

# Improving Product Quality and Safety

## 改善產品質素及安全

### Research and Test Reports

A total of 54 testing, survey and research reports were published in the Council's monthly CHOICE Magazine during the year<sup>7</sup>. When products were found to be non-compliant with Hong Kong regulations or international standards, the Council notified the relevant regulatory authorities for immediate follow-up action, and called on the manufacturers and their agents to rectify the faults and improve the products. Over the years, such market monitoring mechanisms had proven to be effective in facilitating law enforcement and driving different businesses to improve their product quality and services.

### Types of Product Tests

The Council contracts internationally recognised laboratories or collaborates with Government departments to conduct tests on over a thousand products in the year. As an active member of the International Consumer Research & Testing (ICRT), which is an international consortium of more than 35 consumer organisations, the Council has full access to ICRT product tests, through which valuable resources and experience from other markets are shared and effectively applied.

### Food

Consumers are generally getting increasingly health conscious. Meeting such consumer needs, the Council increased its resources in testing popular food products in Hong Kong, including butter and margarine, cookies and sweet pastries, tofu and honey, etc. and advised consumers on their safety and nutrition levels.

# 54

Research &  
Test Reports  
研究及測試報告

### 研究及測試報告

年內，於本會《選擇》月刊上發表的產品測試、調查和研究報告共54份<sup>7</sup>，每當發現產品未能符合香港法規或適用的國際標準時，本會均會通知相關監管機構立即採取跟進行動，並呼籲製造商及代理商糾正錯誤並改善產品。多年來，這種市場監察機制已證明可有效協助執法 and 促進各界改進產品質素及服務。

### 產品測試的種類

本會委托國際認可的實驗室或與政府部門協作測試，每年測試過千種產品。國際消費者研究及試驗組織(ICRT)由世界各地超過35個消費者組織組成，本會作為ICRT的活躍成員，可以充分利用ICRT產品測試，從而共享和有效應用其他市場的寶貴資源和經驗。

### 食品

縱觀全球，消費者的健康意識越來越高。本會增加資源測試廣受歡迎的食品，包括牛油和人造牛油、曲奇及甜酥餅、豆腐和蜂蜜等，提供有關安全和營養成分的建議，滿足消費者的需要。

<sup>7</sup> See Appendix 6 for the lists of testing reports, market survey and in-depth study reports published during 2018-19.  
於2018-19年度公布的產品測試、市場調查及研究報告一覽表見附錄六。

Product quality and safety are vital to consumer protection. Through its extensive research and testing programmes, the Council monitors the safety and quality of a wide spectrum of essential products covering food, household products, electrical appliances, consumer electronics, cosmetics and personal care items, clothing, products designed specifically for children and elderly people, and much more.

The Council's findings empower consumers to make safe, objective and informed choice in their daily consumption.

產品質素與安全對消費權益至關重要。透過廣泛的研究及測試工作，消委會致力監察各類產品的安全和質素，包括食品、家居用品、電器、電子產品、化妝及個人護理產品、服飾、兒童及長者用品等等。本會發放的訊息有助消費者提升自我保護能力，讓其在日常消費時作出安全、客觀以及知情的選擇。

In the year, consumer awareness was drawn to the harmful contaminants such as glycidol, acrylamide and 3-MCPD commonly found in bakery products and other food stuff that undergone high-temperature cooking process. Since these contaminants are classified as genotoxic carcinogens, the Joint Food and Agriculture Organisation/World Health Organisation Expert Committee on Food Additives's advice to consumers is the less consumption the better.

