models exceeds 10 000 hours, the average life span of one model was only 6 058 hours, a shortfall of about 4 000 hours (39%) than its claimed life span of 10 000 hours.

The actual life span among 20 tested samples of the same model varied and the discrepancy could be as high as 8 000 hours. There is much room for improvement for the quality of some CFL models.

## First ever safety test on bathroom heaters

The Consumer Council tested five ceramic fan heaters and 10 bathroom heaters of price range from \$199 to \$3,780 on their safety and convenience of use. The safety test results of only three models were considered satisfactory with none or little deviation from the international safety standard. Plastic materials of six models were found to be of insufficient resistance to heat/flame, while others showed inadequacy in maintaining sufficient insulation distances and wiring connection. Two bathroom heaters claimed to be water resistant failed in the tests on protection against water ingress. The Council reminded consumers intending to use heaters in the bathroom to choose a heater that meets the water resistance requirement and install the heater at a safe distance from the bathtub or water basin.

## 我們完成的任務

年內《選擇》月刊發表的產品測試報告達43個。 多個測試的結果顯示,並非所有產品均符合相關標準 規定,例如國際電工委員會(IEC)標準、內地《化妝品 衛生規範》。根據測試結果,本會通知政府執法部門 以便跟進,及建議製造商及代理商改善產品。長久以 來,本會的產品測試證實是提升產品品質及安全的有 效機制。產品試驗一覽表見附錄八。

## 試驗工作摘要

## 電氣產品

### 慳電膽壽命差距頗大

長壽是慳電膽的一個賣點。本會與機電工程署聯合進行慳電膽一萬小時壽命測試,共測試了12個牌子20款型號。測試結果顯示,18款型號的平均壽命超過一萬小時,但一款測試型號量得的平均壽命卻只得6058小時,比聲稱的一萬小時短了約4000小時,相差達39%。

部分型號的20個測試樣本間,壽命差距很大,最多甚至相差超過8 000小時,顯示質量控制有改善空間。

### 首次浴室電暖爐安全測試

消費者委員會測試了五款普通陶瓷式暖風機和十款聲稱可在浴室使用的電暖爐的產品安全。產品的零售價每具由港幣199元至3,780元。只有三個樣本沒有或出現較少問題,其餘12款都有不足之處:六款的膠料耐熱能力或阻燃能力不足,部分的絕緣距離或接線方法有待改善等。兩個浴室用電暖爐樣本聲稱防水,但卻未能通過相關測試的要求。本會提醒有意在浴室使用電暖爐的用戶,應選購達到防水要求的型號,使用時須保持暖爐與浴缸或洗手盆之間一段安全距離。

## Energy label information checked in air conditioners

The Council tested 15 models of window-type room air conditioners with claimed cooling capacity of 2.05 kW to 2.17 kW. It was found that the model with the lowest price turned out to be one of the better performers. The test items included cooling capacity, energy efficiency, noise level, ease of use, enclosure sweat and condensate disposal. On cooling capacity, nine samples were found to fall slightly below their own claim with the largest discrepancy at 6.8%. On energy efficiency, all but two samples were found to qualify for the top Grade one rating under the Energy Efficiency Labelling Scheme of the Electrical and Mechanical Services Department (EMSD). The two exceptions would be qualified for Grade two rating only according to the Council's test results. Test results were forwarded to EMSD for follow-up.

## Higher price does not translate into better performance of iDTV

The test of integrated digital TV (iDTV) covered 20 models marketed under different makes. All samples were of the most popular 32" screen size, with price ranging from \$3,990 to \$7,000. They were compared for their performance on picture quality, sound quality, ease of use, versatility, special feature and energy efficiency.

Results showed that one sample had serious screen reflection problem. Motion pictures were also found to be unsmooth in 18 samples. And sound quality was less than satisfactory in more than half of the samples.

The test also revealed that some samples were unable to switch to true standby mode if the timer recording function was being used. When timer recording was set, the standby power consumption was as high as 15 to 31 watt. Five samples even failed to switch to true standby after recording was finished, resulting in unnecessary wastage of energy. Such design had lots of room for improvement.

Judging from the overall test results, higher price did not translate into better performance of the samples.

