

# IMPROVING PRODUCT QUALITY AND SAFETY 改善產品質素及安全

Global inflation, marked by escalating prices of consumables, soaring electricity tariffs and rising expenses in daily necessities during the year, has imposed significant pressure on the general public's cost of living, making the quest for value-for-money products a top priority of consumers under the new normal. The Council puts substantial resources behind the testing, survey and research of products in the market, not only to ensure they are safe and at least of reasonable quality, but also to help consumers identify more cost-effective goods.

As part of its ongoing research and testing programme, the Council monitors more than 1,000 products a year, evaluating their essential product features including safety, performance, ease of use, durability and environmental sustainability, serving as reliable reference for consumers.

過去一年,在全球通貨膨脹下,消費品價格上漲、電價飆升,就連生活必需品開支也不斷攀升,對大眾的 生活成本帶來巨大壓力。因此在新常態下,追求物超所值的產品成為消費者的重中之重。本會投放不少資 源對市場上的產品進行測試、調查及研究,以確保產品安全和質素合理,並幫助消費者尋找更具成本效益 的產品。

本會在持續進行的研究及測試計劃中,每年監測超過 1,000 款產品,評估它們的產品特性,包括安全、 效能、使用方便程度、耐用程度及環境可持續性,為消費者提供可靠的參考。

#### **Research and Test Reports**

The products studied ranged from popular foodstuffs and household goods, to cosmetic and personal care products, clothing and apparel, children's products, pet products, stationery, electrical appliances and consumer electronics. Apart from recurring product tests to monitor improvements in performance and quality over

the years, some product tests were introduced for

the first time ever in response to rising consumer demand, including dried edible fungi, chicken essence, bath towels, balance bikes, rabbit feed, etc. during this reporting year. The findings alerted consumers to immediate or potential product hazards and offered objective guidance to making informed choices.

Products found to be non-compliant with Hong Kong regulations or international standards were immediately referred to relevant regulatory authorities for follow-up, while the concerned manufacturers, agents and service providers were called upon to rectify the faults and improve the quality and standards of their products. Over the years, such market monitoring mechanisms have proven to be effective in facilitating law enforcement and driving different businesses to ensure value creation in their product offerings.



## 研究及測試報告

年內進行的研究及測試所涵蓋 的產品種類廣泛,從常見的食 品和家居用品,到化妝品和 個人護理產品、服裝、兒童產 品、寵物產品、文具,以至電 器和電子產品。除了定期為若 干類別產品進行重複測試,以 監察產品多年來於效能和品質上的

改進,年內本會亦因應消費者對某些產品的需 求增加,而進行了首次測試,包括乾製耳類食 用菌、雞精、浴巾、平衡單車和兔用乾糧等。 有關結果能提醒消費者注意產品的即時或潛在 風險,並提供客觀的指南讓消費者知所選擇。

每當發現產品未能符合香港法規或適用的國際 標準時,本會均會立即通知相關監管機構跟進, 並呼籲製造商、代理商及服務供應商糾正錯誤、 改善產品質素和提升產品水準。多年來,這種 市場監察機制均能有效地協助執法,並推動業 界為產品創優增值。

<sup>4.</sup> See Appendix 2 for the lists of product testing, market survey and in-depth study reports published in 2022-23. 附錄二詳列於 2022-23 年度發表的產品測試、市場調查及研究報告。

## **Product Tests**

The Council conducts products tests by engaging internationally recognised laboratories or universities and also through collaboration with Government departments. As an active member of the International Consumer Research & Testing (ICRT), which is an international consortium of more than 30 consumer organisations, the Council benefits from the experience of the other markets by accessing ICRT's product tests and valuable resources.

## Food Fish Oil Products

Many health-conscious consumers take supplements containing fish oil, yet the Council's test on 25 samples of fish oil supplements revealed considerable discrepancies between the test results and their labelled content of healthy fatty acids. For example, 2 samples were found to have DHA contents 83% and 73.2% lower than their labelled values respectively, while for another type of fatty acid EPA, 1 sample was 31.7% lower than its labelled value.

The possibly carcinogenic contaminant polycyclic aromatic hydrocarbons (PAHs) were detected in 6 samples, among which a sample of fish oil capsules for pregnant women was found to contain benzo[a]pyrene, a genotoxic carcinogen, at a level exceeding the upper limit of the European Union (EU) regulations by over 5 times, while its total detected levels of 4 types of PAHs reached  $54.0 \mu g/kg$ , also exceeding the upper limit of EU regulations.

Except for a sample dedicated for pregnant women, all samples were detected with the contaminant 3-MCPD, of which 3 samples' detected amounts exceeded the EU's upper limit. Glycidol was found in 14 samples, one of which had detected levels of glycidol and 3-MCPD both exceeding the upper limits stipulated by the EU.

As these contaminants might also exist in some other types of food, consumers were advised to nurture healthy eating habits to avoid excessive intake of such contaminants. At the same time, the Council reminds consumers that omega-3 fatty acids could also be absorbed through regular diet, such as seafood.

## 產品測試

本會透過委託國際認可的實驗室或大學,或與 政府部門協作以進行產品測試。本會亦為國際 消費者研究及試驗組織(ICRT)的活躍成員, 該組織由世界各地超過30個消費者組織組成, 本會透過共享其產品測試和寶貴資源,從其他 市場的經驗中獲益。

## 食品 魚油補充劑

不少注重健康的消費者都服用含有魚油的補充 劑,不過本會對 25 款魚油補充劑樣本的測試 顯示,其檢出與標示的健康脂肪酸含量存有很 大差異。例如,2 款樣本的 DHA 含量分別比標 示值低 83%和 73.2%,而另一種脂肪酸 EPA 在 1 個樣本檢出的含量比標示值低 31.7%。

6 款樣本檢出可能致癌的污染物多環芳香烴 (PAHs),其中1款孕婦魚油膠囊樣本檢出基因 致癌物苯並[a]芘,含量超過歐盟規定逾5倍, 而4種PAHs總和亦達到每公斤54.0微克,超 出歐盟規定上限。

除1款孕婦專用樣本外,所有樣本均檢出污染物氯丙二醇(3-MCPD),其中3個樣本的檢出 量超過歐盟上限。14個樣本檢出環氧丙醇,其 中1個樣本的環氧丙醇和3-MCPD檢出量均超 過歐盟規定的上限。

由於這些污染物亦可能存在於其他食物中, 因此建議消費者養成健康的飲食習慣,避免 攝入過量此類污染物。同時,本會提醒消費 者,奧米加3脂肪酸亦可透過日常飲食吸收, 例如海產。



#### **Cooking Oils**

As an indispensable element for cooking in every household, the food safety and nutrition of cooking oil could be consequential. With this in mind, the Council tested 50 cooking oil samples, including extra virgin olive oil, olive oil, avocado oil, coconut oil, camellia oil, sunflower oil, rice bran oil, grapeseed oil, corn oil, canola oil, soybean oil, peanut oil and blended oil.