### Butter and Margarine

The Council tested 30 prepackaged models, comprising 9 butter products, 16 margarine and fat spread products, 4 butter and vegetable oil blended fat spreads, and 1 shortening product. The content of 2 harmful contaminants, glycidol and 3-MCPD was measured. 18 margarine models were found to contain from 13 to 640 $\mu$ g/kg of the genotoxic carcinogen glycidol, and 16 of them had 44 to 1,100 $\mu$ g/kg of the contaminant 3-MCPD. Because of the genotoxicity and carcinogenicity of glycidol, consumers were advised to keep their intake of glycidol to as low as reasonably practicable. With regard to 3-MCPD, according to the European Food Safety Authority recommendation on the tolerable daily intake of 2 micrograms, only a sustained daily intake of 24 teaspoons of the test model with the highest 3-MCPD content (1,100 $\mu$ g/kg) would exceed the recommended limits. Therefore, with normal consumption, the impact on health was minimal. The Council urged the authorities to draw on overseas experience to introduce regulatory oversight in the application of partially hydrogenated oils in Hong Kong.

Consumers were advised that bad fatty acids, such as saturated fatty acids and trans fatty acids, can increase the risk of cardiovascular disease and hence reduction in consumption was encouraged. All the butter models were found to have generally high levels of saturated fatty acids (50.5 to 56.2g/100g), and 1 margarine model was found to have saturated fatty acids content (77.2g/100g) that was even higher than that of the average of butter. The trans fatty acids content in the margarine products tested was relatively low, but most were processed from artificial and partially hydrogenated vegetable oils.

年內，本會銳意提高消費者對烘焙和高溫烹飪過程中產生的有害污染物的認知，如環氧丙醇、丙烯酰胺及氯丙二醇。這些污染物屬基因致癌物，聯合國糧食及農業組織/世界衛生組織聯合食品添加劑專家委員會建議，攝入量愈低愈好。

### 牛油及人造牛油

本會測試了30款預先包裝的樣本，包括9款牛油及16款人造牛油及塗抹醬、4款牛油和植物油脂脂肪混合物塗抹醬，以及1款起酥油，量度樣本中有害污染物環氧丙醇及氯丙二醇的含量。測試發現18款人造牛油含有基因致癌物環氧丙醇，含量介乎每公斤13至640微克，而且當中16款同時含污染物氯丙二醇，含量介乎每公斤44至1,100微克。由於環氧丙醇同時具基因毒性和致癌性，消費者應盡量減少攝取。至於氯丙二醇，歐洲食品安全局建議的每日攝入量為2微克。按是次測試中檢出量最高的樣本(1,100微克/公斤)計，要持續每日進食24茶匙，才會超出該建議上限。因此，正常進食對身體的影響甚微。本會呼籲當局參考外地法規以監管本港半氫化油的使用。

由於飽和脂肪酸及反式脂肪酸屬壞脂肪酸，會增加患心血管病的風險，消費者應盡量減少攝入。

全部牛油樣本所含的飽和脂肪酸水平普遍較高(50.5-56.2克/100克)，至於人造牛油則有1款樣本的含量較高(77.2克/100克)，相比牛油的平均含量更高。人造牛油的反式脂肪含量普遍較低，但大多數是在人工半氫化植物油加工時產生。





### Cookies and Sweet Pastries

The Council tested 58 models of cookies and sweet pastries: 8 palmiers, 3 almond puffs, 9 egg rolls, 9 butter cookies, 11 chocolate cookies, and 18 cookies of other flavours.

The food safety tests included tests for 3 contaminants: glycidol, acrylamide, and 3-MCPD. The tests showed that only 7 models were completely free of these 3 contaminants. 40 were found to contain from 3.4 to 1,900µg/kg of glycidol, 42 models were found to contain from 32 to 340µg/kg of acrylamide, and 35 had 11 to 780 µg/kg of 3-MCPD.

The models with high glycidol and 3-MCPD content contained mostly shortening or refined vegetable oil, while the models with low or no levels of contaminants detected used butter as fat ingredient.

According to the definition in the Centre for Food Safety (CFS) “Shopping Cards”, all 58 models were found to be “high in sugar” or “high in fat”; 48 were high in sugar (more than 15g of sugar per 100g of solid food); 56 were high in fat (more than 20g of total fat per 100g of solid food); and 46 were found to be high in both sugar and fat.