#### 檢驗冷氣機的能源標籤

本會測試15款窗口式冷氣機,聲稱製冷量由2.05至2.17千瓦,發現售價最低的一款是表現較佳的其中一款。測試項目包括量得製冷量與聲稱的符合程度、能源效率、寧靜程度、使用方便程度、滴水及「機身出汗」。製冷量方面,九個樣本量得的數值比其聲稱的略低,差別最大的比聲稱低6.8%。能源效率方面,除兩個樣本以外,全部樣本均達到機電工程署能源效益標籤計劃中最高的一級能源效益級別的要求;根據本會的測試結果,該兩個樣本達二級能源效益的要求。測試結果已交機電工程署跟進。

#### iDTV未必愈貴表現愈好

測試樣本包括20款不同牌子和型號的iDTV,全部都是較為普遍的32吋,由每部最低的3,990元至最高的7,000元不等。測試比較了它們的畫質、音質、使用方便程度、多功能程度、特殊使用和用電量。

測試發現有一個樣本的屏幕反光嚴重,18個樣本 播放動作不流暢,近半數樣本的音質欠佳。

測試亦發現有樣本在調校了預校錄影後,便不能 切換至真正的備用狀態,耗電量高達15至31瓦特,更 有五個樣本即使預校錄影完畢後,也不能自動切換至 真正備用狀態,虛耗電力,設計有改善空間。

整體測試結果顯示,樣本售價與質素沒有直接關係。

#### **Food**

# High levels of acrylamide found in potato chips

In the second test for acrylamide conducted jointly by the Council and the Centre for Food Safety, a total of 90 samples over a diverse range of fried and baked snacks – crispy snacks (35),

fried and baked potatoes (10), biscuits (39), breakfast cereals (6) were put to the test. With the exception of one sample, all tested samples were found to contain varying levels of acrylamide. One sample of potato chips was found to contain 3 000 µg of acrylamide per kg of the snack, the highest level ever detected in food products covered in local studies.

Animal testing found that acrylamide increases the incidences of tumors in various organs and tissues. It is classified as "probably carcinogenic to humans" by the International Agency for Research on Cancer.

Acrylamide in food is formed unintentionally during processing and its level is affected by various conditions. In general, food that is rich in carbohydrates, crispy and thin tends to contain a higher level of acrylamide after being cooked at high temperatures. JECFA (Joint FAO/WHO Expert Committee on Food Additives) concludes that it is not possible to make a recommendation on how much of any specific food containing the substance is safe to eat. The only recommendation they provide is that exposure to acrylamide should be "as low as reasonably achievable". In Hong Kong, there is no specific regulation governing the acrylamide level in food.

#### **Personal Care**

# Choose safety shoes carefully for better protection of feet

Wearing a pair of suitable safety shoes can effectively reduce the risk of foot injuries associated with mechanical hazards at workplace, especially on construction sites. In a joint test by the Council and the Occupational Safety and Health Council, a total of 12 models of safety shoes were tested for their performances. Seven of them claimed to be in compliance with safety shoes standard. In general, samples that claimed to be complying with stipulated standard were found to have better overall performance than those without such claims. On the ability to protect against mechanical hazards, three samples passed all the tests including impact resistance and compression resistance of toecap, and penetration resistance

## 食品

#### 薯片檢出高含量丙烯酰胺

本會與食物安全中心第二度 合作測試食品的丙烯酰胺含量, 測試樣本包括90款不同類型的炸 焗小食一香脆零食(35款)、炸薯及 焗薯(10款)、餅乾及餅類零食(39 款)及穀類早餐(6款)。除一款樣本 外,所有樣本都檢測到不同水平的丙烯

酰胺。一款薯片的丙烯酰胺含量高達每公斤3 000微克,是本地食品測試驗出的最高紀錄。

動物實驗發現丙烯酰胺會增加動物的不同器官及 組織出現腫瘤的比率。國際癌症研究機構(IARC)把 丙烯酰胺分類為「可能令人類患癌」。

食物內的丙烯酰胺是在烹調過程中產生,含量多 寡受多種因素影響。一般來說,含豐富碳水化合物而 又薄又脆的食物,經高溫烹調後,丙烯酰胺的含量較 高。聯合國糧食及農業組織世界衞生組織聯合食物 添加劑專家委員會(JECFA)認為,現時不可能為任 何食物定出丙烯酰胺的安全標準。JECFA的建議是盡 量減少丙烯酰胺的攝入量。本港跟其他國家一樣,沒 有法例規管食物中丙烯酰胺的含量。