Approximately 60% were detected with 3-MCPD (30 samples) and glycidol (29 samples), which, despite showing a slight improvement compared to the Council's previous cooking oil test in 2017 (70% detected with 3-MCPD, 77% with glycidol), was still unsatisfactory. Moreover, 1 extra virgin olive oil exceeded the action level of the Centre for Food Safety and the EU's maximum limit, while 2 other samples were found with another genotoxic carcinogen benzo[a]pyrene, among which a corn oil sample slightly exceeded the EU standard. Manufacturers were reminded of their responsibility to ensure product quality and prevent harmful contaminants, so as to safeguard consumers' health.

The healthy and harmful fatty acid ratios and contents varied among samples. Healthy fatty acids including monounsaturated fatty acids (MUFAs) and polyunsaturated fatty acids (PUFAs) could lower "bad" cholesterol levels in the body. The test found that camellia oil, olive oil and extra virgin olive oil had the highest average MUFAs content; grapeseed oil, corn oil and soybean oil contained the highest PUFAs content on average, but simultaneously had higher average trans fatty acids (TFAs) content, which could lower the body's "good" cholesterol levels. A 106-fold variance was found between the samples with the highest (a grapeseed oil) and lowest (a coconut oil) PUFAs content.

The Council recommends selecting cooking oils high in MUFAs and PUFAs, and

lower in TFAs and SFAs contents. Consumers should also be mindful of the smoke points of different cooking

oils to prevent emission of a large amount of cooking fumes which could lead to health risks.

## 食油

食油是每個家庭不可或缺的烹飪材料,其食品 安全和營養值至關重要。有見及此,本會測試 了 50 款食油樣本,包括特級初榨橄欖油、橄欖 油、牛油果油、椰子油、茶花籽油、葵花籽油、 米糠油、葡萄籽油、粟米油、芥花籽油、大豆 油、花生油及調和油。

約6成樣本檢出 3-MCPD(30款樣本)及環氧 丙醇(29款樣本),儘管較本會上一次於2017 年進行的食油測試略有改善(70%樣本檢出 3-MCPD、77%檢出環氧丙醇),但仍然令人失 望。此外,1款特級初榨橄欖油超出食物安全中 心的行動水平及歐盟上限,另有2款樣本檢出 另一種基因毒性致癌物苯並[a]芘,其中一款粟 米油樣本略超歐盟標準。本會提醒生產商有責 任確保產品品質和避免含有有害污染物,以保 障消費者的健康。

樣本間的健康脂肪酸和有害脂肪酸的比例和含 量各有差異。健康的脂肪酸,包括單元不飽和 脂肪酸和多元不飽和脂肪酸,可降低體內的壞 膽固醇水平。測試發現,茶花籽油、橄欖油和 特級初榨橄欖油的平均單元不飽和脂肪酸含量 最高;葡萄籽油、粟米油和大豆油的平均多元 不飽和脂肪酸含量最高,但同時平均反式脂肪 酸含量亦較高,會降低體內的好膽固醇水平。 當比較多元不飽和脂肪酸含量,最高(葡萄籽 油)和最低(椰子油)的樣本相差達 106 倍。

本會建議選擇單元不飽和脂肪酸和多元不飽和 脂肪酸含量高、反式脂肪酸和飽和脂肪酸含量 較低的食油。消費者亦應留意不同食油的煙點, 避免釋出大量油煙而對健康造成風險。

Harmful Contaminants in Fish Oil and Cooking Oil Products 魚油及食油產品中的有害污染物

50 款食油樣本

Glycidol	Genotoxic carcinogen	<ul> <li>基因致癌物</li> </ul>
環氧丙醇	May induce cancer in experimental animals	• 在實驗動物中可能引致癌症
<b>3-MCPD</b> 氯丙二醇	<ul> <li>Toxic contaminant</li> <li>Excessive daily consumption over a prolonged period would adversely affect kidney functions, central nervous system, and mal reproductive system of experimental animals</li> </ul>	
PAHs 多環芳香烴	Over 100 different PAHs, some of which are known or possible carcinogens	e • 超過 100 種不同的多環芳香烴,部分為已知 或可能致癌物質
	• Benzo[a]pyrene, one of the most common PAHs found in fat containing foods, is a Group 1 genotoxic carcinogen	• 苯並 [a] 芘是含脂肪食物中最常見的其中 1 種 多環芳香烴,屬於第 1 組基因致癌物

0款食油安全大檢閱

**50** amples Tested 款測試樣本

#### **Sausages**

Sausages, as a type of processed meat, are widely known to be high in sodium and/or fat, yet they remain highly popular for breakfast and lunch, and even for barbecues, hot pots and parties as they are tasty, versatile and easy to cook. To investigate the nutritional value and food safety level of sausages, the Council tested 30 samples of sausages samples, including 20 chilled, 7 frozen and 3 ambient samples available on the market.

Despite over 90% (28 samples) qualifying as "high-protein" foods, close to 90% were "high-sodium", while half were "high-fat". Besides, semicarbazide (SEM), a metabolite of the veterinary drug nitrofurazone (also known as nitrofural) banned in the Mainland, EU and USA, was detected in 3 samples, of which the detected amounts in 1 sample exceeded the EU's Reference Point for Action (RPA) by 13 times.

Additionally, 2 samples were detected with carcinogenic and genotoxic PAHs. The Council reminds consumers that processed meats have been classified by the International Agency for Research on Cancer (IARC) as "carcinogenic to humans" (Group 1 agents), and thus the consumption of processed meats such as sausages, ham and turkey slices should be reduced, so as to prevent increased risks of high blood pressure due to

prolonged excessive intake of sodium, as well as increased risks of cancer.

## 香腸

香腸屬加工肉類,已被廣知為高鈉及/或高脂 食物,然而因其味美、用途廣泛且易於烹調, 因此仍是深受歡迎的早餐和午餐食品,甚至常 用於燒烤、火鍋和派對中。為調查香腸的營養 價值及食物安全水平,本會測試了市面上 30 款 香腸樣本,包括 20 款冷藏、7 款冷凍及 3 款室 溫樣本。

儘管逾9成(28款)樣本符合「高蛋白質」食物的水平,但近9成屬「高鈉」,而半數屬「高 脂」。此外,3款樣本檢出內地、歐盟及美國禁 用的獸藥呋喃西林的代謝物氨基脲(SEM),其 中1款樣本檢出的含量超出歐盟的行動參考值 13倍。

此外,2款樣本檢出具致癌性及基因毒性的多 環芳香烴。本會提醒消費者,國際癌症研究機 構已將加工肉類列為「令人類致癌」(第1組別 物質),因此應減少食用香腸、火腿及火雞片等 加工肉類,避免長期攝入過量鈉而增 加患高血壓及癌症的風險。

#### **Dried Edible Fungi**

Samples Tested 款測試樣本

The Council tested the nutrient content and safety of 28 samples of prepackaged dried edible fungi, including 10 black fungus, 9 white back black fungus and 9 snow fungus.