The Council stressed that food safety and health are crucial consumer rights and urged manufacturers to improve their recipes and production process to offer a wider range of consumer choices. Despite the obvious benefits of unsaturated fatty acids, consumer should refrain from eating too many cookies and sweet pastries with nuts and seeds to avoid excessive intake of fats and calories.

### Tea-based Beverages

Joined with the CFS, the Council tested 8 models of non-prepackaged tea products for their sugar content. The test found the sugar content of the 78 non-prepackaged original flavour models ranged from 1.4 to 11g/100g. On average, Passion Fruit Black Tea had the highest sugar content and (cheese) Milk Foam Green Tea had the lowest.

The test revealed that the sugar content per cup in 5 models reached 50g or more, which means that drinking a whole cup would exceed the World Health Organisation recommended daily limit on sugar content. The model with the highest sugar content per cup in the test was a Matcha Latte (72g).

### 曲奇及甜酥餅

本會測試58款曲奇及甜酥餅：8款蝴蝶酥/千層酥、3款杏仁條、9款蛋卷、9款牛油曲奇、11款朱古力味曲奇及18款其他口味的曲奇。

是次食物安全測試包括3種污染物：環氧丙醇、丙烯酰胺及氯丙二醇。測試結果顯示，只有7款完全不含上述3款污染物，有40款樣本檢出環氧丙醇，含量介乎每公斤3.4至1,900微克，另有42款樣本檢出丙烯酰胺，含量介乎每公斤32至340微克，35款樣本檢出氯丙二醇，含量介乎每公斤11至780微克。

環氧丙醇及氯丙二醇含量較高的樣本，多數含起酥油或精煉植物油，而不含污染物或含量較少的樣本，則以牛油作為油脂配料。

根據食物安全中心「購物指南卡」的定義，58款樣本全屬「高糖」或「高脂肪」食物，其中48款屬「高糖」（即每100克固體食物含超過15克糖），另外56款可界定為「高脂肪」（即每100克固體食物含超過20克總脂肪），有46款既高糖又高脂。

本會強調，食物安全和健康是重要的消費權益，促請廠商改良生產配方及程序，讓消費者有更健康的選擇。儘管不飽和脂肪酸對身體有一定好處，消費者亦需注意不應吃太多含堅果和種子的曲奇及甜酥餅，以免攝入過多脂肪和卡路里。

### 調製茶類飲品

本會與食物安全中心合作，測試8種非預先包裝調製茶類飲品樣本的糖含量。測試發現78款非預先包裝的原味樣本中，糖含量由每100克含1.4克至11克不等，平均糖含量最高的是百香果紅茶，而最低則是芝士奶蓋綠茶。

測試顯示，以每杯計算，有5款的糖含量達50克或以上，即飲一杯已超出世界衛生組織建議的游離糖全日攝入上限。當中1款抹茶拿鐵樣本的糖含量最高，每杯達72克。

In general, the “no-sugar-added” recipes were found to contain less sugar than the original flavour, e.g. the “no-sugar-added” Jasmine Green Tea had an average of 99% less sugar content per 100g. However, for beverages containing concentrated fruit juice, honey or fruit juice syrup as essential ingredients, reduction in sugar content in the “no-sugar-added” recipes was limited.

With regard to Pearl Tapioca Milk Tea, the test found that the average energy level of a whole cup of original flavour model could reach 400kcal (around 20% of the required calories intake of an average adult), with over 40% of the energy coming from the pearls.

The Council advised consumers to choose beverages with less sugar content and choose “no-sugar-added” or “less sugar” recipes if available. Consumers should be mindful of the portion size and choose smaller portion or share drinks with friends.

## Electrical Products

Since there are more and more Hong Kong people living in tiny flats, more electrical appliances and devices in compact size have been launched in the market recently.