#### 個人護理用品

#### 小心選購安全鞋保護雙腳

在工作場所,特別是建築地盤,穿著合適的安全 鞋能有效減低被下墜重物擊中或被尖銳物件刺到,導 致腳部受傷的機會。本會與職業安全健康局的一項聯 合測試,評估12款安全鞋的表現,其中七款標明符合 安全鞋標準。測試發現附有標註符合安全鞋標準的樣 本,整體表現比沒有標註的為佳。保護程度方面,三 款樣本通過全部測試項目,包括鞋頭防撞擊和耐壓能 力,以及鞋底防刺穿能力,另外四個樣本未能通過上 述三個測試項目,其中一款更標註符合安全鞋標準, 本會已將有關測試結果交予香港海關跟進。防滑能力 方面,儘管大部分樣本通過瓷磚表面的防滑要求,但 只有兩個樣本同時符合在鋼板表面的防滑要求。 報告亦包括選購安全鞋的貼士供消費者參考。 of sole, while four samples failed to pass any of the tests, among them one claimed to be in compliance of safety shoes standard. The Council had passed the relevant test findings to the Customs and Excise Department for follow up. On slip resistance, although results of the tests showed that most of the samples passed the test on ceramic tile floor, only two were found to pass also the test on steel floor. Useful tips and guidance in the choice of safety shoes were included in the report.

#### Baby shampoos and bath products

The Council tested 50 samples of shampoos and bath products marketed specifically for use by babies and children. Two baby bath products were found to contain excessive level of bacteria, one had bacterial count reaching a high 30 000 CFU/g, while another had 7 300 CFU/g.

According to the Mainland's Hygienic Standard for Cosmetics, the safety limit of aerobic bacterial count for children's cosmetics is a maximum level of 500 CFU/g. Excessive level of bacteria could result in higher risk of infection.

While 11 samples were found to contain trace amount of 1, 4-dioxane and four samples with free formaldehyde, the level of contamination was within the standard or recommended safety limit.

Labelling the product with expiry dates enable consumers to use the products in a timely manner. However, our inspection of the labels revealed that only six samples were labelled with both the expiry dates and period after opening. Suppliers were urged to label their products clearly to safeguard the interests of consumers.

#### Toxic chemicals found in nail polishes

The Council tested 42 models of nail polishes and base coats for the presence and quantities of heavy metals (lead, mercury and arsenic), phthalates and selected organic compounds. Toxic chemicals and cancer-causing substances such as methanol and benzene were found in some models of nail polishes.

Heavy metal content in all models was found in compliance with the limits specified in the Mainland's Hygienic Standard for Cosmetics. Benzene, a cancer-causing substance, was

#### 嬰兒沐浴用品含菌超標

消費者委員會測試了50款嬰兒和兒童沐浴用品,發現其中兩款的菌落總數大幅超出嬰兒和兒童化妝品的衞生標準上限。一款嬰兒洗髮露的菌落總數為每克30000CFU,另一款嬰兒沐浴露則為每克7300CFU。

根據內地《化妝品衞生規範2007》的規定,嬰兒和 兒童化妝用品的菌落總數不可大於每克或每毫升500 CFU的上限。微生物含量愈多,引致感染的機會愈大。



此外,測試同時發現,11款樣本驗出含微量二噁烷,四款樣本驗出微量游離甲醛,全都低於建議或規定的含量上限。

清楚標示使用限期資料有助消費者適時使用產品。不過,本會發現只有六款產品同時清楚標示到期日和開封後使用期。本會呼籲供應商在產品上自願性標示使用期,以保障消費者利益。

#### 多款指甲油含有毒物質

本會共測試了42款指甲油及底油樣本,測試項目包括重金屬(鉛、水銀和砷)、鄰苯二甲酸酯類及部分選定的有機化合物,結果發現部份樣本含有毒化學物及致癌物如甲醇或苯。

各測試樣本的重金屬含量均符合內地有關化妝品的衛生標準。但有四個樣本卻檢出屬致癌物的苯,含量介乎9.7 ppm至260 ppm;其中一個樣本同時檢出有毒

detected in four models with concentration ranging from 9.7 ppm to 260 ppm. One of the four models also contained 41 000 ppm of methanol, nearly 20 times higher than the limit (2 000 ppm) specified in the Mainland standard.