Results found all samples to be rich in nutrients, especially dietary fibre. Among the 3 types of fungi tested, black fungus was found with the highest average iron content. Iron is an essential element for making haemoglobin, and consuming iron-rich food could help prevent iron deficiency anaemia. White back black fungus had the highest average insoluble fibre content, befitting consumers with general concern about intestinal health. Snow fungus was found to have the highest average soluble fibre content, making it suitable for those concerned about blood cholesterol and blood sugar levels.

#### 乾製耳類食用菌

本會檢測了 28 款預先包裝乾製耳類食用菌樣本 的營養價值和食物安全,包括 10 款黑木耳、9 款白背木耳,以及 9 款雪耳樣本。

測試結果發現全部樣本均含豐富營養,尤其膳 食纖維。3種耳類中,黑木耳類的平均鐵質含量 最高。鐵質是製造血紅素的主要元素,食用含 豐富鐵質的食物有助預防缺鐵性貧血。白背木 耳類的平均非水溶性纖維含量最高,適合一般 關注腸道健康的消費者。雪耳類則有最高的平 均水溶性纖維含量,適合關注血膽固醇及血糖 水平的消費者。 Food safety tests covered the content of 6 metallic contaminants (total arsenic, cadmium, chromium, lead, total mercury, and antimony), pesticide residues, and 2 preservatives, namely benzoic acid and sulphur dioxide. Over 40% (12 samples) were found to contain at least 1 type of pesticide, while all contained metallic contaminants though unlikely to cause any significant health risk with normal consumption. Sulphur dioxide was detected in 2 samples, and though the levels did not exceed the permitted upper limit stipulated in the Preservatives in Food Regulation, the information was not included in the list of ingredients in accordance with the Food and Drugs (Composition and Labelling) Regulations.

Although dried edible fungi are highly nutritious, consumers should pay attention to the proper preparation methods of dried edible fungi, and avoid soaking them at room temperature for too long to prevent bongkrekic acid poisoning.

#### **Dried Meat Snacks**

The Council tested 30 dried meat snacks, including 10 pork jerky, 8 beef jerky, 8 pork floss and 4 pork crisps samples. Food safety test items included PAHs, residue levels of veterinary drugs and preservatives; tests on nutrient content covered sugar, sodium, total fat, saturated fatty acids, trans fatty acids, and protein.

Over 40% (13 samples) were detected with PAHs, with the highest level found in 1 beef jerky sample with a total of 4 PAHs exceeding the EU limit by over 50%. 1 pork crisps sample was found with the metabolite AOZ of the non-permitted veterinary drug furazolidone, which did not comply with legal requirements and exceeded the EU's RPA. Consumption of the sample should be avoided.

Preservatives may be added during the preparation of meat snacks to slow down bacterial growth and prevent spoilage. 2 beef jerky samples were detected with high levels of sorbic acid, believed to be added directly to the product and not originated from other ingredients. As such, this might be in violation of the Preservatives in Food Regulation.

Furthermore, all samples were found to be high in sugar, and over 95% were high in sodium. Considering this finding and the fact that processed meat products are Group 1 carcinogens, consumers should be mindful of the consumption amount of jerky, floss, and crisps.

Upon reviewing the labelling on the samples, 16 were found with discrepancies between the labelled nutrient values and actual nutrient content that did not comply with the requirements of the Technical Guidance Notes on Nutrition Labelling and Nutrition Claims. The Council urged relevant manufacturers to improve immediately.

食物安全測試包括6種金屬污染物(總砷、鎘、 銘、鉛、總汞和銻)、除害劑殘餘,以及2種防 腐劑含量,包括苯甲酸和二氧化硫。逾4成樣本 (12款)驗出至少1種除害劑,全部樣本均檢出 金屬污染物,惟在正常食用情況下,理應不會對 健康造成不良影響。另有2款樣本檢出二氧化 硫,檢出量雖然沒有超出《食物內防腐劑規例》 上限,但並未有根據《食物及藥物(成分組合及 標籤)規例》於其成分表上列明相關資料。

雖然乾製耳類食用菌的營養價值高,惟消費者 烹調時需留意此類食材的正確處理方法,避免 在室溫下浸泡過久,以防止米酵菌酸中毒。

#### 肉乾零食

本會測試 30 款肉乾零食樣本,包括 10 款豬肉 乾、8 款牛肉乾、8 款豬肉鬆和 4 款豬肉紙(脆 豬肉乾)樣本。食用安全檢測項目包括 PAHs、 獸藥殘餘和防腐劑含量;營養素含量測試項目 則包括糖、鈉、總脂肪、飽和脂肪酸、反式脂 肪酸和蛋白質。

逾4成樣本(13款)檢出PAHs,含量最高的 1款為牛肉乾,其4種PAHs的總含量超出歐盟 上限逾5成。1款豬肉紙檢出禁用獸藥呋喃唑 酮的代謝物AOZ,不符合法例要求,亦超出歐 盟的行動參考值,消費者應避免食用。

肉類零食在製作過程中或需添加防腐劑以減慢 細菌滋生,防止變壞。2款牛肉乾樣本檢出的山 梨酸含量最高,相信是直接被加進產品內,而 非來自其他配料,或不符《食物內防腐劑規例》。

另外,全部樣本皆達高糖水平,逾9成半樣本 則屬高鈉。考慮到此檢測結果,而且加工肉製 品屬第1組致癌物,消費者宜小心注意肉乾、 肉鬆和肉紙的食用分量。

檢視樣本的標籤,發現 16 款樣本的營養素標示 值與檢測結果有差異,不符合《營養標籤及營 養聲稱技術指引》要求。本會促請相關製造商 馬上作出改善。



\* 同類樣本的平均食用分量

## Cosmetics and Personal Care Gel Nail Polish

Beautifully manicured hands not only leave a neat impression but are an essential beauty routine for many. While acrylic gel manicures done at professional salons are popular, soak-off gel (also known as "soft gel") nail polish products have become increasingly favoured in recent years as they can be used in the comfort of one's home yet achieve the same professional effect.