### Electric Hot Plates

The Council conducted a test to evaluate the safety and performance of 9 electric hot plates, with prices ranged from \$599 to \$998.

None of the test models was in full compliance with the latest international safety standards, as all of them were found unsatisfactory in temperature rise, while 8 were found to have inadequate insulation distance. Also, the leakage current of 2 models was relatively high when operated at 1.15 times of the rated power input. Other non-compliance regarding product safety was found in abnormal operation, protection against access to live parts, provision for earthing, etc. The test results were forwarded to the Electrical and Mechanical Services Department for follow-up.

On grilling performance, the food browning of 1 model was relatively uneven. After pre-heating, the highest temperature discrepancy recorded on the models at 5 different positions of the flat plate ranged from 35.4°C to 61.1°C, reflecting an uneven heat distribution.

### USB Travel Adaptors

A test on 10 models of USB travel adaptors revealed that none of them could pass all safety parameters in test. The overall safety rating of 2 unbranded models was only 2 points or below. Such common defects as insufficient insulation distance between the USB transformer and circuit were found, which increased risks in circuit breaker or short-circuit; and non-compliant dimensions of the plug pins with the standard leading to poor contact and affecting electrical operation. Further, the product labelling of all models was incomplete with missing warning messages, such as “Does Not Convert Voltage” and “For Use with Unearthed Appliances Only”.

一般來說，不加糖樣本的糖含量均較原味的樣本少，例如無糖茉莉綠茶每100克的平均糖含量可減99%。不過，加入濃縮果汁、蜜糖或果汁糖漿的樣本，不加糖配方的糖含量減幅則有限。

至於珍珠奶茶，測試發現一杯原味珍珠奶茶平均的能量值為400千卡(約一般成年人每日所需能量的20%)，當中超過4成能量來自珍珠。

本會建議消費者選擇糖含量較少的飲品，盡量選擇「不加糖」或「少糖」配方，並留意飲品的分量，宜選擇分量較少的飲品或與他人分享。

## 電氣產品

由於香港人的居住環境愈趨細小，近年市場上推出不同小型家電和設備，以配合需要。

### 電熱盤

本會測試了9款售價由\$599至\$998的多功能電熱盤的安全程度及效能表現。



所有樣本均未能完全符合最新的國際安全標準測試要求。所有樣本的溫度升幅均未能符合標準要求，8款的絕緣距離不足。其中2款樣本在1.15倍的額定輸入功率下操作時，量得的洩漏電流過高。其他安全不符的問題出現於非正常操作、防觸電保護及接地措施等。本會已將安全測試結果轉交機電工程署跟進。

燒烤測試方面，1款樣本的食物色澤較為不均勻。各樣本預熱後於平面烤盤的5個不同位置量得的最高溫度差異由35.4°C至61.1°C，反映其溫度分佈不均勻。

### USB旅行萬能蘇

測試10款USB旅行萬能蘇的結果顯示，無一能完全通過所有安全測試項目。2款無牌子型號的樣本，其總評分僅為2分或以下。測試發現不少型號的USB變壓器及電路的絕緣距離不足，可能導致供電跳掣或短路；插腳大小與標準尺寸有差異，可引致接觸不良或影響操作。此外，所有樣本的產品標示未盡完善，欠缺重要警告字句，如「不能轉化電壓」及「只供非接地電器使用」。

Apart from strengthening enforcement actions, the Council also called on the manufacturers to immediately improve the design and quality control of their products. The Council also cautioned consumers to exercise extra care when selecting USB travel adaptors.

## Cosmetics and Personal Care

The Council advised consumers to be vigilant about the presence of fragrance allergens, as well as skin sensitisation potency of the allergens and their oxidised compounds in cosmetics and personal care products. Consumers with sensitive skin may experience temporary redness, itchiness or skin irritation after use, and some may even develop contact sensitisation, such as skin rashes or swelling. Because of frequent usage, the Council called for a closer surveillance on these products to assess their claims and actual value.