DEHP, one of the phthalates which is prohibited for use in cosmetics in the Mainland and EU, was detected in one model with a concentration level of 10 ppm. Some animal studies showed that certain phthalates at high levels might produce endocrine-disrupting effects and cause birth defects.

Furthermore, a tested model was found with 27% toluene which exceeded the 25% limit set in the Cosmetic Directive in the European Union and 0.03% of methyl methacrylate (MMA) was detected in one tested model. Due to the concern over allergic effects, MMA is an organic compound which Health Canada advises not to use in nail cosmetics.

The test revealed that nail polishes may contain potentially harmful ingredients. To minimise the health risk, the Council recommended that nail polishes should be used properly.

## **International Comparative Tests**

During the year under review, the Council also joined forces with consumer associations overseas and stepped up its collaborations with ICRT to conduct international comparative tests, including those on:

- Audio-visual and optical products Blu-ray disc players, pocket camcorders, digital camcorders, digital compact cameras, digital photo frames, interchangeable lens cameras, MP3 and PMP players, MP3 speakers.
- Computer and telecommunications products e-book readers, external hard disks, internet security software, mobile phone handsets, mobile phone handsets for the elderly, printers.
- Automobile and related products child car seats.
- Battery products NiMH rechargeable batteries.

Among them, test reports on digital products, e.g. digital cameras and mobile phone handsets, were very popular among CHOICE readers.



一個樣本檢出含有一種鄰苯二甲酸酯類化學物質(DEHP),含量為10 ppm,在內地及歐洲的化妝品標準規範均禁止將DEHP用在化妝品中。動物研究發現,某些高濃度鄰苯二甲酸酯會令動物內分泌失調及其胎兒可能有缺陷。

此外,一個檢測樣本發現甲苯含量27%,超出歐盟化妝品規定的上限25%。另一個測試樣本發現含0.03%的甲基丙烯酸甲酯(MMA),由於會導致敏感,加拿大健康局並不建議在美甲用品中使用這種有機化合物。

由於指甲油可能含有潛在有害成分,本會建議消費者應恰當地使用指甲油,避免不必要的健康風險。

## 國際合作產品測試

年內,本會加強與國際消費者研究及試驗組織的 合作,進行國際性比較測試,包括:

- 影音及光學產品—Blu-ray影碟播放機、袖珍攝錄機、數碼攝錄機、數碼輕便相機、數碼相架、可換鏡頭相機、MP3/PMP播放機、MP3揚聲器;
- 電腦及通訊產品一電子書閱讀器、外置式硬碟、上 網保安軟件、電話手機、長者手機、打印機;
- 汽車及相關產品一兒童汽車安全座椅;
- 電池產品—鎳氫充電池。

其中數碼產品如數碼相機及電話手機的測試報告 深受《選擇》月刊的讀者歡迎。

# In-depth Reports on Products and Health Issues

Apart from product tests, studies were also carried out on a wide range of consumer products to provide consumer information and, in some cases, to verify certain product claims.

The lists of product study reports and regular columns published during the year are set out in Appendix 9.

## It pays to read the nutrition label of prepackaged foods for healthier choice

The new Nutrition Labelling Scheme came into force on 1 July 2010. All applicable prepackaged food products were required to provide nutrition labels with contents of energy plus seven specified nutrients, namely protein, total fat, saturated fat, trans fat, carbohydrates, sugars and sodium.

In order to publicise the Scheme and educate the public regarding the application of the information provided on nutrition label to make healthier food choices, the Council and the Centre for Food Safety joined together and conducted a series of surveys on the nutrient contents as labelled on nutrition labels among various types of prepackaged food products between March and July 2010.

In the series, four types of prepackaged food products were studied: instant noodles (48 models), canned meat and fish (42 models), crispy snacks (32 models) and breakfast cereals (38 models). Results of the surveys, published in the CHOICE magazine, captured wide attention of the public.