The Council's test on 25 models of "soak off gel" nail polish products revealed that almost 70% (17 models) were detected with 1 or more EU-banned carcinogens, including human carcinogen benzene in 1 sample, formaldehyde in 3 samples, while over half (14 models) were detected with 1 or 2 PAHs. Consumers are reminded to select products that contain no or less harmful substances and to use such products in well-ventilated spaces.

The product labelling was also found to be inadequate. Apart from 8 models which included a detailed list of ingredients in English on the bottle or packaging, another 9 models only displayed ingredient information in Korean or Japanese, whereas the remaining 8 did not contain any such information. As gel nail polish must be cured under a UV lamp, relevant instructions such as the exposure time

and type of UV light are important information for consumers to use the product properly. However, only 7 models clearly displayed such usage instructions in English on the packaging, while the remaining 18 models lacked such information. The Council strongly urges manufacturers to improve their labelling, and provide comprehensive and legible information to safeguard consumers' health.

#### **Toothpaste**

Brushing teeth twice a day is an important habit for maintaining good dental and oral health, which makes toothpaste an essential daily oral care product for both children and adults. Apart from basic cleaning functions, many toothpastes claim additional functions such as desensitising, whitening, prevention of dental calculus, etc.

The Council's test on 30 toothpaste models found that 3 out of the 13 models of children's toothpaste had a pH level that was too low, failing to comply with the Mainland standard and might lead to damage of the tooth enamel; whereas 2 children's toothpaste models claiming to contain fluoride were found to have low levels of fluoride and might not be able to strengthen the teeth.

16 models were detected with fragrance allergens, 4 of which had a detected amount exceeding the upper limit that requires labelling set by the EU regulation, yet did not display the name of the allergens in the list of ingredients. Furthermore, 90% (27 models) were detected with trace amounts of heavy metals (arsenic and/or lead) and though the levels did not exceed the relevant standards, consumers should be mindful of the risks of ingesting these substances over a prolonged period.

## mation in Korean or Japanese, h information. As gel nail polish ions such as the exposure time 口可油有歐思禁用致語物?

## 化妝品及個人護理 凝膠指甲油

修得一手漂亮的指甲不但可給人整潔的印象, 更是不少「貪靚一族」日常「扮靚」的指定動 作。除了流行到美甲專門店 gel 甲,能夠讓消費 者安坐家中自行美甲的水溶性樹脂指甲油(即 soft gel)近年亦愈來愈受歡迎,效果更媲美美 甲店的專業水準。

本會測試市面上 25 款水溶性樹脂指甲油產品, 發現當中近 7 成(17 款)樣本檢出最少一種歐 盟禁用的致癌物,包括 1 款檢出人類致癌物苯、 3 款檢出甲醛,另外超過一半的樣本(14 款) 檢出 1 至 2 種 PAHs。本會提醒消費者,應挑 選不含有害物質或有害物質含量較低的指甲油, 進行美甲時亦要確保室內空氣流通。

25款樣本中,只有8款在產品瓶身或包裝上 以英文詳細標示成分資料,另有9款樣本只提 供韓文或日文的成分資料,餘下8款樣本則完

> 全沒有成分資料,標籤資料,標籤資料,標籤資料,總籤資料,總統指甲,此外,由於指甲,故UV 照射才能固化,例如照射時間,以至紫外線,但是,只有7款有在包裝上以英文清楚標示,其餘18款 則完全沒有提供使用的指調 改善包裝上的資料,為消產 者提供完整及清晰易讀的產 品資訊,以保障消費者健康。

## 牙膏

每天早晚刷牙是保持牙齒及口腔清潔的重要習 慣,故牙膏是兒童和成人每天都會使用的必需 品。除了基本潔淨功能外,不少牙膏還標榜其 他功效,包括抗敏感、美白、防牙石等。

本會測試了 30 款普通和兒童牙膏樣本,發現在 13 款兒童牙膏中,3 款的酸鹼值太低,未能符 合內地標準,有機會損害琺瑯質;而2款聲稱含 氟的兒童牙膏的氟含量太低,或未能鞏固牙齒。

16 款樣本檢出致敏香料成分,當中4款的檢出 量超出歐盟法規需標示的上限,卻沒有按規定 在成分表上列出;另外,9成樣本(27款)檢 出微量重金屬(砷及/或鉛),雖然含量沒有超 出相關標準,但須注意長期攝入該等物質對健 康帶來的風險。



## Children's Products Balance Bikes

Balance bikes allow children to experience the joy of cycling while training their balance and muscle coordination. In the Council's test on 15 balance bikes, 6 models failed to comply with the requirements of the EU toy safety standard on mechanical and physical aspect. After the torque/tension test, 3 models broke off small parts which could cause suffocation if accidentally swallowed by children. The space between the wheel and bicycle frame of 4 models did not comply with the requirements of the relevant standard and could pose risks of trapping children's fingers or toes.

Children would hold the grip and touch the saddle when using the balance bikes. If the materials of these parts contain harmful chemical substances, they might pose health risks to children. Results showed that the grip and/or saddle materials of all models were detected with 8 types of restricted PAHs. For the parts with long-term skin contact, the total sum of 15 PAHs in 3 models exceeded the safety limit set by

the German safety standard, and the saddle material of 1 model was detected with benzo[ghi]perylene which also exceeded the relevant limit.

Phthalates are often added to plastic to increase their elasticity and durability, yet some phthalates could pose health risks. For example, research studies have shown that DEHP could possibly hinder the normal growth of children and may also damage the male reproductive system. 3 tested models were detected with DEHP, the highest of which exceeded the upper limit set out in Hong Kong regulations by 18 times. The Council calls for manufacturers to improve product designs and use materials free from phthalates and PAHs to strengthen safeguard for the health of children.

## Health Products

## Face Masks

As the pandemic persisted during the reporting year and wearing a face mask had become routine, many brands started offering coloured or patterned options to brighten up this daily drill. After the 2 previous tests in 2017 and 2020, the Council tested samples of 30 coloured/patterned face mask models during the year, 27 of which claimed to meet the requirements for ASTM F2100 Standard Level 3, while 3 were labelled as meeting Level 2 standard. Besides, 12 models simultaneously claimed to comply with the EU standard EN 14683 Type IIR.

In general, the tested samples had satisfactory filtration efficiency, though a few models had discrepancies between their claimed values and test results. In the test of resistance to penetration by synthetic blood, which simulated the splashing of blood or body fluid onto the mask surface, 2 models performed poorly. Even at the lowest pressure (80mmHg), the number of samples penetrated by synthetic blood exceeded the limit, indicating doubtful water resistance and leak resistance.