### Essential Oils

The Council tested 30 models of essential oils of lavender, sweet orange and eucalyptus flavours, which were extracted respectively from flowers, fruits and leaves. With reference to the European Union (EU) cosmetics regulations, the test examined the models for the presence of 26 fragrance allergens. The tests detected 10 different fragrance allergens in the 30 models with each model containing at least 2 allergens.

The EU regulations stipulate that products with any of these 26 allergens exceeding specified levels must indicate the allergens on their ingredient lists. The test revealed that the amount of allergens in all models exceeded the levels set under the EU cosmetics regulations, but only 4 were labelled with some of the allergens. Furthermore, 14 models had no detailed dilution instructions for proper usage on the label or packaging.

The Council was highly concerned about the non-disclosure of allergens and the lack of dilution instructions, which might expose consumers to allergic reactions. Manufacturers and traders were urged to improve their product labelling to safeguard consumer health.

In the test, 24 models were labelled “For External Use Only” or “Not to be Taken Internally”. Only 1 lavender model was labelled for dietary use, but no detailed instruction for this use was indicated. The report urged consumers to exercise due care when using essential oils as flavouring condiments, and to consume them sparingly to avoid adverse reactions in any case.

### Perfumes

The Council tested 55 models of perfumes, comprising 28 eau de parfum, 23 eau de toilette and 4 eau de cologne, whose prices ranged from \$48 to \$1,775 a bottle. The test findings revealed that all the perfumes tested contained 4 to 15 types of fragrance allergens, and 23 models had 10 or more types of fragrance allergens. The total concentration of fragrance allergens ranged between 0.17% and 5.35%. 6 models had a relatively higher total concentration of 3% or more, while 18 models had less than 1%.

除了加強執法行動外，本會亦呼籲生產商應立即改善產品設計及生產品質監控，而消費者選購及使用時也應加倍留意。

## 化妝品及個人護理

本會建議消費者應留意化妝品和個人護理用品含香料致敏物，及其產生的皮膚致敏作用和氧化化合物。敏感皮膚人士可能在用後出現短暫泛紅、痕癢和皮膚刺激，少數人更會出現接觸性過敏反應，如產生紅斑、腫脹等。由於經常使用，本會建議加強此類產品的監察，以評估產品的聲稱和其實際效用。

### 香薰精油

本會檢測市面上30款香薰精油樣本，包括分別提取自花朵、果實、葉子的薰衣草、甜橙和尤加利樣本。參考歐盟的化妝品規例，檢測各樣本是否含有26種香料致敏物。30款樣本中共檢出10種香料致敏物，每款樣本含最少2種致敏物。

歐盟規定含有該26種致敏物並超過特定水平的產品，需要在成分標籤上列出所含香料致敏物。測試顯示，全部樣本的致敏物含量均高於歐盟化妝品規例的規定，當中只有4款樣本有標示致敏物。此外，14款樣本沒有在標籤或包裝上詳細列明正確的稀釋方法。


本會高度關注產品欠缺致敏物成分標示及稀釋方法，認為有機會增加消費者產生過敏反應的風險。本會亦敦促供應商改善標籤說明，以保障消費者健康。

測試中有24款標示「只限外用」或「不可進食」等字眼。只有1款薰衣草精油的標籤資料提及產品可作膳食用途，但沒有詳細描述食用方法。報告提醒消費者不宜隨便使用香薰精油作調味料之用，在任何情況下都要謹慎使用，以免有不良反應。

### 香水

本會測試了市面上55款香水的安全程度，包括28款淡香精、23款為淡香水和4款古龍水，每瓶售價由\$48至\$1,775不等。測試發現全部樣本均檢出4至15種香料致敏物，當中23款更檢出含有10種或以上香料致敏物。檢出的致敏物濃度總量由0.17%至5.35%。其中6款樣本的香料致敏物質總量相對較高，達3%或以上，另有18款的總量低於1%。





The test also found 17 models contained chemical HICC (hydroxyisohexyl 3-cyclohexene carboxaldehyde), 15 of them with a concentration of over 0.02%. The EU's Scientific Committee on Consumer Safety recommends that HICC should not be used in the manufacture of consumer products, pointing out that even if the HICC concentration in cosmetics is as low as 0.02%, it should not be regarded as safe from allergic reactions.