The surveys found that the nutrient contents among different models of similar type of food products might vary a lot. For instance, for 100 g of instant noodle product, the range of sodium, total fat and saturated fat contents among 48 models were found to be 834 mg - 5 800 mg, 0 g - 30.5 g, 0 g - 12.2 g respectively. Consumers are therefore advised to read the nutrition labels for a healthier choice.

#### Child protection features in washing machines

In view of the potential children drowning risks posed by some washing machines, the Council studied the child protection design of 10 models of washers and washerdryers. Models of both drum type and impeller type priced from \$2,780 to \$7,689 were included. It was found that the drum type models were equipped with an automatic door

#### 產品研究報告及健康問題

除產品測試外,本會還研究各類消費品,為消費者 提供資訊及分析若干產品的聲稱是否屬實。

年內完成的產品研究報告及專欄一覽表見附錄 九·

## 查看營養標籤揀選較健康產品

新營養標籤規例於二零一零年七月一日生效,規 定所有適用的預先包裝食物均須附有營養標籤,列出 能量和七種指定須標示營養素的含量,包括蛋白質、 總脂肪、飽和脂肪、反式脂肪、碳水化合物、糖及鈉。

為宣傳規例和教育消費者如何使用營養標籤來選 擇較健康食品,本會與食物安全中心合作,於二零一零 年三月至七月,進行了一系列有關不同預先包裝食物 營養標籤上載列的營養資料的研究,結果刊登於《選 擇》月刊。

研究的產品包括四類食物:即食麵(48款)、罐頭肉 和罐頭魚(42款)、香脆小食(32款)和穀類早餐(38款)。

結果發現,同類食物的不同型號產品,其營養素含量可以相差很大。舉例說,48款即食麵產品的鈉、總脂肪及飽和脂肪含量,以100克計,分別由834毫克至5800毫克、0克至30.5克及0克至12.2克,差異極大。故消費者必須仔細閱讀食品包裝上的營養標籤,揀選較健康的產品。

#### 洗衣機兒童安全設計

由於部分洗衣機有令幼童溺斃的潛在危險,本會研究了十款洗衣機及洗衣乾衣機的兒童安全設計,包括常見的歐洲滾桶式和波輪式型號,售價由2,780元至7,689元。結果發現滾桶式型號(歐洲型)設有自動門鎖功能,機蓋在洗衣程序啟動後會被鎖上,直至洗衣程序停止,才可開啟;而波輪式洗衣機(日本型)的用戶需要先啟動兒童保護程式,才能提供「發出響號及停止洗衣運轉」功能或「發出響號、然後排水」功能,本會建議父母在洗衣時好好照顧幼兒及緊記啟動兒童保護程式。

lock, a safety feature whereby the door / lid of the washer is securely locked and cannot be opened in any way while in operation - until the washing cycle is completed. For impeller type washers, users need to switch on the child protection mode to provide the "beep" sound and stop running feature or "beep-and-drain-later" feature upon opening of the lid. The Council urged parents to take good care of their young children when washing clothes and always activate the child protection features of the washers.

#### Health ornaments

The Council examined an array of health ornaments on the market that had claimed to have beneficial effect on human health. Test reports were collected from suppliers and manufacturers for study by medical and science experts.

In one case, despite the product claimed to contain germanium with effects of stabilising the flow of electric current inside the bodies and guarding against electromagnetic radiation, the report submitted by the supplier showed that the element was "not detected". The case was forwarded to the Customs and Excise Department for follow-up actions.

In another case, a bangle presented as a product emitting negative ions was shown to contain a radioactive substance named thorium in the test report provided by the supplier. There were concerns over whether the radioactivity content of the product is within safety limits.

Various claims that these accessories are able to improve health and alleviate pain were judged as lack support of scientific research by the expert panel.

#### Products with dubious nanotechnology claims

The Council alerted consumers to guard against dubious health claims made by so-called "nano cup" products.

In one case, the promotional materials alleged that the cups were embedded with nanomaterial that could break clusters of molecules in water poured into it. It was claimed that the water would be more "active", and easily absorbed by the body resulting in "biological effects" of benefit to health. However, experts opined that for water in liquid or solid states, its molecules form clusters of variable sizes through hydrogen bonding, and all pure water would produce the same biological effects.