## 兒童產品 平衡單車

兒童騎乘平衡單車時既可以體驗踏單 車的樂趣,又可訓練他們的平衡力和 肌肉協調能力。本會測試 15 款平衡 單車,當中6款樣本在機械及物理性 能方面未能符合歐洲玩具安全標準的要 求。3款樣本在扭力或拉力測試後有破 損,產生細小部件,如果被兒童意外誤 吞,有機會引致窒息。此外,4款樣本 的車輪與車架之間的間隙未能符合相關 標準要求,存在夾傷兒童手指或腳趾的 風險。

兒童使用平衡單車時,雙手會緊握手把 及接觸座位。若此等部分的物料含有有 害化學物質,可能對兒童的健康構成 風險。結果發現,全部樣本的手把及 /或座位物料分別檢出 8 種被限制的 PAHs。在長時間與皮膚接觸的部分,3 款樣本檢出的 15 種 PAHs 總量超出德國 安全標準 GS Mark 所設的安全限值,1 款樣本的座位物料檢出苯并 [gh,i] 花,含量亦超 出相關的限值要求。

塑化劑是常用於塑膠中的化學添加劑,以提高 物料的彈性和耐用度,惟部分塑化劑會對健康 構成風險,例如有研究指出 DEHP 或會妨礙兒 童正常發育,也可能損害男性生殖系統。3款 測試樣本檢出 DEHP,最高含量的1款超出本 港法例中訂立的上限達18倍。本會呼籲製造商 改善產品的設計,同時改用不含塑化劑及 PAHs 的物料,以加強對兒童健康的保障。

#### 健康產品 口罩

年內,隨著疫情持續,戴口罩已成為習慣,許 多品牌開始提供各種顏色或圖案的口罩款式, 為日常生活增添色彩。繼 2017 年和 2020 年的 2 次測試,本會在本年度測試了 30 款不同型號 的彩色 / 圖案口罩樣本,其中 27 款聲稱符合 ASTM F2100 標準三級要求,3 款標示為符合 二級標準。此外,12 款同時聲稱符合歐盟標準 EN 14683 Type IIR。

總括而言,測試樣本的過濾效率令人滿意,惟 個別樣本的聲稱值與測試結果存有差異。在模 擬血液或體液飛濺到口罩表面的合成血穿透 測試中,有2款表現不佳。即使在最低壓力 (80mmHg)下,被合成血液穿透的樣本數量也 超過了限值,顯示防水和防滲效能存疑。



Unsatisfactory hygiene condition of the face mask itself could cause skin problems for the face, yet the detected bioburden levels of 6 models exceeded the limit of the European standard. In the delta pressure test, which reflects the comfort and breathability of the samples, 4 models had samples found to have a pressure difference of over  $6.0 \text{mmH}_2\text{O/cm}^2$ , which did not meet the requirements for ASTM Level 2 and Level 3.

In addition to the 2017 and 2020 test items, the carcinogenic azo dye test was added this time to assess the safety of the dyes used in face masks. None of the models were detected with azo dyes and are safe for consumers to use.

The Council also reviewed the labelling information of the products and found that the labelling information and user instructions for many models were not comprehensive enough. Manufacturers were urged to improve the labelling information. 口罩本身的衛生狀況欠佳可導致面部 皮膚出現問題,然而其中6款樣本的含 菌量卻超出歐洲標準的上限。在反映樣本舒適 度和透氣度的氣壓差測試中,有4款樣本的壓 力差高於6.0mmH<sub>2</sub>O/cm<sup>2</sup>,不符合ASTM二級 和三級的要求。

除了2017年和2020年的測試項目外,是次 還增加了致癌偶氮染料測試,以評估口罩所用 染料的安全性。所有型號均沒有檢出偶氮染料, 消費者可安全使用。

本會亦檢視產品的標籤資料,發現不少型號的 標籤資料及使用説明不夠全面,本會敦促製造 商改善產品標籤。



#### **Pulse Oximeters**

In the first half of 2022, the fifth wave of the COVID-19 pandemic in Hong Kong caused many patients to be quarantined at home. Some people chose to purchase a fingertip pulse oximeter to self-monitor their blood oxygen level, so as to observe their health condition or whether medical attention was needed.

As some fingertip pulse oximeters on the market, especially non-medical use ones, may not have been reviewed by medical regulatory authorities, the product quality may not be guaranteed. An article was published in CHOICE Magazine to provide consumers with basic information about oximeters, including how to obtain a proper measurement and interpret the readings.

In the course of the study, the Council found that the name of 1 model in a retail store, which was marked with the HKMD Number of the Medical Device Division of the Department of Health (DH), was actually inconsistent with the product name listed on the DH's official website, while only the company name of the local responsible person was found to match.

Currently, there is no specific legislation in Hong Kong to regulate medical devices such as fingertip pulse oximeters, while the "Medical Device Administrative Control System" implemented by the DH since 2004 operates by voluntary listing only. In view of this, the Council urged the Government to introduce regulations to ensure the quality of these medical devices to safeguard consumer rights.

#### 脈搏血氧計

2022 年上半年,本港爆發第5波新冠疫情,不 少患者需居家隔離。有人選擇購買指式脈搏血 氧計來自我監測血氧水平,以觀察自己的健康 狀況,或判斷是否有需要就醫。

由於市場上一些指式脈搏血氧計,尤其是非醫療用的,未必經過醫療監管機構審核,品質未 必有保證。本會在《選擇》月刊上發表了一篇 文章,為消費者提供有關血氧計的基本資訊, 包括如何正確量度和理解讀數。

本會在研究過程中,發現零售店內1款標有衞 生署醫療儀器科 HKMD 編號的產品名稱,竟與 署方網頁所列的產品名稱不符,只有本地負責 人的公司名稱相符。

本港現時並沒有專門法例規管指式脈搏血氧 計等醫療儀器,而衞生署自2004年起實施的 「醫療儀器行政管理制度」(MDACS)僅以自願 表列方式運作。有鑑於此,本會促請政府制定 法規,確保此類醫療儀器的品質,以保障消費 者權益。

## Electrical Products Home Surveillance Cameras

"Smart homes" have become increasingly popular in recent years, with many households installing home surveillance cameras for home security purposes. As the first test of its kind conducted in Hong Kong, the Council tested the cyber security of 10 models with reference to the European Standards ETSI EN 303 645 and the industry standard OWASP MASVS in areas including protection against attack, security of data transmission and apps, security of data storage, and hardware design. Only 1 model complied with the cyber security requirements of the European standard while 9 models posed various cyber security concerns.

The test revealed that 5 models transmitted video or data without encryption, exposing security flaws for hackers. During live video streaming, a hacker could launch "brute-force attacks" to crack the password of 3 models. Among them, the default password of 2 models was only 6 digits or characters, an extremely weak password strength that can be easily cracked by hackers to steal videos.