In addition, 11 models were found to contain chemical DEP (diethyl phthalate), with concentration ranging from 0.00086% to 1.1%. Consumers who apply perfumes frequently, in addition to scented body care products, were advised to pay extra attention to the DEP content in perfumes.

### **Toilet Rolls**

In a test on 25 models of toilet rolls, the Council found wide variations in their net weight, number of sheets, total length and area per roll. The rolls were sold in 10- or 12-roll packs and were priced from an average of \$2.2 to \$4.2 per roll.

The models were also put through a series of tests on tensile strength (dry and wet), and bursting strength. The combined test results indicated that the 3-ply models were weaker than the 4-ply rolls. All 4 models of the latter were rated 3 points or above. In contrast, only 6 out of 21 3-ply models (less than 30%) achieved a rating of 3 points and above.

Almost half of the models did not provide full product information; and of the 13 models that provided the weight, more than half (8 models) were actually weighed less than what were listed on the package. The Council stressed that consumers have the fundamental right to be accurately informed with full and truthful information on packaging.

### **Sanitary Napkins**

The Council tested 45 models of sanitary napkins: 21 models were purportedly suitable for day use and regular menstrual flow; 10 models were for day/night use, and 14 models were for overnight use.

The test made reference to the Mainland's mandatory and recommended standards for sanitary products, a Taiwan's Standard on Feminine Sanitary Napkins, and in conjunction with the laboratory to jointly devise a test method for evaluation of the product performance from different aspects, including absorption tests and rewet assessment, based on a simulated usage of the products.

41 models almost fully absorbed the fluid (5ml) within a short time, indicating good absorption rate, while the remaining 4 absorbed only 3.1g to 3.6g of fluid, but were still in compliance with the Mainland's standard.

測試亦發現，17款樣本檢出新鈴蘭醛，當中15款檢出的濃度均高於0.02%。歐盟消費者安全科學委員會建議，新鈴蘭醛不應用於製造消費品，更指即使化妝品的新鈴蘭醛濃度低至0.02%，仍不可視作安全和不致敏。

此外，有11款樣本檢出塑化劑鄰苯二甲酸二乙酯，檢出量由0.00086%至1.1%不等。消費者若經常使用香水，並習慣使用添加香味的身體護理產品，便要特別留意香水中的鄰苯二甲酸二乙酯含量。

### **衛生卷紙**

25款衛生卷紙的測試發現每卷的淨重、張數、總長度及總面積的差異頗大。樣本分每抽10卷或12卷包裝出售，平均每卷售價\$2.2至\$4.2。

樣本經過一系列拉力強度（乾紙和濕紙）和爆裂強度測試。綜合測試結果顯示，3層紙樣本的強度較4層紙樣本遜色。4款4層紙樣本的紙張強度均取得3分或以上。相反21款3層紙樣本中，只有6款（不足3成）取得3分或以上。

近半樣本沒有提供完整產品資料；至於有提供重量資料的13款樣本，多於一半（8款）量得的實際重量較其聲稱為輕。本會強調於包裝上獲得完整及正確的產品資料是消費者的基本權益。

### **衛生巾**

本會測試了45款衛生巾，包括21款聲稱為適合日用或供一般流量的型號、10款為供日用/夜用型號，及14款夜用型號。

測試參考內地強制性及推薦性國家標準，以及台灣衛生棉標準，另加上與實驗室共同設計的試驗方法，以模擬日常使用情況，多方面評估產品的吸收和回滲等效能表現。

41款樣本在短時間內幾乎完全吸收5毫升人造經血，吸收速度表現理想。其餘4款僅能吸收3.1克至3.6克人造經血，但仍符合內地標準的要求。

In the multiple absorption test, those for day/night use performed the least satisfactory; 2 of them were saturated upon absorption of their first dose of artificial menstrual fluid. Although the remaining 8 models completed the absorption test, the time required varied from 189 to 1,754 seconds, revealing an eight-fold difference.