#### 健康飾物聲稱欠缺理據

市面上有不少聲稱能改善健康的健康飾物,本會將 收集到代理商或生產商提供支持產品聲稱的資料,轉 交專家研究。

報告顯示:一款聲稱含鍺(germanium)的產品,指 鍺能保持體內電的平衡,並能防護電磁波等,但其公 司提交的產品測試報告卻顯示,鍺的含量為「檢不出」 (not detected)。此個案其後轉介予香港海關跟進。

一款聲稱可釋出負離子的手鐲,在其供應商所提供的測試報告中,被發現同時含有放射性物質針(thorium)。產品的放射性含量是否在安全範圍內值得關注。

專家團還認為,產品之改善健康和減少痛楚聲稱 缺乏科學理據支持。

#### 納米科技產品的神奇聲稱存疑

本會關注有產品利用逐漸普及的納米科技,作出 奇特的聲稱吸引消費者。

一款納米杯聲稱可將杯中的普通飲用水,變為單體化水分子和水分子的小團簇,使水的活性增加,較易被身體吸收,因而產生多種「生物效應」,對身體有益。然而專家認為,水分子無論在液、固兩種狀態中都可通過氫鍵,形成離合、大小不一的水團簇存在。而任何純水的「生物效應」都相同。

另一款聲稱其磁力共振17O-NMR譜測試結果顯示 產品可令「水中能量超強,所含負氧離子眾多」,又表示 長期使用該杯盛水飲用會改善健康。專家指出,水分子 中氫鍵的強弱與多少,不表示水有什麼神奇能量。

納米科技日漸廣泛應用於製造消費品如成衣和運動用品、藥物和美容產品等,本會的報告亦有向消費者介紹。

In another case, the promotional materials claimed that the water inside nano cups bears very strong energy and contains plenty of negative oxygen ions as reflected by the 17O-NMR (Nuclear Magnetic Resonance) result. Nevertheless, experts pointed out that the strength and amount of hydrogen bonding among water molecules does not imply any mysterious energy in the water.

Nanotechnology's applications in the manufacture of various consumer products in clothing, sports, medicines and cosmetics were also introduced to consumers.

### Beware of liquid fuel hand warmers

Warm pads and hand warmers are popular in chilly weather. The Council conducted a study on these products and alerted consumers of the potential hazards in using them, in particular the liquid fuel hand warmers.

To operate a liquid fuel hand warmer, it has to be filled with lighter fluid and then ignited at the catalytic burner unit. The working process was actually combustion of the liquid fuel.

Fire hazard could occur due to leakage or the use of inappropriate fuel, carbon monoxide could also be released during operation. In a confined area, high concentration of carbon monoxide could be life threatening. Moreover, its metal case was found to reach a temperature exceeding 70°C while the top could reach up to 100°C while in operation.

As there were apparently loopholes in the relevant regulations in monitoring the safety of these products, suppliers were urged to provide appropriate warning label on the metal case of the liquid fuel hand warmer. The Council advised not to let children or the elderly use such products on their own.

#### **International Exchange**

The Council pays special attention to the movement of unsafe products into Hong Kong and will request suppliers to recall any such products as appropriate. Through communication with other consumer organisations and foreign authorities, the Council receives a constant flow of information about unsafe products found outside Hong Kong.



#### 暖手器潛藏危機

嚴寒天氣下,暖包或暖手器是消費者的禦寒恩物, 但消費者使用這些產品,特別是液體燃料暖手爐時, 應留意其潛藏的危機。

要使用該等暖手爐,使用者須自行添加火機油,再在爐頭點火加熱。專家指出產品的操作原理其實是將液體燃料燃燒。

使用不當的燃料或因注入過多火機油而導致滲漏 均會有失火的危險,操作時亦有機會釋出一氧化碳。 在密閉的地方,如一氧化碳的濃度過高,可能會令人中 毒,甚至死亡。此外,暖手爐的高溫也值得關注。金屬 外殼機身於使用期間的溫度可超過70℃,而頂部的位 置更可高達100℃。

由於現時規管這類產品安全使用的法例存在漏洞,消委會呼籲生產商在暖手爐的金屬外殼上附加 警告字句。本會建議不應讓幼童或長者使用這類暖手 器。

#### 國際間交換資訊

本會積極監察有否危險產品在本地市場出現,並 要求有關供應商進行回收。本會透過與外地消費者機 構的聯繫,定期收到外地危險產品的資訊。