Each time the user logs in and connects to their surveillance cameras, a session key equivalent to a temporary password will be used for encryption and decryption when transmitting information and data. The session key should expire after logging out while a new one will be used for the new login. The test found that the previous session key of 3 models was still valid for re-logging in.

The security of in-app data storage for all 10 models was inadequate. 5 models were found to allow access to the user files stored in smart devices through Android apps, whereas the app of 5 models requested excessive permission. The Council recommends the Government to make reference to the practices in other jurisdictions and introduce relevant schemes or standards for Hong Kong to promote the cyber security of local IoT devices. Manufacturers were also urged to improve the cyber security of their products.

#### **Thermo Ventilators**

A multifunctional and energy-efficient thermo ventilator can serve several purposes, from keeping the bathroom heated and toasty to boosting ventilation and drying clothes. The Council and the Electrical and Mechanical Services Department (EMSD) commissioned local laboratories to test the performance and safety of 6 window-mounted and 3 ceiling-mounted thermo ventilators, and 4 portable bathroom heaters. The performance test items included clothes drying, heating performance, air delivery rate, warm air output temperature, noise level, etc.

In the clothes drying test, the worst-performing model could not completely dry the designated load of damp clothes within the 8-hour time limit as the device automatically stopped after 6 hours of operation. All remaining fixed installed models were able to dry the clothes in 3.3 hours to 6.4 hours, a difference of

## 電器產品 家用監控鏡頭

「智能家居」近年愈趨普及,不少家庭都安裝 家用監控鏡頭來保障家居安全。本會參考歐 洲標準 ETSI EN 303 645 及工業標準 OWASP MASVS,測試 10 款家居監控鏡頭樣本的網絡 安全,屬本港首個同類型測試。項目包括防止 攻擊能力、資料傳送及應用程式安全性、儲存 資料保密性,以及硬件設計。結果發現,只有 1 款樣本符合歐洲的網絡安全標準,其餘 9 款 均有不同的網絡安全隱患。

測試發現,5款樣本傳送影像或資料時,沒有 將數據加密,較容易讓駭客竊探。3款樣本進 行實時動態影像串流時,駭客可展開「暴力攻 擊」破解密碼,其中2款樣本的預設密碼只有 6位數字或字母,強度非常低,可被駭客輕易 破解,繼而竊取影片。

用戶每次登入連接鏡頭時,均會使用相當於臨時密碼的對話金鑰,在用戶傳送資料及數據時,用作加密和解密。對話金鑰理應在中斷連接後失效,當用戶再次登入時, 會使用一個新的對話金鑰。不過,測 試結果發現其中3款樣本在重新登入 連接鏡頭時,用於上一次連接的對話 金鑰仍然有效。

全部 10 款樣本的應用程式,儲存資料的安 全性均不足。其中 5 款樣本可透過 Android 版本的應用程式存取智能裝置內的檔案, 另有 5 款樣本的手機應用程式要求過多權 限。本會建議政府可參考不同國家的做法, 推出適合本港的相關計劃或標準,從而促進 本地物聯網裝置的網絡安全,亦促請製造商 改善產品的網絡安全。

#### 浴室暖風機

一部多功能、兼具能源效益的浴室暖風機,既 可保持浴室溫暖舒適,又可通風和乾衣。本會 與機電工程署分別委託本地實驗室測試了6款 窗口式、3款天花式及4款移動式浴室暖風機 的性能及安全性。性能測試項目包括乾衣和加 熱表現、氣流量、暖風溫度及寧靜程度等。

在乾衣測試中,表現最差的樣本運行6小時後 自動停止,未能於8小時的時限內完全烘乾指 定重量的濕衣物;其餘固定安裝的樣本都能於 3.3小時至6.4小時內完全烘乾衣物,時間相差 接近1倍,電費也因而倍增。一般來說,天花 式樣本的的乾衣表現較佳,當中3款樣本均於 almost twofold which would result in the same variance in the electricity bill. In general, ceiling types were found to perform better in clothes drying, as all 3 models completed it within 4 hours. The lowest power consumptions were found in 1 window-type and 2 ceiling-type models, indicating better clothes drying energy efficiency. The warm air output temperature could also vary by over  $16^{\circ}$ C among the tested models.

According to the 2017 comparative test results on thermo ventilators of various designs, clothes drying by blowing warm air was found to be less energy-efficient than by blowing dry air from a thermo ventilator with compressor. Users are recommended to consider drying clothes by sunlight/natural wind if household conditions allow, or with more energy-efficient drying devices.

For the safety assessment, 2 window-type models failed to comply with the standard requirements for earthing continuity, while 3 models were found inadequate in the provision of proper marking and instructions.

#### Inverter Split-type Air Conditioners

Considering that "1 horsepower" (HP) air conditioners are the most commonly used type in Hong Kong's compact living space, the Council tested 14 models of "1 HP" inverter split-type air conditioners, covering the heating performance of 7 reverse cycle air conditioners (RCAC) for the first time.

The results revealed that despite all models achieving Energy Efficiency Grade 1 based on the appliance's Cooling Seasonal Performance Factor (CSPF) or Heating Seasonal Performance Factor (HSPF), the CSPF and HSPF values varied by as much as around 30% and 35% respectively among models, representing a vast discrepancy in energy efficiency and energy-saving performance. The Council recommends consumers to select air conditioners with higher CSPF and HSPF values, as they are more eco-friendly and cost-saving.

The cooling capacity of air conditioners is also crucial as the higher the value, the faster it cools. The test revealed outstanding cooling performance across all models, with the measured cooling capacity ranging from 2.55kW to 2.88kW, all higher than claimed, among which 1 cooling-only model even achieved 10.8% higher than its claimed value. On the other hand, the heating performance of the 7 RCAC models with heating function could vary by around 19%, of which the measured heating capacity of 4 models were higher than claimed by 1.0% to 6.9%, while that for the remaining 3 models were lower than claimed.