With consideration of rewet test and multiple absorption test, the findings showed that the speed of absorption might not necessarily go hand in hand with the efficacy of keeping the surface dry. Manufacturers were urged to improve product design to meet both quality standards.

## Household Products

### Cot Mattresses

The Council, in conjunction with ICRT, carried out a test on 8 models of cot mattresses including 3 spring mattresses and 5 foam mattresses.

The firmness of 2 models was found to be inadequate in some positions, which could result in respiratory problems or even suffocation should infants roll over and bury their face in the mattress. After the 10,000-cycle durability test, 1 model was found to have inadequate firmness. 1 model did not comply with the requirement in the safety standard regarding dimension accuracy, resulting in the danger of trapping the infant's limbs, fingers, toes or head in the gap between the mattress and the cot frame. The test results were referred to the Customs and Excise Department (C&ED) for investigation and follow-up.

The Council urged manufacturers to improve their mattress designs to ensure conformity with requirements of the safety standard to minimise the risk of accidents.

## Clothing Products

### School Uniforms

A test on 49 models of school uniforms sourced from 22 suppliers found the presence of azo dyes in 2 models tested. These dyes can release carcinogenic aromatic amines, so their use has been long banned in many countries and regions. The safety of school uniforms is regulated under the Consumer Goods Safety Ordinance and thus, the test results were referred to C&ED for investigation and follow-up. The Council urged school uniform suppliers to check the source of the dyes and to immediately stop selling any uniforms that were found to contain such harmful substances. The Council also suggested the Government to consider specific legislation to govern the production of textile products to enhance consumer protection.

而在多次吸收測試中，日用/夜用的型號整體表現最遜色；其中2款在吸收第1次人造經血後已呈飽和狀況。而餘下的8款日用/夜用型號雖能完成測試，但需時由189秒至1,754秒不等，相差超過8倍。

就多次吸收試驗表現及其表層回滲量而言，測試結果發現樣本未必可以同時兼備吸收速度及維持表層乾爽的功能。廠商應改善設計，使產品達致兩者的優質標準。

## 家居產品

### 嬰兒床床褥

本會聯同ICRT測試8款嬰兒床床褥，當中包括3款彈簧床褥及5款泡膠床褥。

測試發現2款樣本的部分位置硬度不足，若嬰兒翻身俯睡，有機會因床褥緊貼嬰兒面部而影響呼吸，甚至造成缺氧窒息。耐力測試發現再有多1款樣本的硬度不足。1款樣本的尺寸準確度不符合安全標準要求，有機會令嬰兒在床架和床褥的空隙間夾傷四肢、手指、腳趾或頭部。有關測試結果已經轉交海關跟進。

本會呼籲廠商從速改善床褥設計，確保床褥符合各項安全標準，減低發生意外的機會。

## 服裝產品

### 校服

本會測試了來自22間校服供應商的49款校服，發現2款樣本檢出偶氮染料。這些染料可釋出有害芳香胺，在不少國家及地區已被禁用多年。本港現時雖然未有相關法例要求，但校服等紡織品受《消費品安全條例》規管，須符合產品的一般安全標準，測試結果已交予海關跟進。本會促請校服供應商檢視染料來源及立即停售有問題的產品，同時促請政府為紡織品訂立相關法例，提升對消費者的保障。



Furthermore, 8 models were found to contain formaldehyde and 2 had pH values that exceeded the Mainland standard. The Council strongly recommended that school uniform suppliers should strictly monitor and control the quality and safety of their products. Schools, on the other hand, should seek more information about the safety of the materials used and validate quality as appropriate.

### UV Protection Arm Sleeves

A total of 20 models of UV protection arm sleeves, priced from \$12 to \$480, were tested for UV protection, cooling and comfort, durability and accuracy of fabric composition. The test showed that 19 models had an Ultraviolet Protection Factor (UPF) value of over 50, which means they are capable of blocking more than 98% of UV sunlight. Only 1 model was found to have a UPF value of 30, which is capable of blocking about 97% of UV light. Interestingly, after 10 wash cycles, the UPF value of that model was found to increase to 50.

12 of the 20 models had an unsatisfactory rating in sweat wicking and quick drying performance. There was also a vast variation in air permeability, with a substantial difference between the best and worst performers of over 50 times. On the other hand, the test found rather good cooling and comfort performance in the general UV protection arm sleeves; some were even better than most of the models that claimed to have a cooling function.

## International Comparative Tests

During the year under review, the Council stepped up collaboration with ICRT and joined forces with consumer associations in other jurisdictions to conduct international comparative tests on following products and to advise consumers on selection tips, especially for expensive or durable products:

- Audio-visual and optical products, including soundbars, bookshelf speakers, Bluetooth speakers, wireless headphones, omnidirectional cameras, high-end cameras and interchangeable lens camera kits;
- Computer and telecommunications products, comprising internet security software, VPN services, mesh type Wi-Fi routers, mobile security apps, smart phones and tablet PCs;
- Automobiles and other road vehicles and related products (comprehensive test);
- Household, personal and travel products, such as pushchairs, chef's knives and espresso makers; and
- Sports products, including fitness tracker wristbands and cycling helmets.

In addition to the increasing popularity of the test findings in Hong Kong, the Council's reports on products such as cameras, mobile phones and fitness tracker wristbands were viewed by a considerable number of visitors from the Council's Shoptsmart website, which targets visitors from the Mainland.

此外，測試亦發現8款樣本含甲醛，2款樣本的酸鹼值超出內地標準。本會敦促各校服供應商嚴謹監控產品質量及安全程度；另一方面，學校亦應要求供應商提供更多安全資料及監察產品質素。

### 防曬手袖

本會測試了20款售價由\$12至\$480的防曬手袖。測試主要比較樣本的紫外線防護效能、涼感及舒適程度、耐用程度、纖維成分吻合度等。測試結果顯示，19款樣本的紫外線防護系數 (UPF) 均大於50，能阻隔98%以上的紫外線。惟其中1款樣本測出的UPF值為30，能阻隔約97%的紫外線。但此樣本於洗濯10次後，其UPF值竟增至50。

20款樣本中，12款樣本排汗快乾性能表現遜色。各樣本的透氣度極為懸殊，表現最好與最差的樣本可相差超過50倍。測試又發現，部分屬一般防曬手袖類別的樣本在涼感及舒適度反而比大部分聲稱有涼感功能的樣本優勝。

## 國際測試合作

回顧本年度，本會進一步與ICRT合作，並聯同其他地區的消費者組織，對不同種類的產品進行國際性比較測試，並針對昂貴或耐用的產品向消費者提供選擇貼士：

- 影音及光學產品，包括 soundbars、小型揚聲器、藍牙揚聲器、無線耳機、360° 全景相機、高端相機和可換鏡頭相機套裝；
- 電腦及通訊產品，包括電腦安全軟件、VPN服務、網狀Wi-Fi路由器、手機安全程式、智能手機及平板電腦；
- 汽車、道路車輛，以及相關產品(綜合測試)；
- 家居、個人及旅行產品，如嬰孩手推車、廚師刀及特濃咖啡機；及
- 運動產品，如運動手環及單車頭盔

測試結果除了在本地的關注度日漸上升，本會對其他產品的不少報道，如相機、手提電話和運動手環等，都在本會專為內地旅客而設的「精明消費香港遊」網站中常被瀏覽。