4 小時內完成乾衣。1 款窗口式及 2 款天花式 樣本的耗電量最低,顯示乾衣的能源效益較高, 而樣本間的暖風溫度亦相差超過 16℃。

根據本會2017年就不同設計的浴室暖風機的比較測試,結果發現通過壓縮機吹出乾風乾衣的型號,較以發熱器吹出暖風乾衣的型號更為省電。本會建議用戶若家居情況許可,盡量使用陽光或自然風乾衣,或使用更節能的乾衣產品。

安全方面,2款窗口式樣本不符合標準的接地要求,3款則未有提供適當的標示及説明。

#### 變頻式分體冷氣機

有見「1 匹」冷氣機常用於本港空間狹小的家 居,本會測試了 14 款俗稱「1 匹」的變頻式分 體冷氣機,並首次涵蓋7款冷暖空調機樣本的 供暖表現。

測試結果發現,儘管全部樣本的製冷季節性表 現系數(CSPF)或供暖季節性表現系數(HSPF) 所計算出的能源效益級別均達1級,惟樣本間 的CSPF數值及HSPF數值,分別最多相差約3 成及3成半,代表能源效率和節能程度差異頗 大。本會建議為環保和節省開支,消費者宜選 購CSPF數值和HSPF數值較高的空調機。

冷氣機的製冷能力至為重要,製冷量數值愈高 表示製冷速度愈快。所有樣本量得的製冷量由 2.55千瓦至2.88千瓦不等,全部高於其聲稱的 製冷量數值,表現出色。其中1款淨冷型冷氣 機樣本,比其聲稱的數值高10.8%。至於同時 設有暖氣功能的7款冷暖空調機,其供暖量表 現可相差約19%,當中4款樣本量得的供暖量 高於其聲稱的數值1.0%至6.9%不等,其餘3 款樣本的供暖量卻低於其聲稱數值。



## **Household Products Bath Towels**

A bath towel with good water absorbency, durability, softness, and antibacterial function is a must-have household product. The Council tested 40 bath towels

mainly made of cotton, including 32 ordinary towels and 8 with claims of antibacterial properties.

Good absorbency is the most basic requirement of bath towels, yet the test found a huge disparity in the water absorption performance among the models, ranging from 3 to 50 seconds to absorb water before washing. The water absorption performance of all models did not decrease after 50 repeated washes and about 80% of the models even took a shorter time to absorb water than the initial wash.

To maintain hygiene, consumers should frequently replace and wash bath towels. After 50 times of washing and drying, 3 models were shortened by about 10% in length. As for the appearance, 9 models were found to vary significantly after the initial wash, such as showing

visible pills and/or discolouration, of which 3 were more expensive models priced from \$460 to \$1,120.

In measuring the antibacterial performance of the 8 models with such claims, only 1 showed satisfactory antibacterial performance in effectively inhibiting the growth of the 2 test microorganisms. However, 6 models could only effectively inhibit the growth of *Staphylococcus aureus*, and among them, the antibacterial capability in 2 models dropped after 50 washes. The Council reminded consumers to wash and dry used wet bath towels immediately and avoid storing clean and dry bath towels in damp and non-ventilated bathrooms for a long time.

#### **Bed Sheets and Mattress Protectors**

While most people spend a third of their day sleeping, bed sheets with antibacterial and anti-mites properties along with a soft texture could help improve the quality of sleep. The Council tested 15 models of bed sheets and mattress protectors with antibacterial or anti-mites efficacy claims. 9 were labelled with both "antibacterial" and "anti-mites" function, while 6 were labelled as "anti-mites".

Test results revealed that although all models showed satisfactory anti-mites activity, some models had mediocre antibacterial performance. Close to 80% of the models labelled with antibacterial efficacy were unable to effectively inhibit the growth of 2 test bacteria in the antibacterial test.

Many consumers would select bed sheets according to their personally preferred texture, which is related to the thread count and material composition of the products. However, test results revealed that actual materials of 3 models were different than claimed and 1 sample was found with over 30% discrepancy between its actual and labelled thread count.

#### 家居產品 浴巾

一條吸水、耐用、柔軟又抗菌的浴巾,是家居 必備用品。本會測試 40 款以棉為主要成分的浴

巾,當中32款為一般浴巾,另外8款 聲稱具有抗菌功能。

浴巾最基本要具有良好的吸水性能, 惟測試發現樣本間的吸水表現參差, 不同樣本洗濯前吸水需時3秒至50秒 不等。全部樣本在洗濯 50 次後,其 吸水效能均沒有下降,其中約8成 樣本吸水所需的時間更較首次洗濯 後短。

要保持衞生,消費者應經常替換及清 洗浴巾。經50次洗滌及晾乾,3款樣 本的長度,較洗濯前縮短約10%。有 9款樣本在洗濯1次後,其外觀跟洗濯 前有明顯的落差,例如表面出現明顯的 毛球及 / 或褪色。而當中有 3 款樣本售 價較高,由\$460至\$1,120。

在抗菌效能試驗方面,8款聲稱有此功能的樣 本中,只有1款能有效抑制2種試驗菌種的生 長,抗菌表現尚算不俗,但有6款樣本只能有 效抑制金黃葡萄球菌的生長,當中有2款樣本 在洗濯 50 次後抗菌能力下降。本會提醒消費 者,使用過的濕浴巾應立即清洗及晾乾,亦應 避免長期存放清潔及乾透的浴巾於潮濕、不通 風的浴室。

#### 床單和床褥保護套

大部分人一天約有三分之一時間在睡眠中度過, 一張具備抗菌、防蟎功能及手感柔軟的床單, 有助提升睡眠質素。本會測試 15 款聲稱具抗菌 或防蟎功能的床單和床褥保護套,當中9款同 時標示有「抗菌」及「防螨」功能,6款標示 有「防蟎」功能。

測試發現全部樣本都有不俗的防蟎效能,惟部 分樣本的抗菌表現遜色,近8成標示有「抗菌」 功能的樣本在抗菌試驗中未能有效抑制2種試 驗菌種的生長。

不少消費者會按照個人喜歡的質感去選購床單, 而質感與產品的針數和物料成分有關。然而, 測試發現3款樣本檢出的物料與標示不符,而 1款樣本實際針數和標示相差逾3成。





## **Stationery Ballpoint Pens and Gel Ink Pens**

The Council tested the writing performance and safety levels of 18 ballpoint pen models and 22 gel ink pen models, with vastly varying prices from \$2.4 to \$86 per pen.

The test found that a seemingly simple pen might pose safety risks to children, as the pen cap and/or end closure of 6 models were relatively small and failed to comply with the minimum air flow requirements (8 litres per minute) of UK standards, leading to a higher risk of asphyxiation in the event of accidental swallowing into the trachea. Manufacturers were recommended to improve the security of end closures, or design with air holes to ensure the air flow meets the relevant requirements, so as to reduce the possible risks of suffocation.

Long-lasting and resistant inks should be used for signing or writing on important documents. With reference to ISO test standards, test paper pieces were prepared and soaked in 50% ethanol solution for 10 minutes and air-dried. Results showed that 1 gel ink pen model failed the test as both text and lines on the sheets of test paper disappeared completely. On the other hand, all models passed the water resistance test after being soaked in distilled water for 1 hour, as the lines and text on all the sheets of paper remained visible/legible. Overall, most of the tested models were suitable for general writing purposes.

Results also showed that the total writing distance varied drastically among models, with the averaged value ranging from 388.3m to 2,323.7m, an almost 5-fold difference. The total writing distance of ballpoint pens was generally longer, averaging 1,052m, while that of gel ink pens was only 699.2m.

## **Pet Products Rabbit Feed**

Keeping a pet rabbit could be a decade-long commitment and a suitable diet is essential for its nutritional needs. The Council tested 12 rabbit feed models for adult rabbits which claimed to be "complete feed" or "complementary feed", including 9 in pellet form, 2 with mixed ingredients, and 1 comprised of pellets in different shapes and colours.

Among the 8 complete feed models, the crude fat contents in 2 models were higher than the recommendation established by the European Pet Food Industry Federation (FEDIAF) for adult rabbits, while the starch contents in 2 models were higher than the recommendation. On the other hand, 2 complete feed models were found to have a crude fibre content lower than the FEDIAF's recommendations.

If rabbits consume a high-fat, high-calorie diet over an extended period, they may become overweight easily; an excessive amount of starch may lead to severe diarrhoea; whereas insufficient fibre may slow down gut movement as well as causing dental problems.

## 文具產品 原子筆和啫喱筆

本會測試了 18 款原子筆及 22 款啫喱筆的書寫 性能和安全程度,每支售價由 2.4 元至 86 元不 等,價格差距頗為懸殊。

測試發現,看似簡單的一支筆也可能對學童存 有安全隱患,6款型號的筆蓋及/或筆尾端蓋 尺寸較細小,同時未能通過空氣流通量的最低 要求(每分鐘8公升),未能符合英國標準,若 被誤吞或吸入氣管,造成意外窒息的風險較高。 本會建議製造商改善筆尾端蓋的牢固程度,或 於端蓋留有氣孔,確保空氣流通量符合相關規 定,減少可能造成窒息的機會。

在簽署或書寫重要文件時,應使用可長時間保 存和耐化學品的墨水。試驗按國際試驗標準準 備各型號書寫的試驗紙條,並浸泡於 50% 乙醇 溶液中 10 分鐘,讓其自然風乾。結果 1 款啫喱 筆型號未能通過相關試驗,紙條上的文字或線 條經浸泡後均完全消失。另外,亦將已劃線的 試驗紙條浸泡於蒸餾水中1小時後風乾,全部 型號均通過試驗要求,所有紙條上的線條和文 字仍然可供閱讀。整體而言,大部分型號都適 合一般書寫用。

另外,各款型號的可書寫總長度十分懸殊,平 均值由 388.3 米至 2,323.7 米不等,相差接近 5 倍。綜觀結果,原子筆型號的可書寫總長度 一般較長,平均為1,052米,啫喱筆型號則平 均只有 699.2 米。

## 寵物用品 兔用乾糧

飼養兔子是個長達 10 年的承諾,為兔子預備營 養合適的膳食尤為重要。本會檢測了 12 款聲稱 為主食或副食的成年寵物兔食用乾糧,包括9 款顆粒狀產品、2款混合了不同材料和1款混 合不同形狀及顏色顆粒的「混合乾糧」。

8款主食糧樣本中,2款樣本的粗脂肪含量高於 歐洲寵物食品工業聯合會(FEDIAF)就成年寵 物兔膳食的含量建議,另有2款的澱粉質含量 亦高於相關建議。另一方面,2款主食樣本檢 出的粗纖維量則低於 FEDIAF 的指引建議。

如果兔子長期食用高脂肪、高熱量的膳食, 容易出現過胖問題;攝入過量澱粉質,可 能導致嚴重腹瀉;纖維量不足則會減慢免 子的腸道蠕動,甚至造成牙齒問題。

The test also found that the mineral contents of all tested models failed to fully comply with the FEDIAF's recommendations. Improper calcium-to-phosphorus ratio (Ca:P ratio) was the most prevalent problem, with 8 models failing to meet the recommended range. Another 2 models were found with calcium contents exceeding the recommended safe upper limit set by the EU guidelines. If these models were used as a long-term staple diet, it would pose health risks to rabbits.

The Council urged pet food manufacturers to improve the content of various nutrients in pet food, so as to safeguard the health of small animals.

測試亦發現,全部樣本的礦物質含量都未能完 全符合歐盟 FEDIAF 指引的建議。當中以鈣磷比 例的問題最為普遍,有 8 款樣本未能符合指引 建議的範圍。另有 2 款的鈣含量超出歐洲指引 建議的安全上限。如果將相關樣本長期作為主 食餵飼,有機會損害兔子的健康。

本會促請寵物食品製造商改善寵物飼料中的各 種營養素含量,以保障小動物的健康。

#### **International Comparative Tests**

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

- Audio-visual and optical products, including speakers, soundbars and interchangeable lens camera kits;
- Computer and telecommunications products, comprising internet security software, VPN services, smart phones, tablet PCs and laptops;
- Household and personal products, such as electric men shavers, electric toothbrushes, clinical thermometers and cordless upright vacuum cleaners; and
- Children's and outdoor products, including pushchairs and running backpacks.

#### Where Have All the Tested Products Gone?

The products used for testing by the Council were put to further use with a number of items donated to environmental protection organisations, charity groups and non-profit organisations for further consumption and recycling. During the year, a total of 1,109 items, including electrical appliances, household consumables, health products, infant products, skincare products as well as food and beverages, were donated to 6 recipient organisations.

The recipient organisations were: Action Care, ALBA Integrated Waste Solutions (Hong Kong) Ltd., Caritas Second Hand Recycling Shop, Hong Kong Women Development Association Limited, Sai Kung and Tseung Kwan O Women's Association Limited, and St. James' Settlement.

#### 國際測試合作

年內,本會繼續與 ICRT 緊密合作,並聯同其他 司法管轄區的消費者組織,對以下不同種類的 產品進行國際性比較測試,並特別針對昂貴或 耐用產品向消費者提供選擇貼士:

- 影音及光學產品:藍牙/Wi-Fi 揚聲器、整 合式揚聲器(soundbars)及可換鏡頭的相機 套裝;
- 電腦及通訊產品:網絡安全軟件、虛擬私人 網絡(VPN)服務、智能手機、平板電腦及 手提電腦;
- 家居及個人用品:電鬚刨、電動牙刷、體溫 計及無線直立式吸塵機;及
- 兒童及戶外用品:嬰幼兒手推車及跑步背囊。

#### 產品測試完畢後的去向

部分經本會測試的產品會捐贈予環保組織、慈 善團體及非牟利機構使用及回收。年內,本會 共捐贈1,109件物品予6間機構,當中包括電 器、家庭消耗品、健康產品、兒童產品、護膚 產品及食品。

受惠機構如下:關愛動員、歐綠保綜合環保 (香港)有限公司、明愛懷寶坊、香港婦聯、西 貢將軍澳婦女會,以及聖雅各福群會。

